



LEAPING TO ERA OF TRANSFORMATION



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Leading Integrated Petrochemical Complex
in Asia by 2020



Operational Excellence	Value Creation
High Performance Organization	Innovation & Creation of New Business
Corporate Social Responsibility	



	Innovation
Individual Ownership	Responsibility for Society
Synergy	Integrity & Ethics
Performance Excellence	Trust & Respect

MESSAGE FROM THE CHAIRMAN



Dear Shareholders,

A vision has been defined by the Board of Directors for IRPC Public Company Limited to be a Leading Integrated Petrochemical Complex in Asia by 2020 along with short-term and long-term plans to ensure that IRPC would be guided by the planned directions and plans to goal achievement.

One might call 2015 a golden year for IRPC, with its performance recovery from last year, evident in Baht 17,033 million (a 10-year high) in EBITDA and Baht 9,402 million in net profit-a stark contrast with the loss of Baht 5.235 million in 2014. Accounting for this remarkable achievement were IRPC's continued preparedness moves, accurate projections, and efficient endeavor in business conduct and management of its executives and staff under the supervision of the Board and its four committees.

Mr. Tevin Vongvanich
Chairman

The Board highly values business conduct with responsibility to society, the environment, and communities in line with IRPC's philosophy of striking a balance among its economy, society, and environment. As a result, this year saw IRPC maintain its DJSI (Dow Jones Sustainability Indices) membership in the oil & gas category for a second successive year.

By and large, an entity that is robust, renowned, and publicly trusted is one with high business capability, management governance, and social responsibility. The Board has supervised IRPC's business for efficiency based on good governance and has put such efforts into Board performance that it earned certification as Board of the Year 2015 along with Audit Committee of the Year 2015, attested by the Thai Institute of Directors (IOD) and evident in sound performance outcomes and extensive recognition. Shareholders can therefore rest assured that IRPC is conducting its business transparently and takes very seriously internal control, anti-corruption, and risk management with due regard for all stakeholders, in addition to proper development in various aspects. Incidentally IRPC has enforced a new set of values called iSPIRIT, focusing on strengthening from within for sustainable growth.

The Board has also promoted IRPC's status as a learning and creative organization, whether one talks about operating innovation, business innovation,

or innovation for the good of society. IRPC also values research and development (R&D) because it believes that leapfrog growth must be R&D-based and can create significant value addition. Out of these innovative concepts by the management sprang successful undertakings like the DELTA Project, with excellence in operation, marketing, procurement, and HR administration as its goals. The benefits reaped by the project this year totaled Baht 4,565 million. The year 2016 sees IRPC extend its success to a new EVEREST Project, which is going to be a stiffer challenge calling for ability, earnest commitment, and participation of all employees. The Board fully supports this project, which is bound to achieve its goals, thanks to IRPC's collaboration with a leading worldwide consultant.

On behalf of the Board, may I express my appreciation to all of you for your confidence, support, and cooperation with us IRPC over the years-the shareholders, customers, business partners, government agencies, academicians, financial institutions, communities, mass media, NGOs, and our own executives and staff. Your perseverance has paid off handsomely this year. It is my conviction that from now on, IRPC will grow stronger in business and organization health alike into a good corporate and global citizen with responsibility for society. IRPC's capability is bound to benefit and create value for shareholders, stakeholders, and our nation.

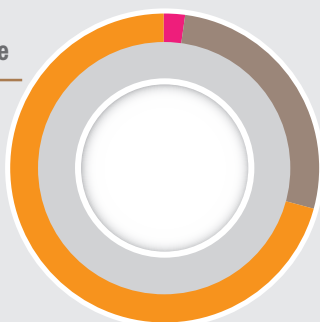
KEY PERFORMANCE

Net Sales Revenue

72%
Petroleum Products

27%
Petrochemical Products

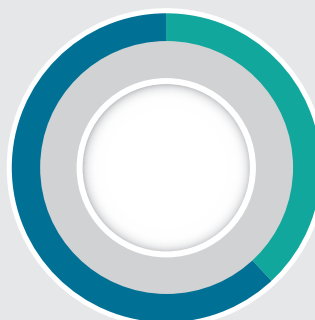
1%
Others



By Distribution

61%
Domestic

39%
Export



Petroleum Products

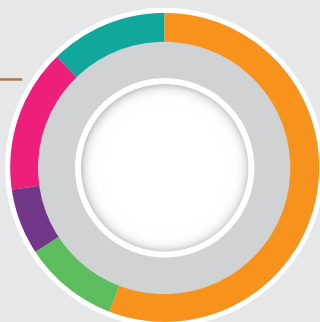
10%
Gasoline

56%
Diesel

7%
Fuel Oil

15%
Lube Base Oil and Asphalt

12%
Others



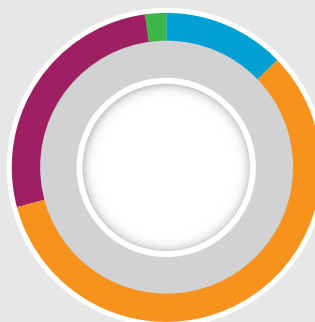
Petrochemical Products

58%
Olefins and Polyolefins

13%
Aromatic

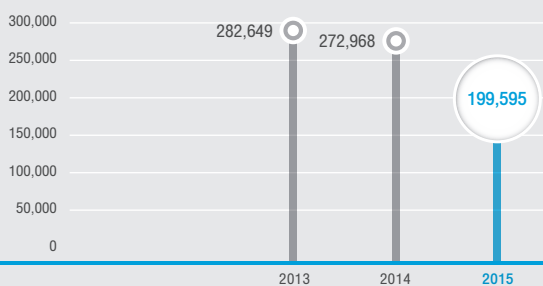
27%
Styrenics

2%
Polyol



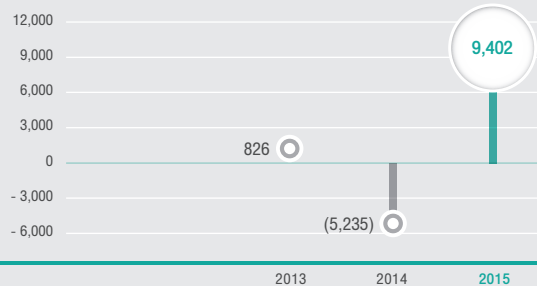
Net Sales

Unit: Million Baht



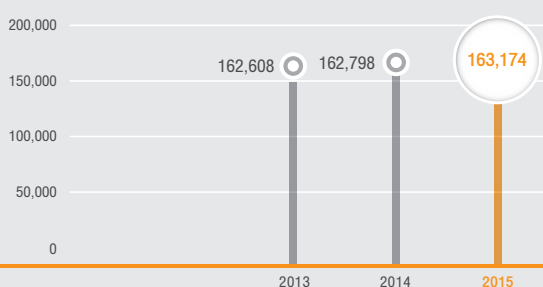
Net Profit

Unit: Million Baht



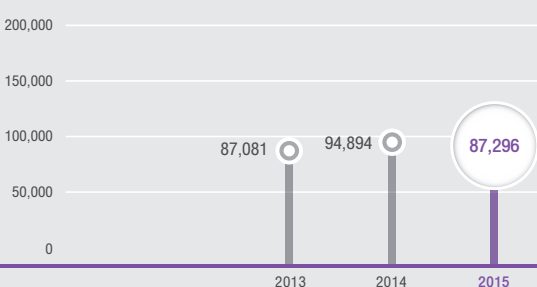
Total Assets

Unit: Million Baht



Total Liabilities

Unit: Million Baht



FINANCIAL HIGHLIGHTS

(Unit : Million Baht)

	2013	2014	2015
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Financial Position

Current Assets	63,772	44,142	35,984
Total Assts	162,608	162,798	163,174
Current Liabilities	49,530	46,829	36,210
Total Liabilities	87,081	94,894	87,296
Shareholder's Equity	75,527	67,904	75,878
Registered Capital	20,475	20,475	20,475
Paid-up Capital	20,434	20,434	20,434

Operating Performance

Sales	292,593	281,589	214,172
Net Sales ⁽¹⁾	282,649	272,968	199,595
Cost of Goods Sold	287,695	287,930	197,913
Gross Profit (Loss)	4,897	(6,341)	16,258
EBITDA ⁽²⁾	7,489	(1,402)	17,033
Net Profit (Loss)	826	(5,235)	9,402

Financial Ratio

EBITDA Margin	2.56%	N/A	7.95%
Net Profit Margin	0.28%	N/A	4.39%
Return on Assets	0.54%	N/A	5.77%
Return on Equity	1.09%	N/A	13.09%
Current Ratio (time)	1.29	0.94	0.99
Net Debt to Equity (time) ⁽³⁾	0.50	0.87	0.66
Dividend per share	0.10	0.08	⁽⁴⁾ 0.22
Dividend payout	247%	N/A	48%
Book Value per share (baht)	3.69	3.32	3.71
Earning per share (baht)	0.04	(0.26)	0.46

Note :

(1) Net Sales excluded excise taxes

(2) EBITDA means Earnings before interest, taxes, depreciation and amortization

(3) Net Debt means interest bearing debt less cash and short-term investments

(4) The Board of Directors of the Company's meeting on 9 February 2016, approved a dividend payment for the operating results of 2015 at Baht 0.22 per share.

However, the approval for the dividend payment shall be proposed to the Annual Shareholders' Meeting for the year 2016 for the further consideration and approval.

IRPC'S KEY MILESTONES OF THE DECADE

2006 was a significant turning point in the history of IRPC as a result of the success of business rehabilitation, which yielded valuable achievement and made a big step forward in the name of "IRPC".

Throughout these 10 years, IRPC has remained firmly and sustainably strong with a commitment to developing business with social responsibility under corporate strategic plan to strengthen the business and devotedly research and develop new products to provide consumers with innovative technologies that are environmentally friendly, while maintaining a good governance as the key.

2006

Dr. Piti Yimprasert
appointed President



1 Q

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3 Q

4 Q

BUSINESS

- **Re-Branding**
TPI as IRPC



- **Joining Thailo in a feasibility study of the Refining Margin Improvement Project**
to make maximum profit from the assets in possession.

OPERATION

INNOVATION & VALUE ADDED PRODUCTS



- **Launching three products in the styrenics group, namely:**
 - PS/SEBS/HDPE alloy
 - ABS/Nylon
 - HIPS/PC
- **Achieving success in the development of halogen-free fire-inhibiting substance in ABS and HIPS products.**

RESPONSIBILITY FOR COMMUNITY, SOCIAL, AND ENVIRONMENT



- **Installing monitoring equipment**
for air quality at 114 points,
for water quality at 124 points,
and for noise quality at 57 points.

2007

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- **Announcing the organization development plan for 2007 – 2011**

to raise production capacity
to consolidate the business
foundation.



- **Issuing the first Corporate Governance Handbook**



- **Starting the Refinery Improvement Project**

to increase production capacity,
reduce cost, and preserve the environment.



- **Initiating the Mobile Clinic Project**

in collaboration with the
HM Queen Sirikit Hospital to provide
free medical service for villagers living
around IRPC Industrial Zone

2008

Dr. Pailin Chuchottaworn
appointed President



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BUSINESS

- **The most successful in bond issue (10 years)** in foreign market, USD 280 million
- **Redemption of Thai Baht debentures in total value of Baht 360 Million.**
- **Introducing the Enterprise Resource Planning Improvement Project (ERP)** to raise human resource and database management efficiency.
- **Purchasing 25% shares of PTT Polymer Marketing Co., Ltd. (PTTPM),** from PTT Plc worth Baht 58.32 million.

OPERATION

INNOVATION & VALUE ADDED PRODUCTS

- **Launching K-Buyer Financing and e-Supply Chain service** to Petrochemical Agent.

RESPONSIBILITY FOR COMMUNITY, SOCIAL, AND ENVIRONMENT



- **Restoring Khlong Kon Puek Mangrove Learning Center.**

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- **Entering into a Baht 10,000-million long-term loan contract** for petrochemical debottlenecking as well as the Combined Heat and Power Project.



- **Carrying out business restructuring under the Phoenix Project.**



- **Completing the ABS and CCM debottlenecking project** by 21,000 tons per year and that of HDP (pipe-grade) by 40,000 tons per year.



- **Promoting Corporate Governance Handbook (Revision 1)**



- **Developing the iDEAL Solution system (IRPC Digital E-Commerce Account and Logistics).**



- **Introducing iRON (IRPC Oil On Net)** to facilitate online transaction linkage in the petroleum business.



- **Restoring Phra Samut Jedi Mangrove Forest** as a learning center for the mangrove ecological system in Rayong.

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BUSINESS

OPERATION

INNOVATION
& VALUE ADDED
PRODUCTS

RESPONSIBILITY FOR
COMMUNITY, SOCIAL,
AND ENVIRONMENT



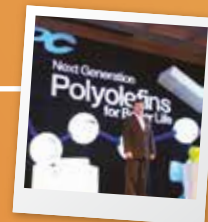
- **Achieving success in research and development (R&D) of products in the Green ABS group**, the first in the world to use natural rubber as a substitute for synthetic rubber in producing ABS polymers.



- **Launching the innovative lube base oil products**, namely TDAE and RAE (Treated Distillate Aromatic Extract and Residue Aromatic Extract), with reduced carcinogens used in car tire production.



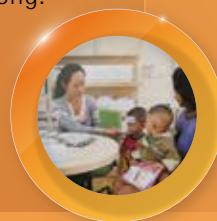
- **Starting the sale of UHMW-PE polymers.**
- **Launching seven products in the polyolefins group** under the "Next Generation Polyolefins for Better Life" concept.



- **Opening the Community Center** as a learning center for Rayong people to strengthen relationship between IRPC and the community.

- **Establishing multilateral committee** for stakeholders' participation and for monitoring CHP project as per EIA requirement.

- **Launching "Pan Nam Jai" clinic** at the Community Center, Rayong.



2011



Mr. Atikom Terbsiri
appointed President

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WE SUPPORT

- **Joining UN Global Compact.**



- **Successfully running the Combined Heat and Power Project (CHPI),** fueled by natural gas, with a capacity of 220 MW of electricity and 420 tons per hour of steam.



- **Inaugurating Mae Klong Oil Depot,** Samut Songkhram province.

- **Developing UHMW-PE (Ultra-high Molecular Weight Polyethylene) with PTTTPM.**

- **Launching the  trademark for the company's plastic products.**

- **Developing the IRPC Global Export Insured, an innovative financial product for export insurance.**

- **Developing Wood Plastic Composite** by mixing wood powder with various plastics.

- **Introducing iPORT system (IRPC Intelligent Port Service)** to facilitate online port service.



- **Developing Super Clarity Polypropylene for Baby Bottles,** a kind of ultra-clear polypropylene polymer for baby bottle production.

- **Developing online customer database management systems,** namely iCons for the petrochemical business and IRIS for the petroleum business.



- **Launching Protection Strip Project**

- **The Prostheses Project from innovative anti-bacteria plastics,** by donating POLIMAXX BANBAX to Prostheses Foundation of H.R.H. the Princess Mother.

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BUSINESS

- **Entering into a sales-purchase agreement and a shareholders' agreement**
to acquire 25% of the paid-up capital of Ube Chemicals (Asia) Pcl.

- **Entering into a sales-purchase agreement of the land**
in the eco-industrial zone, IRPC Zone 4, with Thai Kyowa Biotechnologies Co., Ltd.

OPERATION

- **Achieving success in the Gasoline Hydrogenation Unit (GHU) upgrade** to produce oil products of Euro IV standard.
- **Installing the Power Management System (PMS)** to ensure power supply stability in IRPC plants.

- **Running a dredging project at the deepsea port to receive large oil vessels.**

- **Achieving propylene capacity expansion** by 100,000 tons per year.

INNOVATION & VALUE ADDED PRODUCTS



- **Entering into an academic cooperation with Oxford University** for R&D of high-performance polymers.



- **Launching the POLIMAXX BANBAX product.**



- **Entering into a contract with Department of Industrial Works (DIW) on the development of eco-industry,** for which IRPC was selected by DIW a pilot factory for Thailand.



- **Constructing a viewpoint tower** at Phra Jedi Klang Nam Mangrove Ecosystem Center, Rayong.

RESPONSIBILITY FOR COMMUNITY, SOCIAL, AND ENVIRONMENT

2013



Mr. Sukrit Surabotsopon
appointed President

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- **Implementing DELTA, the organizational excellence plan.**



- **Establishing IRPC Clean Power Co., Ltd. (IRPC-CP).**

- **Selling the 51% shares IRPC was holding in IRPC Clean Power Co., Ltd. (IRPC-CP) to Global Power Synergy Co., Ltd. (GPSC).**



- **Launching the EBSM Debottlenecking Project** by 260,000 tons per year.



- **Completing the construction of ABS6 and SAN3 plant,** raising IRPC's ABS6 capacity by 29 KTA and SAN3 by about 33 KTA.



- **Launching IRPC Process License for Green ABS production.**



- **Joining hand with PTTRI, devised and improved the BHD (Bio Hydrogenated Diesel) process** from RPO (refined palm oil) to produce high – quality, green synthetic diesel fuel.

- **Joining PTTM and PTT Research and Technology Institute** in the Polymer Compounding Synergy Project.



- **1 for 9 projects** with the office of National Education Standards and Quality Assessment.

	1Q	2Q	3Q	4Q
BUSINESS		<ul style="list-style-type: none"> • Joining the Call to Action: Anti-Corruption and the Global Development Agenda project under UN Global Compact (UNGC). • Accepted as a member of Collective Action Coalition against Corruption (CAC), certified by the Anti-corruption Organization of Thailand. 		<div> <small>MEMBER OF</small> Dow Jones Sustainability Indices <small>In Collaboration with RobecoSAM</small> </div> <ul style="list-style-type: none"> • Included in DJSI's Emerging Markets 2014 in the Oil & Gas Industry category.
OPERATION			<ul style="list-style-type: none"> • Increasing the capacity of the lube oil plant. in Phra Padaeng, Samut Prakan, to 72 million liters per year. 	<ul style="list-style-type: none"> • Improving the polyethylene production process from PE natural to PE-Pipe Grade to increase the production of PE-Pipe Grade to 120,000 tons per year.
INNOVATION & VALUE ADDED PRODUCTS			<ul style="list-style-type: none"> • Inaugurating the NANO Chemical factory, located in IRPC Industrial Zone, Rayong. 	<div>  </div> <ul style="list-style-type: none"> • Joining Picnic Plast Industrial Co., Ltd., in launching Natural Color Compound.
RESPONSIBILITY FOR COMMUNITY, SOCIAL, AND ENVIRONMENT				<ul style="list-style-type: none"> • Entering into an agreement with DIW and its counterpart of Kitakyushu, Japan, on the development of an eco-industrial city. • Build Canal Build People Project. 

Selected as the member of DJSI's Emerging Markets in the Oil & Gas industry for 2 consecutive years. An international proof of IRPC's sustainable development with good economic, social, and environmental balance, which will drive the company forward with stability while making the challenging short-term EVEREST Project achievable

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- **Signing joint-venture Agreement with PCC Rockita SA, Poland** to align with developing value added product strategy with a focus on Asia-Pacific markets.



- **Selected as the member of DJSI's Emerging Markets** in the Oil & Gas industry for 2 consecutive years.



IRPC announced i SPIRIT – a new set of values to take it toward efficient operations with corporate governance.



- **Launching the “EVEREST” project** designed to steer IRPC toward excellence.



- **Printing and promoting Corporate Governance Handbook (revised 2).**



- **Starting Oil Refinery Improvement Project** to enhance efficiency, reduce cost and save environment.



- **Construction ended for the Upstream Project for Hygiene and Value Added Products (UHV)** and under testing and pre-commissioning.

- **IRPC joined Blue Light Industrial Co., Ltd.,** in launching the world's first luggage made with green ABS under the CAGGIONI brand.



- **With Wonder World Products Co., Ltd.** Launched Wood Plastic Composite under the “Trix Track” brand.



- **Joined Fine Arts Department to restore the historical site,** Wat Krua Ta Phet, located in the vicinity of IRPC's Ayutthaya depot.



unicef

- **Adopting Children's Rights and Business Principleness: CRBP**



- **Launching “IRPC Cubic Academy” Project.**

- **Princess Maha Chakri Sirindorn** inaugurated Kamnoetvidya Academy and Vidyasirimedhi Institute, which IRPC and PTT Group had founded, aiming to be a world-class institutes in science.

MILESTONES, AWARDS AND RECOGNITION 2015

January



- Signed a joint-venture agreement with PCC Rokita SA of Poland for an investment scheme aligning with IRPC's High Value Added Product strategy to undertake polyurethane distribution with a focus on Asia-Pacific markets.

February



- Honorary plaque for sustainability, SET (Stock Exchange of Thailand)



- With Blue Light Industrial Co., Ltd., unveiled the world's first Green ABS travel luggage under the Caggioni brand, marked by strength, durability, impact resistance, toughness, and greater resilience than other polymers.

March



- Signed an agreement on the production, sale, and purchase of ABS powder and resins with Asahi Kasei Chemicals Corporation.

April



- Thailand Top Company Awards 2015 (Top Business Strategy Award), Business+ journal, an affiliate of ARiP Pcl and the University of the Thai Chamber of Commerce



- Launched the IRPC Cubic Academy, where quality personnel are molded to drive the organization toward sustainability under PTT Group's key policy and guidelines ("Creating an Intellectual Society"). The academy focuses on human resource development so that they may strive for lifelong learning, forge professionalism, and promote business strength at the national and international levels.



- Best Investor Relations by Company in 2015 award, Corporate Governance Asia journal



May



- Participated in the launch of a cooperative project to develop EIZ under an MOU between the Department of Industrial Works, the Japanese city of Kitakyushu, and IRPC. To this end, the IRPC Industrial Zone was singled out as an area qualified for an EIZ town and a prototype for national EIZ town development.

June



- With Wonderworld Products Co., Ltd., launched wood plastic composite, an innovation under the "Trix Track" product name, featuring the highlight quality of plastics together with the natural feel of wood.



- Signed a construction agreement for the PPE (polypropylene expansion) project and PPC (polypropylene compound and specialties project) to add value to propylene derived from the UHV (Upstream Project for Hygiene and Value Added Products) project.



- Carbon Footprint for Organization 2015 award under a best-practice guideline project for green supply chains of target export industries, Bureau of Logistics, Department of Primary Industries and Mining, Ministry of Industry.



- Thailand ICT Excellence Awards 2015.
 - Excellence Award, Excise Integrated System Project.
 - Special-mention Award, Intelligence PORT & TANK Service Project.



- National Outstanding Workplace for Safety, Health, and Environment 2015 Award, Department of Labour Protection and Social Welfare



- Asia Responsible Entrepreneurship Awards 2015 (Social Empowerment, "From Bench to Community"—a prosthesis project), Enterprise Asia journal



August



- Participated in welcoming HRH Princess Maha Chakri Sirindhorn, who graciously inaugurated Kamnoetvidya Science Academy and Vidyasirimedhi Institute of Science and Technology, under the auspices of PTT Group companies, located at Tambon Pa Yup Nai, Amphoe Wang Chan, Rayong.



- Asia Best Employer Brand Awards 2015, Employer Branding Institute in India.

September



- Signed a US\$220-million sponsorship agreement with Kasikornbank to extend the crude-oil bill payment period with PTT Plc, which added liquidity for IRPC's businesses and sustained future work expansion.

MEMBER OF

**Dow Jones
Sustainability Indices**

In Collaboration with RobecoSAM

- Attained ranking on the DJSI Emerging Market as one of the leading companies worldwide for sustainable development among the Oil & Gas Industry group for 2015 for the second consecutive year.

October



- Signed a propylene sales agreement under the UHV project with Marubeni Thailand Co., Ltd.



- Eco Factory Award, Industrial Environment Institute, Federation of Thai Industries (FTI).



- Rolled out the i SPIRIT set of corporate values for employees to adhere to as practical guidelines for attitude and behavioral change, leading to efficient performance and good governance.



- Golden Peacock Global Award for Excellence in Corporate Governance 2015, India's Institute of Directors (IOD).



- Thailand Sustainability Investment Awards 2015, SET, Office of the Securities and Exchange Commission (SEC), Association of Thai Securities Companies, Thai Listed Companies Association (TLCA), Thai IOD, and Khon Thai Foundation.



November



- Honorary awards for One for Nine Project, Office for National Education Standards and Quality Assessment (ONESQA).



- Role Model Award (Energy and Public Utilities Sector), Foundation of Science and Technology Council of Thailand.



- The Muang Rayong Combined Heat and Power Project (CHP II) came on stream for the first phase of commercial production.



- Thai ABS Co., Ltd., signed a joint-venture agreement with Nippon A&L Inc. for its product development (High Value Added Products) and greater competitiveness among styrenics compound product group, with a focus on growing the AEC market for the automotive industry.



- “Board of the Year Awards 2015” recognition for its outstanding board of directors and audit committee by the Thai IOD, SET, Board of Trade of Thailand, Federation of Thai Industries, Thai Bankers’ Association, Thai Listed Companies Association, and the Federation of Thai Capital Market Organization. The awards honor boards of directors performing with quality and effectiveness—the heart of good governance.

December



- Launched the “Everest” project, designed to steer IRPC toward excellence by raising its hardware, software, and personnel capability to tackle the highest goals that are challenging and sustained, as one would in tackling the peak of Mount Everest, the world’s highest mountain.



- Ranked among the Top 50 of ASEAN under the ASEAN CG Scorecard criteria



- Construction ended for the UHV Project, with the project under testing and pre-commissioning. Commercial production is expected to run in the first quarter of 2016.



- Best Corporate Governance Asia 2015 Award, Corporate Governance Asia journal, Hong Kong SAR.



- IRPC vowed to promote Children’s Rights and Business Principles (CRBP) at the “Sustainability in Children’s Context: Business for Tomorrow” event.



- Sustainability Report Award 2015, level of excellence The Stock Exchange of Thailand. IRPC was 1 of 32 companies to receive the Sustainability Report Award from a total of 106 companies. IRPC received the award for the third consecutive year whereby the Corporate Sustainability Reporting Awards.



BOARD RESPONSIBILITY

- Board of Directors
- Organization Structure
- Executives
- Report of the Audit Committee
- Internal Controls
- Message from the Chairman,
Nomination and Remuneration Committee
- Message from the Chairman,
Risk Management Committee
- Message from the Chairman,
Corporate Governance Committee
- Corporate Governance Report

BOARD OF DIRECTORS



Mr. Cherdpong Siriwit

Independent Director/
Chairman of Audit Committee

Mr. Tevin Vongvanich

Chairman

Mr. Woothisarn Tanchai

Independent Director/
Chairman of Nomination
and Remuneration Committee



Mr. Sarun Rungkasiri

Director/ Chairman of
Risk Management Committee/
Member of Nomination and
Remuneration Committee

Mr. Watcharakiti Watcharothai

Independent Director/
Chairman of Corporate
Governance Committee

Mr. Prasit Suebchana

Director
(Until 4 January 2016)

Mr. Chavalit Punthong

Director



Mr.Ekniti Nitithanprapas

Director

Mr.Chansin Treenuchagron

Director

**Lieutenant General
Sasin Thongpakdee**

Independent Director/
Member of Corporate
Governance Committee

Mr.Songpope Polachan

Independent Director/
Member of Nomination and
Remuneration Committee/
Member of Audit Committee



Mr. Triumph Jalichandra

Independent Director/
Member of Audit Committee

Mr. Pramoul Chanpong

Director/
Member of Corporate
Governance Committee

Mr. Somnuk Bomrungsalee

Director

Mr. Sukrit Surabotsopon

Director/
Member of Risk Management
Committee/ President/
Secretary of the Board of Directors

BOARD OF DIRECTOR

Mr.Tevin Vongvanich

Chairman

No. of share on 31 December 2015: 900 (%) Share Possession: 0.0000044
Age : 57 Position Starting Date: 20 October 2015

Education/Training

- B.E. Chemical Engineering (1st Class Honor), Chulalongkorn University, Thailand
- M.Sc. Chemical Engineering, Rice University, USA
- M.Sc. Petroleum Engineering, University of Houston, USA
- Senior Executive Program (SEP), Sasin Graduate Institute of Business Administration, Chulalongkorn University, Class 7
- Program for Global Leadership (PGL), Harvard Business School, USA, Class 3
- Democratic Politics and Governance for High-Level Administrators Program, King Prajadhipok's Institute, Class 10
- Top Executives Program, Capital Market Academy, Class 6
- The Joint State Private Sector Course, National Defense College, Class 22
- Public Director Certification Program, King Prajadhipok's Institute, Class 7
- The Executive Program in Energy Literacy for a Sustainable Future, Thailand Energy Academy (TEA), Class 3
- Director Certification Program (DCP), Thai Institute of Directors (IOD), Class 21/2002
- Financial Statements for Directors (FSD), Thai Institute of Directors (IOD), Class 6/2009
- Role of the Compensation Committee (RCC), Thai Institute of Directors (IOD), Class 13/2011
- Anti-Corruption for Executive Program (ACEP), Thai Institute of Directors (IOD), Class 15/2015

Experience

- Sep. 2014 - Sep. 2015 Chairman, MCOT Public Company Limited
- May. 2012 - Sep. 2015 President / Chief Executive Officer, PTT Exploration and Production Public Company Limited
- Jan. 2010 - Apr. 2012 Chief Financial Officer, PTT Public Company Limited
- Apr. 2010 - Apr. 2012 Director, Thai Oil Public Company Limited
- Apr. 2009 - Mar. 2011 Chairman, PTT ICT Solution Company Limited

- Jul. 2009 - Dec. 2009 Chief Financial Officer/ Acting Senior Executive Vice President, Corporate Strategy & Development, PTT Public Company Limited
- Jul. 2009 - Oct. 2009 Director/ Member of Remuneration Committee, PTT Chemical Public Company Limited
- Apr. 2007 - Apr. 2010 Director/ Member of Risk Management Committee, Bangchak Petroleum Public Company Limited

Current Position

Current Position in Public Companies

- Oct. 2015 - Present Chairman, IRPC Public Company Limited
- Sep. 2015 - Present President/ Chief Executive Officer, PTT Public Company Limited
- Sep. 2015 - Present Director/ Secretary to the Board, PTT Public Company Limited
- Nov. 2009 - Present Director, PTT Exploration and Production Public Company Limited

Current Position in Limited Companies and Others

- Jul. 2015 - Present Honorary Board Member, National Science and Technology Development Agency
- Jul. 2014 - Present Director to the Board of Trustee, Thailand Management Association (TMA)
- Nov. 2014 - Present Chairman, Information and Public Communication Management Sub-committee, National Committee on Competitive Advantage (NCC), National Economic and Social Development Board (NESDB)
- Nov. 2014 - Present Honorary Advisor, Energy Committee, National Legislative Assembly

Mr.Cherdpong Siriwit

Independent Director/ Chairman of Audit Committee

No. of share on 31 December 2015: None
Age: 69 Position Starting Date: 8 April 2009

Education/Training

- Bachelor of Economics Program, (Honor), Thammasat University
- M.A.Economics, Georgetown University, USA
- Diploma, The Joint State-Private Sector Course, National Defence College, Class 40
- Advanced Certificate Course in Politics and Governance in Democratic System for Executives, King Prajadhipok's Institute, Class 5
- The Civil Service Executive Development Program I, The Civil Service Training Institute, Class 13/1993
- Capital Market Academy Leadership Program, Capital Market Academy (CMA), Class 5
- Director Accreditation Program (DAP), Thai Institute of Directors (IOD) Class 8/2004
- Role of the Chairman Program (RCP), Thai Institute of Directors (IOD) Class 10/2004
- Finance for Non-Finance Directors (FND), Thai Institute of Directors (IOD) Class 13/2004
- Director Certification Program (DCP), Thai Institute of Directors (IOD) Class 104/2008
- Audit Committee Program (ACP), Thai Institute of Directors (IOD) Class 27/2009
- The Board's Role in Strategic Formulation, Governance Matters Australia

Experience

- Nov. 2011 - Oct. 2014 Chairman of Corporate Governance Committee, IRPC Public Company Limited
- 2006 - 2008 Independent Director/
Audit Committee/
Remuneration Director,
PTT Chemical Public
Company Limited
- 2005 - 2007 Chairman,
Rayong Refinery Public
Company Limited
- 2004 - 2008 Chairman,
PTT Exploration and Production
Public Company Limited
- 2004 - 2008 Chairman,
Thai Oil Public Company Limited
- 2003 - 2007 Chairman,
PTT Public Company Limited

- 2003 - 2007 Chairman,
Ratchaburi Electricity
Generating Holding Public
Company Limited
- 2003 - 2004 Chairman,
Electricity Generating
Authority of Thailand (EGAT)
- 2002 - 2006 Permanent Secretary,
Ministry of Energy

Current Position

Current Position in Public Companies

- Apr. 2009 - Present Independent Director,
IRPC Public Company Limited
- May. 2009 - Present Chairman of Audit Committee,
IRPC Public Company Limited
- 2013 - Present Independent Director/
Audit Committee/
Risk Management Committee,
Thoresen Thai Agencies
Public Company Limited
- 2010 - Present Chairman,
Solartron Public Company
Limited
- 2009 - Present Chairman and Audit Committee,
Advance Finance Public
Company Limited

Current Position in Limited Companies and Others

- 2012 - Present Chairman,
Thai Sugar Millers
Corporation Limited
- 2011 - Present Chairman,
Vithai Biopower Company Limited
- 2009 - Present Director,
EverGreen Plus Company
Limited

Mr.Woothisarn Tanchai

Independent Director/ Chairman of Nomination and Remuneration Committee

No. of share on 31 December 2015: None
Age: 57 Position Starting Date: 19 June 2015

Education/Training

- Bachelor of Science, Khon Kaen University
- Master of Public Administration, National Institute of Development Administration (NIDA)
- Master of Policy Science (M.P.S.), International Program, Saitama University, Japan
- Public Law Certificate, Faculty of Law, Thammasat University
- Public Director Certification Program, King Prajadhipok's Institute, Class 1

Experience

- Oct. 2014 - Apr. 2015 Member of Risk Management Committee, IRPC Public Company Limited
- Apr. 2013 - Apr. 2015 Chairman of Nomination and Remuneration Committee, IRPC Public Company Limited
- 2012 Member of Audit Committee, IRPC Public Company Limited
- Apr. 2009 - Apr. 2015 Independent Director, IRPC Public Company Limited

Current Position

Current Position in Public Companies

- Jun. 2015 - Present Independent Director/ Chairman of Nomination and Remuneration Committee, IRPC Public Company Limited

Current Position in Limited Companies and Others

- Dec. 2014 - Present Secretary General, King Prajadhipok's Institute
- Present Advisor, Constitution Drafting Committee 2014
- Present Member, Nakhon Ratchasima Rajabhat University Council
- Present Member of the National Culture Commission
- Present Sub-Committee, the Public Sector Development Commission Office of the Public Sector Development Commission
- Present Member of the Office of the Basic Education Commission

Mr.Songpope Polachan

Independent Director/ Member of Nomination and Remuneration Committee/ Member of Audit Committee

No. of share on 31 December 2015: None
Age: 61 Position Starting Date: 5 April 2013

Education/Training

- Bachelor of Science (Geology), Chiangmai University
- Ph.D. (Petroleum Geology), Royal Holloway and Bedford New College, University of London, U.K.
- Top Executive Program in Administrative Justice Development, Administrative Justice Development Institute, Class 3
- The Executive Program in Energy Literacy for a Sustainable Future, Thailand Energy Academy (TEA), Class 2
- Diploma, National Defence College, Class 50
- Advanced Executive Program, Kellogg School of Management, Northwestern University, USA
- ASEAN Executive Program, New York, USA
- Senior Executive Service Course, Office of the Civil Service Commission, Class 42
- Director Accreditation Program (DAP), Thai Institute of Directors (IOD), Class 23/2004
- Finance for Non-Finance Directors Program (FND) Thai Institute of Directors (IOD), Class 9/2004
- The Board's Role in Strategic Formulation, Governance Matters Australia

Experience

- Jul. 2014 - Sep. 2014 Inspector General, Ministry of Energy
- Apr. 2013 - Oct. 2014 Director, IRPC Public Company Limited
- 2010 - 2014 Director General, Department of Mineral Fuels, Ministry of Energy
- 2006 - 2010 Deputy Director-General, Department of Mineral Fuels, Ministry of Energy
- 2002 - 2006 Director of Policy and Strategy Coordination, Office of the Permanent Secretary, Ministry of Energy
- 2000 Head of Policy and Planning, Mineral Fuel Division, Department of Mineral Resources
- 1996 Deputy Chief Executive Office, the Malaysia-Thailand Joint Authority (MTJA)

Current Position

Current Position in Public Companies

- Jun. 2015 - Present Member of Audit Committee, IRPC Public Company Limited
- Oct. 2014 - Present Independent Director, IRPC Public Company Limited
- Apr. 2013 - Present Member of Nomination and Remuneration Committee, IRPC Public Company Limited

Mr. Sarun Rungkasiri

Director/ Chairman of Risk Management Committee/ Member of Nomination and Remuneration Committee

No. of share on 31 December 2015: None
Age: 58 Position Starting Date: 15 October 2013

Education/Training

- B.Eng. (Industrial Engineering), Chulalongkorn University
- M.S. Management, Polytechnic Institute of New York., USA
- NIDA: Wharton Executive Leadership Program 2009, The Wharton School of the University of Pennsylvania, USA
- The Joint State - Private Sector Course, National Defense College, Class 23
- Top Executive in Industrial Development and Investment, Institute of Business and Industrial Development (IBID), Class 1
- The Executive Program in Energy Literacy for a Sustainable Future, Thailand Energy Academy (TEA), Class 5
- Company Secretary Program (CSP), Thai Institute of Directors (IOD), Class 8/2004
- Director Certification Program (DCP), Thai Institute of Directors (IOD), Class 61/2005
- Finance for Non-Finance Directors Program (FND), Thai Institute of Directors (IOD), Class 19/2005

Experience

- 2011- Sep. 2013 Senior Executive Vice President, Oil Business Group, PTT Public Company Limited
- 2011- Sep. 2013 Chairman, PTT Retail Business Company Limited (PTTRB)
- 2011- Sep. 2013 Chairman, PTT Retail Management Company Limited (PTTRM)
- 2011- Sep. 2013 Chairman, Thai Petroleum Pipeline Company Limited (Thappline)
- 2010 - 2011 Executive Vice President, Retail Marketing, PTT Public Company Limited
- 2009 - 2010 Executive Vice President, Commercial & International Marketing, PTT Public Company Limited
- 2008 - 2009 Executive Vice President, Corporate Communication & Social Responsibility, PTT Public Company Limited

Current Position

Current Position in Public Companies

- Jun. 2015 - Present Member of Nomination and Remuneration Committee, IRPC Public Company Limited
- Oct. 2014 - Present Chairman of Risk Management Committee, IRPC Public Company Limited
- Oct. 2013 - Present Director, IRPC Public Company Limited
- Oct. 2013 - Present Chief Operating Officer, Downstream Petroleum Business Group, PTT Public Company Limited
- Oct. 2013 - Present Director/ Member of Nomination and Remuneration Committee/ Member of Risk Management Committee, PTT Global Chemical Public Company Limited

Mr. Watcharakiti Watcharothai

Independent Director/ Chairman of Corporate Governance Committee

No. of share on 31 December 2015: 260,250 (%) Share Possession: 0.00127
Age: 55 Position Starting Date: 5 April 2011

Education/Training

- Bachelor of Arts (Political Science), Kasetsart University
- Master of Public Administration (M.P.A.), Roosevelt University, IL., USA
- Honorary Degree of Doctor of Philosophy, Department of Administration, Ramkhamhaeng University
- Doctor of Business Administration (Honorary), Management, Thongsook College
- Diploma, The State Private Political Sector Course, National Defence College, Class 4/2006
- Capital Market Academy Leadership Program, Capital Market Academy (CMA), Class 9/2009
- Public Director Certification Program, Public Director Institute (PDI), Class 5/2010
- The Program for Senior Executive on Justice, Administration Batch, National Justice Academy, Class 15/2010
- Top Executive Program in Commerce and Trade (TEPCoT) Commerce Academy, Class 5
- The Executive Program in Energy Literacy for a Sustainable Future, Thailand Energy Academy (TEA), Class 1/2011
- Power of the Kingdom, Chula Unisearch, Chulalongkorn University, Class 1/2012
- Diploma, Top Executive Program in industrial development and investment (IBID), Institute of Business and Industrial Development, Class 1
- The Urban Development and Administration Training Course for the executive administrators, (Mahanakorn Class 3), Urban Green development Institute (URB-GREEN)
- Director Certification Program (DCP), Thai Institute of Directors (IOD), Class 121/2009
- The Board's Role in Strategic Formulation, Governance Matters Australia

Experience

- Apr. 2011 - Aug. 2014 Director, IRPC Public Company Limited
- 2001 - 2007 Assistant of Lord Chamberlain, Bureau of the Royal Household

Current Position

Current Position in Public Companies

- Oct. 2014 - Present Chairman of Corporate Governance Committee, IRPC Public Company Limited
- Aug. 2014 - Present Independent Director, IRPC Public Company Limited
- Present Independent Director/ Member of Corporate Governance Committee, PTT Public Company Limited

Current Position in Limited Companies and Others

- Present Grand Chamberlain, Bureau of the Royal Household
- Present Committee Member of The Red Cross Fair, Thai Red Cross
- Present Chairman of Parents & Teachers Association, Rachavinit Prathom School
- Present Member of the Board of Directors, Suan Sunanda Rajabhat University
- Present Member of the Board of Directors, Suan Dusit Rajabhat University

Mr. Pramoul Chanpong

Director/ Member of Corporate Governance Committee

No. of share on 31 December 2015: None
Age: 60 Position Starting Date: 1 April 2014

Education/Training

- Bachelor of Engineering in Electrical Engineering (Electrical Power), Rajamangala Institute of Technology
- Master of Arts (Political Science), Kasetsart University
- Certificate of Rational Use of Energy, Asian Institute of Technology (AIT)
- Professional Engineer
- Diploma, The State Private Political Sector Course, National Defence College, Class 6
- Senior Executive Training Course, The Civil Service Training Institute, Office of the Civil Service Commission, Batch 45
- Energy Executive Course, Ministry of Energy, Class 2
- The Course for Middle Executive Officer, Ministry of Science and Technology
- The Board's Role in Strategic Formulation, Governance Matters Australia

Experience

- 2013 - 2014 Director - General, Dept. Of Alternative Energy Development and Efficiency
- 1997 - 2001 Subcommittee and Secretary to Consider Machineries and Equipment for Energy Efficiency and Environmental Conservation, Ministry of Science and Technology
- 1997 - 2001 and 2009 - 2010 Director, committee to Consider Machineries and Equipment for Energy Efficiency and Environmental Conservation, Ministry of Science and Technology
- 1994 - 2006 Lecturer, Faculty of Engineering, Chiang Mai University/ King Mongkut's University of Technology North Bangkok/ Ramkhamhaeng University

Current Position

Current Position in Public Companies

- Apr. 2014 - Present Director, IRPC Public Company Limited
- Oct. 2014 - Present Member of Corporate Governance Committee, IRPC Public Company Limited

Current Position in Limited Companies and Others

- Jul. 2014 - Present Inspector General, Ministry of Energy

Mr. Triumph Jalichandra

Independent Director/ Member of Audit Committee

No. of share on 31 December 2015: None
Age: 57 Position Starting Date: 22 May 2012

Education/Training

- Bachelor of Law, Ramkhamhaeng University
- Barrister at law, Institute of Legal Education of the Thai Bar
- Master of Law, Bristol University, England
- Diploma, The Joint State-Private Sector Course, National Defence College, Class 54
- Capital Market Academy Leader Program, Capital Market Academy, Class 16

Experience

- 2011 - 2012 Director, Corporation for Small Enterprise Funding
- 2003 - 2004 Advisor, Software Industry Promotion Agency (Public Organization)
- 2002 - 2011 Debt Restructuring Committee, Thai Assets Management Corporation - TAMC

Current Position

Current Position in Public Companies

- Jul. 2012 - Present Member of Audit Committee, IRPC Public Company Limited
- Apr. 2012 - Present Independent Director, IRPC Public Company Limited

Current Position in Limited Companies and Others

- 2013 - Present Senior Expert Public Prosecutor, Department of Legal counsel Office of the Attorney General
- 2002 - Present Debt Restructuring Committee, Sukhumvit Asset Management Corporation
- 2002 - Present Legal Advisor, Government Housing Bank

Mr. Somnuk Bomrungsalee

Director

No. of share on 31 December 2015: None
Age: 58 Position Starting Date: 9 April 2014

Education/Training

- Bachelor of Engineering (Civil Engineering), King Mongkut's University of Technology Thonburi (Kmutt)
- Master of Public and Private Management, The National Institute of Development Administration (NIDA)
- Energy Executive Course, Ministry of Energy, Class 2/2008
- Executive Training Course, Office of the Civil Service Commission, Class 65/2009
- Course in Politics and Governance in Democratic Systems for Executives, King Prajadhipok's Institute, Class 16/2012
- Executive Training Course 2, Office of the Civil Service Commission, Class 5/2013
- The Executive Program in Energy Literacy for a Sustainable Future, Thailand Energy Academy (TEA), Class 5/2014
- The Program for Senior Executive on Justice, Administration Batch, National Justice Academy, Class 20/2015

Experience

- 2013 - 2014 Director - General, Department of Energy Business, Ministry of Energy
- 2011 - 2013 Deputy Director General, Department of Energy Business
- 2006 - 2011 Director, Bureau of Fuel Business Safety, Department of Energy Business

Current Position

Current Position in Public Companies

- Apr. 2014 - Present Director, IRPC Public Company Limited

Current Position in Limited Companies and Others

- Jul. 2014 - Present Inspector General, Ministry of Energy

Lieutenant General Sasin Thongpakdee

Independent Director/ Member of Corporate Governance Committee

No. of share on 31 December 2015: None
Age: 57 Position Starting Date: 1 September 2014

Education/Training

- Armed Forces Academy Preparatory School
- Chulachomklao Royal Military Academy
- Royal Thai Army Command and General Staff College, Class 68/1989
- Joint Services Staff College, Thailand, Class 40/1998
- National Defence College, The Joint State - Private Sector Course, Class 24/2011
- Armour Officer Advance Course, Class 7/87, FT.KNOX, KY, USA
- Junior Maintenance Officer Course, FT.KNOX, KY, USA (1988)
- The Board's Role in Strategic Formulation, Governance Matters Australia

Experience

- 2007 Deputy Director-General, Directorate of Operations, RTA
- 2003 Director, Directorate of Operations, RTA
- 2000 Staff Officer Attached to Directorate of Operations, RTA
- 1997 Deputy Director, Directorate of Operations, RTA

Current Position

Current Position in Public Companies

- Oct. 2014 - Present Member of Corporate Governance Committee, IRPC Public Company Limited
- Sep. 2014 - Present Independent Director, IRPC Public Company Limited

Current Position in Limited Companies and Others

- 2012 - Present Director-General, Directorate of Operations, RTA

Mr. Prasit Suebchana

Director/ Member of Risk Management Committee

No. of share on 31 December 2015: None

Age: 58 Position Starting Date: 18 November 2014 (Until 4 January 2016)

Education/Training

• Bachelor of Law, Ramkhamhaeng University	• 2014 - 2015	Deputy Permanent Secretary, Ministry of Finance
• Master of Public Administration, National Institute of Development Administration (NIDA)	• 2012 - 2014	Director, Don Muang Tollway Public Company Limited
• Mini MBA, Thammasat University		Vice Chairman, Dhanarak Asset Development Company Limited
• Strategic for Improving Director' Effectiveness Program, Kellogg School of Management, U.S.A	• 2011 - 2015	Chairman of the Board of Directors, Government Housing Bank
• National Defence of the State, Private Sectors and Political Sectors Course, The National Defence College	• 2011 - 2014	Inspector General
• Chief Information Officer (CIO), Human Resources Institute, Thammasat University, Class 10	• 2010 - 2014	Director, N.C.C. Management and Development Company Limited
• People for HR Executive, Human Resources Institute, Thammasat University, Class 2	• 2010 - 2012	Director, PEA ENCOM International Company Limited
• Top Executive Development Program, Office of The Civil Service Commission		Chairman of Audit Committee, National Housing Authority
• Corporate Governance Program for Directors and Top Executive of State Enterprises and Public Organizations 2010, Public Director Institute (PDI), King Prajadhipok's Institute, Class 5	• 2010	Director of National Housing Authority
• The Program for Senior Executive on Justice, Administration Batch, National Justice Academy, Class 15	• 2009 - 2011	Property Valuation Development Advisor, The Treasury Department
• Top Executive Program in Commerce and Trade (TEPCoT), Class 5	• 2009 - 2011	Director, Dhippaya Insurance Public Company Limited
• The Training Course on Administrative Justice for Executives, Administrative Justice Development Institute, Class 5	• 2008 - 2010	Director, Bangpra Golf International Company Limited
• Director Certificate Program (DCP), Thai Institute of Directors (IOD), Class 90/2007	• 2008 - 2010	Deputy Director General, The Treasury Department
• Audit Committee Program (ACP), Thai Institute of Directors (IOD), Class 20/2007	• 2007 - 2008	
	• 2006 - 2008	

Experience

• Jun. 2015 - Jan. 2016	Member of Risk Management Committee, IRPC Public Company Limited
• 2015	Chairman of Executive Committee, Government Savings Bank
• 2014 - Jan. 2016	Director, IRPC Public Company Limited
• 2014 - 2015	Director, Government Savings Bank
• 2014 - 2015	Director Disciplinary Budgeting and Monetary, Office of the Auditor General

Current Position

Current Position in Limited Companies and Others

• 2015 - Present	Inspector General
• 2014 - Present	Director, Provincial Electricity Authority
• 2013 - Present	Director, Judicial Service Officers
• 2007 - Present	Advisor, The Administrative Court

Mr.Chansin Treenuchagron

Director

No. of share on 31 December 2015: None

No. of share on 11 February 2016: 500,000 (%) Share Possession: 0.00245

Age: 55 Position Starting Date: 20 October 2015

Education/Training

- Bachelor of Economics Program, Thammasat University
- Master of Economic, Chulalongkorn University
- Executive Development Relation, Directorate of Civil Affairs, Class 1
- Air War College, Class 35/2006
- Senior Executive Program (SEP-20), Sasin Graduate Institute of Business Administration of Chulalongkorn University, Class 20
- PTT Executive Leadership, General Electric, GE, New York, USA
- Advance Senior Executive Program (ASEP-5), KELLOGG & SASIN, Chicago, USA, Class 5/2010
- Advanced Certificate Course in Public Economics Management for Executives, King Prajadhipok's Institute, Class 10
- Leadership Excellence through Awareness and Practice (LEAP), INSEAD, Singapore & France
- Leadership Development Program III (LDP III), PTT Public Company Limited, Class 1/2014
- The National Defence College (NDC), Class 57/2014
- The Executive Program in Energy Literacy for a Sustainable Future, Thailand Energy Academy (TEA7), Class 7/2015
- Director Certification Program (DCP), Thai Institute of Directors (IOD), Class 85/2007
- Financial Statements for Directors (FSD), Thai Institute of Directors (IOD), Class 12/2011
- Director Accreditation Program (DAP), Thai Institute of Directors (IOD), Class 93/2011
- Director Luncheon Briefing (M-DLB), Thai Institute of Directors (IOD), Class 1/2013
- Director Dinner Talk (M-DDT), Thai Institute of Directors (IOD), Class 1/2014
- Chartered Director Class (CDC), Thai Institute of Directors (IOD), Class 11/2015

Experience

- Oct. 2015 - Dec. 2015 Senior Executive Vice President, Petrochemicals & Refining Business Unit PTT Public Company Limited
- Apr. 2015 - Oct. 2015 Director, Thai Oil Public Company Limited
- Oct. 2014 - Sep. 2015 Senior Executive Vice President, Corporate Strategy, PTT Public Company Limited
- Oct. 2014 - Dec. 2015 Chairman, PTT Green Energy (Thailand) Company Limited

- Mar. 2013 - Sep. 2014 Senior Executive Vice President, Corporate Commercial and Marketing, IRPC Public Company Limited
- Nov. 2012 - Sep. 2014 Director, PTT Polymer Marketing Company Limited
- Jun. 2012 - Sep. 2014 Director, UBE Chemical (Asia) Public Company Limited
- Jun. 2012 - Sep. 2014 Director, PTT Polymer Logistics Company Limited
- Feb. 2012 - 2014 Director, Rayong Acetylene Company Limited
- Dec. 2011 - Jun. 2014 Director, Technology IRPC Company Limited
- Nov. 2011 - Sep. 2014 Director, IRPC Polyol Company Limited
- Nov. 2011 - Aug. 2014 Chairman, Rak Pa Sak Company Limited
- Oct. 2011 - Feb. 2013 Senior Executive Vice President, Corporate Port and Asset Management Business Unit, IRPC Public Company Limited

Current Position

Current Position in Public Companies

- Oct. 2015 - Present Director, IRPC Public Company Limited
- Jan. 2016 - Present Senior Executive Vice President, Downstream Business Group Alignment, PTT Public Company Limited

Current Position in Limited Companies and Others

- Nov. 2015 - Present Chairman, PTT Polymer Marketing Company Limited
- Nov. 2015 - Present Chairman, PTT Polymer Logistics Company Limited

Mr.Chavalit Punthong

Director

No. of share on 31 December 2015: None
Age: 59 Position Starting Date: 17 November 2015

Education/Training

- Bachelor of Engineering (Mechanical), Kasetsart University
- MBA, Central Missouri State University, USA.
- Senior Executive Program (SEP), Sasin Graduate Institute of Business Administration of Chulalongkorn University
- PTT : GE Executive Leadership Program, GE Croton Ville, USA
- Nida : Wharton Executive Leadership Program 2009, The Wharton School, University of Pennsylvania, USA
- Capital Market Academy (CMA) Leadership Program, class 18
- Director Certification Program (DCP), Thai Institute of Directors (IOD), Class 177/2013

Experience

- 2013 - Nov. 2015 Chairman, Thai Petroleum Pipeline Company Limited (Thapline)
- 2013 - 2015 Senior Executive Vice President, Oil Business Unit, PTT Public Company Limited
- 2012 - Nov. 2015 Chairman, PTT Retail Management Company Limited (PTTRM)
- 2012 - Nov. 2015 Chairman, PTT Retail Business Company Limited (PTTRB)
- 2011 - 2013 Executive Vice President, Retail Marketing, PTT Public Company Limited
- 2010 - 2011 Executive Vice President, Commercial & International Marketing, PTT Public Company Limited

Current Position

Current Position in Public Companies

- Oct. 2015 - Present Chief Operating Officer Infrastructure and Sustainability Management Business Group, PTT Public Company Limited
- Nov. 2015 - Present Director, IRPC Public Company Limited
- Dec. 2015 - Present Director, Global Power Synergy Public Company Limited

Mr.Ekniti Nitithanprapas

Director

No. of share on 31 December 2015: None
Age: 44 Position Starting Date: 17 November 2015

Education/Training

- B.A. in Economics, (Honor), Thammasat University
- M.S. in Economics/ Policy Economics, University of Illinois at Urbana-Champaign USA
- Ph.D. in Economics/ Macroeconomics and International Finance, Claremont Graduate University USA
- Advanced Certificate Course in Public Administration and Law for Executives, King Prajadhipok's Institute, Class 9/2011
- Director Certification Program (DCP), Thai Institute of Directors (IOD) Class 93/2007
- Corporate Governance for Capital Market Intermediaries (CGI), Thai Institute of Directors (IOD), Class 4/2015

Experience

- 2015 International Economic Advisor of Fiscal Policy Office, Ministry of Finance
- 2012 - 2015 Deputy Director-General of Fiscal Policy Office, Ministry of Finance
- 2010 - 2015 Minister (Economics and Finance), Office of Economics and Financial Affairs for U.K. and Europe, Royal Thai Embassy, U.K.

Current Position

Current Position in Public Companies

- Nov. 2015 - Present Director, IRPC Public Company Limited

Current Position in Limited Companies and Others

- 2015 - Present Director-General of the State Enterprise Policy Office, Ministry of Finance

Mr. Sukrit Surabotsopon

Director/ Member of Risk Management Committee/ President / Secretary of the Board of Directors

No. of share on 31 December 2015: 7,000,000 (%) Share Possession: 0.03426
Age: 57 Position Starting Date: 1 October 2013

Education/Training

- Bachelor of Engineering in Chemical Engineering with 2nd Class Honor, Chulalongkorn University
- TLCA Executive Development Program (EDP), Thai Listed Company Association, Class 3/2009
- Politics and Governance in Democratic Systems for Executives Course, King Prajadhipok's Institute, Class 15/2012
- Capital Market Academy Leader Program, Capital Market Academy, Class 16/2013
- The Joint State - Private Sector Course, National Defence College, Class 26/2013
- The Executive Program in Energy Literacy for a Sustainable Future, Thailand Energy Academy (TEA), Class 6/2015
- Director Certification Program (DCP), Thai Institute of Directors (IOD), Class 132/2010
- Audit Committee Program (ACP), Thai Institute of Directors (IOD), Class 38/2012
- Monitoring the System of Internal Control & Risk Management (MIR), Thai Institute of Directors (IOD), Class 12/2012
- The Board's Role in Strategic Formulation, Governance Matters Australia

Experience

- Nov. 2013 - Jun. 2015 Director, PTT Polymer Marketing Company Limited
- Jan. 2012 - Oct. 2013 Director, PTT International Company Limited
- Oct. 2011 - Sep. 2013 Director, PTT Global Chemical Public Company Limited
- Jan. 2010 - Sep. 2013 Senior Executive Vice President, Petrochemicals & Refining Business Unit, PTT Public Company Limited
- Mar. 2009 - Oct. 2013 Director, Star Petroleum Refining Public Company Limited

- 2009 - 2010 Executive Vice President, Subsidiary Planning & Management, Petrochemicals & Refining Business Unit, PTT Public Company Limited
- 2008 - 2009 Assistant Managing Director, Strategic Planning and Business Development, Thai Oil Public Company Limited
- 2007 - 2008 Assistant Managing Director, Business, Thai Oil Public Company Limited

Current Position

Current Position in Public Companies

- Oct. 2013 - Present Director/ President/ Secretary of the Board of Directors, IRPC Public Company Limited
- Oct. 2014 - Present Member of Risk Management Committee, IRPC Public Company Limited
- Oct. 2013 - Present Senior Executive Vice President, Downstream Petroleum Business Group, PTT Public Company Limited
- Nov. 2013 - Present Director, UBE Chemicals (Asia) Public Company Limited

Current Position in Limited Companies and Others

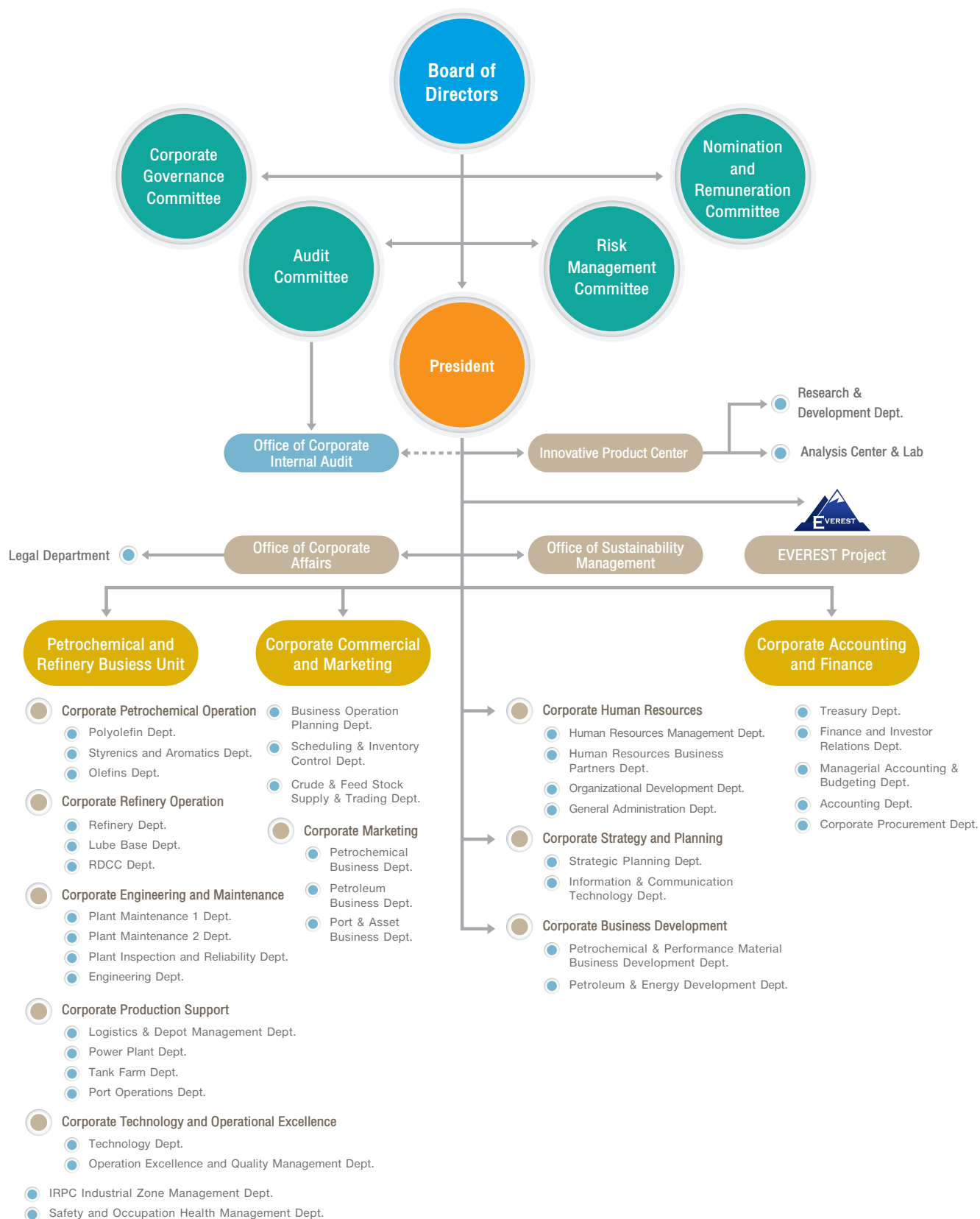
- Mar. 2015 - Present Chairman, IRPC Technology Company Limited
- Feb. 2015 - Present Chairman, IRPC PCC Company Limited
- Aug. 2014 - Present Chairman, IRPC Oil Company Limited
- Aug. 2014 - Present Chairman, Thai ABS Company Limited
- Aug. 2014 - Present Chairman, IRPC Polyol Company Limited
- Nov. 2013 - Present Chairman, IRPC A&L Company Limited

The Directors who resigned during the year 2015

- | | | |
|-----------------------------|--------------------------|-----------------------------------|
| 1. Mr.Pailin Chuchottaworn | Tendered his resignation | with effect from 9 September 2015 |
| 2. Mr.Sombat Narawutthichai | Tendered his resignation | with effect from 1 May 2015 |
| 3. Mr.Surong Bulakul | Tendered his resignation | with effect from 20 May 2015 |
| 4. Mr.Wasan Soyphisudh | Tendered his resignation | with effect from 1 September 2015 |
| 5. Mr.Auttapol Rerkpiboon | Tendered his resignation | with effect from 1 October 2015 |
| 5. Mr.Somchai Sujjapongse | Tendered his resignation | with effect from 30 October 2015 |

ORGANIZATION STRUCTURE

IRPC Public Company Limited



EXECUTIVES



**Mr. Peerapong
Achariyacheevin**

Senior Executive
Vice President,
Petrochemical & Refinery
Business Unit
*(End of Contract
at 31 December 2015)*

**Mr. Pongpraphan
Titathavewatana**

Senior Executive Vice President,
Petrochemical & Refinery
Business Unit/
Acting Executive Vice President,
Refinery Operation

**Mr. Sukrit
Surabotsopon**

President

**Mrs. Rachadaporn
Rajchataewindra**

Senior Executive
Vice President,
Corporate Accounting &
Finance

**Mr. Somkiat
Lertritpuwadol**

Senior Executive Vice President,
Corporate Commercial and
Marketing/
Acting Executive Vice President,
Corporate Marketing



**Mr. Thammasak
Panyowatkool**

Executive Vice President,
Officiate as Office of Internal Audit
Manager and Secretary of
Audit Committee

**Miss Monwipa
Choopiban**

Executive Vice President,
Corporate Affairs/
Company Secretary

**Mr. Pravet
Assavadakorn**

Executive Vice President,
Innovative Product Center

**Miss Awrapin
Ketratanakul**

Executive Vice President,
Sustainability Management
Office



**Mr. Sirimet
Leepagorn**

Executive Vice President,
EVEREST Project Director



**Mr. Kraisit
Anukoolutaiwong**

Executive Vice President,
Corporate Human Resource



**Miss Wanida
Utaisomnapa**

Executive Vice President,
Corporate Business Planning



**Mr. Chalor
Panutrakul**

Executive Vice President,
Corporate Business Development



**Mr. Veerawat
Srinoradithlert**

Executive Vice President,
Engineering & Maintenance

**Mr. Trisdee
Watanangkur**

Executive Vice President,
Operation Support

**Mr. Woravuth
Sivapetranart**

Executive Vice President,
Technology & Operational
Excellence

**Mr. Vichi
Nittayanonte**

Executive Vice President,
Petrochemical Operation

**Mr. Phothiwat
Paopongchuang**

Executive Vice President/
Managing Director,
Technology IRPC Co., Ltd

Mr. Sukrit Surabotsopon

President

No. of share on 31 December 2015: 7,000,000
(%) Share Possession: 0.03426
Age: 57

Education/Training

- Bachelor of Engineering in Chemical Engineering with 2nd Class Honor, Chulalongkorn University
- TLCA Executive Development Program (EDP), Thai Listed Company Association, Class 3/2009
- Politics and Governance in Democratic Systems for Executives Course, King Prajadhipok's Institute, Class 15/2012
- Capital Market Academy Leader Program, Capital Market Academy, Class 16/2013
- The Joint State - Private Sector Course, National Defence College, Class 26/2013
- Energy Literacy Executive Management Program, Thailand Energy Academy (TEA), Class 6/2015
- Director Certification Program (DCP), Thai Institute of Directors (IOD), Class 132/2010
- Audit Committee Program (ACP), Thai Institute of Directors (IOD), Class 38/2012
- Monitoring the System of Internal Control & Risk Management (MIR), Thai Institute of Directors (IOD), Class 12/2012
- The Board's Role in Strategic Formulation, Governance Matters Australia

Experience

- Nov. 2013 - Jun. 2015 Director, PTT Polymer Marketing Company Limited
- Jan. 2012 - Oct. 2013 Director, PTT International Company Limited
- Oct. 2011 - Sep. 2013 Director, PTT Global Chemical Public Company Limited
- Jan. 2010 - Sep. 2013 Senior Executive Vice President, Petrochemicals & Refining Business Unit, PTT Public Company Limited
- Mar. 2009 - Oct. 2013 Director, Star Petroleum Refining Public Company Limited

- 2009 - 2010 Executive Vice President, Subsidiary Planning & Management, Petrochemicals & Refining Business Unit, PTT Public Company Limited
- 2008 - 2009 Assistant Managing Director, Strategic Planning and Business Development, Thai Oil Public Company Limited
- 2007 - 2008 Assistant Managing Director, Business, Thai Oil Public Company Limited

Current Position

Current Position in Public Companies

- Oct. 2013 - Present Director/ President/ Secretary of the Board of Directors, IRPC Public Company Limited
- Oct. 2014 - Present Member of Risk Management Committee, IRPC Public Company Limited
- Oct. 2013 - Present Senior Executive Vice President, Downstream Petroleum Business Group, PTT Public Company Limited
- Nov. 2013 - Present Director, UBE Chemicals (Asia) Public Company Limited

Current Position in Limited Companies and Others

- Mar. 2015 - Present Chairman, IRPC Technology Company Limited
- Feb. 2015 - Present Chairman, IRPC PCC Company Limited
- Aug. 2014 - Present Chairman, IRPC Oil Company Limited
- Aug. 2014 - Present Chairman, Thai ABS Company Limited
- Aug. 2014 - Present Chairman, IRPC Polyol Company Limited
- Nov. 2013 - Present Chairman, IRPC A&L Company Limited

Mr. Pongraphan Titathavewatana

Senior Executive Vice President, Petrochemical & Refinery Business Unit/ Acting Executive Vice President, Refinery Operation

No. of share on 31 December 2015: 264,478

(%) Share Possession: 0.00129

Age: 57

Education/Training

- Bachelor of Science (Chemistry), Khon Kaen University
- Mini MBA, Thammasart University
- Certificate of Executive Education Program for Senior Management, Fiscal Policy Research Institute Foundation, year 2009

Experience

- 2014 - 2015 Executive Vice President, Refinery Operation, IRPC Public Company Limited
- 2013 - 2014 Executive Vice President Asset Management, Executive Vice President Port Business (Acting), IRPC Public Company Limited
- 2011 - 2013 Executive Vice President Operation 4, IRPC Public Company Limited
- 2010 - 2011 Executive Vice President Operation 3, IRPC Public Company Limited

Current Position

Current Position in Public Companies

- Jan. 2016 - Present Senior Executive Vice President, Petrochemical & Refinery Business Unit, IRPC Public Company Limited
- Jan. 2016 - Present Acting Executive Vice President, Refinery Operation, IRPC Public Company Limited

Current Position in Limited Companies and Others

- Jan. 2016 - Present Director, IRPC Clean Power Company Limited

Mr. Somkiat Lertritpuwadol

Senior Executive Vice President, Corporate Commercial and Marketing/ Acting Executive Vice President, Corporate Marketing

No. of share on 31 December 2015: 311,480

(%) Share Possession: 0.00152

Age: 53

Education/Training

- Bachelor of Science (Chemistry), Ramkhamhaeng University
- Master of Business Administration, Asian University
- Mini MBA, Thammasart University
- Director Accreditation Program (DAP), Thai Institute of Directors (IOD), Class 111/2014
- The Board's Role in Strategic Formulation, Governance Matters Australia

Experience

- Oct. 2012 - May 2015 Director, TPI Internet Portal Company Limited
- 2011 - 2015 Executive Vice President, Corporate Marketing, IRPC Public Company Limited
- 2010 - 2011 Executive Vice President, Corporate Planning Supply Feedstock&Trading/ Acting Executive Vice President, Research and Development, IRPC Public Company Limited
- 2010 Vice President, Operation Planning/ Acting Vice President, Research&Development, IRPC Public Company Limited
- 2008 - 2009 Vice President, Complex 3, IRPC Public Company Limited
- 2006 - 2008 Assistant Vice President, Complex3, IRPC Public Company Limited
- 2000 - 2005 Department Manager, Lube Base Oil, IRPC Public Company Limited
- 1995 - 2000 Assistant Section Manager, Section Manger, Assistant Department Manager and Department Manager, DCC, IRPC Public Company Limited
- 1993 - 1995 Shift Supervisor ADU (1st Unit of IRPC OIL Refinery), IRPC Public Company Limited
- 1985 - 1993 Boardman, Shift Supervisor HDPE, IRPC Public Company Limited

Current Position

Current Position in Public Companies

- Jan. 2016 - Present Senior Executive Vice President, Corporate Commercial and Marketing, IRPC Public Company Limited
- Jan. 2016 - Present Acting Executive Vice President, Corporate Marketing, IRPC Public Company Limited
- Dec. 2015 - Present Director, UBE Chemical (Asia) Public Company Limited

Current Position in Limited Companies and Others

- Jan. 2016 - Present Acting Managing Director, IRPC OIL Company Limited
- Jan. 2016 - Present Acting Managing Director, IRPC A&L Company Limited
- Feb. 2015 - Present Director, IRPC-PCC Company Limited
- Dec. 2014 - Present Director, IRPC A&L Company Limited
- Feb. 2012 - Present Director, IRPC Oil Company Limited
- Feb. 2012 - Present Director, Thai ABS Company Limited

Mrs. Rachadaporn Rajchataewindra

Senior Executive Vice President, Corporate Accounting & Finance

No. of share on 31 December 2015 : 102,000
(%) Share Possession: 0.00050
Age: 57

Education/Training

- Bachelor of Art (Accounting), Chiangmai University
- Bachelor of Law, Sukhothai Thammathirat University
- Master of Business Administration, International Business (English Program), University of the Thai Chamber of Commerce
- PTT Group Leadership Development Program III, PLLI
- NIDA-Wharton Executive Leadership Program, The Wharton School University of Pennsylvania
- TLCA Executive Development Program (EDP), Thai Listed Companies Association, Class 4/2009
- Director Accreditation Program (DAP), Thai Institute of Directors (IOD), Class 111/2014
- Corporate Governance for Executive, Thai Institute of Directors (IOD), Class 1/2014
- Successful Formulation and Execution of Strategy, Thai Institute of Directors (IOD), Class 21/2014
- Director Certification Program (DCP), Thai Institute of Directors (IOD), Class 204/2015
- The Board's Role in Strategic Formulation, Governance Matters Australia

Experience

- 2010 - Oct. 2015 Vice President, Corporate, PTT Asahi Chemical Company Limited
- 2008 - 2010 Vice President, Planning & Subsidiaries Management Department, PTT Public Company Limited
- 2001 - 2008 Division Manager, Planning & Subsidiaries Management Department, PTT Public Company Limited
- 1996 - 2001 Senior Analyst, Petrochemical Business Unit, PTT Public Company Limited

- 1989 - 1996 Section Manager, Credit Department, Petroleum Authority of Thailand
- 1983 - 1989 Financial Officer, Accounting & Finance Department, Petroleum Authority of Thailand

Current Position

Current Position in Public Companies

- Dec. 2015 - Present Director, UBE Chemicals (Asia) Public Company Limited
- Nov. 2015 - Present Senior Executive Vice President, Corporate Accounting & Finance, IRPC Public Company Limited
- Nov. 2015 - Present Executive Vice President, Corporate Finance & Accounting, PTT Public Company Limited

Current Position in Limited Companies and Others

- Nov. 2015 - Present Director, IRPC Clean Power Company Limited
- Nov. 2015 - Present Director, IRPC A&L Company Limited
- Dec. 2015 - Present Director, IRPC OIL Company Limited
- Dec. 2015 - Present Director, Thai ABS Company Limited
- Dec. 2015 - Present Director, IRPC Polyol Company Limited

Mr. Thammasak Panyowatkool

Executive Vice President, Officiate as Office of Internal Audit Manager

No. of share on 31 December 2015 : None
Age: 49

Education/Training

- Bachelor of Science (Accounting), Kasetsart University
- Mini MBA : Executive Leadership Development Program Faculty of Commerce and Accountancy, Thammasat University
- The Manager Program, Management and Psychology Institute, Class 47
- The Board's Role in Strategic Formulation, Governance Matters Australia

Experience

- 2014 - 2015 Executive Vice President, Corporate Accounting, IRPC Public Company Limited
- 2013 - 2014 Acting Executive Vice President, Corporate Accounting, IRPC Public Company Limited
- 2010 - 2013 Vice President, Managerial Accounting Department, IRPC Public Company Limited

Current Position

Current Position in Public Companies

- Jan. 2016 - Present Executive Vice President, Officiate as Office of Internal Audit Manager
- Jan. 2016 - Present Secretary of Audit Committee IRPC Public Company Limited

Current Position in Limited Companies and Others

- 2015 - Present Director, IRPC Technology Company Limited

Mr. Pravet Assavadakorn

Executive Vice President, Innovative Product Center

No. of share on 31 December 2015 : 148,600
(%) Share Possession: 0.00073
Age: 57

Education/Training

- Bachelor of Chemical (Engineering), University of Tokyo
- Master of Chemical (Energy Engineering), University of Tokyo
- Director Accreditation Program (DAP), Thai Institute of Directors (IOD), Class 98/2012
- The Board's Role in Strategic Formulation, Governance Matters Australia

Experience

- 2009 - 2014 Executive Vice President, Corporate Business Development, IRPC Public Company Limited

Current Position

Current Position in Public Companies

- 2014 - Present Executive Vice President, Innovative Product Center, IRPC Public Company Limited

Miss Monwipa Choopiban

Executive Vice President, Corporate Affairs/ Company Secretary

No. of share on 31 December 2015 : None
Age: 57

Education/Training

- Bachelor of Education (English), Chulalongkorn University
- Master of Arts (English), Chulalongkorn University
- Master of Political Science (Political Communication), Political Communication College, Krirk University
- Fundamental Practice for Corporate Secretary, Thai Listed Companies Association (TLCA)
- Fundamentals of Law for Corporate Secretaries, Thai Listed Companies Association (TLCA)
- CGR Workshop: Enhancing Good Corporate based on CGR Scorecard
- London Global Convention on Corporate Governance and Sustainability Year 2011 and 2014
- CSR Thailand Conference: CSR Roadmap for ASEAN
- 10th International Conference on CSR Year 2016
- Thailand's 5th National Conference on Collective Action Against Corruption (CAC)
- Company Secretary Program (CSP), Thai Institute of Directors (IOD), Class 40/ 2011
- Director Certification Program (DCP), Thai Institute of Directors (IOD), Class 164/2012
- Director Certification Program Update (DPCU), Thai Institute of Directors (IOD), Class 3/2015
- Anti-Corruption: The Practical Guide (ACPG), Thai Institute of Directors (IOD), Class 24/2015
- The Board's Role in Strategic Formulation, Governance Matters Australia
- Thailand CG Forum, Governance as a driving force for business sustainabilities

Experience

- 2014 - 2015 Acting Executive Vice President, Corporate Affairs, IRPC Public Company Limited
- Oct. 2012 - Apr. 2015 Director, TPI Internet Portal Company Limited
- Feb. 2012 - Mar. 2015 Director, IRPC Oil Company Limited

- 2011 - 2014 Vice President, President Office and Company Secretary Acting Executive Vice President, Corporate Affairs IRPC Public Company Limited
- 2009 - 2010 Manager Corporate Governance Division, PTT Aromatics and Refining Public Company Limited
- 2010 Vice President Corporate Compliance & Communication Department, PTT Aromatics and Refining Public Company Limited
- 2010 - 2011 Vice President, Corporate Compliance and Communication and Company Secretary, PTT Aromatics and Refining Public Company Limited

Current Position

Current Position in Public Companies

- 2015 - Present Executive Vice President, Corporate Affairs, IRPC Public Company Limited
- 2013 - Present Secretary of Nomination and Remuneration Committee, IRPC Public Company Limited
- 2012 - Present Company Secretary/Secretary of Corporate Governance Committee, IRPC Public Company Limited
- 2011 - Present Secretary of the Management Committee, IRPC Public Company Limited

Current Position in Limited Companies and Others

- 2015 - Present Director, Technology IRPC Company Limited

Miss Awrapin Kettranakul

Executive Vice President, Sustainability Management Office

No. of share on 31 December 2015 : 92,721
(%) Share Possession: 0.00045
Age: 56

Education/Training

- Bachelor of Science (Medical Technology), Mahidol University
- Master of Science (Environmental Engineering), Asian Institute of Technology
- Doctor of Engineering (Urban Engineering), The University of Tokyo (TODAI), Tokyo, Japan.
- Mini MBA, Thammasat University
- Leadership Great Leaders, Great Teams, Great Results By PacRim
- Management Accounting for Non - Financial Executives, Federation of Accounting Professions
- Air Emission Abatement Technology for Petroleum&Petrochemical industry, The Overseas Human Resources and Industry Development Association (HIDA)
- Change Acceleration Process, GE
- PTT Group VP Leadership Development Program, PTT Public Company Limited
- Executive Development Program 2010, Fiscal Policy Research Institute Foundation Kingdom of Thailand
- The Board's Role in Strategic Formulation, Governance Matters Australia

Experience

- 2012 - 2014 Executive Vice President, Corporate Quality, Safety, Occupational Health& Environment Department, IRPC Public Company Limited
- 2008 - 2012 Vice President, Department of Corporate Quality Safety Health and Environment, IRPC Public Company Limited

Current Position

Current Position in Public Companies

- 2014 - Present Executive Vice President, Sustainability Management Office, IRPC Public Company Limited

Mr.Sirimet Leepagorn

Executive Vice President, EVEREST Project Director

No. of share on 31 December 2015 : 93,154
(%) Share Possession: 0.00046
Age: 48

Education/Training

- Bachelor of Science (Chemistry), Chiang Mai University
- Master of Business Administration, Burapha University
- PTT Leadership Development Program(LDP II), Harvard Business School
- GE Leadership Development Program
- Director Certification Program (DCP), Thai Institute of Directors (IOD), Class 205/2015

Experience

- Feb 2015-Feb 2016 Secretary of the Risk Management Committee, IRPC Public Company Limited
- Oct. 2014 - 2015 Executive Vice President, Corporate Business Planning, IRPC Public Company Limited
- Jul. 2013 - Sep. 2014 Acting Executive Vice President, Corporate Business Planning, IRPC Public Company Limited
- 2010 - 2013 Vice President Refinery and Related Business Development, IRPC Public Company Limited

Current Position

Current Position in Public Companies

- Jan. 2016 - Present Executive Vice President, EVEREST Project Director

Current Position in Limited Companies and Others

- Jan. 2015 - Present Acting President, IRPC Clean Power Company Limited
- Sep. 2014 - Present Director, IRPC Clean Power Company Limited
- Feb. 2012 - Present Director, IRPC Oil Company Limited

Mr. Kraisit Anukoolutaiwong

Executive Vice President, Corporate Human Resource

No. of share on 31 December 2015: 1
(%) Share Possession: 0.00000
Age: 54

Education/Training

- Bachelor of Arts (Political Science),
Thammasat University
- Master of Public Administration, National
Institute of Development Administration (NIDA)
- Mini MBA, Thammasat University

Experience

- Oct. 2012 - May 2015 Director,
TPI Internet Portal Company
Limited

Current Position

Current Position in Public Companies

- 2011 - Present Executive Vice President,
Corporate Human Resource,
IRPC Public Company Limited

Current Position in Limited Companies and Others

- 2015 - Present Director,
Technology IRPC Company
Limited

Miss Wanida Utaisomnapa

Executive Vice President, Corporate Business Planning

No. of share on 31 December 2015: 210,440
(%) Share Possession: 0.00103
Age: 49

Education/Training

- Bachelor of Business Administration
(Finance with second class honors), Bangkok University
- Master of Business Administration (Finance and Marketing),
National University, San Diego, USA
- PTT - HBS Leadership Development Program Class 1,
Harvard Business School, India&China
- Refinery Economics, Solomon Associates, Singapore
- IRPC Middle Management Leadership Development
Program Wave, Class 1
- Advance Price Risk Management, Invincible Energy,
Singapore
- The Board's Role in Strategic Formulation,
Governance Matters Australia

Experience

- 2014 - 2015 Executive Vice President,
Corporate Planning Supply
Feedstock and Trading,
IRPC Public Company Limited
- 2013 - 2014 Acting Executive Vice
President, Corporate Planning
Supply Feedstock and Trading/
Acting Vice President of Crude
Feedstock Supply Trading
Department/ Acting Price Risk
Management Division Manager,
IRPC Public Company Limited
- 2012 - 2013 Vice President of Crude &
Feedstock Supply Trading
Department / Acting Price Risk
Management Division Manager,
IRPC Public Company Limited
- 2011 - 2012 Vice President, Business
Operation Planning Department,
IRPC Public Company Limited
- 2010 - 2011 Division Manager, Crude Oil &
Petroleum Feedstock Division,
IRPC Public Company Limited

Current Position

Current Position in Public Companies

- Jan. 2015 - Present Executive Vice President,
Corporate Business Planning,
IRPC Public Company Limited
- Feb. 2016 - Present Secretary of the Risk
Management Committee,
IRPC Public Company Limited

Mr. Chalor Panutrakul

Executive Vice President, Corporate Business Development

No. of share on 31 December 2015 : None
Age: 57

Education/Training

- Bachelor of Engineering (chemical engineering), Chulalongkorn University
- Master of Business Administration (Management), Sasin Graduate Institute of Business Administration of Chulalongkorn University
- Thai ASEAN Economic Community, College of Politics and Governance, King Prajadhipok's Institute, Class 4/2013
- Power of the Kingdom, Chula Unisearch, Chulalongkorn University, Class 3/2014
- The Board's Role in Strategic Formulation, Governance Matters Australia

Experience

- 2012 - 2014 Executive Vice President, Corporate Research and Development, IRPC Public Company Limited
- 2010 - 2012 Executive Vice President, Line Business Port, IRPC Public Company Limited
- 2009 - 2010 Executive Vice President, President Office, IRPC Public Company Limited
- 2008 - 2009 Executive Vice President, Corporate Commercial and Marketing, IRPC Public Company Limited

Current Position

Current Position in Public Companies

- 2014 - Present Executive Vice President, Corporate Business Development, IRPC Public Company Limited

Mr. Veerawat Srinoradithlert

Executive Vice President, Engineering & Maintenance

No. of share on 31 December 2015: 10,579
(%) Share Possession: 0.00005
Age: 53

Education/Training

- Bachelor of Engineering (Chemical Engineering), King Mongkut Thonburi University
- Master of Business Administration, Burapha University
- Mini MBA, Thammasat University

Experience

- 2011 - 2012 Vice President, Complex 1 Department/ Analytical Center & Laboratory Department, IRPC Public Company Limited
- 2010 - 2011 Vice President, Complex 1 Department, IRPC Public Company Limited
- 2010 - 2010 Vice President, Human Resource Planning and Development Department, IRPC Public Company Limited

Current Position

Current Position in Public Companies

- 2012 - Present Executive Vice President, Engineering & Maintenance, IRPC Public Company Limited

Mr. Trisdee Watanangkur

Executive Vice President, Operation Support

No. of share on 31 December 2015: 355,866
(%) Share Possession: 0.00174
Age: 59

Education/Training

- Bachelor of Science (Chemical Engineering),
Chulalongkorn University
- Mini MBA, Thammasat University

Experience

- 2013 Executive Vice President
Operation4,
IRPC Public Company
Limited
- 2012 Executive Vice President
Port Business,
IRPC Public Company
Limited
- 2010 Executive Vice President
Operation1,
IRPC Public Company
Limited

Current Position

Current Position in Public Companies

- 2014 - Present Executive Vice President
Operation Support,
IRPC Public Company
Limited

Mr. Woravuth Sivapetranart

Executive Vice President, Technology & Operational Excellence

No. of share on 31 December 2015: 129,351
(%) Share Possession: 0.00063
Age: 52

Education/Training

- Bachelor of Science (Chemistry),
Prince of Songkla University
- Master of Business Administration (Business
Administration), Chulalongkorn University
- Mini MBA Thammasat University

Experience

- 2011 - 2014 Executive Vice President
Operation 2,
IRPC Public Company Limited
- 2010 - 2011 Acting Executive Vice
President, Operation 2,
IRPC Public Company Limited
- 2010 Vice President Complex 3,
IRPC Public Company Limited

Current Position

Current Position in Public Companies

- 2014 - Present Executive Vice President,
Technology & Operational
Excellence,
IRPC Public Company Limited

Mr. Vichit Nittayanonte

Executive Vice President, Petrochemical Operation

No. of share on 31 December 2015: 333,394
(%) Share Possession: 0.00163
Age: 56

Education/Training

- Bachelor of Science (General Science), Chulalongkorn University
- Master of Business Administration Degree, Burapa University
- Mini MBA Thammasat University
- Director Accreditation Program (DAP), Thai Institute of Directors (IOD), Class 91/2011
- Financial Statements for Directors (FSD), Thai Institute of Directors (IOD), Class 12/0211

Experience

- 2010 - 2012 Managing Director, IRPC Polyol Company Limited
- 2009 - 2010 Vice President, Logistics & Oil Distribution Department, IRPC Public Company Limited

Current Position

Current Position in Public Companies

- 2012 - Present Executive Vice President, Petrochemical Operation, IRPC Public Company Limited

Current Position in Limited Companies and Others

- Jan. 2016 - Present Acting Managing Director, IRPC Polyol Company Limited
- Dec. 2012 - Present Acting Managing Director, Thai ABS Company Limited
- Dec. 2014 - Present Director, IRPC A&L Company Limited
- Feb. 2012 - Present Director, Thai ABS Company Limited
- Feb. 2012 - Present Director, IRPC Oil Company Limited
- Feb. 2012 - Present Director, IRPC Polyol Company Limited
- Feb. 2012 - Present Director, Thai Polyurethane Industry Company Limited

Mr. Phothiwat Paopongchuang

Executive Vice President/ Managing Director, Technology IRPC Co., Ltd.

No. of share on 31 December 2015: 148,600
(%) Share Possession: 0.00073
Age: 54

Education/Training

- Bachelor of Engineering (Mechanical Engineering), Khonkhan University
- Master of Industrial (Management Engineering) King Mongkut's University of Technology North Bangkok
- Master of Public Administration, National Institute of Development Administration (NIDA)
- Doctor of Business Administration (Industrial Business and Human Resource), King Mongkut's University of Technology North Bangkok
- Mini MBA, Thammasat University
- Professional Engineer from Council of Engineers
- The Board's Role in Strategic Formulation, Governance Matters Australia

Experience

- 2011 - 2014 Acting Executive Vice President, IRPC's Office of Industrial Zone Management, IRPC Public Company Limited
- 2010 - 2011 Vice President of CSR Division, IRPC Public Company Limited
- 2009 - 2010 Vice President of Engineering Division, IRPC Public Company Limited
- 2003 - 2008 Assistant Vice President of Engineering Division, IRPC Public Company Limited

Current Position

Current Position in Public Companies

- 2014 - Present Executive Vice President, President Office, IRPC Public Company Limited

Current Position in Limited Companies and Others

- 2014 - Present Managing Director, Technology IRPC Company Limited

Mr. Peerapong Achariyacheevin

Senior Executive Vice President, Petrochemical & Refinery Business Unit

(End of Contract at 31 December 2015)

No. of share on 31 December 2015: 1,340,000

(%) Share Possession: 0.00655

Age: 63

Education/Training

- Bachelor Degree of Engineering in Electrical Power Technology, Faculty of Engineering, King Mongkut's University of Technology Thonburi
- MBA, Burapha University
- Senior Executive Program (SEP-20), Sasin Graduate Institute of Business Administration of Chulalongkorn University
- Executive Leadership Program, NIDA-Wharton Aresty Institute of Executive Education, The Wharton School, University of Pennsylvania, USA
- Advanced Certificate Course in Politics and in Democratic Systems, King Prajadhipok's Institute, class 6
- Director Certification Program (DCP), Thai Institute of Directors (IOD) Class 80/2006
- Understanding the Fundamental of Financial Statements (UFS), Thai Institute of Directors (IOD) Class 2/2006

Experience

- Mar. 2013 - Dec. 2015 Senior Executive Vice President, Petrochemical & Refinery Business Unit, IRPC Public Company Limited
- Apr. 2014 - Dec. 2015 Director, IRPC A&L Company Limited
- Jun. 2013 - Dec. 2015 Director, IRPC Clean Power Company Limited
- May 2013 - Dec. 2015 Director, PTT Energy Solution Company Limited (PTTES)

- Jan. 2014 - Oct. 2014 Acting Senior Executive Vice President, Port & Asset Management Business Unit
IRPC Public Company Limited
- Jul. 2011 - Jan. 2013 Chairman,
PTT Utility Company Limited
- Oct. 2011 - Sep. 2012 Senior Executive Vice President, Gas Business Unit,
PTT Public Company Limited
- Jul. 2009 - Sep. 2011 Executive Vice President,
Natural Gas Transmission,
PTT Public Company Limited
- Sep. 2003 - Jun. 2009 Executive Vice President,
Natural Gas Progressing,
PTT Public Company Limited
- Jul. 2001 - Aug. 2003 Vice President, Natural Gas Distribution,
PTT Public Company Limited

Current Position

Current Position in Public Companies

- 2012 - Present Director,
Scan Inter Public Company Limited

Mr. Boondej Phuriyakorn

Executive Vice President, Petrochemical & Refinery Business Unit

(Retire)

No. of share on 31 December 2015: 355,801

(%) Share Possession: 0.00174

Age: 60

Education/Training

- Bachelor of Science (Chemical),
Prince of Songkla University

Experience

- 2012 - 2015 Executive Vice President,
Petrochemical & Refinery
Business Unit,
IRPC Public Company
Limited
- 2012 - 2015 Manager Director,
IRPC Polyol Company
Limited
- 2009 - 2012 Complex 4 Manager,
IRPC Public Company
Limited

Mrs. Srisuda Suralertrungsun

Executive Vice President, Corporate Procurement and Administration

(Retire)

No. of share on 31 December 2015: 462,109

(%) Share Possession: 0.00226

Age: 60

Education/Training

- Bachelor Degree of Business Administration,
Chulalongkorn University
- Master of Business Administration, Sasin
Graduate Institute of Business Administration
- Executive Leadership Program, Thailand
Management Association
- The Board's Role in Strategic Formulation,
Governance Matters Australia

Experience

- 2010 - Dec. 2015 Executive Vice President,
Corporate Procurement and
Administration,
IRPC Public Company
Limited
- 2008 - Aug. 2015 Director,
Technology IRPC Company
Limited

Miss Duangkamol Settanung

Senior Executive Vice President, Corporate Accounting & Finance

(Until 1 November 2015)

No. of share on 31 December 2015 : None

Age: 56

Education/Training

- Bachelor of Science in Statistics with 1st Class Honors, Kasetsart University
- Master of Business Administration, Thammasat University
- PTT Executive Program, GE CROTONVILLE, USA
- PTT Leadership Development Program III
- Director Certification Program (DCP), Thai Institute of Directors (IOD) Class 155/2012

Experience

- Nov. 2011 - Nov. 2015 Senior Executive Vice President, Corporate Accounting & Finance, IRPC Public Company Limited
- Nov. 2014 - Jun. 2015 Director, PTT Polymer Marketing Company Limited
- Jun. 2013 - Nov. 2015 Director, IRPC Clean Power Company Limited
- Feb. 2015 - Nov. 2015 Director, IRPC-PCC Company Limited
- Dec. 2012 - Dec. 2015 Director, UBE Chemical (Asia) Public Company Limited
- Feb. 2012 - Nov. 2015 Director, IRPC Energy Company Limited
- Dec. 2011 - Nov. 2015 Director, IRPC A&L Company Limited
- Nov. 2011 - Nov. 2015 Director, Thai ABS Company Limited
- Nov. 2011 - Nov. 2015 Director, IRPC Oil Company Limited
- Nov. 2011 - Nov. 2015 Director, IRPC Polyol Company Limited
- Feb. 2011 - Oct. 2011 Executive Vice President - Finance and Accounting, PTT Aromatics and Refining Public Company Limited

- Oct. 2010 - Jan. 2011 Senior Vice President - Internal Control System, PTT Aromatics and Refining Public Company Limited
- 2008 - 2011 Director, PTT ICT Solutions Company Limited
- Dec. 2007 - Sep. 2010 Vice President, Corporate Strategy, PTT Aromatics and Refining Public Company Limited
- 2001 - 2007 Vice President, Finance & Accounting, The Aromatics (Thailand) Public Company Limited
- 1995 - 2001 Manager-Feedstock and Production Planning Division, The Aromatics (Thailand) Public Company Limited
- 1995 - 2001 Manager-Feedstock and Product Management Division, The Aromatics (Thailand) Public Company Limited
- 1985 - 1994 Supply Planning Section Manager, The Bangchak Petroleum Public Company Limited
- 1985 - 1994 Financial Economics Section Manager, The Bangchak Petroleum Public Company Limited
- 1982 - 1985 Analyst, Petroleum Authority of Thailand

Current Position

Current Position in Public Companies

- Nov 2011 - Present Executive Vice President, Corporate Finance & Accounting, PTT Public Company Limited

REPORT OF THE AUDIT COMMITTEE

Dear Shareholders,

The Audit Committee of IRPC consists of three independent directors who are qualified and highly experienced in economics, law, and petroleum, petrochemical, and energy businesses. Chaired by Mr. Cherdpong Siriwit, it features Mr. Songpope Polachan and Mr. Triumph Jalichandra as members.

In 2015, meeting 12 times, with perfect attendance, the committee performed its duties independently, with excellent cooperation from the management, internal auditor, and external auditor.

The committee performed the Board-assigned tasks and conformed to IRPC's audit committee charter, which in turn conformed to the announcement of the Stock Exchange of Thailand (SET) and the Securities and Exchange Commission (SEC). Its policy focuses on compliance with good governance together with relevant laws and regulations and on ensuring that IRPC commands suitable, efficient, and effective internal control and internal audit systems. The committee's performance this year is captured below.

- 1. Review of financial reports:** The committee reviewed key data of quarterly and annual financial statements of 2015 to ensure that their preparation was essentially acceptable by TFRS (Thai Financial Reporting Standards), which in turn aligns with international accounting standards, and that complete and adequate disclosure of key information was in place. To this end, it interviewed the head of the Office of Corporate Internal Audit and relied on explanations from executives in the Corporate Accounting and Financial group, as well as the reporting by the external auditor about the key data in the preparation of financial reports unconditionally certified by the external auditor, and held a meeting with the external auditor in the absence of the management to hear the auditor's free views on financial report auditing and its audit plans. The external auditor reported no significant issue or dubious behavior concerning the management's conduct.
- 2. Review of good governance:** The committee focused on conducting business under a code of conduct. To this end, it reviewed connected transactions between IRPC and related parties to avert conflicts of interest, conform to commercial protocols, and optimize IRPC's interests; reviewed IRPC's complaint and whistleblowing processes to ensure compliance with good governance; and ensured complete information disclosure by SET's requirements.
- 3. Review of risk management:** Consisting of the President and the management, the RMSC (Risk Management Steering Committee) defined standard frameworks and risk management processes; reviewed risk management plans; monitored and assessed such risk management; and reported such management outcomes to the RMC (Risk Management Committee) every quarter. The Audit Committee constantly reviewed such risk management plans and monitored the outcomes by examining reports of such outcomes for internal and external risk factors, probabilities, impacts, and risk management actions to keep such risks manageable.

4. Review of compliance: By reviewing IRPC's compliance with securities and exchange laws, SET requirements, industrial and environmental legislation, and other relevant legislation, the committee found that IRPC had complied adequately and suitably, while constantly acting on anti-corruption policy and process matters.

5. Review and oversight of internal control: The committee ensured that IRPC commands an internal audit unit that is independent and reports directly to the committee itself. The unit ensured effective internal audit execution in line with the approved audit plans, and monitored audit outcomes, while constantly providing helpful recommendations for greater efficiency of the internal audit system. The committee also supported and pushed for the Office of Corporate Internal Audit's development of operational excellence in reviewing the internal audit system; in serving as an internal-audit mentor; in forging understanding and acceptance by audited units; and in promoting a proper attitude and inspiration among employees and executives to regularly recognize the value of the internal control system.

6. Nomination and recommendation of the external auditor for 2015: The committee reviewed, chose, nominated, and proposed fees for IRPC's external auditor to secure an auditor that is independent by reviewing the qualifications, caliber, and past performances. This year, it has nominated as the external auditor PricewaterhouseCoopers ABAS Ltd. for the Board's consideration to in turn seek the shareholders' approval.

On the whole, the Audit Committee performed its duties with independence, care, and prudence under the Board-assigned scope, which was in line with SEC's requirements, to ensure that IRPC's financial reports displayed essential, credible data; that employees' and executives' performance was effective and legal; and that the company's risk management and internal control systems were efficient and effective for IRPC's best interests and sustainable growth.



(Mr. Cherdpong Siriwit)

Chairman, Audit Committee

INTERNAL CONTROL

Summary of the Board's Views on the Internal Control System

IRPC recognizes the value of an efficient and effective internal control system to keep its business proper, transparent, and in complete compliance with relevant laws and regulations.

At its meeting No. 1/2559 of January 12, 2016, attended by independent directors and the Audit Committee, the Board assessed IRPC's internal control system by interviewing the management and the Office of Corporate Internal Audit and examined the management-prepared assessment form. Its conclusion was that the system's components, namely the control environment, risk assessment, control activities, information and communication, and monitoring activities, were adequate and suitable, with enough personnel in place for efficient system implementation. Besides, its internal control system helped monitor and control subsidiaries' businesses to prevent the properties of IRPC and subsidiaries from abuse or unauthorized use by directors or executives, and adequately prevented transactions with parties with potential conflicts and connected parties. The Board also viewed other internal controls as adequate.

For 2015, the Board considered the company's internal control management essentially in line with COSO (The Committee of Sponsoring Organizations of the Treadway Commission) in the following aspects of internal control.

1. Control Environment

Oversight of business affairs was done by four committees, namely the Audit Committee, Risk Management Committee, Nomination and Remuneration Committee, and Corporate Governance Committee. IRPC has restructured its organization, modifying its core values in line with its vision and up to date with its circumstances. Known as iSPIRIT, the new values help employees adhere more uniformly, leading to efficient performance in pursuit of the organizational goals.

2. Risk Assessment

Valuing the formulation of business strategies and goals, the Board appointed the Risk Management Committee to suitably and efficiently steer corporate risk management, leading to achievement of such strategies and goals. To this end, IRPC applied the ISO 31000:2009 risk management approach, the latest internationally accepted standard. To manage risks, IRPC identified and assessed all its risks, taking into account internal and external risk factors, probabilities, and impacts, while defining risk management approaches to keep such risks manageable.

3. Control Activities

To keep its business systematic and its risks manageable, IRPC focused on developing its business internal control system and quality system. This past year, it constantly carried out a project to review and modify its work procedures, including procurement excellence, HR excellence, commercial excellence, and operational excellence, to establish operational excellence, supplement value to the organization, and establish good governance in parallel in a balanced and sustainable way.

4. Information & Communication

IRPC put in place several internal and external communication channels along with regular PR work on complaint channels. It also valued corporate information system management and communication, particularly on information quality and data system security. To this end, it applied the ISO/IEC 27001 information security management system to keep data ready for use and keep its business going.

5. Monitoring Activities

IRPC valued the monitoring and assessment of internal control outcomes to ensure that internal control proceeded thoroughly and suitably, while IRPC and subsidiary businesses were adequately monitored and controlled to prevent abuse or unauthorized use of properties and prevent transactions with parties with potential conflicts of interests. The company also constantly campaigned on compliance with good governance and anti-corruption in each of its business lines.



(Mr. Tevin Vongvanich)

Chairman

MESSAGE FROM THE CHAIRMAN, NOMINATION AND REMUNERATION COMMITTEE

Dear Shareholders,

This year the Nomination and Remuneration Committee not only performed all duties prescribed by its charter, but also proposed to the Board a new approach considered beneficial to IRPC, giving the overall composition greater efficiency and alignment with strict international-style corporate governance practices.

This year, two key missions were accomplished. First, amendment to company regulations, lowering the number of Board directors from 5-17 to 5-15 for manageability and efficiency, and in keeping with IRPC's size and those of industry peers. Second, guidelines for the appointment of the President, under which the Board selects a director to serve as President and Secretary to the Board. Both matters were endorsed by the Board for approval by the shareholders at the 2015 AGM.

The committee also laid down the criteria for the President's performance appraisal this year, consisting of corporate KPIs and factors supporting sustainable growth. Such criteria cover business management, leadership, and responsibility for society, the environment, corporate governance, together with benefit to all stakeholders and shareholders, with challenging goals. These criteria were also endorsed by the Board for enforcement, for it can assess all aspects while driving the top executive to leverage his caliber in the best interests of IRPC and stakeholders.

As for the nomination of directors, the committee selected qualified people by also referring to the Directors Pool of the Ministry of Finance in addition to IRPC's nomination criteria, including expertise, experience, Board diversity, and balanced Board composition. In other words, the Board should consist of competent people in all needed fields, suiting IRPC's business and the Cabinet's resolution of January 24, 2011, concerning the appointment of senior government officials and directors of state enterprises or those serving in up to three state enterprises, or both. In addition, the committee values the consideration of independent directors' qualifications so that they may freely serve as shareholders' representatives.

Concerning the compensation of directors, the committee agreed to freeze the rates approved by the shareholders from day one of IRPC. Also, bonuses for the performance of 2014 will not be paid out. To this end, the committee has compared directors' compensation surveyed by the Thai Institute of Directors and Stock Exchange of Thailand, which serves as a good yardstick against Thailand's corporate governance, ASEAN CG Scorecard, and other companies in the same industry for utmost benefit of shareholders.

The Nomination and Remuneration Committee remains firmly committed to its Board-assigned mission in parallel with the investigation of development approaches for the nomination and compensation processes in the best interests of IRPC and all its shareholders.



(Mr. Woothisarn Tanchai)

Chairman, Nomination and
Remuneration Committee

MESSAGE FROM THE CHAIRMAN, RISK MANAGEMENT COMMITTEE

Dear Shareholders,

Highly valuing efficient and effective company-wide risk management to bolster confidence among stakeholders in the achievement of IRPC's objectives and goals and prevent or minimize losses amid business circumstances and uncertainty, the Board of Directors appointed a Risk Management Committee in November 2014 to devise policies, risk management approaches, supervise enterprise risk management, and recommend approaches to keep risks manageable. The committee was chaired by Mr. Sarun Rungkasiri, with Mr. Prasit Suebchana and Mr. Sukrit Surabotsopon as members. All members are experts that are competent and highly experienced in risk management. This year it held a total of 5 meetings, summarized below:

1. Revised and amended the Enterprise Risk Management Policy for compatibility with international standards and best practices on a par with leading corporations
2. Supervised and reviewed enterprise risk management, which consists of the identification, analysis and assessment of risks, definition of risk management measures, and tracking and reviewing of risk management outcomes every quarter so as to keep these risks manageable and achieve goals
3. Recommend enterprise risk management approaches for the Risk Management Steering Committee and the Supply Chain and Finance Risk Management Committee to efficiently implement
4. Reviewed and provided comments on the list of enterprise risks for 2016 before tabling it for the Board's endorsement, by ensuring that the list aligned with business directions, strategies, corporate goals, and prevailing circumstances
5. Reported its quarterly performance outcomes for the Board's acknowledgment.

The Risk Management Committee performed its assignments in a systematic, prudent, complete, and competent manner with freedom and in line with corporate governance in the best interests of IRPC, the shareholders, and other stakeholders.



(Mr. Sarun Rungkasiri)

Chairman, Risk Management Committee

MESSAGE FROM THE CHAIRMAN, CORPORATE GOVERNANCE COMMITTEE

The Corporate Governance Committee of IRPC Public Company Limited this year performed its duties in line with the Board-assigned scope of responsibility to support the drive of IRPC toward Asia's petrochemical leadership by 2020, such success that must come from the synergy of the Board, the management, and all employees to conduct business with transparency for stakeholders' confidence and trust. At the same time, IRPC needs cooperation, support, and acceptance from external parties for its contented, sustainable growth in parallel with society.

As tabled by the committee, the Board has approved a five-year plan and the annual plan, consisting of corporate governance strategies and policy, a policy on anti-corruption, environmental governance, social responsibility, and ways to enhance the ethics of the Board, executives, and employees of IRPC and its affiliates. All these should lead to concrete practices that are more efficient than mere compliance with the law and regulations for an operator and a Thai listed company. IRPC boasts plans to develop good practices for becoming a good corporate citizen of the world community that are on a par with generally accepted criteria and standards of universal industries. The committee strictly performed its supervisory role for IRPC's compliance and performance reporting against goals within due time for review, revision, and development of the corporate governance system and those involved (the Board, management, and employees). The goal is to achieve business excellence with corporate governance and the commitment to enhancing and extending corporate governance and socio-environmental responsibility to IRPC's business allies and stakeholders, which is IRPC's signature practice. IRPC's endeavor and practices have earned acceptance, admiration, and certificates of honor from relevant agencies and entities at national, regional, and global levels-notably the 2015 Board of the Year and the Audit Committee of the Year awards. These are the pride of everyone at IRPC.

IRPC has taken steps to improve key corporate governance practices in policy, good practices, and integrated governance activities from the inside out so as to raise its standard up to the criteria set by SEC, SET, IOD, CGR, ASEAN CG Scorecard, and all other appropriate international criteria. The purpose is to forge engagement in promoting the strength and confidence of the ASEAN capital market for credibility and acceptance, and to demonstrate social responsibility as a good corporate citizen in existing with others with happiness and sustainability. As for the key issues under development, these include the development of roles and responsibilities of the Board and independent directors for greater efficiency and directors' performance quality; director assessment by a third party to assure IRPC's standard of performance to promote useful development; equitable treatment of shareholders; setting of a compliance policy; definition of a policy framework and approach for promoting ethics, transparency, and anti-corruption among all employees, as detailed in the corporate governance report.

The Corporate Governance Committee is convinced that IRPC's endeavor for assembling a system that lends itself to efficient implementation, a credible standard, and a common determination to grow values based on ethics under corporate governance, and finally the collaboration of all employees on the responsibility to IRPC and society, will produce its sustainable growth in tandem with society and stakeholders.



(Mr. Watcharakiti Watcharothai)

Chairman, Corporate Governance Committee

CORPORATE GOVERNANCE REPORT



Tone at the Top

More than just setting the tone, IRPC Board of Directors have a look at organizational culture, inspiring people, and guiding the company's values and ethical climate.

All along, IRPC has valued development of corporate governance, which has earned it a "Level 5" for seven straight years out of the CGR assessment by Thai IOD. This year IRPC's assessment score was 92, which exceeded that of last year, and IRPC is among 17 listed companies whose scores exceeded 90 on the ASEAN CG Scorecard. The Stock Exchange of Thailand (SET) has honored IRPC with a Thailand Sustainability Investment Award 2015 in recognition of its outstanding sustainable business conduct and a role model for social responsibility. IRPC also earned two other awards: Board of the Year and Audit Committee of the Year at the Board of the Year Awards 2015. As for sustainability management, IRPC was ranked as a member of DJSI (Dow Jones Sustainability Indices), Emerging Markets, Oil & Gas, for 2015/2016 for a second straight year, which echoed the Board's dedication to perform its duties such that IRPC commands business efficiency and corporate governance.

Corporate Governance Policy

The Board has defined a corporate governance policy in line with the Corporate Governance Policy for

Listed Companies of SET and the criteria of Corporate Governance Report of Thai Listed Companies (CGR) for the Board, executives, and employees as follows:

To promote IRPC as a business concern marked by efficiency, CG, and operational excellence-focusing on optimizing benefits for the shareholders, with due regard for stakeholders as a whole-while remaining righteous in business conduct, free of fraud, transparent, and open to scrutiny, the Board has defined a CG policy for its Board of Directors, executives, and employees to observe as practical guidelines, detailed as follows:

1. The Board, executives, and employees are committed to applying the key CG principles (CREATE) to their work, namely
 - Creation of long-term value
 - Responsibility for job performance with adequate competency and efficiency
 - Equitable treatment of stakeholders, meaning fair and answerable treatment
 - Accountability for decision-making and actions
 - Transparency of execution and information disclosure
 - Ethics of business execution

2. The Board is dedicated, responsible, and independent, with clear segregation of roles between the Chairman and the President

3. The Board plays a key role in defining IRPC's vision and key strategies, policies, and plans, taking into account risk factors and laying down suitable management approaches, while ensuring that accounting, financial, and audit systems are credible

4. The Board plays a key role in defining an anti-corruption policy and key relevant mechanisms so as to prevent fraud and represent IRPC's practical guidelines leading to a corporate culture. The Board oversees the prevention and resolution of conflicts of interest and connected transactions (See Anti-corruption Policy, Appendix.)

5. The Board must lead in ethics and observance of IRPC's CG approach

6. The Board may appoint suitable ad hoc committees to support its deliberation of key matters

7. The Board must hold annual self-assessment to frame the scrutiny and improvement of its performance

8. The Board sets IRPC's code of conduct for itself, executives, and the rank and file (employees and otherwise) to apply as their practical guidelines in tandem with IRPC's regulations

9 IRPC's shareholders are entitled to fair treatment and access to information, as well as suitable communication channels with IRPC

10. A personnel recruitment system is in place for all key executive positions along with a transparent and fair recruitment process.

Code of Conduct

IRPC is committed to its code of conduct, which includes issues of human rights and treatment of employees, society, the environment, health and safety, anti-corruption and compliance with laws and regulations, and treatment of all stakeholders for all employees to comply. By issuing a Corporate Governance Manual, IRPC cultivates awareness among its people. This year the contents were amended to include more issues dealing with the corporate governance, specifically issues about corporate responsibility for sustainable growth and anti-corruption. All employees must sign their names in acknowledgment of the code of conduct and strictly comply with it in addition to focusing on



transparent business in order to ensure confidence among stakeholders.

Highlights of IRPC's Corporate Governance Development in 2015

In response to the policy of becoming an organization of excellence and the commitment to preserving its quality of corporate governance among ASEAN CG Scorecard leaders, this year the Board amended corporate governance to become more strict by international standards and more suitable for IRPC's businesses. Specifically, one finds a revised number, qualifications, roles and responsibilities of the Board and sub-committees for greater clarity and more alignment with international regulations and protocols. Furthermore, it would better align with IOD's recommendations under the CGR criteria, which are now included in the Corporate Governance Manual (amended 2015) as follows:

1. Directors' Responsibilities

- Assessment of the performances of the Board and all sub-committees by independent assessors for the first year, with a plan to repeat this assessment every three years. This is on top of IRPC's annual assessment of the Board. Also, the assessment forms have been revised and improved in line with the assessment approach of SET of 2015.
- The Nomination and Remuneration Committee proposed that the Board ask the shareholders to amend company regulations in line with the practices of leading listed companies on SET. Specifically, the number of directors on the Board should be cut from 5-17 to 5-15 directors. The Board is also to appoint a director as President, also serving as Secretary to the Board.

2. Equitable Treatment of Shareholders

- IRPC gave the opportunity for one or more shareholders with a combined 4% or more of the eligible voting shares to propose agenda items and nominate directors in advance. To this end, IRPC issued a letter to SET and publicized the message on the company website from September 25 to December 31, 2015, which was more than 90 days before the end of the accounting year.

3. Definition of Compliance Policy

At the BOD-STS 2015 of August 21, 2015, the Board approved CG & CSR Excellence Strategic Plans and endorsed formulation of a Corporate Compliance Policy to declare its intention and elevate the standard of



practices in line with the law and relevant regulations. The Corporate Governance Committee at its Meeting No. 6/2558 of October 26, 2015, examined the policy against the law and such regulations before tabling it to the Board for its approval and roll-out among IRPC and its affiliates as follows:

1. Compliance with relevant laws and regulations

The directors, executives, and employees of the IRPC Group companies are to strictly uphold laws and regulations related to businesses so as to enable businesses to proceed smoothly under relevant laws and regulations, while maintaining their responsibility for society, communities, environment, and health of stakeholders-the foundation of sustainable development.

2. Fair competition and anti-monopoly

The directors, executives, and employees of the IRPC Group companies are to comply with laws on antimonopoly or trade competition, while supporting free and fair commercial competition void of discrimination and unfair practices.

3. Anti-corruption and anti-bribery

The directors, executives, and employees of the IRPC Group companies are to comply with laws on the prevention and suppression of corruption and bribery involving state officers, foreign-state officers, or private-company officers.

4. Upholding of human rights principles

The directors, executives, and employees of the IRPC Group companies are to uphold laws on labor and human rights, while respecting labor rights, women's rights, children's rights, and human dignity as well as the liberty and equality of those certified by or protected under Thai and international laws.

5. Safeguarding of intellectual property rights

The directors, executives, and employees of the IRPC Group companies are to protect intellectual properties of IRPC or IRPC Group of Companies, or both, from being infringed without permission. They are to uphold others' intellectual property rights, while



promoting their executives' and employees' creativity resulting in intellectual properties in the interests of the company and Thailand's economy at large.

6. Prevention and suppression of money laundering and non-sponsorship of terrorism causes

The directors, executives, and employees of the IRPC Group companies are to avoid becoming part of money-laundering networks or sponsoring terrorism causes. To this end, it values oversight and provision of clues to officers in case of illegal deeds, while ensuring proper recording of accounting entries, and financial or property facts in line with Thai and international laws.

7. Proper management, storage, and application of company data

The directors, executives, and employees of the IRPC Group companies are to exercise good stewardship of data and properties under proper management standards under the law to ensure that they are optimally applied; that harm and abuse are averted for the benefits of oneself or others; and that data confidentiality principles are upheld by adhering to the rules of law and business ethics of maintaining data of the company, its customers, business partners, or others' private data and not leveraging them for purposes beyond permission or beyond mutual, lawful relations under Thai and international laws.

8. Responsibility for the environment, health, and safety

The directors, executives, and employees of the IRPC Group companies are to conduct business with responsibility for communities, society, and the environment with due regard for the health and safety of employees and stakeholders. They are also to regularly put in place projects designed to cultivate such awareness among employees, executives, and related parties.

- IRPC set up a compliance unit called "Company Secretary and Compliance Division" under the Office of Corporate Affairs so that there may be a

clear responsible person under the policy of the Board, which would ensure that IRPC has in place a compliance process that is fully accurate by the law, practical guidelines, regulations, and various criteria incorporating governance, risk management, and compliance (CGR).

4. Formulation of Policy Framework and Approach to Promote Ethics, Transparency, and Anti-Corruption

- IRPC amended its Corporate Governance Manual to keep updated with changes in corporate governance for listed companies of SET, ASEAN CG Scorecard, and other international requirements for being a good global corporate citizen and developing sustainably, including UN Global Compact. The amended manual was given to all employees of IRPC Group to sign their names in acknowledgment and give a pledge to observe it.
- Participation in the UNGC's Call to Action: Anti-Corruption and the Global Development Agenda to demand and send a signal to the public sector and private companies worldwide to join hands in anti-corruption moves
- Preparation of an on-line report disclosing items suspected of conflicts of interest with IRPC by all employees for the first year in addition to the reporting of directors and the management required by SET
- Campaigns to cultivate awareness of corporate governance among the management and employees, communicated through suitable channels for big and small groups through training, seminars, and the E-Learning system under the topic of "A Survey of Ethics in You". This year IRPC set a goal of 500 employees participating in responding to the survey. It turned out that 870 employees answered the questionnaire through the E-Learning system, which exceeded the goal by 74%. Note that all PTT Group companies were taking similar action to leverage group synergy to use all PTT Group employees to form a network and convey the force of goodness to all sectors in the hope of cleaning up the Thai society in a sustainable way.
- IRPC publicized the notions of corporate governance and social responsibility to wider audiences apart from Thailand and other ASEAN countries to exchange good practices and promote IRPC's image and its reputation. This year it won the "Winner of the Golden Peacock Global Award for Excellence in Corporate Governance 2015", given by India's IOD, together with the Best Corporate Governance Asia 2015, presented by Hong Kong—based Corporate Governance Asia journal.



Seminar on Compliance Risk Management.

SET's Approach to Corporate Governance

This year the Board ensured compliance with corporate governance as detailed below:

1. Shareholders' Rights

In compliance with the law and company regulations, IRPC protected and promoted shareholders' exercise of their rights through attending shareholders' meetings, decision-making, voting on crucial matters, acknowledging performance outcomes, and expressing views and asking questions.

Before the Meeting

In compliance with the law and company regulations, IRPC protected and promoted shareholders' exercise of their rights through attending shareholders' meetings, decision-making, voting on crucial matters, acknowledging performance outcomes, and expressing views and asking questions.

IRPC publicized details of the 2015 AGM through the IRPC Newsletter Volume 15/2015 in Thai, complete with the English translation, which was sent to all shareholders along with the meeting notices. IRPC invited the shareholders and institutional investors to attend the AGM to exercise their rights and acknowledge IRPC's performance direct from the Board.

2. Quality of Meeting Notice IRPC's meeting notice for the 2015 AGM accompanied relevant attachments and a proxy form to facilitate those that could not attend by themselves, with due regard for data completeness for the shareholders' decision-making on each agenda item. To this end, IRPC categorized the agenda as nine important agenda items this year. There was no agenda item for acknowledging the minutes of the previous meeting because IRPC had presented such minutes on its website and sent them in writing to all shareholders for their review. If amendments were needed, they should inform IRPC by June 30,

2014. It turned out that no shareholder objected to the minutes, and so automatic acknowledgment was adopted. For each agenda item, objectives and justification together with the opinion of the Board were stated, as highlighted below:

2.1 Approval of the 2014 financial statements, audited and certified unconditionally by an authorized external auditor

2.2 Appointment of directors, complete with complete profiles (namely, name-last name, age, biography, education, career profile, and the number of companies in which each nominee served) in full details so that the shareholders may have substantial data for their consideration of suitable directors.

2.3 Approval of directors' compensation, for which IRPC proposed a policy for directors' compensation (namely, retention fee, meeting fee, bonus). In 2014, no bonus was paid out due to the loss in performance outcome. Apart from this, IRPC gave no other benefits.

2.4 Appointment of the external auditor and audit fee-setting, stating the detailed profile of the external auditor (namely, auditors' names, company, experience and ability, independence, audit fees and non-audit fees together with other services). These details were given in full and clearly.

2.5 Approval of dividend payment: IRPC disclosed its dividend policy and successfully maintained suitable financial liquidity in keeping with its business, with categories and sources of retained earnings from which the dividends were to be paid, the proposed dividend rate, the dividend date, complete with clear rationale and consideration data.

2.6 This year IRPC proposed an agenda item for amendment of company regulations in Section 4 (the Board), Item 15 and Item 22 (the number of directors and appointment of the President) to amend the number of directors from 5-17 to 5-15 and that the Board should select one of them as President and Secretary to the Board in keeping with the good practices of leading companies on SET and with PTT Group companies, since PTT Plc was IRPC's major shareholder.

For each agenda item in the meeting notice, IRPC clearly included the objective and justification along with the opinion of the Board and the number of votes needed.

IRPC sends proxy forms (Form A and Form B) together with the shareholders' meeting notices for those that could not attend in person, stating the documents, evidence, advice, and proxy procedure along with the names of the six independent directors for shareholders' choice. These are also downloadable from www.irpc.co.th along with Proxy Form C. IRPC also eased shareholders and institutional investors who wish to send the real copies of the proxy forms along with supporting documents by regular mail. The envelope should be addressed to the Company Secretary or Investor Relations before the meeting date so that IRPC officers may inspect the documents for completeness before the proxies arrive for speedy registration, which smoothened meeting organization.

Date (2015)	Detail
February 10	<ul style="list-style-type: none"> The Board decided February 25 as the record date and April 3 as the AGM date IRPC publicized the Board resolution through the SET Portal and the company website
February 25	<ul style="list-style-type: none"> The record date for attending the AGM and receiving dividends Publicized the complete AGM meeting notice together with supporting documents in Thai and English at www.irpc.co.th 33 days ahead of the AGM
February 26	<ul style="list-style-type: none"> Closing of the share roster to collect the names of eligible shareholders for the AGM and dividends
March 11	<ul style="list-style-type: none"> Meeting notices were sent to the shareholders by registered mail by the Thailand Securities Depository Co., Ltd., 22 days ahead of the meeting
March 25-27	<ul style="list-style-type: none"> Details of the 2015 AGM were published in Thai and English daily newspapers (Khao Hun and the Bangkok Post) for three consecutive work days ahead of the meeting
April 3	<ul style="list-style-type: none"> AGM day, beginning at 09.30 hours at the Bangkok Convention Center, 22nd floor, Centara Grand Hotel and Bangkok Convention Center, CentralWorld, No. 999/99 Rama 1 Road, Pathumwan District, Bangkok 10330



On the meeting date

IRPC's 2015 AGM was held on April 3, 2015, starting at 09.30 hours at the Bangkok Convention Center, 22nd Floor, Centara Grand Hotel and Bangkok Convention Center, CentralWorld, No. 999/99 Rama I Road, Pathumwan District, Bangkok 10330. IRPC facilitated shareholders in the following ways:

- A convenient meeting venue accessible by public transport (BTS and buses) with spacious parking lots and efficient security
- The Green Meeting organization prevailed, maintaining IRPC's standard certified by TBCSD and the Thailand Environment Institute for the third year running
- Seats had been reserved for the handicapped, the elderly, and pregnant ladies, with expediting officers.
- Enough registration points were arranged, with registration starting two hours ahead of the meeting.

The Barcode system was applied during registration and vote-counting for greater efficiency, accuracy, and speed.

- IRPC facilitated proxy-giving by having available free duty stamps for the legal sanctity of documents.
- IRPC staged an exhibition about business directions and its innovative products sold in the market, including bathroom shelves made of anti-bacterial plastics as a way of providing information to shareholders and an opportunity for them to provide recommendations or inquire the Board about IRPC's marketing moves and innovations.

1. The AGM began as scheduled, with the Chairman of the Board serving as meeting chairman. In attendance were the sub-committee chairs, directors, and the President along with senior executives and the Company Secretary. (Full details appear in the AGM meeting minutes, disclosed on IRPC's website.

Directors in attendance at the 2015 AGM (12 out of 14, or 86%)

Name		Current Position on the Board/Sub-committees
1.	Mr. Pailin Chuchottaworn	Chairman
2.	Mr. Cherdpong Siriwit	Independent Director /Chairman of the Audit Committee
3.	Mr. Songpope Polachan	Independent Director Member of the Nomination and Remuneration Committee
4.	Mr. Watcharakiti Watcharothai	Independent Director Chairman of the Corporate Governance Committee
5.	Mr. Sarun Rungkasiri	Director Chairman of the Risk Management Committee
6.	Mr. Triumph Jalichandra	Independent Director Member of the Audit Committee
7.	Mr. Surong Bulakul	Director Member of the Nomination and Remuneration Committee
8.	Lt. Gen. Sasin Thongpakdee	Independent Director Member of the Corporate Governance Committee
9.	Mr. Pramual Chanpong	Director Member of the Corporate Governance Committee
10.	Mr. Somnuk Bomrungsalee	Director
11.	Mr. Prasit Suebchana	Director
12.	Mr. Sukrit Surabotsopon	Director Member of the Risk Management Committee President/ Secretary to the Board of Directors

Note: Two directors were absent from the meeting

1. Mr. Woothisarn Tanchai Chairman, Nomination and Remuneration Committee (due to urgent business engagement)
 2. Mr. Sombat Narawutthichai Director (due to urgent business engagement)
- Mr. Kritsda Udyanin, Director, had passed away on March 26, 2015.

There are 10 Management members in attendance at the 2015 AGM.

2. IRPC requested an independent legal adviser from Weerawong Chinnavat and Peangpanor Co., Ltd. (Ms. Peangpanor Boonklum) to ensure full AGM compliance with the law.

The external auditor in attendance at the AGM was Mr. Wichian Kingmontree, CPA No. 3977, PricewaterhouseCoopers ABAS (PWC).

1. Ms. Ratchada Khlongprong
Volunteer from the shareholders in attendance
2. Mr. Surapong Tembunprasertsuk
Volunteer from the shareholders in attendance.

3. Before consideration of the meeting agenda, the Chairman clearly informed the meeting about the voting method and vote-tallying. IRPC issued only one class of shares, for which one share equals one vote.

4. On the agenda of directors' appointment, IRPC allowed shareholders to vote for individual directors, with individual names on the ballot one by one. In line with its good practices, directors with vested interests left the meeting on the agenda item in question. For this meeting, five such directors, namely Mr. Pailin Chuchottaworn, Mr. Cherdpong Siriwit, Mr. Sarun Rungkasiri, Lt.Gen. Sasin Thongpakdee, and Mr. Sukrit Surabotsopon, left the meeting until the end of deliberation and voting. To this end, the Chairman (Mr. Chuchottaworn) assigned Mr. Songpope Polachan, director and member of the Nomination and Remuneration Committee, to conduct the meeting on this agenda item.

During the meeting, the Chairman allowed the shareholders to exercise equal rights in asking questions or giving comments at the AGM, allocating enough time and asking relevant directors to provide assorted data to the shareholders until no further questions were asked. He ensured that these questions, answers, and comments were included in the minutes for those who missed the AGM.

6. IRPC arranged for ballot-casting, ensured that ballots were collected from the shareholders, and inspected the vote outcomes and recording of votes from the ballots. To this end, the Barcode system aided in compiling outcomes for greater efficiency and speed. Meeting resolutions were spelled out for every agenda item, complete with the numbers of yes, no, or abstained votes.

7. The Chairman conducted the meeting strictly in the sequence given in the meeting notice. No other agenda items were added apart from what appeared in the meeting notice.

After the AGM

IRPC took the following actions:

1. On the meeting date (April 3, 2015), sent a summary of the vote outcomes on each agenda item in Thai and English via the SET Portal of the stock exchange and distributed this summary on the company website after the meeting had concluded.
2. Sent the minutes, complete with the voting method and tallying for the shareholders' information before entering the agenda, together with key details by agenda item clearly and fully:
 - Meeting contents
 - List of directors and senior executives in attendance and those who excused themselves
 - Shareholders' questions along with respective responses of directors and executives
 - Meeting resolutions and voting outcomes for each agenda item, complete with details of the yes, no, and abstained votes on each agenda item.

IRPC concurrently disclosed on SET's and IRPC's websites on April 17, 2015 (within 14 days) and prepared documents for mailing to all shareholders, stating that the shareholders who wanted amendment made or disputed certain points could get back to IRPC by June 30, 2015. When this date passed, no shareholder had sought amendment to the minutes, which were then automatically adopted.

3. Sent the minutes to the Department of Business Development, Ministry of Commerce, and added to IRPC's regulations as decided by the shareholders' meeting.

2. Equitable treatment of shareholders

IRPC respected shareholders' rights and issued just one class of share with due regard for, and treatment of, all shareholders in an equitable way:

1. Provided adequate data in Thai and English to the shareholders in advance through several channels conveniently accessible. Details about this point appear under the Information Disclosure and Transparency section.
2. Enabled minor shareholders to propose in advance agenda items ahead of the AGM. To this



end, a single shareholder or more with a combined shareholding of no less than 4% of all eligible votes may do so. Announced the criteria, with steps clearly stated, through the Investor Relations section of its website on the date and time announced by IRPC. The 2016 AGM will be the first year in which IRPC allows the shareholders to nominate directors; this was conveyed to the shareholders through IRPC's website from September 25 to December 31, 2015. When this date passed, no shareholder had proposed any agenda item or nominate directors.

3. To avert conflicts of interest for the benefit of transparency and integrity, IRPC prepared a Corporate Governance Manual (Revision 2015), stating criteria and good practices about items of conflicts of interest for the directors, executives, and employees of IRPC and its affiliates to conform to by:

- 3.1 Showing related and connected transactions, taking into account IRPC's maximum interests. Reporting and disclosing approval of the shareholders transparently in the annual report (detailed in the Notes to the Financial Statements).
- 3.2 Refusing to sponsor companies that were not subsidiaries. The shareholding structure featured no cross-shareholding in the Group; nor were IRPC shares repurchased.
- 3.3 Preparing directors' and executives' reports on securities portfolios and requiring them to be responsible for properly and fully complying with the regulations and requirements of SET and SEC. Each month, IRPC reported these to the Board. IRPC had never been warned by the regulators about this matter. This year, the Board together held no more than 25% of IRPC's issued and paid-up shares.
- 3.4 Preventing the use of inside information. IRPC stated in its Corporate Governance Manual (Section 4, Code of Conduct for the Board, Executives, and



Employees, Item 4.1.5: Code of Conduct on the trading of IRPC securities and the use of inside information). It defined a policy on the prevention of such trading and use of inside information. To prevent trading based on inside information, prohibition was defined against exploiting the opportunity or data as a result of the directorship or service in the company for personal gains.

- 3.5 Refraining from trading IRPC securities. To this end, IRPC informed them about the date of financial statements and the "embargo" of securities 45 days ahead of and at least 2 days after the disclosure of financial statements.
- 3.6 Requiring all employees of IRPC Group to prepare an on-line report of items suspected of conflicts of interest with IRPC, under corporate governance, to cultivate awareness of operating transparently and prevent fraud. IRPC also presented this report to the Corporate Governance Committee for their acknowledgment. Employees appreciated the principles and rationale, lending good cooperation.

3. Stakeholders' Roles

IRPC has adopted international standards, including the UN Global Compact, on voluntary roles of stakeholders and defined its interacting roles and activities accordingly in order to maintain a balance of benefits among all of stakeholders. All short-term and long-term plans of IRPC must include considerations on expectations and satisfaction of each group of stakeholders in all aspects, including sustainable development (SD), corporate governance (CG) and operational excellence management system (OEMS). Moreover, IRPC has established various channels of communication to appropriately and efficiently converse with each group of stakeholder on company policies, business ethics and good operation practices, particularly impacts on stakeholders including the following.

1. Shareholders/Investors

For maximum profits and long-term value creation for shareholders, IRPC has continuously manage its businesses while strictly adhering to corporate governance to ensure sustainable growth and reasonable returns. In 2015, IRPC won an ASEAN Corporate Governance Award in Manila, the Philippines, as a Thai listed company with governance assessment score, using the ASEAN CG Scorecard criteria in the Top 50 ASEAN PLCs, with a transparent disclosure system of sufficient data to the public. The sharing of information, also supporting good relations with the public, is communicated via the following channels and activities:

- Regular meetings with local and international investors and market analysts (detailed as appeared in Section 4, Information Disclosure Page 79-81).
- Participation with SET in activities promoting investment in the capital market and dissemination of company data.
- Organizing a shareholders' visit to IRPC facilities in Rayong on November 12, 2015.
- Preparation and dissemination of company news to the public in various media formats.
- Organizing activities with shareholders for the communities and society, and promoting human rights issues. These activities in 2015 included
 - Donation of sports equipment to the House of Juvenile Observation and Protection, Rayong.
 - Organizing jointly with the Faculty of Humanities and Social Science, Burapha University, and shareholders in generating reading materials in Braille for the visually impaired from used desk-top calendars under the '3rd Page Project'. Donation also included cash.
 - Jointly organizing with shareholders during the Open Houses, promoting and sustaining the Thai culture and festivity with responsibility for the environment on the Loy Krathong Festival.
 - Annually organizing jointly with shareholders during the AGM cash donation for heart transplant for children and juveniles. The foundation also delivered its annual report and progress on the project to the shareholders.

Customer satisfaction surveys were conducted on all activities, with conclusions and recommendations incorporated to improve and better develop future activities

2. Customers/Consumers

IRPC's ultimate objectives are to continuously develop and upgrade with dedication its goods and services which are environmentally friendly by international standards, in meeting demands by and improving the living quality of consumers. It is also committed to disclosing its marketing data in its entirety with accuracy and without keeping away or distorting facts, as well as to developing efficient information technology that could promptly respond to needs with the capability to manage the entire chain of data, from purchasing and order placement, payment, work order monitoring, to product delivery. Its obligation also includes services on providing consultation and making recommendations, delivering technical solutions, as well as joint development of products and innovations with customers, and organizing customer relations activities in big or small groups (details shown under Operating Result on Page 171)

3. Business partners

IRPC adheres to its code of conduct in working with all business partners with equality, fairness, transparency, and integrity. A Procurement Excellence policy was enforced as a guiding principle for drafting procedures and business ethics on procurement activities, including fair treatment of all business partners under the laws and conditions set forth in the respective contractual arrangements, and truly staying away from violation of human rights. Procurement Excellence focuses on managing the business under the ESG concept in supporting sustainability.

E: Environment – The Green Procurement Policy demands that all procured materials shall be green products. All procurements for any chemicals shall be made in full compliance with either REACH or RoHS standards, and products with green labels are given a privilege for purchasing consideration.

S: Social – IRPC supports hiring a local workforce and activities run by local communities. It also supports business interactions with business partners who respect human rights.

G: Governance – Practices complying with good governance including rules, practices and procurement procedures acceptable by standards of the leading industry, anti-corruption, money-laundering prevention, business partner registration and approved lists of vendors, manufacturers and contractors; and an efficient and auditable procurement system.



IRPC's Analyst Meeting

- IRPC organized Supplier Conference 2015 as part of the IRPC Sustainability Growth activities on October 14, 2015, to share knowledge of business practices under the DJSI Sustainability Business with DJSI Appliance, and invited its business partners to adopt and comply with the IRPC Supplier Code of Conduct and the IRPC anti-corruption policy. With these policies, business partners can enjoy using the venue provided for launching any complaints or selecting products with least impacts on the environment, or deciding to co-develop any product specialty. These activities are part of IRPC's intention to obtain Level 5 and meet assessment criteria set forth for Eco-Factory by the Industrial Environment Institute of the Federation of Thai Industries. At the conference, IRPC also introduced its Procurement Web Portal to business partners to use as another communication channel with the IRPC Procurement group on various issues such as e-sourcing (RFP and RFQ), evaluation (AVL and ACL) for convenience, speed, transparency and auditability by business partners.
- IRPC invited its business partners to participate in the PTT Group CG Day 2015 on August 25, 2015. Jointly organized by six listed companies under the PTT Group, the event strengthened corporate governance practices and extended the CG network to business partner groups, as well as inviting business partners to join the anti-corruption movement.
- Jointly organized with contractors the IRPC CSHE Day on November 27, 2015, to raise awareness among all contractors on human rights and campaign for contract workers and employees to be fully conscious of work quality, safety, occupational health and the environment.
- To comply with good corporate governance and anti-corruption policies, IRPC issued an announcement to the Company's Business partners to prohibit giving and accepting gifts during the New Year and other celebrations.



Shareholder's Company Visit

4. Competitors

IRPC manages its businesses under the policy of equality with all competitors under a fair-competition framework, laws, ethics and business code of conduct on business competition. IRPC does not seek information about its competitors' trade secrets, including their intellectual properties, through dishonest means, or damage competitors' reputation without factual data.

5. Creditors

IRPC honestly and strictly honors all contractual conditions and obligations with its creditors and financial institutions in the entirety, including disclosure of accurate and factual data. Wherever IRPC cannot comply with a contract or an agreement, a prior notification shall be made to the respective creditor and call for a joint resolution.

6. Employees

With full recognition of the value of its human assets to drive the organization to success, IRPC is committed to doing its best to continuously look after, develop potential and generate good quality of life for its employees to the same level of peer leading companies. These can be achieved by providing appropriate, fair compensation and benefits to employees and retain quality employees with the organization for the long term; creating good work culture and good work atmosphere, giving priority to human rights, ensuring safety and occupational health in the workplace with proper work equipment, and a respect for worker's privacy.

- Highlights of key activities and employee development Design of a human resource management structure in pursuit of HR Excellence, as part of the DELTA Project, including the following.
 - Organizational restructuring for higher efficiency: IRPC pursued organizational restructuring, including job re-evaluation, redefining compensation and benefits structures, manpower planning, and creating

professional career development in order to increase the human resource management efficiency.

- Development of Performance Management System (PMS): A new performance appraisal system was put in place with specific set of KPIs for thoroughly explainable, fair performance measurement. A new salary structure compatible with peer industries was adopted for IRPC to retain quality employees. The system also provides promotional criteria which are fair and explainable to all, with a specific set of knowledge and capability for each job which can be used to design proper training and development programs for job holders.

- Leadership development: IRPC introduced performance appraisals for their leaders, including 180-degree performance behavioral feedback and leadership. An attitude test was also introduced to measure the relationship between an employee and the organization to support the development and creation of proper motivation to strengthen ties of such relationship and cope with changes and growth of the organization in the long term.

- Creation of organizational values: To support alignment with values of PTT Group, IRPC introduced and nurtured the i SPIRIT as an organizational culture to drive the entire organization in the same direction (both short-term and long-term)

- Development of knowledge and capab

- IRPC issued a policy with guiding principles on human resource management and published “A Handbook and Guiding Principle for Human Resource Management”, with management signature, to communicate and disseminate to employees to be fully aware of its systematic human resource management, policy, standards and work practices, as well as various rights of the employees.

- IRPC published a policy on training and development for employees in the “Training and Development Handbook”, for use as a tool and guidelines for managing employees’ development through giving

knowledge and capability, and creating potential of each employee. Four training needs were defined for all executives and employees: management, safety & environment, quality & productivity, and technical, including the business code of conduct and anti-corruption training under the corporate policy. Moreover, an individual development plan was introduced as a performance management tool for an employee and his or her supervisor to plan efficient development and proper technical career development. Each employee plans and attends training for certain hours per year, and the training statistics are reported in the Sustainability Report.

- Communication and activities with employees

- The “President meets Employees” activities are held quarterly and whenever there is a critical need for communication. The general topics for communication in this program are sharing of general work performance, policy, and business directions to employees for better understanding, questioning and information exchange. The activity is held in a room, with video conference broadcast to all operating offices for two-way communication via the company’s intranet.

- The communication program between the president and executives and the labor union is promoted to support activities of the union and improved relationship between the two groups. Some of these activities are the annual party and the 15th anniversary of the union of IRPC and its subsidiaries including all eight labor unions. With full intention on the rights and benefits of employees, the president always presides as chairman of the meeting, together with the employee committee, to efficiently develop resolutions between the employer and employees on issues in a timely manner.

- The President, executives and employees jointly organize an annual retirement party to honor and inspire employees who devote themselves and are dedicated to working for the company, while fostering a good model for an organizational culture.





IRPC staff meet the CEO

- Compensation and welfare to employees
 - Developed a compensation policy conforming to work performance in the short term and the long term. The review process is appraised with assessment of the agreed at the organization, business unit and individual level for the completed year against its competencies. A variation bonus was granted to senior executives in proportion with specific achievements in the pilot year of the program.
 - Modified the welfare structure to better retain quality employees, promote and upgrade the quality of life of employees. These welfare benefits included medical fees, housing rent and non-resident allowance.
 - Formulated a provident fund for the long-term welfare of employees, with a higher company contribution than the legal requirement and exponential to service years. Employees were given data and training, together with options for appropriate investment, depending on the individual's need for maximum return and investment flexibility.
 - Organized annual recognition service-year awards for employees with 10, 20 and 30 service years.
 - Recognition of commercial patents and intellectual property IRPC constantly promotes and creates awareness among its workforce of commercial patents and intellectual property. Several campaigns were organized to remind employees to fully comply with the Copyright Act B.E. 2537 (1994). IRPC also published its policy on standard practices to use its computer machines and computing network, as well as good operation practice to prevent employees from using illegal computer programs and software. Periodic reviews and monitoring are conducted to prevent infringement.
 - Internal Audit is tasked to monitor and audit violations on the use of copyrights owned by IRPC, and to protect and optimize IRPC's intellectual properties.



EVEREST Project Communication

7. Society and Community

(referenced to details described in the CSR Report on social responsibility activities Page 207-217)

IRPC's sustainable value creation is fully incorporated with the stakeholder management and the community and social activity program under the integrated corporate community and social responsibility policy with long-term and annual activities guided by the Creating Shared Value (CSV) approach. Under this policy, there is no segregation, exclusion or selective treatment to differences in gender, nationality and religion but to fully respect human rights, conforming to the guiding principles of the UN Global Compact and UNICEF, adopted and adapted by IRPC to fit with the Thai social setting and the development of its corporate CSR policy. Thanks to the policy and its commitment, IRPC was honored with the "Asia Responsible Entrepreneurship Awards: Social Empowerment" from the "From Bench to Community" program, presented by Enterprise Asia, Hong Kong. Below are highlights of community and social activities and development.

- Development of a policy and clear guidelines on fair, socially responsible practices, sustainability management policy, corporate governance policy and compliance policy, as well as policy adjustments to cope with changes.
- Promotion of activities on joint community development. Activities in 2015 included the participation in the CSR-DIW by 11 IRPC plants including PW, PP, PS, ADU2, ETP, ACB, PRP, LUBE, WWT1, WWT2, Polyol and Ban Khai distillation plant; of which four (ETP, ACB, ADU2 and PRP) were qualified for outstanding community programs.
- Continued the IRPC Cubic Academy with Class 2 after the graduation of Class 1 on August 20, 2015. Class 2 graduation was on December 25, 2015, with participation of 27 external attendees.

- Supported the “1 for 9 Project” by having IRPCT volunteers provide classes for two Border Patrol Police schools, special tuition on O-NET/A-NET for one school, organizing special activity on turning dream into a meal under the “Moderate Class More Knowledge” initiative, and taking executives of the Office for National Education Standards and Quality Assessment (ONESQA) and four groups of teachers from different schools to visit IRPC facilities and observe community enterprises at Tambon Choeng Noen, Amphoe Muang, Rayong.
- Supported the “Build Canal, Build Generation Project” with value-added activities including allocation of the rice market for rice farmers in Tambon Lam Sai Yong, Buri Ram, and provision of tap water and drinking water for the communities.

8. Environment and Natural Resources

IRPC has developed a policy on responsibility to the environment, natural resources and safety, which are critical agenda items for the world community today. IRPC was selected by the Industrial Environment Institute of the Federation of Thai Industries as a role model for eco-industrial operations. The highlighted 2015 activities pertaining to the development of the environment, natural resources and safety are summarized as follows.

- Defined a clear, concrete policy on safety and occupational health for all employees for all sites, including contract workforce under service hire and contractual agreements for short-term work services. Under the policy, a number of key indicators relevant to rates of accident, loss time or work injury were developed, with publication of these statistics in the sustainability report. Also, developed a policy and guiding principles to care for the environment, with practices complying with international standards and laws and an ultimate goal to become an Eco-Factory.
- Jointly promoted 4 environmental projects with the Office of Environmental Fund under the Office of Natural Resources and Environmental Policy and Planning. Four projects organized in 2015 were
 1. Tree thunnel at Sri Mahosot Project
 2. Prohibited food from wild animal campaign
 3. Herb Project at Phu Lanka
 4. Forest Reservation, Burirum Province.
- Continuously managed health development programs in areas surrounding the IRPC Industrial Zone, including the community's wellness through the use of a geographic

information system (GIS), mobile medical clinic, drinking water for community, sports for youths, potential development for the Local Administrative Organization and stakeholders, and so on.

- Joined as an expert panel of the public talk on CSR activities on natural resources and the environment, with participation of the private sector, now and in the future.
- Organized and jointly organized various activities promoting the development of the environment, natural resources and safety (details published in the Management on Quality, Safety, Occupational Health and the Environment, Page 197-206, and Sustainability Management, Page 192-196).

4. Disclosure and Transparency

IRPC is committed to accurate, complete, sufficient, timely, transparent and equitable disclosure of financial and non-financial information to the shareholders, investors and analysts. It has set guidelines on information disclosure as follows:

1. Reports on company information under the rules set by the Securities and Exchange Commission (SEC) and the Stock Exchange of Thailand (SET) as follows:
 - Reports on vested interests of the directors and executives under SEC's rules. Details as shown in the Management Structure, page...
 - Important news and financial statements via SET's channel (SET Portal)
 - Annual Report 2014, which features key information on performance and financial statements unconditionally approved by the auditor. IRPC has never been ordered by SEC and SET to make any amendment.
 - Disclosure of information on business transactions, or agreement made between the shareholders which posed significant impact on other shareholders or IRPC.



Governance and Private Sector Seminar in CSR: Environment & Natural Resources



Investors and Media Conference on Petrochemical Investment in Phuket

- Corporate Sustainability Report 2014 to communicate the approach to management and economic, social and environment performances. IRPC adopted the Sustainability Reporting Guidelines by Global Reporting Initiative, version 4 (GRI G.4), so that the disclosure of information may meet international standards and can be assessed against the “core” level. The information was reviewed by an external agency for reliability and was sent to the shareholders together with the annual report. It is also available via IRPC’s website.

- The Communication on Progress (CoP) report presented to UN Global Compact. IRPC joined the UN Global Compact in 2011 as an associate member and was committed to operating and reporting the performance under the UN Global Compact guidelines. The reporting for 2014-2015 has been upgraded to the GC Advanced Level, the highest level of reporting. The report is available on IRPC’s website. The electronic report was forwarded to the UN Global Compact website (www.unglobalcompact.org).

2. E- communication: Important information is disclosed in the annual report and on IRPC’s website at www.irpc.co.th for timely and up-to-date disclosure in Thai and English, such as vision, nature of business, press releases, shareholding structure, organization structure, business group structure, details of the Board and the management, investor relations, affidavit, articles of association, memorandum of association, annual report (downloadable), notice of the shareholders’ meeting (downloadable), shareholders’ meeting documents, financial statements, annual registration statements (Form 56-1), documents for the analyst meeting, CG policy, activities and other information relating to IRPC’s businesses, IRPC’s responsibilities, treatment of stakeholders, and operation in pursuit of sustainable growth.

3. Communication through printed media, radio, television, activities with stakeholders and other public relations channels such as Newsletter to regularly inform the shareholders on IRPC’s performance results and important activities.

4. Direct disclosure to shareholders, investors, securities analysts and the press.

Activity	Times
Roadshow (aboard)	4
Roadshow (domestic)	7
Analyst Meeting	4
Opportunity Day	4
Company Visit (video conference)	8
Company Visit (site visit)	32
SET in the City 2015	1
IRPC Newsletter	4
Meeting with the press / press conference/ press release	19

5. No disclosure on IRPC’s performance to investors or analysts or appointment with any analysts during the seven days prior to performance reporting to SET.

Thanks to its outstanding performance in 2015, IRPC’s Investor Relations has been recognized by investors and analysts, and won the “Corporate Governance Asia Recognition Awards 2015: Best Investor Relations by Company” from CorporateGovernance Asia Magazine in recognition of the transparent and fair information disclosure to investors and stakeholders.

Investors and interested parties can acquire more information via IRPC’s website, www.irpc.co.th, or directly contact Investor Relations at:

- Telephone : +66(0)2649-7380
- Electronic mail : ir@irpc.co.th
- Facsimile : +66(0)2649-7379.

5. Board Responsibilities

With their Fiduciary Duties, The Boards of Directors have performance as follows:

1. Duty of Care

The Board carefully performed their duties with cautions as well as oversee the Company to conduct business with sustainability while enhancing benefits to all stakeholders. (detailed as shown in Corporate Responsibility page 207-217)

2. Duty of Loyalty

The Board performed their duties with honesty for utmost benefits of shareholders, stakeholders, and society. (detailed as shown in Performance Summary page 165-181)

3. Duty of Obedience

The Board oversee and supported the Company to strictly conduct the business in compliance with laws, regulations, and other relevant conditions. Therefore, in 2015, the board had set the "Compliance Policy" (detailed as shown in the Management Structure page 165-181)

4. Duty of Disclosure

The Board oversee that the Company had disclosed accurate information required by laws, as well as disclosed useful information to investors. (detailed as shown in Information Disclosure and Transparency page 165-181)

- In 2016, The Board performs with integrity, honesty, transparency and vision, and elevated the corporate governance level of IRPC in line with the ASEAN CG Scorecard standard as follows:

- The number of listed companies where each director can serve as a director was set at five.
- The term of office for each independent director was set to up to nine years (three consecutive terms)

- In addition to the annual performance assessment by IRPC, the Board arranged for the assessment of the Board and sub-committees by independent assessment for the year 2015 based on the ASEAN CG Scorecard standard, and planned to go through this every three years.

- Review and develop forms for performance assessment of the Board and sub-committees in line with SET's assessment guidelines 2015.

- Allow the shareholders to propose meeting agenda and nominate directors.

- Define a Corporate Compliance Policy covering eight areas: 1) compliance with related laws and regulations 2) fair competition and anti-monopoly 3) anti-corruption and no bribery 4) respect for and compliance with human rights principles 5) protection of intellectual property rights 6) anti-money laundering 7) management of company properties and information 8) environmental, health and safety responsibility.

Structure of the Board and Terms of Office

- The Board consists of at least five and up to 15 directors, at least half of whom must be residing in Thailand. Gender is not one of the criteria for the nomination of directors, and directors must have the qualifications as stipulated in the Public Company Act on the Board of Directors.

- The age of directors must not exceed 70 years.

- Have extensive and various knowledge, expertise, and experience which are suitable to and benefit IRPC's businesses. IRPC has prepared a skill matrix defining the qualifications of its directors as framework for the nomination and appointment of directors to ensure efficient and complete composition of the Board in every aspects.

- Dedicate time to performing duties appropriately and efficiently, make important decisions for the best interests of company, display leadership and are role models in ethics, and possess other appropriate and qualifications for directors of listed companies.

- The term of office of directors and independent directors shall not exceed three consecutive terms (nine years).

- The number of companies listed on SET where each director can serve as a director must not exceed five. (Detail in Management Structure Page 117)

Scope of Duties of the Board

- Define vision, directions, and strategy to support sustainable growth. The Board is engaged in a brainstorm to formulate Board Strategic Thinking Session (STS) every August. Reviews are performed on all economic, social and environmental strategies, crisis and opportunity, and potential risks to ensure business growth and competitiveness so that the management can incorporated them in the formulation of operating plans for efficient implementation such as financial, investment, risk management, internal control and audit, sustainability management, and social and environmental responsibility plans.

For the year 2015, STS was held on August, 21. Directors had gathered information useful for defining IRPC's business direction prior to the meeting and had engaged in extensive discussion on the meeting day. As a result, the five-year operating plan was approved with strategies for Excellence ie: Operational Excellence, Financial Excellence, HR Excellence, SD Excellence, IRPCT Excellence and CG & CSR Excellence. The plan will be reviewed annually by the Board.



IRPC Audit Committee gave the Diamond Awards to the winner who had practice on outstanding internal control and transparen

- Establish reliable systems for accounting, financial reporting, and auditing and ensure that the processes for internal control and audit assessment are in place and are sufficient and efficient. This year, IRPC won “The Audit Committee of the Year 2015” at the “Board of the Year Awards 2015” event.
- Establish a corporate governance policy which reflects the Board’s corporate governance guidelines and roles and responsibility. The Board is to set, introduce, approve and review the corporate governance policy, as well as policies on business ethics and the code of conduct for all directors, management and employees and disclose downloadable details via IRPC’s website.
- Instruct all directors, management, and employees to comply with the business ethics and corporate governance manual, and establish measures for efficiently monitoring and reporting the performance.
- Establish a policy on the holding of offices as directors at other companies or other positions by the President.
- No record on violation of SEC’s or SET’s rules or regulations, or any reprimand from related regulators or governmental agencies.

Approval Authority of the Board

1. Approve vision, strategies, short-term and long-term business plans, and important policies such as those on risk management and anti-corruption, as well as financial goals and annual plans and budget.
2. Approve financial criteria, investment and investment directions
3. Approve procurement for the portion exceeding the authorized amount of the President under the authority given for each item.

4. Approve major operations within the objectives, articles of association and resolutions of shareholders’ meetings, and ensure that the management operates under given plans and policies with efficiency and effectiveness.

5. Approve the President’s performance assessment and remuneration.

6. Approve interim dividend payment and annual employees’ remuneration.

7. Approve the President’s service as director at other companies or any academic or social positions.

8. Approve management members’ service as directors at affiliates or joint-venture companies in proportion with the shares held.

For crucial matters and matters that need the approval of shareholders as required by law, the Board must arrange for the submission of all such matters for the shareholders’ consideration and approval.

Directors’ Nomination and Appointment

Independent directors

- IRPC has redefined the definition of independent directors which is stricter than that of SEC and SET, and included in the Corporate Governance Manual independent directors’ qualifications, terms of office, and limitation on the number of listed companies each independent director can serve. Details are shown under Management Structure, page 117-118

Nomination and Appointment

- To ensure the transparency of directors’ nomination and appointment and ensure that it is in compliance with CG principles, the Board appoints the Nomination and Remuneration Committee to screen and select competent candidates through a systematic process, as well as to allow shareholders to nominate candidates of their choices, regardless of gender, social status, or religion, and then propose them to Board and shareholders’ meetings for approval. The procedures follow the rules on diversity of knowledge and experience (Skill Matrix). IOD’s and the Ministry of Finance’s Directors’ Pool are also used in identifying potential candidates. IRPC’s nomination and appointment of directors is in compliance with CG principles.

Separation of Chairman and President

- As the role of the Chairman is to control and monitor, while the role of the President is to manage, the Board therefore rules that the Chairman and the President must be two separate persons so that they may be

independent from each other. The present Chairman, Mr. Tevin Vongvanich, is not an independent director; however, the Board has unanimously appointed him Chairman, as he possesses extensive knowledge in the energy, petroleum, and petrochemical businesses and is experienced in running major companies, which is considered beneficial for IRPC's businesses.

Chairman's Scope of Duties

- The Chairman schedules the meetings and, in collaboration with the President, establishes agenda for all Board meetings, ensuring that all crucial issues are included. The directors are free to propose agenda items for the meeting by notifying the Chairman. The President, as Secretary to the Board, is responsible for agenda preparation.
- The Chairman controls and conducts meetings with efficiency and in compliance with IRPC's regulations, encouraging directors to freely express their opinions and allocating sufficient time for executives to make their presentations and directors to discuss on essential issues. The average meeting time is about 2.5 hours.
- The Chairman must establish clear measures to ensure that the directors receive all relevant meeting documents and have sufficient time to study, consider and make a proper decision on each agenda item. The Chairman reviews the issues and agenda documents with the President/Secretary to the Board two days in advance of every meeting to ensure completeness of the documents and decide whether the directors should need additional information, in order that the meetings can be smoothly conducted.
- The Chairman supports and encourages directors to perform their duties to the best of their ability, within the scope of authority, duties and responsibility and in compliance with corporate governance principles.
- Monitor and follow up on the Board's and sub-committees' performance in order to achieve the goals.
- Cast the decisive vote in the case there is a tie in the voting of the Board.

Sub-Committees

The Board appoints four sub-committees, namely the Audit Committee, Corporate Governance Committee, Nomination and Remuneration Committee, and Risk Management Committee to prudently and efficiently screen significant issues according to the clearly defined roles and duties (details under Structure of the Board: sub-committees, page 120-125)

1. Audit Committee *(a total of 12 meetings held in 2015)*

Audit Committee	
1.	Mr. Cherdpong Siriwit Independent director/ Chairman of the Audit Committee
2.	Mr. Songpope Polachan Independent director/ Member of the Audit Committee
3.	Mr. Triumph Jalichandra Independent director/ Member of the Audit Committee

Roles and responsibilities

The Audit Committee defines the auditing policy, reviews the internal control system and reports the findings to the Board and stakeholders. The Office of Corporate Internal Audit carries out the audit and submits the results to the Audit Committee, which focuses on important issues such as assessment and review of the internal audit system, review of financial statements and connected transactions between IRPC and related parties, appointment and dismissal of the external auditor as well as the head of the Office of Corporate Internal Audit, which reports directly to the Audit Committee, with Mr. Thammasak Panyowatkool, Executive Vice President, Corporate Accounting, as the acting head of the Office and Secretary to the Audit Committee. Duties and responsibilities of the Audit Committee and meeting attendance of each director appear under Management Structure, page 121-122 and 126

2. Nomination and Remuneration Committee

(a total of eight meetings held in 2015)

Nomination and Remuneration Committee	
1.	Mr. Woothisarn Tanchai Independent director/Chairman of the Nomination and Remuneration Committee
2.	Mr. Sarun Rungkasiri Director/ Member of the Nomination and Remuneration Committee
3.	Mr. Songpope Polachan Independent director/Member of the Nomination and Remuneration Committee

Roles and responsibilities

The Nomination and Remuneration Committee is responsible for the nomination of competent candidates for the positions of President, directors of the Board and sub-committees as well as their remuneration for the Board or the shareholders' consideration. The procedures in such determination must be transparent,

based on fair principles and reliable information for the maximum benefits of IRPC and shareholders. Duties and responsibilities of the Nomination and Remuneration Committee and meeting attendance of each director appear under Management Structure, page 121-123 and 126.

Qualifications of the Nomination and Remuneration Committee

- The Board appoints the Nomination and Remuneration Committee
- The Nomination and Remuneration Committees must consist of at least three directors and at least one of them must be an independent director. (Two members (over 50%) of the current committee are independent directors.)

3. Corporate Governance Committee

(a total of seven meetings held in 2015)

Corporate Governance Committee	
1.	Mr. Watcharakiti Watcharothai Independent director/ Chairman of the Corporate Governance Committee
2.	Lt. Gen. Sasin Thongpakdee Independent director/ Member of the Corporate Governance Committee
3.	Mr. Pramual Chanpong Director/ Member of the Corporate Governance Committee

Roles and responsibilities

The Corporate Governance Committee is responsible for the formulation of corporate governance guidelines and provides related recommendations to the Board, ensures that the implementation of IRPC's corporate governance is in accordance with the annual corporate governance operation plan aimed to promote corporate governance strict compliance among directors, executives and employees, and develops and elevates corporate governance level as planned. In 2015, the committee implemented new plans to promote stakeholders' participation, such as IRPC Cubic Academy and activities with trade partners. Duties and responsibilities of the committee and meeting attendance of each director appear under Management Structure, page 124-126.

Qualifications of the Corporate Governance Committee

- The Corporate Governance Committee must consist of at least three directors and at least one of them must be an independent director. (Two members (over 50%) of the current committee are independent directors)
- Must be knowledgeable and keen on corporate governance principles of international practices.

4. Risk Management Committee

(a total of five meetings held in 2015)

Risk Management Committee	
1.	Mr. Sarun Rungkasiri Director/ Chairman of the Risk Management Committee
2.	Mr. Prasit Suebchana Director/ Member of the Risk Management Committee
3.	Mr. Sukrit Surabotsopon Director/Member of the Risk Management Committee

Roles and responsibilities

The Risk Management Committee defines the risk management policy and plans, together with the risk management process for the entire company, develops the risk management system, consider principles on financial and derivative instruments, follow ups and assesses the application of risk management methods for alignment with IRPC's business plans, and regularly reports to the Board. Its duties and responsibilities and the meeting attendance of each director under Management Structure, page 124-126.

Qualifications of the Risk Management Committee

The Risk Management Committee must consist of at least three directors who are experts in petroleum and petrochemical businesses or other fields which will be beneficial to IRPC's risk management.

Board Meetings

Board meetings are set in advance every year. The Company Secretary (Ms. Monwipa Choopiban has been appointed Company Secretary since 2012.) will advise the Board of the next year's meeting schedule in advance to allow time for the directors to schedule their time to attend. Additional meetings may be called as appropriate. The Company Secretary is responsible for staging the meeting, sending meeting notices and agenda of the meeting, supporting documents to the directors at least five days in advance to allow time for adequate perusal.

IRPC has set the rules for the meeting as follows:

- The Board must meet at least once a month. Each director must attend at least 75% of all the meetings held. In 2015, the Committee met 12 times (Details of each director's attendance as on page 126)
- The number of attending directors must consist of at least half of all directors to form a quorum under the Articles of Association registered with the Ministry of Commerce.
- Board resolutions must carry the majority votes, and at least two-thirds of all directors must be present at the meeting. Directors with vested interests must refrain from expressing their opinions and abstain from voting on that agenda. (See CG Manual, Part 2, Article 2.6).
- The Board has a policy for the non-management directors to convene a meeting in the absence of the management at least once a year.
- The Board has a policy for a meeting among the independent directors at least 2 times a year
- The Board has set a rule to convene an offsite meeting at least once a year to enhance relations and understanding among the directors and executives. In 2015, the meeting was held at Kamnoetvidya Science Academy, Rayong, on June 19.

The Board has defined goals, long-term strategies, and workplan 2015, together with KPIs in significant as follows:

1. IRPC's economic performance
2. Quality, safety and occupational health index
3. Environmental, energy and resource efficiency index
4. Sustainability under DJSI guidelines and factors
5. Employees and organizational health index (OHI).



The Board of Directors visited the UHV Project Construction at the IRPC Industrial estate, Rayong

Board Performance Assessment

The Board and sub-committees annually conduct performance assessment and report the results to the Corporate Governance Committee and the Board respectively. The assessment allows review of the performance of the past year, whether the work has been fulfilled and are appropriate within the scope of work and in compliance with corporate governance principles. The results will result in improvement for the subsequent year.

In 2015, IRPC included its assessment of the Board and sub-committees by independent assessment and intends to conduct it every three years.

Annual Performance Assessment

IRPC has prepared a Performance Assessment Form for the Board and sub-committees.

Summary of the overall performance assessment of the Board as follows:

1. An average score of 95.28%

Assessment Areas	Point
• Board's structure and qualifications	93.10%
• Role and responsibilities of the Board in defining business policies	94.68%
• Board's practices	96.79%
• Board's meeting	96.57%

The Board has recommended that directors with expertise in commerce, personnel and accounting should be included in the composition, as well as more independent directors in the future, and IRPC should be prepared for unplanned shutdowns of the plant which might cause pollution and impacts on communities.

2. Results of the assessment :

- Self-assessment 2015: An average score of 95.97%
- Cross-assessment of other directors 2015: An average score of 89.15%

Assessment Areas	Self-assessment	Cross-assessment
• Board's qualifications	94.00%	89.97%
• Accountability of one's own decision and justification	99.05%	91.56%
• Responsibility for one's own work with due competence and sufficient efficiency	94.29%	87.73%
• Equitable, fair, and justifiable treatment of stakeholders	97.14%	90.67%
• Transparency in one's own work with accountability and information disclosure	97.86%	83.33%
• Vision to create long-term value for IRPC	91.43%	88.00%
• Business ethics/ code of conduct	98.10%	92.89%

3. Assessment of Audit Committee

3.1 Performance assessment of the entire Audit Committee for 2015: An average score of 99.44%

Assessment Areas	Point
• Structure and composition of the Audit Committee	96.66%
• Roles and responsibilities	100%
• Relations with the internal and external auditors	100%
• Relations with the management	100%
• Reporting	100%
• Quality control	100%

3.2 Individual assessment of the Audit Committee 2015: An average score of 91.95%

Assessment Areas	Point
• Business knowledge	88.88%
• Expertise in performing duties	91.66%
• Authorities and responsibilities assigned	80.55%
• Independency and integrity	100%
• Understanding of roles and responsibilities	95.23%
• Performing and meeting	95.37%

3.3 Performance Assessment of Audit Committee by the Chairman for 2015. An average score of 100%

4. Results of the Performance Assessment of the sub-committees for 2015

- Nomination and Remuneration Committee: An average score of 92.15%
- Corporate Governance Committee : An average score of 98.96%
- Risk Management Committee : An average score of 99.44%

Assessment Area	Nomination and Remuneration Committee	Corporate Governance Committee	Risk Management Committee
Structure of the Committee	91.11%	97.77%	97.77%
Policy of the Committee	88.33%	98.09%	100%
Practices of the Committee	94.16%	100%	100%
Meetings of the Committee	95.00%	100%	100%

Independent Assessment of Board of Directors

In 2015, the Good Corporate Governance Committee decided to undertake a self- evaluation of the Board of Directors and also the 4 Board Committees, namely: the Audit Committee, the Corporate Governance Committee, the Nomination and Remuneration Committee, and the Risk Management Committee.

Additionally, a self-evaluation of their own respective performances was undertaken by the Chairman of the Board and by each individual Director, through engaging an external consultant, which in accordance with the best practices specified by the Principles of Good Corporate Governance of the Stock Exchange of Thailand (SET) in Section 5 - 5.3: Responsibilities of the Board of Directors. Those best practices recommend engaging an external consultant to assist in defining guidelines and procedures together with appropriate recommendations regarding the performance evaluation process for a Company's Board of Directors that should take place every 3 years; as well as disclosing the results of such performance evaluation exercises in the Company's Annual Report. This is in order to open up opportunities for receiving any external insights and inputs regarding the discharge of the duties and responsibilities by the Company's Board of Directors, so as to lead to any required improvements to be made accordingly in order that the Board of Directors will always act in timely manner appropriate to the current situation and environment, as well as to enhance the working standards of the Board of Directors of the IRPC Plc. to be on par with international standards.

• Results of the Performance of the Board of Directors

In undertaking a self-evaluation of the Board of Directors, external experienced assistance was acquired by engaging the independent consultant Governance Matters Thailand (GMT) that is part of the Australian-based Governance Matters (GM) network, together with making use of comparable performance indicators (or benchmarks) as used for 50 Australian companies. These performance indicators were exactly the same as specified on evaluation form used there, which assesses 8 categories of a Board of Directors' performance, namely: 1.Structure and Skills; 2.Strategic Direction and Planning; 3.Policy; 4.Monitoring and Supervision; 5.Accountability; 6.CEO and Succession; 7.Leadership and Teamwork; and 8.Agendas, Papers, Meetings and Minutes.

The results of the self-evaluation of the performance of the Board of Directors of IRPC Plc., based on a 'model governance performance against benchmarks' process, show an overall average score of 94 points – namely, IRPC received a 'very good' rating for its overall governance and oversight activities - which should be well-accepted and used as a positive role model by other companies - as shown in the 'rating chart' below that indicate the actual scores (blue line) being is higher than the comparable established 'benchmarks' (red line) for each key performance aspect or element.

The key aspects that the Board of Directors of IRPC Plc. considers to be indicative of the overall effectiveness of the Board's performance is its good teamwork, together with the ability of its Board Members to express their respective opinions in a fully independent manner. The Board of Directors work together for the maximum benefit of the Company as a whole. The respective members of the Board of Directors all possess good moral principles, and are fully intent on devoting themselves to their work responsibilities, both of which are the desired core characteristics of effective Board of Directors.

At the same time, from the results of the evaluation of the performance of the Board of Directors an assessment was made in regards to the planned

development, on a continuing basis, of the Board of Directors together with ongoing plans to increase the implementation of good corporate governance principles into actual practices within the organization.

• Results of the Performance of Sub Committees

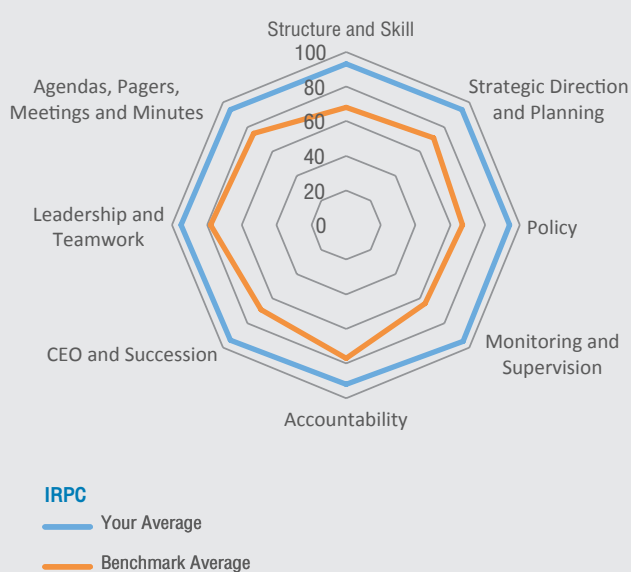
The overall achieved average score for all Board Committees was 95 points; namely, it means that all Board Committees achieved the required effectiveness in regards to their governance and oversight responsibilities, or achieved 'very good' standards of good corporate governance.

Audit Committee

The key aspects or elements used in evaluating the performance of the Audit Committee comprised of: 1.Composition; 2.Charter, Duties, and Responsibilities; 3.Auditors; 4.Meetings; and 5.Reporting. The overall achieved average score from the evaluation exercise was 97 points; namely: the Audit Committee was highly effective in its assigned duties and responsibilities - such as, held very effective and productive Committee meetings, and received a high score of 98 points for its reports to the Board of Directors. Nevertheless, the Audit Committee has, in place, plans to develop and further improve its audit activities, through making use of various available technology and tools that will enhance their overall effectiveness.

Nomination and Remuneration Committee

The self-evaluation of its performance by the Nomination and Remuneration Committee was based on these 4 key aspects or elements: 1.Composition; 2.Charter, Duties, and Responsibilities; 3.Meetings; and 4.Reporting; whereby an overall average score of 95 points was achieved - with a highest score of 99 points being received for Reporting. This indicates the effectiveness of this Board Committee for the reports prepared and submitted to the Company's Board of Directors; while the achieved scores for various other aspects are: 97 and 93 for composition and Meetings respectively. The Nomination and Remuneration Committee will formulate plans to further improve its overall effectiveness in the selection and nomination process for new Board Directors - through using 'Board Skill Matrix', which will facilitate in having in place a Board of Directors comprised of characteristics and qualifications that are fully aligned with the intended strategic direction and goals of the organization as well as being varied in terms of age and gender together with a Board of Directors that possesses



varied insights, opinions and ideas. This plan also includes analyzing the current 'Board skills gap, so as to be well-prepared in selecting and nominating appropriate candidates for new Board Directors whenever the occasion arises.

Risk Management Committee

The self-evaluation of the performance of the Risk Management Committee was based on these 4 categories: 1.Composition; 2.Charter, Duties, and Responsibilities; 3.Meetings; and 4.Reporting; whereby it resulted in an overall achieved average score of 96 points. This score indicates that the Risk Management Committee is most effective in terms undertaking various activities in full accordance with its stated Charter. Effectiveness in discharging its responsibilities and in reporting to the Board of Directors received a high score of 96 points. As for the scores received for other key aspects, they were 95 and 94 points for Composition and Effective Meetings respectively. The Risk Management Committee has determined a risk management plan, that has the objective and goals to create an increased awareness, on the part of all Staff members at every level within the organization, of the vital importance of preventing against perceived risks together with the full recognition, on their part, that this is the responsibility of everyone throughout the organization.

Corporate Governance Committee

The evaluation of the performance of the Corporate Governance Committee was based on these 4 categories: 1. Composition; 2. Charter, Duties, and Responsibilities; 3. Meetings; and 4.Reporting; whereby it received the overall average score of 94 points. The Charter, Duties, and Responsibilities aspects received the highest score of 95 points; while the other key aspects received a respective score of not less than 93 points. As such, it is considered that the Corporate Governance Committee has achieved a 'very good' overall standard of effectiveness in discharging its assigned oversight and governance responsibilities.

The Corporate Governance Committee has defined plans to further enhances its overall effectiveness in discharging its duties, through determining its good governance principles and policies in a more clearly defined, concise and comprehensive manner, as well as through focusing more achieving effective implementation of these principles and policies into genuine and real practices – namely, focusing more on 'substance than form'.

Results of the Performance of the Chairman and Individual Directors

The self-evaluation for the performance of individual director - including the Chairman of the Board were based on the categories following:

- Categories used in evaluating the performance of the Chairman of the Board were: 1.Strategic; 2.Ethics/ Values; 3. Knowledge and Experience; 4. Relationship with other Directors; 5.Relationship with the Chief Executive Officer; 6.Public Profile; 7.Diligence; and 8. Chairing Meetings.
- Categories used in evaluating the performance of Board Directors on an individual basis were: 1.Character; 2.Knowledge and Experiences; 3. Competence and Judgement; 4.Diligence; and 5. Collegiality

The results of the self-evaluation of the performance of the Chairman of the Board and Board Directors, on an individual basis, achieved an overall average score of 95 points.

Additional plans to further develop and improve the overall effectiveness of the activities of the Board of Directors.

In undertaking a self-evaluation of the performance of the Board of Directors, the overall intent and objective is to enable further positive changes to the activities of the Board of Directors. As such, focus should be given to the required changes and areas for improvement despite having already achieved a high score this time around. From these evaluation results, the Board of Directors sees that further improvements to its overall effectiveness can still be made in these areas of activities:

- Selecting and nominating for appointment of new Board Directors,
- Developing the skills of Board Directors on a continuing basis,
- Allocating more time to consider strategic matters and issues,
- Reviewing established policies, and
- Making arrangements and preparation for Board Meetings in a systematic manner

As such within each area of activities, both the Company Secretary and the Secretary of the respective involved each Board Committee will need to monitor and closely follow-up together, so as to ensure they are implemented according to the established plans and agreed goals. Various suggestions and recommendations from Independent Assessor could be used to define



The Board's Room in Strategic Formulation Session

the plan to support further development of Board of Directors accordingly.

President Performance Assessment

Performance Evaluation of the President are designed under clear, transparent, accountable, and taking into consideration of his duties and responsibility and the company's out come. The evaluation processes are as follow:

- The Nomination and Remuneration Committee reviewed the evaluation criteria, with the president's consent in target achievement and proposed to the Board for approval in the Board meeting No.1/2015 in January 2015.
- The Nomination and Remuneration Committee considered the President performance in 2015 as per the set criteria and proposed to the Board for approved in December 2016.
- In 2016, the performance consist of corporate KPI and sustainability supporting factors.

Committee Orientation

In 2015, IRPC held an orientation for seven newly-appointed directors, namely Mr. Prasit Suebchana, Mr. Auttapol Rerkpiboon, Mr. Wasan Soypisudh, Mr. Tevin Vongvanich, Mr. Charnsin Treenuchagron, Mr. Chavalit Punthong, and Mr. Ekniti Nitithanprapas.

Essential information was provided for the new directors as follows:

1. The President presented the information, consisting of IRPC's vision, policies, organization structure, overall business operations, business performance and other relevant information to enhance their knowledge and understanding of IRPC's businesses.

2. The Company Secretary presented to them handbooks and relevant documents, including Director's Handbook (books 1-3), Corporate Governance Manual, Code of Conduct, Company's Affidavit, Objectives and Articles of Association, list of directors, duties of sub-committees, minutes of shareholders' meetings (2009- 2015), minutes of Board meetings (2012-2015), Annual Registration Statement (Form 56-1), Annual Report 2014, Sustainability Report 2014, Institute of Directors (IOD) training courses, and the schedule of Board meetings for 2015-2016.

Development of the Board and the Management

The Board encourages the directors and the management to participate in training and seminars that will be useful to their performance in business administration/ industry, roles, duties and responsibilities of directors. Ten directors have attended the basic training with IOD (the number of directors who attended and their details are shown on Page 32-41). However, for the directors that have not done so, the Company Secretary has coordinated scheduling them to the next IOD training courses as seen fit. Moreover, this year, two special presentations were held for the Board on the role of the Board in strategic formulation and on oil prices, which have direct impacts on IRPC's businesses as follows:

- On November 10, 2015, Ms. Kate Costello, a speaker on corporate governance from Governance Matters, Australia, gave a keynote address on "The Board's Role in Strategic Formulation" (a case study) to share the knowledge and experiences with the directors and the management on corporate strategic formulation based on CG principles.



*The World Oil Situation Session
by Dr. Feredium Fesharaki*

- On December 15, 2015, Mr. Feredium Fesharaki, Chairman of FACTS Global Energy, an internationally recognized energy consultancy company, gave a keynote address to the directors.

Nomination of the President

The Nomination and Remuneration Committee is responsible for the nomination for the Board's consideration of competent candidates with suitable knowledge, experience and ability for the position of President. Such candidates must possess extensive experience, knowledge and understanding of the petroleum and petrochemical businesses, as well as a good image and leadership, and comply with corporate governance.

There was no nomination for the President this year. However, the Board appointed senior executives vice president comprise of Ms. Rachadaporn Rajchataewindra, Corporate Accounting & Finance, to replace Ms. Duangkamol Settanung, Mr. Pongpraphan Titathavewatana, Petrochemecal and Refinery Business Unit to replace Mr. Peerapong Achariyacheevin and Mr. Somkiat Lertritpuwadol, Corporate Commercial and Marketing.

Succession Plan

The Board ensures that IRPC commands a proper human resource management plan and a recruitment system in place for all those who will assume the positions of top executives, as well as plans on training courses to enhance their skills and knowledge, and career path development under the HR Excellence program. IRPC has a plan for succession in the position of the President, top management and middle management so that they may efficiently assume new jobs and promptly handle all situations, either academic or management, and leadership. The

plan also includes responsibility transfer and cross-functional jobs in order that they may gain extensive knowledge of IRPC's core operations in parallel with on-the-job training.

Business Monitoring for IRPC, its subsidiaries and affiliates

- Management Structure

The Board approves IRPC's management structure to ensure efficiency of business management, led by the President. This year, the Board approved the new, streamlined organization structure with fewer (flatter) authority levels to avoid redundancy and better suit the responsibilities and nature of IRPC's businesses detailed in Organization Structure Page 42

- Monitoring mechanism

Besides the nomination of the President and the management, the Board sets guidelines for monitoring the businesses of IRPC, its six subsidiaries and five affiliates (detailed under Shareholding Structure, page 93) as follows:

- The President needs the approval of the Board to serve as a director or other positions in other organizations
- Members of the management need the approval of the President to serve as a director or other positions in other organizations
- IRPC's representatives need the approval of the Board to serve as a director or management members of its subsidiaries or affiliates
- Role as shareholders of subsidiaries or affiliates
 - To exercise the voting right at shareholders' meetings under the rules and regulations of subsidiaries and affiliates, and within the Board-approved authority.

- Management mechanism for subsidiaries and affiliates

- Business conduct of the subsidiaries and affiliates must follow the direction of IRPC's main policy and must conform to market prices. Connected transactions and reports on conflicts of interest must be accurate, complete, transparent, and accountable under corporate governance.

Dividend Policy

IRPC has a policy for dividend payment of no less than 25% of the annual net profit after deduction of taxes and all provisional reserves required by law and IRPC's Articles of Association. The dividend payment also depends on the investment plans, necessity, and suitability as the Board deemed appropriate. The 2015 AGM approved dividend payment of Baht 0.08 per share for the 2014 performance, which resulted in a loss.

Use of Inside Information

The Board has defined guidelines and good practices on maintaining confidentiality of information in its Corporate Governance Manual requiring the directors, the management, and employees to be prudent in maintaining confidential information, as well as forbidding the use of inside information and disclosure of IRPC's information to outsiders. A system to maintain the confidentiality of information was established, levels of confidentiality classified, and data access restricted. IRPC's policy forbids disclosure and use of material inside information not yet revealed to the public for the benefit of oneself or others, including the trading of IRPC's shares.

Significant Conflicts with Stakeholders

IRPC was not engaged in any significant conflict with its stakeholders.

Audit Fee

In 2015, the shareholders approved the appointment of Pricewaterhouse Coopers (PWC) BAS to serve as the external auditor of IRPC Group. PWC is found to be reliable and does not have any relation or vested interests, or both, with IRPC, its subsidiaries, directors, executives, major shareholders or related parties, and therefore has full independence in auditing IRPC Group.

1. Audit fees paid to the auditor or the auditing company

Description	Amount (Baht)
1. Audit fee of IRPC	3,100,000
2. Audit fee of the affiliates	1,000,000
3. Other expenses: travel costs, postal fees, printing of reports	120,000
Total	4,220,000

2. Non-audit fees paid to the auditor or the auditing company

Description	Amount
1. Verification of privileges under two Investment Promotion Certificates, issued by Thailand's Board of Investment (BOI)	120,000
2. Tax and legal consultancy fees	552,320
3. Expenses for financial seminars	16,000
4. Seminar expenses	23,800
Total	712,120

Good Corporate Citizenship

In 2016, The practices of IRPC have reflected its Good Corporate Citizenship in 5 areas: Human Rights, Labour Rights, The Environment, Anti-Corruption Practices and Learning and Development as follows:

1. Human Rights

- Part of the good corporate citizenship that IRPC has developed is the promotion of human rights with no segregation and exclusion of human beings due to differences, with promotional activities on children, women, the handicapped and the socially disadvantaged, and fair deployment and treatment of labor workforce including
- Participated in projects and activities promoting systematic administration of human rights with independent and international organizations such as the United Nations.
- Jointly founded with nine other private enterprises the domestic UN Global Compact Local Network and used the network for knowledge exchange and pushed to respect human integrity. Participation in the network also provided decent preparation for IRPC to pursue ways of doing business under the United Nation's 17 Global Goals.
- Took part in the UNICEF Children's Right program on Children's Rights and Business Principles (CRBP), and Thaipat Institute organizing training classes

for executives and employees to fully understand precise ways to simultaneously develop business and sustainably protect children's rights. Activities on children's rights are detailed in the Corporate Social Responsibility report, page 203.

- Sponsored construction materials for Pakkred Babies Home.
- Provided materials for religious activities, regardless of religion. Supported a media center for Thai Muslims in the "Returning Peace to the South" project with the donation of the Baitullah portrait with a clock for checking al-falak (prayer) times with intention to support the correct teaching of Islam and awaken consciousness of the misguided to jointly return peace to the nation. The portraits were and will be distributed to masjids, prayer rooms in pondok (Islamic private schools), and schools or government offices with prayer rooms in southern provinces. Donations were also made to other foundations.

2. Labour Rights

- Employees: Developed rules, procedures, and practices that are fair to select, evaluate, and promote employees. IRPC provides career opportunities and career development, and training for a better quality of life of employees and their families, as well as their neighboring communities.
- Labor union: IRPC supports the union's constructive activities and always listens to the opinions of all eight labor unions.
- Service hire labors: IRPC policy is to enter agreements only with contractors complying with labor rights laws and always care for safety of the workplace for their staff.
- Employees and labors of business partners and contractors: IRPC has put in place measures and ways to ask its business partners and contractors to treat their employees or labors fairly and legally.
- Children and youths: IRPC strictly adheres to children's rights and employment of labor workforce under the UNICEF guideline.
- IRPC manages employees and labors with no segregation due to differences on gender, age, education, religion, and race, and truly respects the privacy of all personnel.
- IRPC fully supports a good quality of life of all members of the society, including children, women, the handicapped, the elderly and the socially disadvantaged.

3. The Environment

IRPC has created a conglomerated value chain pertaining to the environment as follows.

- Environment protection and impact mitigation: IRPC has developed standards of work quality, safety and the environment compatible with those of international companies. Business partners have been asked to comply with these standards. IRPC, in addition, has devoted itself to become a role model for managing the standards of the eco-industry zone (EIZ).
- Eco-forest: IRPC selected specific types of trees fitting the local ecology for planting around the periphery of the industrial area as a buffer zone. All saplings were procured from the local community.

(Details of operations pertaining to the environment are reported in the Sustainability Report and QSHE Report, Page 193 and Page 188)

4. Anti-Corruption Practices

- IRPC has clearly defined its policy, guiding principles and measures on anti-corruption and published in Section 3 of the Corporate Governance Manual, for all personnel to efficiently pursue and to strictly avoid fraudulent act. Promotion of anti-corruption activities among employees and stakeholders has been continuously supported.
- To prevent conflicts of interest, IRPC demands that all its board, executives and employees annually disclose details on items that could involve conflicts of interest with itself under corporate governance.
- To expand the anti-fraud and anti-corruption alliance, IRPC enforced its subsidiaries and invited its business partners and stakeholders to join the CAC.
- With the CAC guideline, IRPC conducts risk assessment on fraud and corruption in every three-year cycle. With efficient and sufficient internal control and internal audit systems, the IRPC Risk Management Committee foresees no serious risk on corruption.
- IRPC became a member of the Collective Action Coalition against Corruption (CAC) under the Anti-Corruption Organization (Thailand) on April 4, 2014, as a show of certification of the existence of policy and guiding principles on anti-fraud required by the CAC. In 2015, IRPC was certified with Level 4 of the Anti-Corruption Progress Indicator from the Securities and Exchange Commission (SEC). The next three-year CAC anti-corruption recertification is set for 2017.
- To become a role model for all employees to strictly perform, IRPC jointly organized anti-corruption

campaigns with the public sector and government agencies, including the following.

- “Active Citizen – People Power on Anti-corruption” by the Anti-Corruption Organization (Thailand), chaired by Gen. Prayuth Chan-ocha, Prime Minister and Head of the National Council for Peace and Order.

- The International Anti-Corruption Day, organized by the Royal Thai Government and the Office of the National Anti-Corruption Commission (NACC) under the “Transparent Thailand” theme, chaired by Gen. Prayuth Chan-ocha, Prime Minister and Head of the National Council for Peace and Order. The event demonstrated excellent and strong collaboration between the government and the private sector to oppose corruption, deemed to be the firm foundation for the development of the nation sustainably and equally, and acceptable by civilized nations.

- IRPC has completed the anti-corruption training for 2,990 employees, equivalent to 57% of the total. A promotional campaign entitled “We Can Stop Corruption” was conducted as printing posters and video clips, and broadcast via the intranet to persuade all employees to join the program. The campaign raised awareness of the detriments of corruption and created anti-corruption awareness, which could become an organizational culture.

- In collaboration with PTT Group, IRPC organized “PTT Group CG Day 2015” on August 25, 2015, under the “Shade of Sharing” theme. The event was intended to extend the anti-corruption joint efforts within PTT Group to all its stakeholders and business partners by creation of anti-corruption awareness, establishing preventive measures, and encouraging all business practices to be transparent.

- The IRPC Internal Audit Office organized the 5th annual Diamond Award event in 2015. The purpose was to give corporate recognition to the business unit with the best cooperation on internal auditing and internal control, and transparency. The 2015 Diamond Award went to the Procurement Department.

- A whistleblowing policy was endorsed and approved by the Board to provide a communication channel for internal and external whistleblowers to notify clues and evidence on illegal and unethical conducts, frauds and malfeasance by employees of any level and stakeholders. The policy also spelled out stages of verification and remedy. The processes are unbiased and transparent, with protection measures of the whistleblowers and involved witnesses.

- Notification and complaint channels

- By email to auditor@irpc.co.th

- By ordinary mail to the Audit Committee Chairman IRPC Public Company Limited
555/2 Energy Complex Building B 6th Floor,
Vibhavadi-Rangsit Road, Chatuchak, Chatuchak,
Bangkok 10900

- By mailbox to P.O. Box 35, Suntowers NDPO (non-delivery post office) Bangkok 10905 or the P.O. Box stated by IRPC for this notification

- The policy includes stages of data and complaint verification. Internal Audit is assigned to manage all work processes and monitor progress, gather all misconduct and unethical activities, and report directly to the Audit Committee and the Board monthly and quarterly.

In 2015, IRPC received 65 complaints from P.O. Box 35, phone calls, ordinary mails and emails. The P.O. Box 35 channel seems to be the most efficient and safe notification practice. Out of these complaints, 60 were unrelated to work governance and unethical conduct, but more to the operations and work behavior of certain employees. The remaining five complaints were possible frauds. The cases were assigned to Internal Audit to verify related data and interface with relevant business units. The reports were made to the President, Management Committee, Audit Committee and the Board, in such sequence. IRPC finally concluded 25 cases from the total within 2015 and is reviewing the remaining 40 cases.

5. Learning and Development

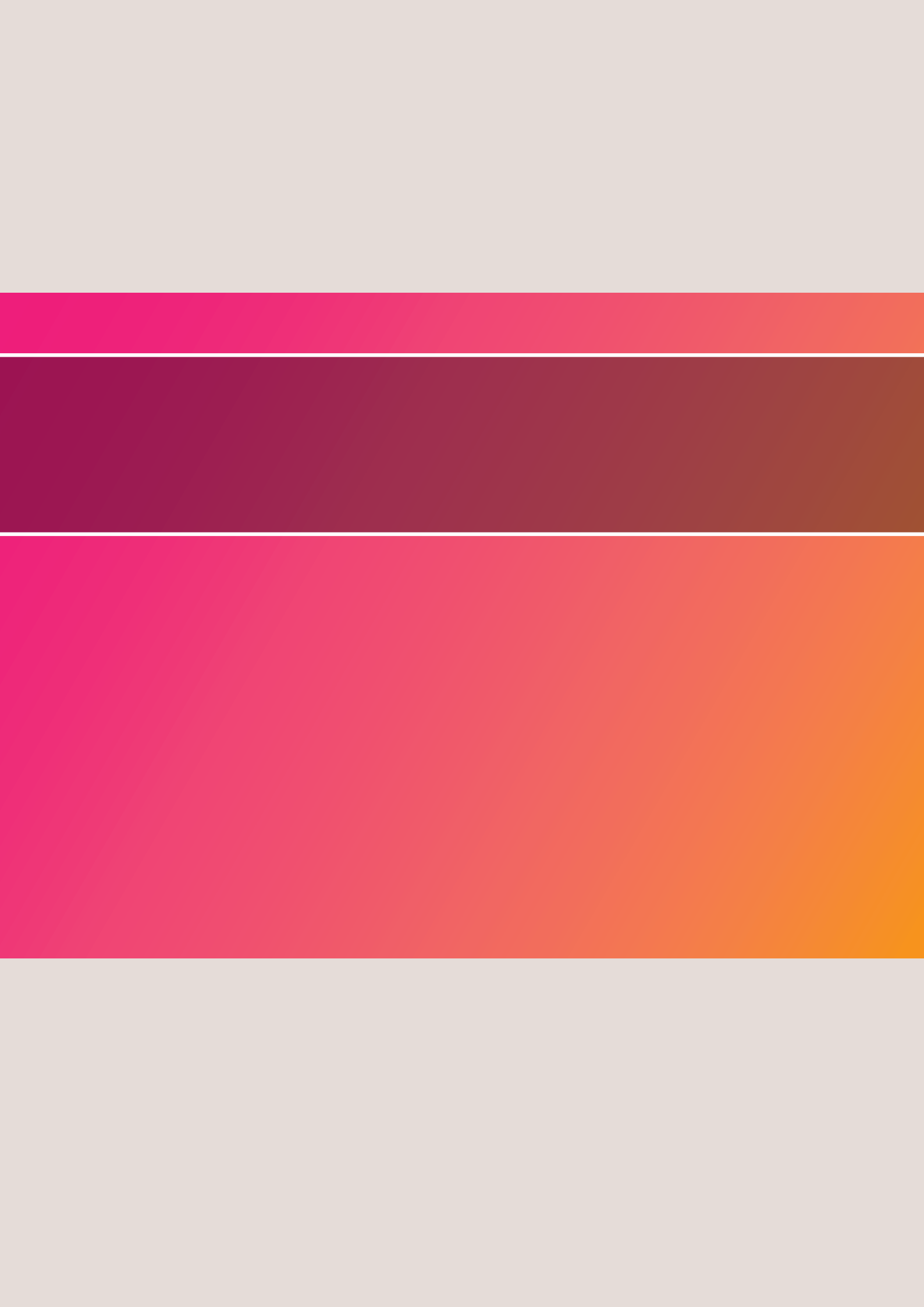
IRPC has been a member of World Economic Forum (WEF) since 2012. The President has joined the Annual Forum every year. With this world forum comes the global idea of business as well as the global agenda that IRPC can adopt in its social development and sustainability. In 2016, one of the significant agenda is “The Forth Industrial Revolution.”

IRPC is determined to be a CG role model for Thai and ASEAN listed companies by consistently elevating its CG level to enhance economic growth and gain the trust and confidence of investors and stakeholders. IRPC is committed to operating its business in a socially responsible manner and being a good citizen that conducts business toward sustainable growth with due regard for social development and environmental conservation, which will lead to genuinely sustainable happiness. Details of significant performance, improvement and development for the year and future operation plans are as mentioned.

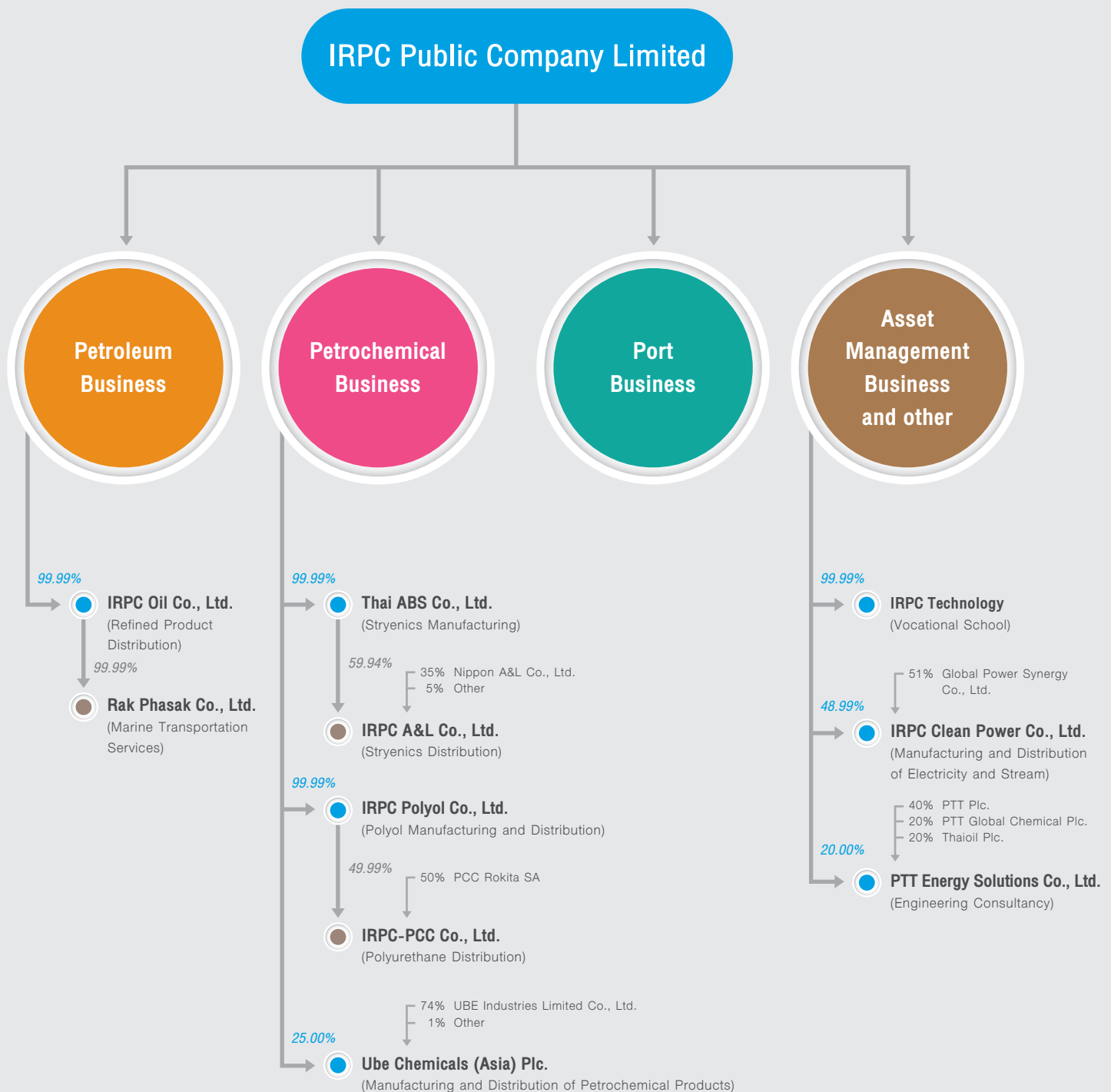


BUSINESS STRUCTURE

- Business Structure and Shareholding
- Nature of Business
- Individual Product Lines' Businesses
- Integrated Refinery and Petrochemical
Complex Flow Chart
- Revenue Structure
- Connected transactions



BUSINESS STRUCTURE AND SHAREHOLDING



Noted: The chart includes only companies with active operations

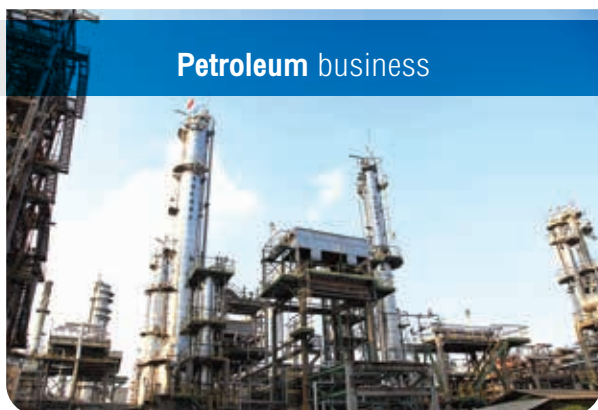
NATURE OF BUSINESS

Business Overall

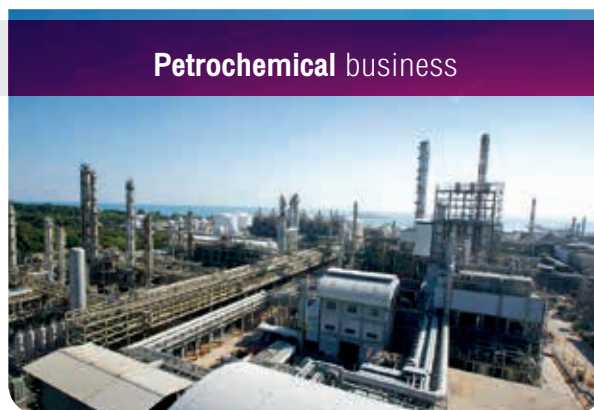
IRPC is an integrated pioneer in Southeast Asia's petrochemical industry with a refinery and petrochemical complex located in its own industrial zone in Rayong province. The zone is fully equipped with essential infrastructure and utilities supporting production, including a deepsea terminal, oil tank service, and a power plant.

Consisting of ADU1 (with a throughput capacity of 65,000 bpd) and ADU2 (150,000 bpd), IRPC's oil refinery unit commands a total capacity of 215,000 bpd. The refinery (the third largest in Thailand) yields

IRPC's upstream petrochemical products include olefins (828 KTA capacity) and aromatics (367 KTA capacity), both serving as downstream petrochemical feedstock. Sold under the POLIMAXX brand to



assorted petroleum products, namely LPG and Fuel oil naphtha, gasoline and diesel. Its lube base plant (with the largest domestic capacity) boasts a total capacity of 320 KTA (320,000 tons per annum), whereas an associated asphalt plant's total capacity is 600 KTA.



various domestic and international plastic operators, polyolefins consist of HDPE and PP (615 KTA total capacity), and styrenics consist of ABS, SAN, EPS, and PS (334 KTA total capacity).

IRPC's petrochemical business focuses on growth and keeping pace with change, developing the quality of life, together with enhancing international competitiveness by inventing and creating innovative styrenics products like Green ABS, ABS Powder, Impact Modifier-MBS, Anti-dripping Additives, and Anti-bacteria products, and innovative polyolefins such as UHMW-PE, Polyolefin Catalyst, Baby-Bottle Polypropylene, and Antimicrobial Compounds.

Located in the Eastern Region at Amphoe Muang, Rayong, this deep sea port business features infrastructure, facilities, and international-standard dock services for domestic and international cargoes. The main terminal area consists of

Bulk & container terminal (BCT): At 900 meters long and 44 meters wide, the six sub-wharfs handle vessels ranging from 800 to 150,000 DWT, serving general cargoes, including iron ores, palm shells, coal, and ores. The current annual cargo volumes exceed 2 million tons.

Liquid & chemical terminal (LCT): This petrochemical-liquid-petroleum terminal handles petrochemicals, liquid petroleum, and gaseous cargoes. At 1,623 meters long, the port features six sub-wharfs, handling

IRPC has set up a unit to manage high-potential land in Rayong and other provinces with a total acreage of about 10,000 rai, with a goal to develop such land into EIZ projects of industrial estates and industrial zones. These projects are equipped with essential infrastructure and utilities systems to accommodate target industries. Today, IRPC has secured approval to jointly operate businesses with the Industrial Estate Authority of Thailand in developing the Rayong Industrial Estate (Ban Khai) to serve worldwide prospective investors. In short, service is ready to accommodate projects of IRPC and the public alike.

The asset management business also houses IRPC Solutions Provider, designed to provide full support to investors in IRPC Industrial Zone with skills and



Port and tank service business

vessels ranging from 1,000 to 250,000 DWT. The annual cargo volume is about 15 million tons (more than 2,000 vessels).

Tank service: Service is provided through more than 300 tanks for liquid petroleum and petrochemical products with a storage capacity of 2.9 million tons, designed to accommodate IRPC's oil product distribution and the public alike. IRPC's team is experienced, equipped with efficient management systems and some 33 years of experience. Four IRPC oil depots are found in Rayong, Phra Padaeng (Bangkok), Ayutthaya, and Chumphon provinces. Each depot features a jetty to accommodate cargo transfers for efficient operation and merchandise distribution to save costs and shorten transport time for customers.



Asset management business

professionalism so that their businesses may grow hand in hand with those of IRPC. Services include plant and machinery maintenance, IT and internet system configuration, testing and laboratory analytical services, metrological services, warehouse services, trailer weighing services, and training on safety required by law.

INDIVIDUAL PRODUCT LINES' BUSINESSES

Products

IRPC and its subsidiaries produce and distribute petrochemical and petroleum products detailed below

Petroleum Products

1. Fuels

- LPG-A mixture of propane and butane, LPG is commonly used in households and various industries, and can also replace gasoline in vehicle engines.
- Gasoline-Powering gasoline-engine vehicles, gasoline is classified by octane number, which indicates resistance to engine knocking. Under government regulations, gasoline consists of ULG 95, GSH 95,

GSH 91, and gasohol base-the base oil for gasohol and E20.

- Diesel-Diesel powers for the industrial sector and vehicles like cars, trucks, fishing trawlers, passenger boats, and tractors. A 5-7% blend of biodiesel is currently required by government policy to promote alternative energy.

- Fuel Oil-The portion of crude with a high boiling point, fuel oil is commonly used in the industrial and transport sectors, as well as for power generation.

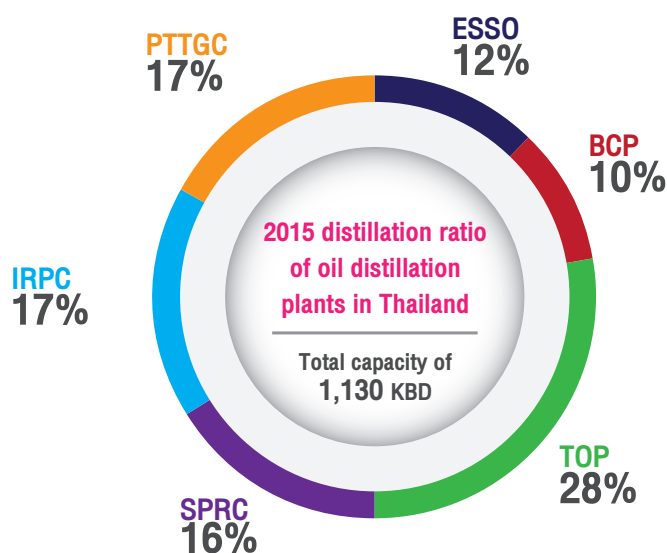
2. Lube Base Oil

- Lube Base Oil consists of heavy distillates used for producing different grades of lubricant. At present, IRPC produces these grades for different purposes:

- 150 SN is used as a lubricant raw material in the manufacturing, automotive, and transport industries
- 500 SN is used as a lubricant raw material for most vehicles
- 150 BS is used in industries and heavy-duty engines with high friction, such as engines of trucks, trains, and marine vessels.

- Long Residue, a heavy distillate, is used as a raw material for lube base oil.

Besides these products, IRPC features innovative lube base oil, namely Treated Distillate Aromatic Extract (TDAE) and Residue Aromatic Extract (RAE), which are used as raw materials for car tires with reduced polycyclic aromatic hydrocarbons (PAHs), which are carcinogenic-evidence of IRPC's concerns for consumers' health.



Source: Department of Energy Business, Ministry of Energy, Thailand (January - December 2015)

3. Other Petroleum Products

- Naphtha (meaning light distillates obtained from crude oil refining processes) serves as major petrochemical feedstock.
- Asphalt (a thick and viscous compound of assorted hydrocarbons and some other organic substances collectively called bitumen) is the heaviest portion obtained from refining processes and serves in road pavement and waterproof materials.

Petrochemical Products

1. Olefins

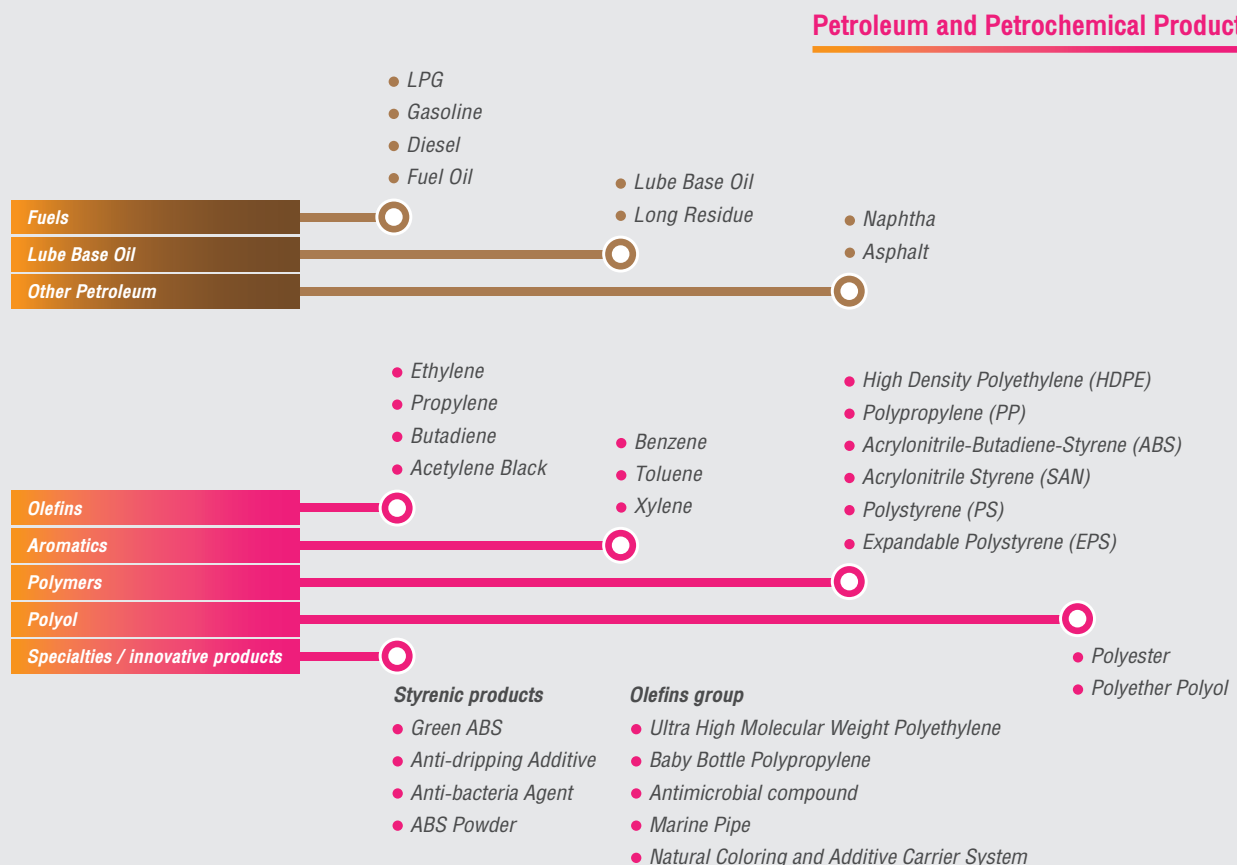
Olefin products (ethylene, propylene, and butadiene) form feedstock for polymers, namely polyethylene (PE) and polypropylene (PP). IRPC currently produces 828 KTA of olefins, that is, 360 KTA of ethylene, 412

KTA of propylene, and 56 KTA of butadiene. Most serve as feedstock for various plants in IRPC Group.

Moreover, a by-product from the olefin plant known as acetylene black-black powder with outstanding purity and high electrical conductivity, which commonly serves as a raw material for batteries, polymers, and rubber products. At present, IRPC has a capacity of 4 KTA.

2. Aromatics

Aromatic products (BTX: benzene, toluene, and xylene) are feedstock for styrenic polymers. IRPC has a capacity of 367 KTA of aromatics, which basically serve as feedstock for other plants in IRPC Group, and part of the output is for sale.



3. Polymers

IRPC and its subsidiaries produce polymer products (or plastic pellets) of the 'POLIMAXX' brand. Categorized as a downstream petrochemical product, polymers can form various plastic products. IRPC's polymers are divided into the polyolefins group (HDPE, PP) and the styrenics group (ABS, PS, and EPS). Each polymer type possesses different properties and serves different purposes.

3.1 High-Density Polyethylene-HDPE

IRPC's HDPE is a high-density PE with in-line compounding. Colored black, it suits extrusion molding, namely pipe extrusion. Pipe HDPE suits water pipes and electrical-wiring pipes, thanks to its mechanical qualities, namely high tensile strength, high impact strength, high resilience, and durability under various circumstances.

3.2 Polypropylene-PP

IRPC's PP, with very similar properties to those of HDPE and LDPE, can sometimes replace them. However, PP is tough and strong, with higher resistance to heat, pressure, and impact. It is not easily corroded and is chemical-resistant; it is therefore good for electrical insulators. PP is generally suitable for the following conversion methods:

- **Film** - PP is used for producing clear plastic sheets for heat-resistant bags, packing film, and food-packaging film.
- **Filament/Yarn** - PP is used for producing woven sacks, onion and garlic bags, and canvas. PP filament comes in two forms: mono-filament (used for making heavy-duty ropes such as giant ropes) and multi-filament (used for making belts and bag holders).
- **Injection Molding** - PP is found in common household products, kitchen utensils, car parts, electrical appliance parts, battery covers, paint kegs, and outdoor furniture items.
- **Blow Molding** - PP has the right properties for conversion into clear products which need a hard surface that can resist acids and alkalis. PP is clean and highly safe for making bottles for food and cosmetic products.

- **Sheet Extrusion** - PP has now become more common for sheet extrusion because of its properties to assume different shapes. Recyclable and reasonably priced, PP is popular for making document files, vacuum-forming work such as packaging, including water cups and trays.

3.3 Acrylonitrile-Butadiene-Styrene (ABS)

With its high impact strength, high gloss, high heat resistance, high stiffness and high rigidity, and high chemical resistance, ABS is commonly used for

- **Injection Molding** The method is to inject polymers into various shapes and forms of molds suitable for making
 - **Electrical Appliances** - such as parts of rice cookers, irons, telephones, electric fans, computer keyboards, and television sets due to its high heat resistance and glossy surface. ABS is also ideal for metal plating due to its high flow rate and flame retardation.
 - **Car Parts** - such as the side mirror, glove compartment, dashboard, and motorcycle parts such as the dashboard, mudguard, and safety helmet. This stems from its high heat resistance with high strength and durability. It also boasts high impact strength, good adhesion to paint, resistance to solvents like thinner, and a glossy surface.
 - **Household Appliances** - such as furniture parts and sanitary ware due to its high gloss, high impact strength, and high chemical resistance. It is also good for metal plating.
 - **Toys** - Since ABS is strong and not brittle, even when broken, it makes no sharp point that harms children. It also has high gloss, which gives bright colors.
- **Extrusion** - Polymers can be extruded into thin sheets and vacuum-molded into various forms, such as refrigerator walls.

3.4 Acrylonitrile Styrene (SAN)

Transparent, strong, rigid, and tough, SAN (or AS) is heat-resistant and more chemical-resistant than PS, and is commonly used for injection molding:

- **Car Parts** - such as headlight lens, tail lights, and parts of turning signals. Thanks to its lower cost, SAN often replaces PMMA.
- **Household Appliances** - With its unique properties, SAN is commonly turned into household appliances such as sanitary ware, lighters, and containers.
- **Electrical Appliances** - such as fan blades, air-conditioner outer covers, and fruit juice blenders due to its properties of gloss, stable form, heat resistance, chemical resistance, and shear resistance.

3.5 Polystyrene (PS)

Based on its properties, PS falls into two categories.

- **GPPS (General Purpose Polystyrene)**

GPPS, a PS polymer with high clarity and rigidity, is readily molded into various forms without pre-heating, though it has low impact strength. It is commonly used for making products that need clarity and a rigid form, like tape or CD cartridges, electrical appliances, and household appliances.

- **HIPS (High Impact Polystyrene)**

HIPS is a PS polymer with high impact strength due to the blend of butadiene in product development, which causes HIPS to lose some clarity. Priced much lower than ABS, it often replaces ABS to save cost. HIPS, however, has less gloss and a less stable form. GPPS and HIPS are generally used for

- **Injection Molding** - such as tape and CD cartridges, and household appliances
- **Sheet & Film Extrusion** - such as ice-cream cups and flower-wrapping film.

3.6 Expandable Polystyrene (EPS)

EPS is a white, round polymer using styrene monomer as the main feedstock and pentane gas as the blowing agent without using CFC, which is not so ozone-friendly, in its production process. EPS can be used in the following ways.

- **Packaging** such as shock-absorbing foam used in the packaging and electrical-appliance industries
- **Block** such as heat insulation in the fishery industry's cold storage, construction, and decoration work.

4. Polyol

Polyol products consist of polyester and polyether polyol. Polyol is feedstock for polyurethane, which can be further converted into various products, such as foam used in furniture work, heat insulation in construction work, and refrigerating appliances, as well as foam used for making shoe soles. Imported propylene oxide serves as the main feedstock for polyol.

IRPC Polyol Co., Ltd, 99.99%-owned by IRPC, is the producer and distributor of polyol products with a production capacity of 25 KTA and located in the same industrial zone as IRPC in Rayong.

5. Specialties and innovative products

IRPC highly values constant research and development (R&D) through the self-development approach in response to customers' diverse needs and dynamic environment. It can therefore best fulfill customers' expectations while taking care of the environment.

5.1 Styrenics products:

- **Green ABS** - IRPC, the world's first producer of Green ABS, has already filed a patent for its production process, in which natural rubber replaces synthetic rubber in the innovative ABS production. The product can be used in support programs for farmers, resulting in reduced imports while observing the Clean Development Mechanism (CDM) initiative.
- **Anti-dripping Additive** - IRPC's nanotechnology is applied to the development of this additive, which prevents polymers from dripping when heated. The additive can disperse well in polymers and can be kept at ambient temperatures to lower the costs of product storage and distribution. It is suitable for mixing in various polymers to enhance flame retardation under UL-94 (V.0) standards. IRPC has now used the additive in quality improvement of ABS-Flame Retardant Grade polymers.
- **Anti-bacteria Agent** - This new product is developed by means of nanotechnology. Able to stop growth and kill bacteria, the agent can be used as an additive in various plastics, whether ABS, PS, or PP, to check the growth of bacteria in the product while doing no harm to the properties of polymers.

- **ABS Powder** - ABS Powder is a powdery polymer suitable for manufacturers that want polymers with better dispersion of polymers than conventional plastics. It can be used with PVC, PC, or PC/ABS to enhance impact strength and heat resistance.

5.2 Olefins group, featuring:

- **Ultra - High Molecular Weight Polyethylene** (UHMW-PE) resembles cloudy white and opaque powder with as much as 10 times higher molecular density than other PE varieties. It can be converted by various methods, such as compression, RAM extrusion, and gel spinning, and can be used from -200 to 200 degrees Celsius. Thanks to superior properties to those of iron joints and gear, UHMW-PE suits work that needs toughness, strength, resistance to traction, and chemical erosion.

- **Baby - Bottle Polypropylene** - This is a new option of plastics developed for easy conversion by both injection and blowing methods. The product can tolerate over 100 degrees Celsius of heat. It has stable forms, high clarity, and low shrinkage, while containing no carcinogens-and therefore it is safe for babies.

- **Antimicrobial compound** - This is a product in the polyolefins group, whose properties are enhanced to prevent bacteria without harming the usual polymer properties. The product upgrades the quality of life with its high safety standard. It is popularly used in the food-packaging industry and medical circles, as well as household appliances.

- **Marine Pipe** - This compound is made with a special formula to prevent pipe surface from shellfish piercing along coast lines and in brackish water areas.

GREEN ABS

Green ABS, first developed in the world by IRPC by mixing natural rubber (as a substitute for synthetic rubber) with ABS, not only benefits farmers but also responds to the Clean Development Mechanism (CDM) concept.

WOOD PLASTIC COMPOSITE

Wood Plastic Composite, a group of innovative environment-friendly products made from the mixture of waste wood powder with PP plastics to obtain a material with the original properties of plastics and wood, promotes optimal use of resources.



- **Natural Coloring and Additive Carrier System consisting of**

- Natural Coloring-This boasts a mixture of natural extract colors in place of synthetic petrochemical colors, such as green from spinach and brown from caramel. Natural coloring reduces poisonous and heavy-metal residues. The durability of natural colors is the same as that of synthetic colors.
- Master Batch Carrier-This new HDPE product comes in the form of a white powder that blends well with color powder and additives. With a flow index of as high as 33 grams/10 minutes, this HDPE can promote the dispersion of color powder and additives.

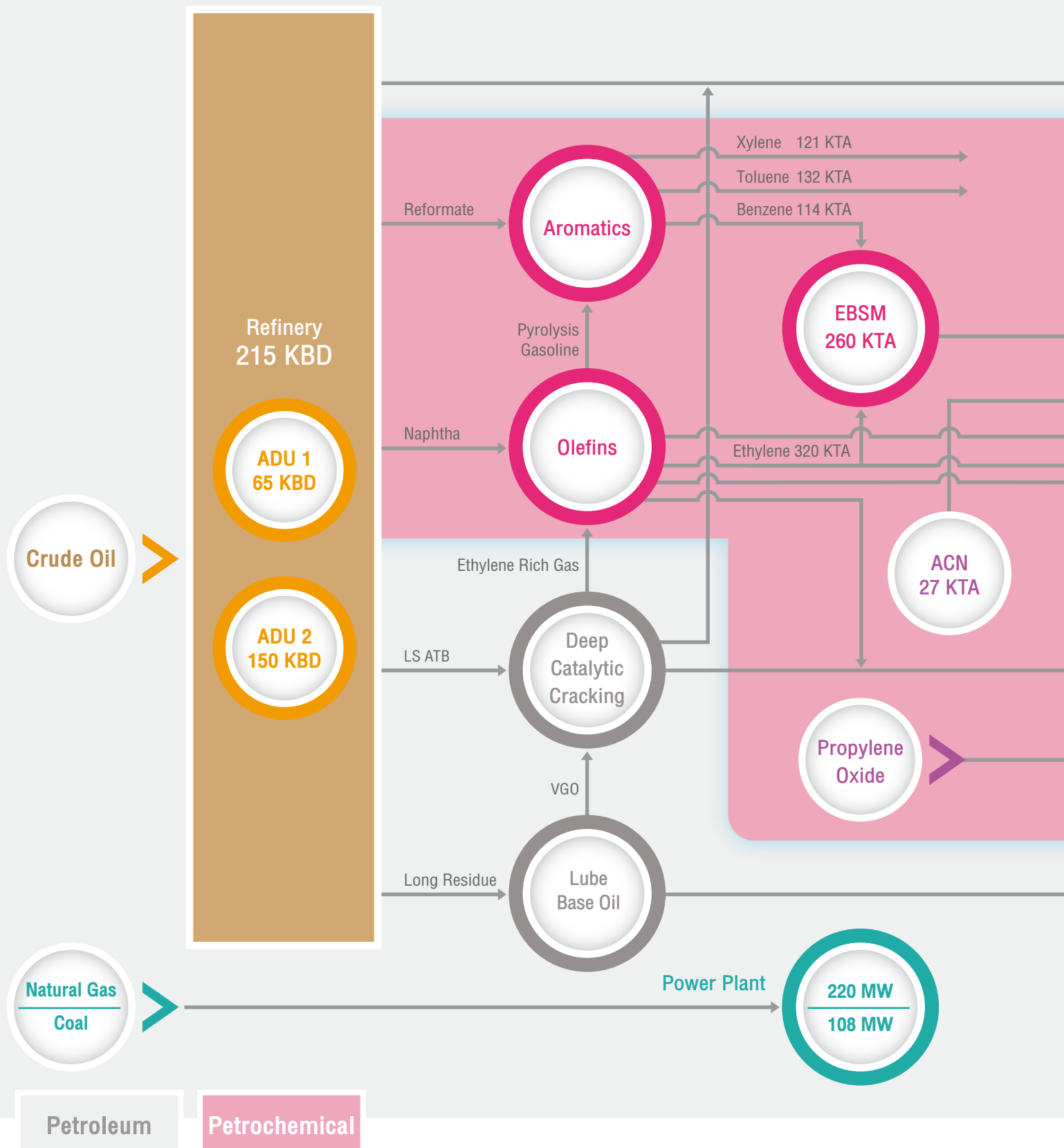
- Wood Plastic Composite-Valuing nature conservation, IRPC blends natural wood powder into the production process of alkaline plastics. The mixture is then converted into new products that retain the outstanding properties of both plastics and wood and can substitute natural materials. This promotes cost-effective use of resources.

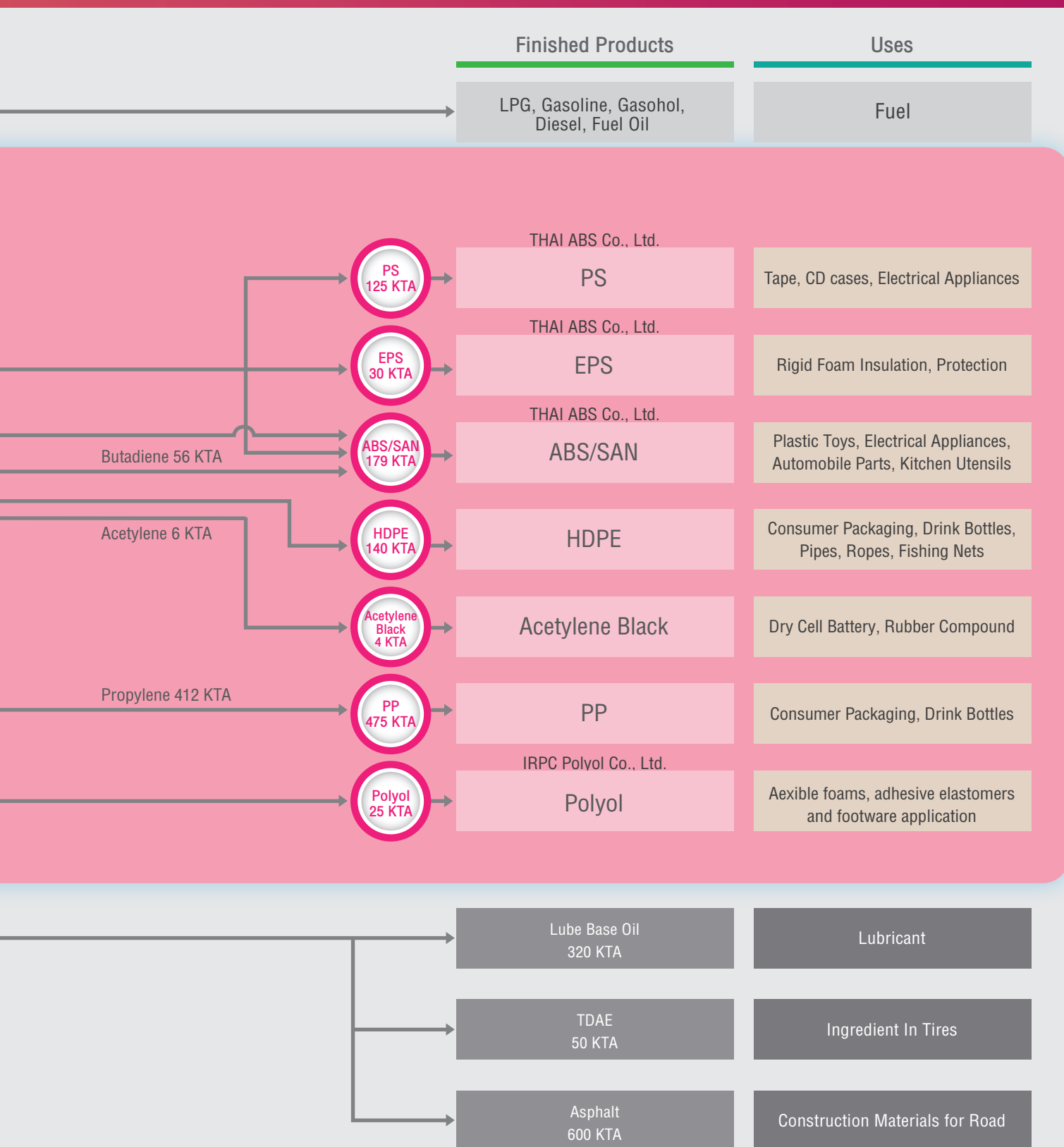
Polymer producers and domestic production capacities (2015)

Unit: KTA

Product	Company	Capacity	%
HDPE	IRPC Plc.	140	7
	Thai Polyethylene Co., Ltd.	960	51
	Bangkok Polyethylene Plc	500	26
	PTT Global Chemical Plc	300	16
Total		1,900	100
PP	IRPC Plc	475	24.11
	HMC Polymers Co., Ltd.	775	39.34
	Thai Polypropylene Co., Ltd.	720	36.55
Total		1,970	100
ABS	Thai ABS Co., Ltd.	179	65
	Ineos ABS (Thailand) Co., Ltd.	95	35
Total		274	100
EPS	Thai ABS Co., Ltd.	30	50
	Mingdi Chemical Co., Ltd.	30	50
Total		60	100
PS	Thai ABS Co., Ltd.	125	34
	Siam Polystyrene Co., Ltd.	150	41
	Thai Styrenics Co., Ltd.	90	25
Total		365	100

INTEGRATED REFINERY AND PETROCHEMICAL COMPLEX FLOW CHART





REVENUE STRUCTURE

Business Segment	Operated by / IRPC's shares	2013		2014		2015	
		Baht Million	%	Baht Million	%	Baht Million	%
1. Petroleum	IRPC Plc., IRPC Oil Co., Ltd. (99.99%)	216,175	76%	205,657	75%	143,295	72%
2. Petrochemical	IRPC Plc., Thai ABS Co., Ltd. (99.99%), IRPC Polyol Co., Ltd.	63,582	23%	63,853	24%	53,111	27%
3. Other Businesses ⁽¹⁾	IRPC Plc.	2,892	1%	3,458	1%	3,189	1%
Total net sales revenues ⁽²⁾		282,649	100%	272,968	100%	199,595	100%
Share of loss of investments in associates and interest in joint venture		(39)		(139)		(184)	
Sales ratio (domestic : export)		61	39	63	37	61	39

Note: ⁽¹⁾ Other businesses consisted of power and utilities revenues

⁽²⁾ Net sales revenues excluded excise tax.

CONNECTED TRANSACTIONS

Connected Transactions between IRPC and Its Subsidiaries with Connected Parties

For the accounting year 2015, IRPC and its subsidiaries engaged in connected transactions with related companies or parties, either as major shareholders or having common directors, or both. These transactions were based on market prices or, in the absence of market prices, the prices as agreed in the contractual agreements at reasonable prices and fair conditions. The relationship and connected transactions are described below:

Connected Party / Relationship	Transaction	2015 Baht Million	2014 Baht Million	Nature and Condition
PTT Plc (PTT) Relationship: - IRPC's major shareholder with 38.51% - Two common directors: Mr. Tevin Vongvanich Mr. Watcharakiti Watcharoathai - PTT Management on IRPC Board: Mr. Tevin Vongvanich Mr. Sarun Rungkasiri Mr. Chansin Treenuchagron Mr. Chavalit Punthong Mr. Sukrit Surabotsopon	- Sale of goods - Purchase of goods - Other revenue - Sales & administrative expenses - Account receivable - Account payable - Other receivable - Other payable	19,806 128,922 20 50 866 22,758 13 4	28,444 175,327 454 53 1,099 22,752 23 57	IRPC sold petroleum products to PTT at market prices. IRPC bought crude oil and petroleum products from PTT at market prices. IRPC received the gain from crack spread hedging contracts of crude oil, IT consultancy fees, and personnel expenses to PTT at contract prices. Personnel expenses paid to PTT at contract prices.
PTT Global Chemical Plc (PTTGC) Relationship: 48.89% of shares held by PTT - Common director: Mr. Sarun Rungkasiri	- Sale of goods - Purchase of goods - Other revenue - Sales & administrative expenses - Account receivable - Account payable	14,531 20,055 1 1 1,024 1,668	23,027 28,691 - 2 1,477 2,058	IRPC sold petroleum products to PTTGC at market prices. IRPC bought petroleum products from PTTGC at market prices. IRPC provided research services to PTTGC at market prices. Personnel expenses paid to PTTGC at contract prices.
Thai Oil Plc (TOP) Relationship: 49.10% of shares held by PTT	- Sale of goods - Purchase of goods - Account receivable	994 910 8	94 617 8	IRPC sold crude oil and provided tank storage service to TOP at market prices. IRPC bought crude oil and petroleum products from TOP at market prices.
Thai Lube Base Plc (TLB) Relationship: 99.99% of shares held by TOP	- Sale of goods - Purchase of goods - Account receivable	226 10 19	740 27 -	IRPC sold lube base oil to TLB at market prices. IRPC bought lube base oil from TLB at market prices.
Thai Paraxylene Co., Ltd. (TPX) Relationship: 99.99% of shares held by TOP	- Sale of goods - Purchase of goods - Account payable	23 1,218 51	- 2,021 -	IRPC sold aromatics to TPX at market prices. IRPC bought aromatics from TPX at market prices.

Connected Party / Relationship	Transaction	2015 Baht Million	2014 Baht Million	Nature and Condition
Thaioil Marine Co., Ltd. (TOM) Relationship: 99.99% of shares held by TOP	- Service revenue	21	23	IRPC provided port services to TOM at market prices.
	- Sales & administrative expenses	-	3	IRPC paid freight expenses to TOM at market prices.
	- Account receivable	1	3	
TOP Solvent Co., Ltd. (TS) Relationship: 99.99% of shares held by Thaioil Solvent Co., Ltd.	- Sale of goods	1,332	1,953	IRPC sold aromatics to TS at market prices.
	- Purchase of goods	75	107	IRPC bought solvents from TS at market prices.
	- Account receivable	66	100	
	- Account payable	8	13	
TOP Solvent (Vietnam) Co., Ltd. Relationship: 99.99% of shares held by TOP Solvent Co., Ltd.	- Sale of goods	674	491	IRPC sold aromatics to TOP Solvent (Vietnam) at market prices.
	- Account receivable	53	57	
Sak Chaisidhi Co., Ltd. (SAKC) Relationship: 80.52% of shares held by TS	- Sale of goods	364	590	IRPC sold aromatics to SAKC at market prices.
	- Account receivable	20	8	
PTT Energy Solutions Co., Ltd. (PTTES) Relationship: 40.00% of shares held by PTT 20.00% of shares held by IRPC - IRPC Management on Board: Mr. Peerapong Achariyacheevin	- Sales & administrative expenses	82	94	IRPC paid for technical services to PTTES at market prices.
PTT Polymer Logistics Co., Ltd. (PTTPL) Relationship: 50.00% of shares held by PTT - Common director: Mr. Chansin Treenuchagorn	- Other revenue	1	3	IRPC earned personnel wages from PTTPL at market prices.
	- Sales & administrative expenses	2	2	IRPC paid transport expenses to PTTPL at market prices.
PTT Polymer Marketing Co., Ltd. (PTTPM) Relationship: 50.00% of shares held by PTT - Common director: Mr. Chansin Treenuchagorn	- Sale of goods	119	299	IRPC sold polymers to PTTPM at market prices.
	- Purchase of goods	800	606	IRPC bought polymers from PTTPM at market prices.
	- Account receivable	5	4	
	- Account payable	51	76	
Polymer Marketing DMCC (PMDMCC) Relationship: 99.99% of shares held by PTTPM	- Sale of goods	4	-	IRPC sold polymers to PMDMCC at market prices.
	- Account receivable	2	-	
Energy Complex Co., Ltd. (EnCo) Relationship: 50.00% of shares held by PTT	- Sales & administrative expenses	90	83	IRPC rented offices and facilities from EnCo at market prices.

Connected Party / Relationship	Transaction	2015 Baht Million	2014 Baht Million	Nature and Condition
PTT International Trading Co.,Ltd. (PTTT) Relationship: 99.99% of shares held by PTT	- Sale of goods - Purchase of goods - Sales & administrative expenses - Account receivable - Other payable	11,024 928 282 572 63	11,167 35,336 56 801 65	IRPC sold petroleum products to PTTT at market prices. IRPC bought crude oil and olefins from PTTT at market prices. Expenses from oil futures contracts entered with PTTT at market prices.
PTT Asahi Chemicals Co., Ltd. (PTTAC) Relationship: 48.50% of shares held by PTT	- Sale of goods - Other revenue - Account payable	1,206 1 85	1,665 1 127	Thai ABS bought acrylonitrile (AN) from PTTAC at market prices. IRPC provided IT services to PTTAC at market prices.
HMC Polymers Co., Ltd. (HMC) Relationship: 41.44% of shares held by PTT	- Other revenue	1	1	IRPC provided training services to HMC at market prices.
Dhipaya Insurance Plc. (TIP) Relationship: 13.33% of shares held by PTT	- Other revenue - Sales & administrative expenses - Other receivable	1,313 844 -	1,710 473 1,000	IRPC received compensation from TIP at contract prices. IRPC paid premiums for building, health and accident insurance to TIP at contract prices.
PTT Tank Terminal Co., Ltd. (PTTTANK) Relationship: 99.99% of shares held by PTT	- Other revenue - Other receivable	2 1	- -	IRPC received personnel wages from PTT TANK at market prices.
Business Service Alliance Co., Ltd. (BSA) Relationship: 25.00% of shares held by PTT	- Other revenue - Sales & administrative expenses - Other payable	4 248 6	4 263 23	IRPC Oil received revenue for store administrative services from BSA at contract prices. IRPC paid personnel wages to BSA at contract prices.
Sport Services Alliance Co., Ltd. (SSA) Relationship: 99.99% of shares held by BSA - IRPC Management on Board: Mr. Phothiwat Paopongchuang	- Sales & administrative expenses	5	5	IRPC funded publicity for the PTT Rayong soccer team for SSA.
PTT ICT Solutions Co., Ltd. (PTTICT) Relationship: 40.00% of shares held by PTTGC 20.00% of shares held by PTT	- Sales & administrative expenses - Other payable	36 1	38 2	IRPC paid IT service fees to PTTICT at market prices.

Connected Party / Relationship	Transaction	2015 Baht Million	2014 Baht Million	Nature and Condition
Thai Styrenics Co., Ltd. (TSCL) Relationship: 99.99% of shares held by PTTGC	- Sale of goods - Account receivable	199 7	858 64	IRPC sold aromatics to TSCL at market prices.
PTT Phenol Co., Ltd. (PPCL) Relationship: 99.99% of shares held by PTTGC	- Sale of goods	1	1	IRPC sold aromatics to PPCL at market prices.
TOC Glycol Co., Ltd. (TOCGC) Relationship: 99.99% of shares held by PTTGC	- Purchase of goods - Account payable	36 6	45 11	IRPC Polyol bought ethylene oxide from TOCGC at market prices.
NPC Safety and Environmental Service Co., Ltd. (NPC S&E) Relationship: 99.99% of shares held by PTTGC	- Purchase of goods - Sales & administrative expenses	1 2	2 3	IRPC bought safety suits and equipment from NPC S&E at market prices. IRPC paid for safety equipment rent to NPC S&E at market prices.
Thai Oleochemicals Co., Ltd. (TOL) Relationship: 99.99% of shares held by PTTGC	- Purchase of goods	266	239	IRPC bought petroleum products from TOL at market prices.
PTT Maintenance and Engineering Co., Ltd. Relationship: 60.00% of shares held by PTTGC	- Sales & administrative expenses - Other payable	- -	1 4	IRPC paid for equipment maintenance to PTTME under a service contract.
Global Power Synergy Plc (GPSC) Relationship: 22.73% of shares held by PTTGC 22.58% of shares held by PTT	- Other revenue - Other receivable	- -	2 1	IRPC received personnel wages from GPSC at market prices.
IRPC Clean Power Co., Ltd. (IRPC-CP) Relationship: 51.00% of shares held by GPSC 48.99% of shares held by IRPC - IRPC Management on Board: Mrs. Ratchadaporn Rajchataewindra Mr. Peerapong Achariyacheevin Mr. Sirimet Leepagorn	- Revenue from services - Other revenue - Sales & administrative expenses - Account receivable - Account payable - Other payable	64 10 257 20 286 106	30 23 - 8 - -	IRPC provided engineering services to IRPC-CP at market prices. IRPC earned income for project development from IRPC-CP at contract price. IRPC paid electricity bills for IRPC-CP at market prices.
Vinythai Public PLC (VNT) Relationship: 24.98% of shares held by PTTGC	- Purchase of goods	23	37	IRPC bought sodium hydroxide from VNT at market prices.
Bangchak Petroleum Plc (BCP) * Relationship: 27.22% of shares held by PTT	- Sale of goods - Purchase of goods - Account receivable - Account payable	749 718 - -	6,244 1,506 175 58	IRPC sold petroleum products to BCP at market prices. IRPC bought petroleum products from BCP at market prices.

Connected Party / Relationship	Transaction	2015 Baht Million	2014 Baht Million	Nature and Condition
Ubon Bio Ethanol Co., Ltd. (UBE) Relationship: 21.28% of shares held by BCP*	- Revenue from services - Account receivable	25 -	22 8	IRPC rented oil storage tanks to UBE at market prices.
Star Petroleum Refining Co., Ltd. (SPRC) Relationship: 36.00% of shares held by PTT	- Sale of goods - Purchase of goods	- -	1,765 37	IRPC sold ATB to SPRC at market prices. IRPC bought petroleum products from SPR at market prices.

* PTT held 27.22% of the shares in Bangchak until April 30, 2015, before selling all the shares to Vayupak Fund 1 and the Social Security Office.

** PTT held 36% of the shares in SPRC until December 2015, before selling some shares and currently holds 5.41% interest in SPRC.

Connected Transactions Policy and Requirements

Since IRPC and its subsidiaries operate fully integrated refining and petrochemical businesses, similar to the operations of PTT Group companies, connected transactions between IRPC and PTT affiliates are inevitable and therefore regarded as normal business operations. These transactions included buying and selling of oil products and related services, as well as other normal business-supporting transactions, which were executed on an arm's length basis with the same pricing and conditions as those executed with a third party and without transfer of benefits between the concerned parties. IRPC has made prudent, reasonable and independent consideration of these connected transactions in its best interests

Connected Transaction Measures

IRPC complied with SEC's and SET's requirements concerning connected transactions. The Board has prudently considered the transactions with possible conflicts of interests to ensure that they were executed in a fair, transparent and reasonable manner. Any directors, employees or related parties with potential conflicts of interest must not be present at the meeting and must refrain from voting on the agenda item in question.

Moreover, each quarter the Audit Committee reviews IRPC's and its subsidiaries' connected transactions with related companies or parties to avoid conflicts of interest and ensure maximum benefits to IRPC.

Policy on Future Connected Transactions

IRPC's future connected transactions will be conducted in the normal course of business in adherence to suitable conditions and fair market prices. The practice is meant to ensure the best interests of all shareholders and stakeholders, and ensure strict conformity to the corporate governance policy, as well as SEC's and SET's regulations concerning connected transactions.

Opinion of the Audit Committee

Having reviewed all connected transactions, the Audit Committee regards these connected transactions as sensible and conducted in the normal course of business, based on suitable reference market prices and in conformity to the corporate governance policy, as well as SEC's and SET's regulatory requirements.



MANAGEMENT STRUCTURE

- Management Structure
- IRPC Information

MANAGEMENT STRUCTURE

IRPC's organization structure consists of the Board of Directors and the management. The Board consists of four sub-committees, namely the Audit Committee, the Nomination and Remuneration Committee, the Corporate Governance Committee, and the Risk Management Committee.

Board of Directors

As of December 31 this year, the Board consisted of 15 members:

- 14 non-executive directors (93.34% of the entire Board)
- One executive director
- Six independent directors (40% of the entire Board).

Details of the Board are as follows:

No.	Name	Current Position on the Board/Sub-committees	
1	Mr. Tevin Vongvanich	Chairman	
2	Mr. Cherdpong Siriwit	Independent Director	Chairman of the Audit Committee
3	Mr. Woothisarn Tanchai	Independent Director	Chairman of the Nomination and Remuneration Committee
4	Mr. Watcharakiti Watcharothai	Independent Director	Chairman of the Corporate Governance Committee
5	Mr. Sarun Rungkasiri	Director	Chairman of the Risk Management Committee Member of the Nomination and Remuneration Committee
6	Mr. Chansin Treenuchagron	Director	
7	Mr. Chavalit Punthong	Director	
8	Mr. Songpope Polachan	Independent Director	Member of the Audit Committee Member of the Nomination and Remuneration Committee
9	Mr. Trumph Jalichandra	Independent Director	Member of the Audit Committee
10	Mr. Somnuk Bomrungsalee	Director	
11	Mr. Pramual Chanpong	Director	Member of the Corporate Governance Committee
12	Lt. Gen. Sasin Thongpakdee	Independent Director	Member of the Corporate Governance Committee
13	Mr. Prasit Suebchana	Director	Member of the Risk Management Committee
14	Mr. Ekniti Nitithanprapas	Director	
15	Mr. Sukrit Surabotsopon	Director (Executive Director)	Member of the Risk Management Committee/ President/ Secretary to the Board of Directors

Directors authorized to sign for IRPC

The directors authorized to sign for IRPC comprise (1) Mr. Tevin Vongvanich, (2) Mr. Watcharakiti Watcharothai, (3) Mr. Sukrit Surabotsopon, (4) Mr. Sarun Rungkasiri, and (5) Mr. Chansin Treenuchagron. The signatures of two of these five are required together with IRPC's Seal affixed.

Composition and Qualifications of the Board

1. The Board of Directors consists of 5-15 directors.
2. Independent directors must account for at least one-third of the Board and there must be at least three of them on the Board.
3. Directors must not be older than 70 years old.
4. Each term of office for directors and independent directors is three years. Directors and independent directors can serve up to three consecutive terms (nine years).
5. Directorship in listed companies on the Stock Exchange of Thailand (SET) must not exceed five companies in total.
6. Directors must be qualified persons with knowledge, skills, capacity, and experience in necessary fields. As a minimum, there must be three petroleum or petrochemical experts, one legal expert, and one accounting and finance expert, in compliance with IRPC's policy, and nomination and appointment criteria, based on education, management experience in relevant fields, as well as success recognized by business with the equivalent size of IRPC.
7. Directors must be duly qualified, without the prohibitions stated in the Public Limited Company Act and the Securities and Exchange Act, the Capital Market Advisory Board's notifications, SEC's and SET's rules and regulations, IRPC's Articles of Association and Corporate Governance principles, and other related laws and regulations. Also, they must be free from any questionable traits for running IRPC's businesses.
8. Directors must be duly qualified, without the prohibitions according to the Cabinet resolution of January 24, 2011, on the appointment of high-ranking government officers and that of directors in state enterprises and other various juristic persons whose shares are held by state enterprises.

9. Directors must possess characteristics and personal images complementary and supportive of their work in corporate governance to add value to IRPC, including ethics, integrity, independence, assertiveness, creativity, capability of performing the duty of care and duty of loyalty with dedication, and are socially acceptable.

10. For former directors, their past performances, dedication, as well as useful opinions/recommendations made will be also considered.

Independent Directors

Independent directors mean directors who are independent from the major shareholder or group of major shareholders and the management. In performing their duties, independent directors are free to provide opinions to protect the interests of all shareholders and stakeholders on an equitable basis. At present, IRPC has six independent directors out of 15, which is over one-third of the entire Board.

Qualifications stipulated by IRPC for independent directors are more stringent than those of SEC and SET:

1. Hold not more than 0.5% of the voting shares in IRPC, its subsidiaries, associated companies, major shareholders, or any persons with controlling power over IRPC. Shares held by parties related to independent directors must also be included.
2. Are not or have not been directors involved in the management, employees, wage earners, or advisers on the payroll of IRPC, or any persons with controlling power over IRPC, its subsidiaries, associated or equivalent companies, major shareholders, or persons with controlling power over IRPC, except such qualifications have ended for at least two years, provided that such restrictions do not apply to independent directors who have been government officers or advisers of government agencies which are IRPC's major shareholders, or of persons with controlling power over IRPC.
3. Are not related by blood or by legal registration as parents, spouses, siblings, or children, spouses of the children of management members, major shareholders, persons with controlling power, or persons about to be nominated as management members or about to exercise controlling power over IRPC or its subsidiaries.

4. Do not have or have not had any business relation with IRPC, subsidiaries, associated companies, major shareholders, or persons with controlling power over IRPC to an extent that such independent directors' discretion may be compromised. Are not or have not been substantial shareholders or persons with controlling power over the person with business relation with IRPC, subsidiaries, associated companies, major shareholders, or persons with controlling power over IRPC, except when such qualifications have ended for at least two years.

Business relations referred to in the first paragraph above include any ordinary course of business transactions, any lease of properties, transactions relating to assets or services, or any financial support or acceptance of financial support by way of either lending, borrowing, guaranteeing, collateral providing, or any other manners similar to it that could result in an obligation required to be performed by the applicant or the party to it for three percent or more of the net tangible asset value of the application of 20 million baht or more, whichever is lesser. The method for calculating the value of connected transactions under the Capital Market Supervisory Board's notification on Rules of Entering into Connected Transactions must be applied mutatis mutandis in the calculation of the amount of debt of the applicant. In calculating such debt, the debt incurred during the past year leading to the date on which such business relation with such person exists must also be included.

5. Are not or have not been auditors of IRPC, subsidiaries, associated companies, major shareholders, or of persons with controlling power over IRPC, and are not substantial shareholders, persons with controlling power, or partners of any audit firms or offices which the auditors of IRPC, subsidiaries, associated companies, major shareholders, or persons with controlling power over IRPC work for, except when such qualifications have ended for at least two years.

6. Are not or have not been professional advisers, including legal or financial advisers with a service fee of over 2 million baht per year from IRPC, subsidiaries, associated companies, major shareholders, or persons with controlling power over IRPC, and are not substantial shareholders, persons with controlling power, or partners of such professional service providers, except when such qualifications have ended for at least two years.

7. Are not directors appointed as a representative of a director of IRPC, a representative of a major shareholder of IRPC, or a representative of a shareholder who is related to the major shareholder of IRPC.

8. Do not engage in any similar business in competition with IRPC or subsidiaries, and are not substantial partners in a partnership, directors with a managing role, employees, wage earners, or advisers hired on the monthly payroll, or shareholders holding more than one percent of the voting shares in another company engaging in a similar business and in competition with IRPC or subsidiaries.

9. Must not have any characteristics which will compromise the ability to provide independent comments on the operation of IRPC.

If there is dismissal or retirement of independent directors, IRPC must find a qualified person as a replacement while maintaining the total number of independent directors under the regulations of the Capital Market Supervisory Board and corporate governance. However, if another director commands the required qualifications for independent directors, he or she will automatically become an independent director of IRPC.

Appointment and Dismissal

Under IRPC's Articles of Association, appointment and dismissal of directors are summarized as follows:

Appointment

1. Shareholders appoint directors. The Nomination and Remuneration Committee screens appropriate candidates and tables a list to the Board before submission to the shareholders' meeting for consideration under the following criteria:

- (1) One shareholder carries one vote per share.
- (2) To elect directors, votes can be cast for individual candidates or a collective vote can be cast for the entire number of directors to be elected, as seen appropriate by the shareholders' meeting. Each candidate, by individual or collective voting, is allowed to receive the number of votes in accordance with the total number of shares held by each shareholder under (1) Shareholders cannot split their votes in favor of other candidates.

- (3) Successful candidates are ranked by the number of voters received, the number of whom matches the number of directors to be elected. If candidates get equal votes, which makes the number of successful candidates exceed that of directors to be elected, the Chairman of that meeting will cast a decisive vote.
2. The Board selects one member as the Chairman and can also select one or more members to be his/her Vice Chairman to perform duty as stipulated in IRPC's Articles of Association and as assigned by the Chairman.
3. The Board selects one member as the President and as the Secretary to the Board.
4. If any vacancies on the Board exist for any reasons other than term expiry, the Board must select a qualified person without prohibited qualities in their following meeting. If the remaining term is less than two months, the newly elected director will stay in office for the remaining term of the former. The resolution of the Board on this matter must consist of no less than three-quarters of the votes of the remaining directors.
5. If the number of vacancies on the Board reduces its composition to less than the Board's quorum, the existing directors are allowed only to call, on behalf of the Board, a shareholders' meeting to elect the replacements for all vacancies. The shareholders' meeting must be held within one month from the date of such vacancy. The newly elected director will stay in office only for the remaining term of the former.
6. The newly elected directors should be briefed on the information that is useful and essential to their work within three months after the date of their appointment.

Dismissal

1. As a rule, directors complete their three-year terms. (However, dismissed ones may be re-elected).
2. In addition to term expiry, directorship ends by death, resignation, lack of qualifications, or being found with prohibitions by law, the resolution of the shareholders' meeting, or court verdict.
3. Directors wishing to leave the post must tender their resignations to IRPC. Such resignation will take effect from the date the resignation reaches IRPC.

Duties and Responsibilities

The Board supervises IRPC's operations with duty of care and duty of loyalty. It is responsible for its shareholders on IRPC's business operations, ensure that management complies with policies, guidelines, and targets for the maximum benefit of shareholders based on ethics and benefits of all stakeholders as follows:

1. Define IRPC's vision, direction, and strategies that support sustainable growth under economic, social, and environmental aspects, by expressing full views, valuing importance of information search beneficial to the direction, as well as consider potential risks to provide confidence that the management can efficiently implement the defined vision, direction, and strategies.
2. Review and approve IRPC's major policies, strategies, objectives, financial targets and action plans, as well as regular follow-up on the implementation of the defined action plans in compliance with IRPC's direction and strategies.
3. Ensure a reliable accounting system, financial reports, and auditing, as well as supervise the suitable assessment procedure to ensure efficient and effective internal control and internal audit.
4. Consider potential major risk factors and determine the overall guidelines of risk management, ensure an efficient risk management system or procedure, as well as seek business opportunities that may arise from the risks.
5. Monitor and solve problems of conflicts of interest that may arise, as well as connected transactions, consider important main business transactions, focusing on maximum benefit to shareholders and all stakeholders.
6. Arrange for an appropriate compensation system or mechanism for IRPC's top management to foster short-term and long-term motivation.
7. Stipulate that the President's directorship in other companies must be approved by the Board and the top management's directorship in other companies must be approved by the President, excluding the appointment of directors in IRPC's subsidiaries or joint-venture companies proportionate its shareholding or to shareholders' agreements, as determined to be the Board's authority.

8. Ensure regular assessment of the President's performance and determine the President's compensation in accordance with his performance.
9. Provide suitable communication channels with each group of shareholders and assess the information disclosure to ensure its correctness, clarity, transparency, reliability, and high standards.
10. Assume leadership and act as a good example, in compliance with IRPC's corporate governance and CSR guidelines.
11. Encourage IRPC to undertake anti-fraud and anti-corruption activities in every form for the maximum benefit to its business and stakeholders.
12. Appoint a qualified Company Secretary as stipulated by law to perform and assume responsibilities in compliance with the Securities and Exchange Act.

Approval Authority

1. Vision, strategies, short-term and long-term corporate plans, and major policies such as the risk management policy, anti-corruption policy, as well as financial goals, action plans, and annual budget.
2. IRPC's financial criteria, investment, and investment direction.
3. Procurement that exceeds the President's approval as authorized for each item.
4. IRPC's major operations under its objectives, regulations, and resolutions of the shareholders' meeting, as well as supervise the management to implement policies and plans as defined with efficiency and effectiveness.
5. Assessment and determination of the President's compensation.
6. Payment of interim dividends to shareholders and staff's annual compensation.
7. List of management to hold directorship in IRPC's subsidiaries or joint-venture companies proportional to its shareholding.

Moreover, in performing their responsibilities on the following matters, the Board must receive approval from the shareholders by votes of no less than three-quarters of the total number of eligible votes cast by eligible shareholders present.

1. Sale or transfer of the entire or essential parts of IRPC's businesses to other parties.
2. Purchase or acquisition of businesses of other companies or private companies.
3. Making, amending, or terminating the entire or essential parts of agreements on the lease of IRPC's businesses.
4. Assigning other parties to manage IRPC's business.
5. Merger of IRPC's business with other parties for profit/loss sharing.
6. Making amendments to IRPC's Memoranda of Association or Articles of Association.
7. Increase or decrease in IRPC's registered capital or issuance of debentures.
8. Merger or dissolution of IRPC.

Duties and Responsibilities of the Chairman

To ensure the clear division of duties of IRPC's policy formulation and IRPC's operation, the Company stipulates that the Chairman and the President must not be the same person. The Chairman's duties and responsibilities include the following:

1. Call Board meetings, chair Board meetings and shareholders' meeting, as well as set meeting agenda in collaboration with the President.
2. Ensure efficient meetings in compliance with IRPC's rules and regulations, while encouraging directors to express their independent views.
3. Encourage the Board to work with their utmost ability, based on their duties and responsibilities, under corporate governance.
4. Supervise and follow up the work of the Board and other sub-committees to ensure that IRPC's objectives are reached.
5. Cast a decisive vote at Board meetings in case of equal votes on both sides.

Sub-committees

In compliance with corporate governance, the Board has appointed four standing sub-committees (committees), each of which is assigned to consider and oversee specific critical matters in their respective areas before submitting recommendations to the Board.

for consideration. Each sub-committee is structured as detailed below:



1. Audit Committee

The Audit Committee appoints at least three independent directors. The Audit Committee must be duly qualified under the Capital Market Supervisory Board's notification on the qualifications and scope of work of audit committees. The Audit Committee must have at least one director who possesses sufficient knowledge and experience to review the reliability of the budget:

- | | |
|---------------------------|----------|
| (1) Mr. Cherdpong Siriwit | Chairman |
| (2) Mr. Trump Jalichandra | Member |
| (3) Mr. Songpope Polachan | Member |

Mr. Thaweesak Dejakaisaya, Executive Vice President, Office of Corporate Internal Audit, serves as Secretary.

Note: Retired on December 31, 2015. The Audit Committee appointed Mr. Thammasak Panyowatkool Secretary to the Audit Committee with effect from January 1, 2016 (Mr. Thammasak Panyowatkool's profile is shown under Management on page 50)

Term of Office

1. Members shall have the same term of office as their directorship of the Board.
2. Members who complete their terms of office may be re-appointed, as deemed appropriate by the Board.
3. Members no longer hold directorship under the following circumstances:
 - Dismissal from IRPC's directorship
 - Lack of qualifications as member of the Audit Committee
 - Resignation
 - Death
 - Dismissal via legal procedure following a shareholders' resolution. The reason of dismissal must be notified to SET.
4. In case of vacancies on the Audit Committee other than term expiry, the Board must appoint other qualified directors as new members within three months after the date when the number of members is not filled.

Duties and Responsibilities

- 1) Review IRPC's financial reports to meet accounting standards with correctness and sufficiency, as stipulated by law.
- 2) Review IRPC's internal control and internal audit systems to ensure their suitability and effectiveness, and review the effectiveness and sufficiency of the risk management process.
- 3) Review IRPC's operations to ensure compliance with the Securities and Exchange laws and other laws relating to IRPC's businesses.
- 4) Review IRPC's connected transactions or any other transaction with possible conflicts of interest to ensure compliance with legislation and SET's regulations, and ensure justification of such transactions and the highest benefit for IRPC.
- 5) Select and nominate external auditors and make recommendations on their fees, and hold a meeting with them in the absence of the management at least once a year.
- 6) Consider the scope of auditing and auditing plans of the external auditors and the Office of Corporate Internal Audit for complementarity and reduced redundancies on financial auditing.
- 7) Approve the auditing plans, as well as provide views on budget and manpower of the Office of Corporate Internal Audit.
- 8) Consider, appoint, transfer, or dismiss the Executive Vice President, Office of Corporate Internal Audit, as well as consider the independence of the office.
- 9) Review the efficiency and effectiveness of information technology systems relevant to internal control and risk management.
- 10) Arrange for an internal audit report to be included in IRPC's annual report. The report must be signed by the Chairman of the Audit Committee.
- 11) Possess the authority to have access to the information of the review and investigation of relevant persons under the duties and responsibilities of the Audit Committee as stipulated by IRPC's regulations.
- 12) In performing its task, if the Audit Committee comes across or doubts list or action that may have significant impact on IRPC's financial status and work performance, namely:

- (1) List of conflicts of interest
 - (2) Fraud or abnormality or major deficiencies in the internal control system
 - (3) On the violation of securities and exchange laws, SET's regulations, or laws relevant to IRPC's business, the Audit Committee must report to the Board for timely improvement and rectification. If the Board or the management does not undertake improvement or rectification within a suitable period and without valid reason, the Audit Committee must report the list or the action of such violation to the Office of the Securities and Exchange Commission or SET on receiving the information without delay.
- 13) Perform other tasks as assigned by the Board, with the Audit Committee's concurrence.

Secretary to the Audit Committee

To ensure the efficiency and compliance with corporate governance by the Audit Committee, the Committee appoints a Secretary to facilitate its work on meeting appointments, preparation of meeting agenda, dispatch of accompanying documents, and minutes of meetings. The Secretary must possess knowledge, ability, and experience, as well as independence to assist the Audit Committee.

Executive Vice President, Corporate Internal Audit, and Secretary to the Audit Committee

Mr. Thaweesak Dejakaisaya

Position held between January 10, 2014, and December 31, 2015

Shares held: None

Education

- B.A. in Science (Economics), Kasetsart University
- MBA, University of Central Oklahoma, USA
- M.A. in Economics, Middle Tennessee State University, USA

Work experience

- Vice President, Intellectual Property Management
- Manager, Quality, Safety, Health, and Environment Division

Relationship with management: None



2. Nomination and Remuneration Committee

The Nomination and Remuneration Committee consists of at least three directors, at least one of whom must be an independent director, with the duties to nominate qualified candidates for new directors and the President, while determining fair and reasonable compensation for the directors:

- (1) Mr. Woothisarn Tanchai
(Independent Director) Chairman
- (2) Mr. Songpope Polachan
(Independent Director) Member
- (3) Mr. Sarun Rungkasiri
Member

Ms. Monwipa Choopiban, Executive Vice President, Corporate Affairs, serves as Secretary.

Term of Office

1. Members shall have the same term of office as their directorship of the Board.
2. Members who complete their terms of office may be re-appointed, as deemed appropriate by the Board.

Duties and Responsibilities

- 1) Consider the structure and qualifications of directors and the President.
- 2) Consider criteria, guidelines, and methods to nominate directors for the Board, the sub-committees, as well as the President, based on relevant rules and regulations with transparency and efficiency.
- 3) Screen appropriate candidates for consideration of directorship, in the cases of vacancies and completion of terms, and table the list to the Board and the shareholders' meeting for approval.
- 4) Consider the list of directors for membership of the sub-committees and table it to the Board for approval.

- 5) Screen appropriate candidates for the position of the President with attention and suitability for IRPC's maximum benefit and submit the list to the Board for approval.
- 6) Base compensation consideration for directors and the President on transparency, fairness, and sensibility. The compensation for directors is submitted to the Board and the shareholders' meeting for approval, whereas the compensation for the President is submitted to the Board for approval.
- 7) Determine criteria, assessment process, bonus, and operation goals of the President and submit them to the Board for approval.
- 8) Assess the yearly performance and the compensation of the President such as salary, bonus, and other monetary and non-monetary benefits which are suitable to the business and submit them to the Board for approval.
- 9) Perform other tasks as assigned by the Board, relevant to the nomination and compensation of directors and the President.

Nomination of Directors

The Board appoints the Nomination and Remuneration Committee to select, screen qualified candidates for directors, and submit the names to the Board or the shareholders for consideration, as seen fit. In consideration of the corporate governance on equitable treatment of shareholders, the Board provides the opportunity for one or many minor shareholders with combined shares of no less than 4% of the paid-up capital to put forward the name of a candidate to be nominated as director in advance of the AGM.

Also, in nominating the President, the nomination and remuneration Committee proposed the candidate to the Board to appoint as the President.

In nominating the top management, the Board authorizes the President to appoint candidates with appropriate knowledge, ability, and experience, and without any legal prohibitions to take up IRPC's management positions. In nominating directors, the procedures include the following:

Procedures of Nomination of Directors

After selecting the director nominees, the Nomination and Remuneration Committee will screen the candidates' qualifications as determined by the Board under the following criteria:

- 1) Consider the suitability of specific knowledge, experience, and ability that will be of use to IRPC, in line with IRPC's business direction. as well as
- 2) Consider the diversification of gender, age, expertise, skill, and experience (Board Skill Matrix), knowledge and ability in both hard skills and soft skills to ensure that the directors can perform their work efficiently, also taking into consideration the information of directors in the Directors' Pool (as of December 30, 2015, there were nine directors in the Directors' Pool).
- 3) Review and verify the qualifications based on the criteria, Article of Association and CG handbook by using 4 checklist: 1. Director/Independent Director qualifications 2. The candidate's qualification 3. Board skill matrix 4. Directorship's term.
- 4) Consider directors' dedication (in case of former directors), number of listed companies that each director holds tenure in, and the Cabinet resolution of January 24, 2011, on the appointment of high-ranking government officers and the appointment of directors in state enterprises.
- 5) In case of nominating independent directors, consider their independence in compliance with the criteria of the Office of the Securities and Exchange Commission, IRPC's criteria, as well as the necessity to nominate additional independent directors.
- 6) Set the terms of office of directors/independent directors at three years. Directors/independent directors can serve up to three consecutive terms (nine years).
- 7) Approach the persons to ensure their willingness to take up IRPC's directorship if appointed.
- 8) Submit the screened candidates with accompanying qualifications and reasons for nomination to the Board for approval or authorization, as seen fit.

For sub-committees, the Nomination and Remuneration Committee will consider appropriate knowledge and ability, the composition of sub-committees, and criteria of directorship such as the Board Skill Matrix and directors' independence.



3. Corporate Governance Committee

The Corporate Governance Committee consists of at least three directors, at least one of whom must be an independent director, with the duties of recommending implementation guidelines and advice on corporate governance to the Board, as well as monitoring IRPC's operations:

- (1) Mr. Watcharakiti Watcharothai
(Independent Director) Chairman
- (2) Lt. Gen. Sasin Thongpakdee
(Independent Director) Member
- (3) Mr. Pramual Chanpong Member

Ms. Monwipa Choopiban, Executive Vice President, Corporate Affairs, serves as Secretary.

Term of Office

1. Members shall have the same term in office as their directorship of the Board.
2. Members who complete their terms of office may be re-appointed, as deemed appropriate by the Board.

Duties and Responsibilities

- 1) Propose corporate governance guidelines to the Board.
- 2) Review IPRC's corporate governance against practices as the international level and make a propose to the Board to ensure continuous and up to date improvement.
- 3) Monitor the work of the management to ensure corporate governance principles and implementation

- 4) Formulate corporate governance policies and efficient guidelines of fraud and corruption prevention
- 5) Perform Board Evaluation and sub-Committee Evaluation.
- 6) Perform other takes as assigned by the Board.



4. Risk Management Committee

The Risk Management Committee consists of at least three directors who are experts in the petroleum or the petrochemical business with the duties and responsibilities of defining the risk management policy, risk management plan, and risk management procedure for the entire company, in compliance with IRPC's corporate and strategic plans:

- | | |
|-----------------------------|----------|
| (1) Mr. Sarun Rungkasiri | Chairman |
| (2) Mr. Prasit Suebchana* | Member |
| (3) Mr. Sukrit Surabotsopon | Member |

Mr. Sirimet Leepagorn, Executive Vice President, Corporate Strategy and Planning, serves as Secretary.

*Note:

- Mr. Prasit Suebchana resigned, with effect from January 4, 2016.
- Miss Wanida Utaisomnana was appointed to with effect from February 16, 2016. Mr. Sirimet Leepagorn completed his term on February 15, 2016

Term of Office

1. Members shall have the same term in office as their directorship of the Board.
2. Members who complete their terms of office may be re-appointed, as deemed appropriate by the Board.

Duties and Responsibilities

- 1) Formulate suitable, efficient policy and recommendations on risk management involving IRPC's business operations.
- 2) Define risk management plans and risk management procedures for the entire company.

- 3) Consider financial tools such as futures contracts and contracts setting price gaps to reduce IRPC's risks.
- 4) Develop a risk management system to ensure efficiency.
- 5) Monitor and assess performance of corporatwide risk management implementation.
- 6) Submit regular reports on the monitoring of risk management performance and operation to reduce risks to the Board for acknowledgment. Important matters having significant impacts on IRPC must be reported to the Board without delay.
- 7) Support the Risk Manager's operation and continuously assess the major factors of risk management in compliance with corporate plans and on a par with other leading companies.
- 8) Perform other tasks as assigned by the Board.

Risk Management

Apart from the sub-committees, IRPC has set up the following steering committees and working groups to monitor its risk management and internal control system:

1. Risk Management Steering Committee (RMSC)
2. Financial and Supply Chain Risk Management Committee (Hedging Committee)
3. The Risk Manager is responsible for overall risk management.
4. The Risk Owner defines risk management plans and is responsible for risk management.
5. The Risk Agent coordinates with everyone in the unit or in projects for risk management planning, report on follow-up and on risk management performance to the project manager or director to ensure appropriate, sufficient risk management that responds to risks at the unit level.

Moreover, IRPC has developed a corporate governance system in pursuit of sustainable growth by adopting modern management in compliance with GRC standards in three dimensions, namely good governance, risk management, and compliance management. The three

dimensions are complimentary with and related to one another. They foster teamwork and knowledge "sharing", welcome the ideas from employees and the management for IRPC's improvement, and hold training and seminars to lay down knowledge and understanding of compliance, with the major KPI goal of IRPC's effectiveness and sustainability.

6) There is a License and Compliance Working Team who has collected rules and regulations the company connected as well as the company's licenses with alert signal when during time.

The Company concerned as well as collecting the company's licenses with alert signal when during time

Meetings of the Board

IRPC schedules Board meetings in advance throughout the year. In 2015, the Board held meetings once a month on every Tuesday of the third week of the month. Extraordinary meetings might be called as seen fit. The Company Secretary sends meeting notices with detailed, sufficient agenda 5-7 days ahead of each meeting to allow directors enough time to prepare themselves.

At every meeting, in compliance with the corporate governance policy, directors with vested interests or conflicts of interest on each agenda item must excuse themselves or abstain from voting on each connected agenda. The minutes of the meeting on this matter must be clearly recorded. The policy on meeting attendance stipulates that for the voting sessions, there must be at least two-thirds of the directors with no vested interests or conflicts of interest present.

In 2015, the Board held 12 meetings, the independent directors held two meetings, and the Board one meeting without the management. A meeting to define and review IRPC's vision, direction and strategies was held once. In every meeting, the Chairman gave opportunities for directors to express their opinions freely. Board of Directors's meeting attendance is 95% in average, detail as below

Meeting Attendance of the Board and Sub-committees in 2015

(Unit: Meetings)

Name	Board (15 members) Number of meetings throughout the year: 12	Risk Management Committee (3 members) Number of meetings throughout the year: 5	Audit Committee (3 members) Number of meetings throughout the year: 12	Corporate Governance Committee (3 members) Number of meetings throughout the year: 7	Nomination and Remuneration Committee (3 members) Number of meetings throughout the year: 8	Independent directors Number of meetings: 2	Board without management Number of meeting: 1
1 Mr. Tevin Vongvanich ⁽¹⁾	2/2	-	-	-	-	-	-
2 Mr. Cherdpong Siriwit	12/12	-	12/12	-	-	2/2	1/1
3 Mr. Woothisarn Tanchai ⁽²⁾	9/9	1/2	-	-	6/6	1/1	1/1
4 Mr. Watcharakiti Watcharothai	12/12	-	-	7/7	-	2/2	1/1
5 Mr. Sarun Rungkasiri	12/12	5/5	-	-	4/4	-	1/1
6 Mr. Chansin Treenuchagron ⁽³⁾	2/2	-	-	-	-	-	-
7 Mr. Chavalit Punthong ⁽⁴⁾	1/1	-	-	-	-	-	-
8 Mr. Songpope Polachan	12/12	-	6/6	-	8/8	2/2	1/1
9 Mr. Triumph Jalichandra	12/12	-	11/12	-	-	2/2	1/1
10 Mr. Somnuk Bomrungsalee	12/12	-	-	-	-	-	1/1
11 Mr. Pramual Chanpong	12/12	-	-	7/7	-	-	1/1
12 Lt. Gen. Sasin Thongpakdee	8/12	-	-	6/6	-	2/2	1/1
13 Mr. Prasit Suebchana ⁽¹²⁾	11/12	2/2	-	-	-	-	1/1
14 Mr. Ekniti Nitithanprapas ⁽⁴⁾	1/1	-	-	-	-	-	-
15 Mr. Sukrit Surabotsopon	12/12	5/5	-	-	-	-	-
16 Mr. Pailin Chuchottaworn ⁽⁵⁾	8/8	-	-	-	-	-	1/1
17 Mr. Surong Bulakul ⁽⁶⁾	5/5	-	-	-	4/4	-	-
18 Mr. Sombat Narawuthichai ⁽⁷⁾	4/4	-	-	-	-	-	-
19 Mr. Kritsada Utthayanin ⁽⁸⁾	2/3	-	3/3	-	-	-	-
20 Mr. Wasan Soypisudh ⁽⁹⁾	5/5	-	-	-	-	1/1	1/1
21 Mr. Auttapol Rerkpiboon ⁽¹⁰⁾	3/3	-	-	-	-	-	1/1
22 Mr. Somchai Sujjapongse ⁽¹¹⁾	2/2	-	-	-	-	-	-

Note:

1. Mr. Tevin Vongvanich was appointed following the resolution of Board Meeting No. 10/2558 on October 20, 2015.
2. Mr. Woothisarn Tanchai completed his term at the 2015 AGM on April 3, 2015, and was re-appointed following the resolution of Board Meeting No. 6/2558 on June 19, 2015.
3. Mr. Chansin Treenuchagron was appointed following the resolution of Board Meeting No. 10/2558 on October 20, 2015.
4. Mr. Chavalit Punthong and Mr. Ekniti Nitithanprapas were appointed following the resolution of Board Meeting No. 11/2558 on November 17, 2015.
5. Mr. Pailin Chuchottaworn tendered his resignation with effect from September 9, 2015.
6. Mr. Surong Bulakul tendered his resignation with effect from May 20, 2015.
7. Mr. Sombat Narawuthichai tendered his resignation with effect from May 1, 2015.
8. Mr. Kritsada Utthayanin passed away on March 26, 2015.
9. Mr. Wasan Soypisudh was appointed following the resolution of the 2015 AGM on April 3, 2015, and tendered his resignation with effect from September 1, 2015.
10. Mr. Auttapol Rerkpiboon was appointed following the resolution of Board Meeting No. 6/2558 on June 19, 2015, and tendered his resignation with effect from October 1, 2015.
11. Mr. Somchai Sujjapongse was appointed following the resolution of Board Meeting No. 8/2558 on August 21, 2015, and tendered his resignation with effect from October 30, 2015.
12. Mr. Prasit Suebchana tendered his resignation with effect from January 4, 2016.

The Management

As of December 31, 2015, IRPC management consists of 20 members as follows:

	Name	Position
1	Mr. Sukrit Surabotsopon	President
2	Mr. Peerapong Achariyacheevin	Senior Executive Vice President, Petrochemical & Refinery Business Unit
3	Ms. Rachadaporn Rajchataewindra ⁽¹⁾	Senior Executive Vice President, Corporate Accounting & Finance
4	Mr. Pongpraphan Titathavewatana	Executive Vice President, Corporate Refinery Operation
5	Mr. Somkiat Lertritpuwadol	Executive Vice President, Corporate Marketing
6	Mr. Thammasak Panyowatkool	Executive Vice President, Corporate Accounting
7	Mr. Pravet Assavadakorn	Executive Vice President, Corporate Research and Development
8	Ms. Monwipa Choopiban	Executive Vice President, Corporate Affairs
9	Ms. Awrapin Ketranakul	Executive Vice President, Sustainability Management
10	Mr. Sirimet Leepagorn	Executive Vice President, Corporate Strategy and Planning
11	Mr. Kraisit Anukoolutaiwong	Executive Vice President, Corporate Human Resources
12	Ms. Srisuda Suralertrungsun	Executive Vice President, Corporate Procurement and Administration
13	Ms. Wanida Utaisomnapa	Executive Vice President, Corporate Planning Supply Feedstock and Trading
14	Mr. Chalor Panutrakul	Executive Vice President, Corporate Business Development
15	Mr. Veerawat Srinoradithlert	Executive Vice President, Corporate Engineering and Maintenance
16	Mr. Trisdee Watanangkur	Executive Vice President, Corporate Production Support
17	Mr. Woravuth Sivapetranart	Executive Vice President, Corporate Technology and Operational Excellence
18	Mr. Vichit Nittayanonte	Executive Vice President, Corporate Petrochemical Operation / Acting Managing Director of Thai ABS Co., Ltd.
19	Mr. Boondej Phuriyakorn	Executive Vice President / Acting Managing Director of IRPC Polyol Company Limited
20	Mr. Phothiwat Paopongchuang	Executive Vice President / Acting Managing Director of IRPC Technology Company Limited
The management member who completed the term during the year:		
	Ms. Duangkamorn Settanung ⁽²⁾	Senior Executive Vice President, Corporate Accounting & Finance

Note: 1. Ms. Rachadaporn Rajchataewindra was appointed with effect from November 1, 2015

2. Ms. Duangkamorn Settanung completed her term on October 31, 2015.

In line with its strategies and better manage operations, IRPC has repositioned the following members of the Management with effect from January 1, 2016:

	Name	Position
1	Mr. Pongpraphan Titathavewatana	Senior Executive Vice President, Petrochemical & Refinery Operation Unit / Acting Executive Vice President, Corporate Refinery Operation
2	Mr. Somkiat Lertritpuwadol	Senior Executive Vice President, Corporate Commercial and Marketing / Acting Executive Vice President, Corporate Marketing
3	Mr. Thammasak Panyowatkool	Executive Vice President/ Acting Manager, Office of Corporate Internal Audit and Secretary to the Audit Committee
4	Mr. Sirimet Leepagorn	EVEREST Project Manager
5	Ms. Wanida Utaisomnapa	Executive Vice President, Corporate Strategy and Planning

Duties and Responsibilities of the President

The Board assigns the President to manage IRPC's business under the Board-defined objectives and policy. His authority is clearly defined in writing. Regulations on IRPC's business operations are issued for all employees to acknowledge and adhere to.

Below is the scope of the President's authorities, mandated by the Board:

1. Manage IRPC's business under the laws, objectives, articles of association, the Board's policies and the resolutions of the shareholders' meeting.
2. Manage all IRPC's executives and employees; draw up regulations and terms of work; appoint; establish salary, wage or welfare ranges; transfer, dismiss, promote executives and employees either to a higher position or salary, and execute disciplinary punishment under the Board's policy.
3. Comply with the Company's policy, strategic and business plans and visions as approved by the Board, with efficiency and for the best interests of IRPC.
4. Approve a budget for the investment and procurement, and operating expenses under IRPC's plans and annual budget approved by the Board.
5. Manage cash flow, investment, budget, plans and risk management process with efficiency under the authority assigned by the Board.
6. Consider IRPC's performance and submit the proposed interim and annual dividend payment to the Board's or shareholders' meeting (as the case may be) for approval.

7. Evaluate IRPC's performance and submit a progress report to the Board every quarter.

8. Act as a leader and role model in conducting business with adherence to business ethics and code of conduct.

9. Perform other acts to support IRPC's operation under the responsibilities delegated by the Board.

Management Committee

To ensure the flow, efficiency, connection support and good business cooperation of IRPC's operations, IRPC appointed a Management Committee, consisting of the President, Senior Executive Vice President and Executive Vice President in every business unit with the Executive Vice President, Office of Corporate Affairs and Company Secretary, serving as Secretary to the Management Committee.

The Management Committee schedules a meeting in advance once a week on Monday. In 2015, it held 44 meetings.

Duties and Responsibilities

The Management Committee provides consultation and recommendations to the President for his decision-making on matters significant to IRPC's strategies, business operation direction, long-term operation plans, corporate performance, investment plans and budgets, resource allocation to IRPC and its affiliates, as well as manage all business operations under the same direction as follows:

- Consider and screen investment management, budget allocation for investment, and support the operation of IRPC and its affiliates.
- Consider important operation directions, based on complete information on IRPC's, the country's and the world's situations.
- Approve important investment budgets within the authority given by the Board.
- Set HR management policy and mechanisms for HR system management.
- Consider and screen operational and business risk
- Consider and suggest the Company's ESG best practices.
- Follow up on progress and operational results of IRPC and its affiliates.

Company Secretary

In conformity with the Securities and Exchange Act, B.E. 2535 (1992) as amended in B.E. 2551 (2008), and the corporate governance of listed companies, the Board appointed Ms. Monwipa Choopiban, Executive Vice President, Corporate Affairs, as Company Secretary to perform duties under the above-mentioned act and the announcements of the Capital Market Supervisory Board.

The main duties and responsibilities of the Company Secretary are summarized as follows:

- Perform with accountability, care, and integrity
- Provide to directors recommendations about laws and IRPC's rules and regulations, and ensure that IRPC's businesses comply with the laws and relevant regulations, and report to the Board any significant changes.
- Arrange Board meetings and shareholders' meetings in compliance with the laws, IRPC's articles of association and regulations, as well as general practices.
- Prepare the minutes of Board meetings and shareholders' meetings and ensure that their resolutions are complied with and carried out.
- Ensure that the information and data under his/her responsibilities are disclosed to regulators and governing units as required.
- Prepare and file important documents, director registration, Board meeting notices, minutes of Board

meetings, annual report, invitation to shareholders' meetings, reports on conflicts of interest by directors and the management, and other duties as defined by the Capital Market Supervisory Board and related laws.

- Prepare information and reports relating to the Board and IRPC's corporate governance in applying for membership or awards at national and international levels.
- Take responsibility in anti-corruption activities under the policy and measures defined by the Board.
- Acquire information, knowledge and good practices relating to her responsibilities and corporate governance, at national and international levels, and propose best practices for IRPC to the Chairman and Secretary to the Board or the Corporate Governance Committee (the Company Secretary is now also Secretary to the Corporate Governance Committee)
- Inform the stakeholders, that is, investors, shareholders, the mass media, and the general public of IRPC's CG activities through one-way and two-way communication channels.

Head of Compliance Division

To announce its intention and elevate operating standards on a par with relevant laws and regulations, IRPC restructured its organization structure, set up a unit to be responsible for corporate compliance and put it under the Company Secretary. This new unit, the Corporate Secretary and Compliance Division under the charge of the Company Secretary, is responsible for setting up a system, defining the scope of works and policy on compliance and turning it into Corporate Compliance Policy, ensuring that IRPC's operations are in compliance with the laws and corporate governance, and preparation of compliance progress reports and follow up to link it with the other two pillars, namely Governance and Risk Management (Governance, Risk Management and Compliance: GRC)

In 2015, the Board of Directors of IRPC, highly valuing business in compliance with applicable laws, rules and regulations and moving forward to the goals set with great success, as well as focusing on the creation of utmost benefits for the shareholders and stakeholders toward mutual trust, stipulated "The Corporate Compliance Policy of IRPC and Group Companies", summarized as follows:

1. Compliance with relevant laws and regulations
2. Fair competition and anti-trade monopoly
3. Anti-corruption and anti-bribery
4. Upholding of human rights principles
5. Safeguarding of intellectual property rights
6. Prevention and suppression of money laundering and non-sponsorship of terrorism causes
7. Proper management, storage, and application of company data
8. Responsibility for the environment, health, and safety.

Company Secretary and Head of Corporate Secretary and Compliance Division

Ms. Monwipa Choopiban

(Appointed Company Secretary with effect from January 24, 2012, to present).(Ms. Choopiban's profile is shown in Management on page 51)

Directors' Remuneration

The Board has appointed the Nomination and Remuneration Committee to consider the guidelines for the compensation of IRPC's directors and members of the sub-committees to propose to the Board. The compensation criteria are:

1. The compensation is divided into monthly pay (retention fees) and meeting allowances. (No other compensation or benefits in other form are to be paid to the directors).

2. The compensation is based on the responsibilities and performances of the directors and IRPC's performance, and it should be comparable to peer companies with a comparable size and business risks. The compensation criteria surveyed by Thai Institute of Directors (IOD) and SET are also used in the consideration.

The compensation proposed for 2015 was comparable to the median of peer companies of the resources group according to the report on directors' compensation 2014, prepared by IOD.

3. The scopes of work and assigned responsibilities of directors and sub-committees are also considered.
4. The Chairman of the Board and the Chairmen of the sub-committees are entitled to an additional 30% compensation of the other directors.
5. Members of the Audit Committee, Nomination and Remuneration Committee, Risk Management Committee and Corporate Governance Committee are entitled to only the meeting allowances for the meetings attended.
6. The compensation of the directors and sub-committee members, that is, monthly pays and meeting allowances, must be approved by the shareholders' meeting.

The 2015 Annual General Meeting held on April 3, 2015, approved the compensation of the Board and sub-committees at the same rate of those of 2014 as detailed below:

1. Board and sub-committees compensation in 2015 (The compensation rate has been used since 2006)

Directors	Monthly compensation/person	Meeting allowance/person
1. Board		
Chairman	60,000 baht	60,000 baht
Director	45,000 baht	45,000 baht
2. Sub- Committees, namely the Audit Committee, Nomination and Remuneration Committee, Corporate Governance Committee, Risk Management Committee and other sub-committees that may be established in the future.		
Chairman	-	60,000 baht
Director	-	45,000 baht

2. Bonuses for Directors: Since IRPC's operation for 2014 resulted in a loss, it was proposed by the Nomination and Remuneration Committee that there would be no bonus for directors for 2014.

In 2015, the compensation received by each director is summarized below:

(Unit: Baht)

No.	Name	Monthly compensation	Meeting allowance for Board	Meeting allowance for sub-committees	Bonus (2014 performance)	Total
1	Mr. Tevin Vongvanich ⁽¹⁾	143,226	120,000	-	-	263,226
2	Mr. Cherdpong Siriwit	540,000	540,000	720,000	-	1,800,000
3	Mr. Woothisarn Tanchai ⁽²⁾	427,500	405,000	405,000	-	1,237,500
4	Mr. Watcharakiti Watcharothai	540,000	540,000	420,000	-	1,500,000
5	Mr. Sarun Rungkasiri	540,000	540,000	480,000	-	1,560,000
6	Mr. Charnsin Treenuchagron ⁽³⁾	107,419	90,000	-	-	197,419
7	Mr. Chavalit Punthong ⁽⁴⁾	66,000	45,000	-	-	111,000
8	Mr. Songpope Polachan	540,000	540,000	630,000	-	1,710,000
9	Mr. Triumph Jalichandra	540,000	540,000	495,000	-	1,575,000
10	Mr. Somnuk Bomrungsalee	540,000	540,000	-	-	1,080,000
11	Mr. Pramual Chanpong	540,000	540,000	315,000	-	1,395,000
12	Lt. Gen. Sasin Thongpakdee	540,000	360,000	270,000	-	1,170,000
13	Mr. Prasit Suebchana ⁽¹²⁾	540,000	495,000	90,000	-	1,125,000
14	Mr. Ekniti Nitithanprapas ⁽⁴⁾	66,000	45,000	-	-	111,000
15	Mr. Sukrit Surabotsopon	540,000	540,000	225,000	-	1,305,000
16	Mr. Pailin Chuchottaworn ⁽⁵⁾	498,000	480,000	-	-	978,000
17	Mr. Surong Bulakul ⁽⁶⁾	207,581	225,000	180,000	-	612,581
18	Mr. Sombat Narawuthichai ⁽⁷⁾	180,000	180,000	-	-	360,000
19	Mr. Kritsada Udyanin ⁽⁸⁾	135,000	90,000	135,000	-	360,000
20	Mr. Wasan Soyphisudh ⁽⁹⁾	222,000	225,000	-	-	447,000
21	Mr. Auttapol Rerkpiboon ⁽¹⁰⁾	153,000	135,000	-	-	288,000
22	Mr. Somchai Sujjapongse ⁽¹¹⁾	105,968	90,000	-	-	195,968
Total		7,711,694	7,305,000	4,365,000	-	19,381,694

Note: Apart from the above, IRPC does not pay any compensation or benefits in any other form to the directors.

1. Mr. Tevin Vongvanich was appointed Chairman of the Board following the resolution of the Board at Meeting No. 10/2015, on October 20, 2015, and had returned to PTT Plc his director's remuneration in compliance with the conditions stipulated in PTT's Employment Agreement.
2. Mr. Woothisarn Tanchai completed his term on April 3, 2015, at the 2015 AGM and was reappointed following the resolution of the Board at Meeting No. 6/2015, on June 19, 2015.
3. Mr. Charnsin Treenuchagron was appointed director following the resolution of the Board at Meeting No. 10/2015, on October 20, 2015.
4. Mr. Chavalit Punthong and Mr. Ekniti Nitithanprapas were appointed directors following the resolution of the Board at Meeting No. 11/2015, on November 17, 2015.
5. Mr. Pailin Chuchottaworn tendered his resignation with effect from September 9, 2015.
6. Mr. Surong Bulakul tendered his resignation with effect from May 20, 2015.
7. Mr. Sombat Narawuthichai tendered his resignation with effect from May 1, 2015.
8. Mr. Kritsada Udyanin passed away on March 26, 2015.
9. Mr. Wasan Soyphisudh was appointed director following the resolution of the 2015 AGM on April 3, 2015, and tendered his resignation with effect from September 1, 2015.
10. Mr. Auttapol Rerkpiboon was appointed director following the resolution of the Board at Meeting No. 6/2015, on June 19, 2015, and tendered his resignation with effect from October 1, 2015. tendered his resignation with effect from October 30, 2015.
12. Mr. Prasit Suebchana tendered his resignation with effect from January 4, 2016.

Management Compensation

IRPC annually measures the performance of the management at every level by defining a performance assessment policy under the Performance Management System (PMS), consisting of (1) Key Performance Indicators (KPIs), representing key missions cascaded down from the corporate level each year and matching IRPC's goals, and (2) job competency, a behavioral assessment tool for a person's ability. These two elements help IRPC achieve its goals with quality and sustainability.

Compensation of the President is designed under clear, transparent, fair and reasonable principles, taking into consideration his duties and responsibilities and IRPC's performance outcomes. The Nomination and Remuneration Committee considers the compensation and proposes it to the Board for approval.

The process is as follows:

1. The Nomination and Remuneration Committee proposes the President's KPIs and remuneration criteria to the Board for consideration in January.
2. After the approval of the Board, the President is informed and acknowledges it.
3. In December, the Nomination and Remuneration Committee evaluates the President's performance during the year, based on the set criteria and supporting reasons and propose it to the Board for approval.

In 2015, The Board approved the President's challenging KPIs consisting of corporate KPI and Leadership skill which supported the sustainable growth. The President accepted the KPIs and expected to drive the company's performance to meet the target goal.

Management Compensation

(Unit : Baht)

Compensation	2014	2015
Remuneration		
Salary	48.38	86.27
Bonus	5.93	35.41
Other remuneration		
Providend Fund	0.30	5.88
Total	54.61	127.56

In 2014, IRPC executives comprise:

Position	
1. Mr. Sukrit Surabotsopon	President
2. Mr. Peerapong Achariyacheevin	Senior Executive Vice President, Petrochemical & Refinery Business Unit
3. Mr. Manit Suthaporn	Senior Executive Vice President, Corporate Legal (Vacated the office and appointed IRPC Legal Advisor on January 2, 2015)
4. Mr. Chansin Treenuchagron	Senior Executive Vice President, Corporate Commercial & Marketing (Vacated the office on October 1, 2014)
5. Ms. Duangkamol Settanung	Senior Executive Vice President, Corporate Accounting & Finance
6. Mr. Wittawat Svasti-Xuto	Senior Executive Vice President, Corporate Strategy & Planning (Vacated the office on August 1, 2014)
7. Ms. Oravan Leelarasamee	Senior Executive Vice President, Corporate Human Resources & Administration (Vacated the office on November 1, 2014)

In 2015, the executive comprises¹ :

	Position
1. Mr. Sukrit Surabotsopon	President
2. Mr. Peerapong Achariyacheevin	Senior Executive Vice President, Petrochemical & Refinery Business Unit
3. Ms. Rachadaporn Rajchataewindra ²	Senior Executive Vice President, Corporate Accounting & Finance
4. Mr. Pongpraphan Titathavewatana	Executive Vice President, Corporate Refinery Operation
5. Mr. Somkiat Lertritpuwadol	Executive Vice President/ Corporate Marketing
6. Mr. Thammasak Panyowatkool	Executive Vice President, Corporate Accounting
7. Mr. Pravet Assavadakorn	Executive Vice President, Corporate Research and Development
8. Ms. Monwipa Chooipiban	Executive Vice President, Corporate Affairs
9. Ms. Awrapin Kettratanakul	Executive Vice President, Sustainability Management
10. Mr. Sirimet Leepagorn	Executive Vice President, Corporate Strategy and Planning
11. Mr. Kraisit Anukoolutaiwong	Executive Vice President, Corporate Human Resources
12. Ms. Srisuda Suralertrungsun	Executive Vice President, Corporate Procurement and Administration
13. Ms. Wanida Utaisomnapa	Executive Vice President, Corporate Planning Supply Feedstock and Trading
14. Mr. Chalor Panutrakul	Executive Vice President, Corporate Business Development
15. Mr. Veerawat Srinoradithlert	Executive Vice President, Corporate Engineering and Maintenance
16. Mr. Trisdee Watanangkur	Executive Vice President, Corporate Production Support
17. Mr. Woravuth Sivapetranart	Executive Vice President, Corporate Technology and Operational Excellence
18. Mr. Vichit Nittayanonte	Executive Vice President, Corporate Petrochemical Operation/ Acting Managing Director of Thai ABS Co., Ltd.
19. Mr. Boondej Phuriyakorn	Executive Vice President/ Acting Managing Director of IRPC Polyol Co., Ltd.
20. Mr. Phothiwat Paopongchuang	Executive Vice President/ Acting Managing Director of IRPC Technology Co., Ltd.

The management member who completed her term during the year:

Ms. Duangkamol Settanung ³	Senior Executive Vice President, Corporate Accounting & Finance
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Note:

1. List of executives as of 2 January 2015 required to disclose compensation under SEC regulations.
2. Ms. Rachadaporn Rajchataewindra was appointed with effect from November 1, 2015.
3. Ms. Duangkamol Settanung completed her term on October 31, 2015.

Position Table of Directors and Executives (as of 31 December 2015)

Name	1. IRPC Plc.	Subsidiaries						Associated Companies/ Related Companies						
		2. IRPC Polyol Co., Ltd.	3. Thai ABS Co., Ltd.	4. IRPC Oil Co., Ltd.	5. IRPC Technology Co., Ltd.	6. IRPC A&L Co., Ltd.	7. Rakpasak Co., Ltd.	8. IRPC Energy Co., Ltd.	9. UBE Chemical (Asia) Plc.	10. IRPC Clean Power Co., Ltd.	11. PTT Polymer Marketing Co., Ltd.	12. IRPC-PCC Co., Ltd.	13. PTT Plc.	14. PTT Global Chemical Plc.
Mr. Tevin Vongvanich	X												/, //	
Mr. Cherdpong Siriwit	/													
Mr. Woothisarn Tanchai	/													
Mr. Watcharakiti Watcharothai	/												/	
Mr. Sarun Rungkasiri	/												//	/
Mr. Chavalit Punthong	/												//	
Mr. Chansin Treenuchagron	/										/		//	
Mr. Songpope Polachan	/													
Mr. Triumph Jalichandra	/													
Mr. Somnuk Bomrungsalee	/													
Mr. Pramual Chanpong	/													
Lt. Gen. Sasin Thongpakdee	/													
Mr. Prasit Suebchana	/													
Mr. Ekniti Nitithanprapas	/													
Mr. Sukrit Surabotsopon	/, //	X	X	X	X	X			/			X	//	
Mr. Peerapong Achariyacheevin	//					/		/		/				
Ms. Rachadaporn Rajchataewindra ¹	//	/	/	/		/			/	/			//	
Mr. Pongpraphan Titathavewatana	//	/	/											
Mr. Somkiat Lertritpuwadol	//					/						/		
Mr. Thammasak Panyowatkool	//				/									
Mr. Pravet Assavadakorn	//	/												
Ms. Monwipa Choopiban	//				/									
Ms. Awrapin Ketrananakul	//													
Mr. Sirimet Leepagorn	//			/						/				
Mr. Kraisit Anukoolutaiwong	//				/									
Ms. Srisuda Suralertrungsun	//													
Ms. Wanida Utaisomnapa	//													
Mr. Chalor Panutrakul	//													
Mr. Veerawat Srinoradithlert	//													
Mr. Trisdee Watanangkur	//													
Mr. Woravuth Sivapetranart	//		/											
Mr. Vichit Nittayanonte	//		/			/								
Mr. Boondej Phuriyakorn	//	/										/		
Mr. Phothiswat Paopongchuang	//				/									

Note: X = Chairman / = Director // = Management

Director of Subsidiaries (as of 31 December 2015)

1. IRPC Oil Co., Ltd.

	Name	Position
1	Mr. Sukrit Surabotsopon	Chairman
2	Mr. Sommai Khowkachaporn	Member
3	Mrs. Rachadaporn Rajchataewindra	Member
4	Mr. Sirimet Leepagorn	Member
5	Mr. Somkiat Lertritpuwadol	Member
6	Mr. Chalermchai Somboonpakorn	Managing Director

2. IRPC Polyol Co., Ltd.

	Name	Position
1	Mr. Sukrit Surabotsopon	Chairman
2	Mr. Sommai Khowkachaporn	Member
3	Mrs. Rachadaporn Rajchataewindra	Member
4	Mr. Vichit Nittayanonte	Member
5	Mr. Pravet Assavadakorn	Member
6	Mr. Boondej Phuriyakorn	Managing Director

3. Thai ABS Co., Ltd.

	Name	Position
1	Mr. Sukrit Surabotsopon	Chairman
2	Mr. Sommai Khowkachaporn	Member
3	Mrs. Rachadaporn Rajchataewindra	Member
4	Mr. Somkiat Lertritpuwadol	Member
5	Mr. Woravuth Sivapetranart	Member
6	Mr. Vichit Nittayanonte	Acting Managing Director

4. IRPC A&L Co., Ltd.

	Name	Position
1	Mr. Sukrit Surabotsopon	Chairman
2	Mrs. Rachadaporn Rajchataewindra	Member
3	Mr. Peerapong Achariyacheevin	Member
4	Mr. Tochiro Kojima	Member
5	Mr. Hideyuki Tokimasa	Member
6	Mr. Takayuki Amano	Member
7	Mr. Hiroshi Osubo	Member
8	Mr. Somkiat Lertritpuwadol	Member
9	Mr. Vichit Nittayanonte	Member
10	Mr. Chalermchai Somboonpakorn	Managing Director

5. IRPC Technology Co., Ltd.

	Name	Position
1	Mr. Sukrit Surabotsopon	Chairman
2	Mr. Thammasak Panyowatkool	Member
3	Miss Monwipa Choopiban	Member
4	Mr. Kraisit Anukoolutaiwong	Member
5	Mr. Pothiwat Paopongchuang	Managing Director

6. Rakpasak Co., Ltd. (TPI Oil (2001) Co., Ltd.)

	Name	Position
1	Mr. Weerachai Ariyapornpiroon	Member
2	Mr. Chalermchai Somboonpakorn	Member
3	Mr. Songklod Charoenphorn	Member
4	Mr. Somboon Satsin	Managing Director

Number of shares held by the directors in December 31, 2015

No	Name ¹	(As of December 31, 2014) Paid-up capital 20,434,419,246 baht	(As of December 31, 2015) Paid-up capital 20,434,419,246 baht	Share increase (decrease) during the year
		Shareholding/ Number of shares	Shareholding/ Number of shares	
1	Mr. Tevin Vongvanich	-	0.000004% 900	-
	Spouse	-	-	-
	Children under legal age	-	-	-
2	Mr. Cherdpong Siriwit	-	-	-
	Spouse	-	-	-
	Children under legal age	-	-	-
3	Mr. Woothisarn Tanchai	-	-	-
	Spouse	-	-	-
	Children under legal age	-	-	-
4	Mr. Watcharakiti Watcharothai	0.00127% 260,250	0.00127% 260,250	-
	Spouse	-	-	-
	Children under legal age	-	-	-
5	Mr. Sarun Rungkasiri	-	-	-
	Spouse	-	-	-
	Children under legal age	-	-	-
6	Mr. Charnsin Treenuchagron ³	-	-	-
	Spouse	-	-	-
	Children under legal age	-	-	-
7	Mr. Chavalit Punthong	-	-	-
	Spouse	-	-	-
	Children under legal age	-	-	-
8	Mr. Songpope Polachan	-	-	-
	Spouse	-	-	-
	Children under legal age	-	-	-
9	Mr. Triumph Jalichandra	-	-	-
	Spouse	-	-	-
	Children under legal age	-	-	-
10	Mr. Somnuk Bomrungsalee	-	-	-
	Spouse	-	-	-
	Children under legal age	-	-	-
11	Mr. Pramual Chanpong	-	-	-
	Spouse	-	-	-
	Children under legal age	-	-	-
12	Lt. Gen. Sasin Thongpakdee	-	-	-
	Spouse	-	-	-
	Children under legal age	-	-	-
13	Mr. Prasit Suebchana	-	-	-
	Spouse	-	-	-
	Children under legal age	-	-	-
14	Mr. Ekniti Nitithanprapas	-	-	-
	Spouse	-	-	-
	Children under legal age	-	-	-
15	Mr. Sukrit Surabotsopon ¹	0.02936% 6,000,000	0.03426% 7,000,000	1,000,000
	Spouse	-	-	-
	Children under legal age	-	-	-

Note: 1. IRPC's management list as of December 31, 2015.

2. Mr. Sukrit Surabotsopon bought 1,000,000 shares on August 24, 2015.

Number of shares held by the management as of December 31, 2015

No	Name	(as of January 2, 2015) Paid-up capital 20,434,419,246 baht	(as of December 31, 2015) Paid-up capital 20,434,419,246 baht	Share increase (decrease) during the year
		Shareholding Number of shares	Shareholding Number of shares	
1	Mr. Sukrit Surabotsopon ¹	0.02936% 6,000,000	0.03426% 7,000,000	1,000,000
	Spouse	-	-	-
	Children under legal age	-	-	-
2	Mr. Peerapong Achariyacheevin	0.00656% 1,340,000	0.00656% 1,340,000	-
	Spouse	-	-	-
	Children under legal age	-	-	-
3	Ms. Rachadaporn Rajchataewindra ²	0.00011% 22,000	0.00011% 22,000	-
	Spouse	0.00039% 80,000	0.00039% 80,000	-
	Children under legal age	-	-	-

No	Name	(as of January 2, 2015) Paid-up capital 20,434,419,246 baht	(as of December 31, 2015) Paid-up capital 20,434,419,246 baht	Share increase (decrease) during the year
		Shareholding Number of shares	Shareholding Number of shares	
4	Mr. Pongpraphan Titathavewatana	0.00129% 264,478	0.00129% 264,478	-
	Spouse	-	-	-
	Children under legal age	-	-	-
5	Mr. Somkiat Lertritpuwadol	0.00145% 295,580	0.00145% 295,580	-
	Spouse	0.00008% 15,900	0.00008% 15,900	-
	Children under legal age	-	-	-
6	Mr. Thammasak Panyowatkool	-	-	-
	Spouse	-	-	-
	Children under legal age	-	-	-
7	Mr. Pravet Assavadakorn	0.00060% 123,600	0.00060% 123,600	-
	Spouse	0.00012% 25,000	0.00012% 25,000	-
	Children under legal age	-	-	-
8	Ms. Monwipa Chooipiban	-	-	-
	Spouse	-	-	-
	Children under legal age	-	-	-
9	Ms. Awrapin Ketranakul	0.00045% 92,721	0.00045% 92,721	-
	Spouse	-	-	-
	Children under legal age	-	-	-
10	Mr. Sirimet Leepagorn	0.00031% 63,292	0.00031% 63,292	-
	Spouse	-	-	-
	Children under legal age	-	-	-
11	Mr. Kraisit Anukoolutaiwong	0.00000% 1	0.00000% 1	-
	Spouse	-	-	-
	Children under legal age	-	-	-
12	Ms. Srisuda Suralertrungsun	0.00226% 462,109	0.00226% 462,109	-
	Spouse	-	-	-
	Children under legal age	-	-	-
13	Ms. Wanida Utaisomnapa	0.00103% 210,440	0.00103% 210,440	-
	Spouse	-	-	-
	Children under legal age	-	-	-
14	Mr. Chalor Panutrakul	-	-	-
	Spouse	-	-	-
	Children under legal age	-	-	-
15	Mr. Veerawat Srinoradithert	0.00005% 10,579	0.00005% 10,579	-
	Spouse	-	-	-
	Children under legal age	-	-	-
16	Mr. Trisdee Watanangkur	0.00174% 355,866	0.00174% 355,866	-
	Spouse	-	-	-
	Children under legal age	-	-	-
17	Mr. Woravuth Sivapetranart	0.00063% 129,351	0.00063% 129,351	-
	Spouse	-	-	-
	Children under legal age	-	-	-
18	Mr. Vichit Nittayanonte	0.00163% 333,394	0.00163% 333,394	-
	Spouse	-	-	-
	Children under legal age	-	-	-
19	Mr. Boondej Phuriyakorn	0.00174% 355,801	0.00174% 355,801	-
	Spouse	-	-	-
	Children under legal age	-	-	-
20	Mr. Phothiwat Paopongchuang	0.00031% 64,320	0.00031% 64,320	-
	Spouse	-	-	-
	Children under legal age	-	-	-
The Management member who completed her term during the year				
21	Ms. Duangkamol Settanung ³	-	-	-
	Spouse	-	-	-
	Children under legal age	-	-	-

Note: 1. Mr. Sukrit Surabotsopon bought 1,000,000 shares on August 24, 2015.
2. Ms. Rachadaporn Rajchataewindra was appointed with effect from November 1, 2015.
3. Ms. Duangkamol Settanung completed her term on October 31, 2015.

IRPC INFORMATION

Company Name	IRPC Public Company Limited
Symbol/ticker	IRPC
Company Registration	0107537002567
Type of Business	Petroleum and Petrochemical
Industry	Resources
Sector	Energy & Utilities
Registered Capital	Baht 20,475,000,000, consisting of 20,475,000,000 common shares at Baht 1 per share
Paid-up Capital	Baht 20,434,419,246, consisting of 20,434,419,246 common shares at Baht 1 per share
Location	<p>Headquarters and Plant: 299 Moo 5, Sukhumvit Road, Choen Noen, Rayong 21000, Thailand Tel. + 66 (0) 3861-1333 Fax. + 66 (0) 3861-2813</p> <p>Bangkok Office: 555/2, Energy Complex, Building B, 6th Floor, Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900 Tel. + 66 (0) 2649-7000 Fax. + 66 (0) 2649-7001</p>
Website	www.irpc.co.th

Reference

Share Registrart	Thailand Securities Depository Company Limited 93 Stock Exchange of Thailand Building, Ratchadaphisek Road, Din Daeng, Bangkok 10400 Tel. + 66 (0) 2009-9000 Fax. + 66 (0) 2009-9991
Auditort	Mr. Vichien Khingmontri CPA No. 3977, Pricewaterhouse Coopers ABAS Limited 179/74-80 Bangkok City Tower, 15 th Floor, South Sathorn Road, Thung Mahamek, Sathorn, Bangkok 10120, Thailand Tel. + 66 (0) 2344-1000 Fax + 66 (0) 2286- 5050
Baht Bond Registrar	TMB Bank Public Company Limited 3000 Phaholyothin Road, Chompon, Chatuchak, Bangkok 10900, Thailand Tel. +66 (0) 2299-1111

Shareholding Structure

The top 10 shareholders of IRPC Public Company Limited as of the closing of the share register book on March 10, 2015, are:

	Shareholder	Number of shares	% shares
1.	PTT Public Company Limited	7,869,694,600	38.51
2.	Government Savings Bank	1,950,000,000	9.54
3.	Thai NVDR Company Limited	843,201,590	4.13
4.	Bangkok Bank Public Company Limited	504,906,708	2.47
5.	State Street Bank Europe Limited	282,768,946	1.38
6.	HSBC (Singapore) Nominees Pte Ltd	231,625,478	1.13
7.	Social Security Office (2 cases)	207,586,900	1.02
8.	State Street Bank and Trust Company	183,546,841	0.90
9.	Thai Value Focus Equity-Dividend Fund	168,404,900	0.82
10.	Electricity Generating Authority of Thailand Employee Provident Fund	132,494,000	0.65

Shareholding by Foreigners

Shareholding by foreigners cannot exceed 49% of the paid-up share capital. As of March 10, 2015, IRPC's shares held by foreign nationals totaled 9.86%.

Dividend Policy

IRRC Public Company Limited

IRRC's policy is to pay dividends at no less than 25% of its annual net profit after tax and all capital provisions, as required by IRPC's regulations and by law. Such dividend payment is subject to its investment plans and other obligations as seen fit by the Board.

Affiliate

Each affiliate will separately consider its own dividend payment, taking into account its cash flow balances or net profits, or both, against its reserved investment budget as required by law, or against other obligations as seen fit by each affiliate's Board.

Juristic persons whose 10% shares or more are held by the IRPC

No.	Company	% of shares holding	Paid- up Capital (Million Baht)
1	Thai ABS Co., Ltd. Address: 555/2 Energy Complex, Building B, 7 th Floor, Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900 Tel. +66 (0) 2646-6700 Fax. +66 (0) 2-646-6750 Type of Business: Manufacturing of styrenics polymers	99.99	625
2	IRPC A&L Co., Ltd. Address: 555/2 Energy Complex, Building B, 9 th Floor, Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900 Tel. +66 (0) 2649-7511 Fax. +66 (0) 2649-7550 Type of Business: Sale of polymers and resins <i>Remarks: Subsidiary of Thai ABS Co., Ltd.</i>	59.94	10
3	IRPC Oil Co., Ltd. Address: 555/2 Energy Complex, Building B, 7 th Floor, Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900 Tel. +66 (0) 2646-6666 Fax. +66 (0) 2646-6677/6688 Type of Business: Sale of refined products	99.99	2,000
4	Rakpasak Co., Ltd. Address: 555/2 Energy Complex, Building B, 7 th Floor, Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900 Tel. +66 (0) 2646-6666 Fax. +66 (0) 2646-6677/6688 Type of Business: Marine logistics <i>Remarks: Subsidiary of IRPC Oil Co., Ltd.</i>	99.99	30
5	IRPC Polyol Co., Ltd. Address: 555/2 Energy Complex, Building B, 7 th Floor, Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900 Tel. +66 (0) 2646-6700 Fax. +66 (0) 2646-6702 Type of Business: Production and sale of polyol	99.99	300
6	IRPC - PCC Co., Ltd. Address: 555/2 Energy Complex, Building B, 7 th Floor, Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900 Tel. +66 (0) 2646-6700 Fax. +66 (0) 2646-6702 Type of Business: Sale of polyurethanes <i>Remarks : Joint venture of IRPC Polyol Co., Ltd.</i>	49.99	10

No.	Company	% of shares holding	Paid- up Capital (Million Baht)
7	IRPC Technology Co., Ltd. Address: 309 Moo 5, Sukhumvit Road, Choeng Noen, Rayong Tel. +66 (0) 3889-9130-2 Fax. +66 (0) 3889-9130-2 ext. 301 Type of Business: Vocational School	99.99	750
8	IRPC Clean Power Co., Ltd. Address: 299 Moo 5, Sukhumvit Road, Choeng Noen, Rayong Tel. +66 (0) 3861-1333 Fax. +66 (0) 3861-2813 Type of Business: Generation and sale of electricity and stream	48.99	2,336
9	UBE Chemicals (Asia) Public Company Limited Address: 98 Sathorn Square Office Tower, 18 th Floor, North Sathorn Road, Silom, Bang Rak, Bangkok 10500 Tel. +66 (0) 2206-9300 Type of Business: Production and sale of petrochemicals	25.00	10,739
10	PTT Energy Solutions Co., Ltd. Address: 555/1 Energy Complex, Building A, 4 th -5 th Floors, Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900 Tel. +66 (0) 2140-2000 Type of Business: Engineering Consultancy	20.00	150
11	Rayong Acetylene Co., Ltd. Address: 2/3 Moo 14, Bangna-Trad Road, Km. 6.5 Bang Kaeo, Bang Phli, Samut Prakan Tel. +66 (0) 2338-6100 Fax. +66 (0) 3862-1602 Type of Business: Production and distribution of acetylene gas	13.04	115

Remarks: The table includes only companies with active operations



MANAGEMENT ANALYSIS

- Message from the President
- Management Discussion and Analysis (MD&A)
- Market Overview and Industry Outlook
- Performance Summary 2015
- Human Resource Administration
- Research and Development for Excellence
- IRPC Business Strategic Roadmap

MESSAGE FROM THE PRESIDENT



Dear Shareholders,

This year 2015 has proved a resounding success for the businesses of IRPC Public Company Limited, with the goal of net profit exceeded to Baht 9,402 million, thanks to the strengthening of our core business under the “Strengthen Core Business” strategy, most remarkably the success of the DELTA Project, which has added significant value. This spectacular success will therefore provide strength to our executives and employees to keep building on our accomplishments under the active promotion and support of the Board of Directors and the shareholders.

To extend our success, the EVEREST Project, launched in late 2015, will be jointly worked on with a leading worldwide consultant for about two years, as we pursue our “Leading Integrated Petrochemical Complex in Asia by 2020” vision. One goal is to attain over 14% in ROIC, which implies EBITDA of around Baht 29,000 million, approximating the altitude in feet of Mount Everest. The project seeks to improve profitability efficiency, lessen expenses, and improve planning and companywide management. Goals will in stages get more challenging, not unlike the climbing of Mount Everest, which calls for expertise, competency, perseverance, physical stamina, moral support, and support from trek companions. Incremental

Mr. Sukrit Surabotsopon
President

margins will be sought in parallel with improvement of organizational health to ensure that IRPC will be getting to the top and staying there.

Besides governance-based business management, operational excellence, efficient management of the supply chain with due regard for cost-effective resource consumption, and mitigation of impacts on communities, society, and the environment, this year IRPC has taken most seriously personnel capability development and HR management system development, in pursuit of maximum efficiency so that people may prove to be our platform for growth thanks to their strengths and our strong corporate culture that would drive our people in a proper, uniform direction. This year we are enforcing i-SPIRIT as corporate values so that all of our people may recognize their common ownership and responsibility (i = individual ownership complements SPIRIT). This echoes PTT Group's common values of being smart and conscientious while also being socially responsible.

We fully recognize that business marked by responsibility to society, communities, and the environment is the foundation of sustainable growth and satisfaction of stakeholders-shareholders, customers, business partners, communities, and employees. Such behavior guides IRPC's development so that we all may strive for maximum added value. In addition, constant communication of useful data for the shareholders, investors, and the public to make good investment decisions has been our task all along. As evidence, this year IRPC received "Thailand Sustainability Awards 2015" from the Stock Exchange of Thailand.

As for our investment project updates, construction of the UHV Project, designed to turn low-value heavy crude oil into higher-value products, especially propylene of 320,000 tons per year, is now completed. The project is under testing and poised for safe raw-material feeding and expected to start commercial operation in the first quarter of 2016. Meanwhile, the Polypropylene Debottlenecking Project, with a capacity of 300,000 tons per year, has kicked off with construction work since May this year and is due for completion in the third quarter of 2017. To fund these projects, IRPC has secured additional long-term, baht-denominated loans worth Baht 4,000 million over eight years, while securing long-term loans to ease financial liquidity. In addition, IRPC has accepted Baht 3,878 million in repayment by TPI Aromatics Public Company Limited, in effect settling all litigation with the former group of executives since September 2014.

Besides these various investment projects, IRPC commands a strategy for success through the R&D of special-grade products for higher value, allocating an investment budget for this purpose amounting to 1% of the petrochemical revenue in 2016 and rising each year to 2-3%, approaching the percentages of leading worldwide companies. At the same time, we are going to raise the ratio of our research personnel to 7% of the workforce so as to develop green, innovative products while adding commercial value.

On this occasion, I would like to express my sincere thanks to the shareholders and the Board, customers, business partners, financial institutions, mass media, and all related parties for their support and confidence in our businesses over the years. I appreciate all the employees' dedication and unity in performance. I am convinced of IRPC's successful strides toward planned goals for secure progress.

MANAGEMENT DISCUSSION AND ANALYSIS (MD&A)

Executive Summary

	Unit	2015	2014	Change
Net Sales ⁽¹⁾	Baht Million	199,595	272,968	(27%)
Market GIM	Baht Million	32,156	15,788	104%
	USD/bbl	13.99	7.63	83%
Accounting GIM	Baht Million	28,741	7,238	297%
	USD/bbl	12.50	3.49	258%
EBITDA	Baht Million	17,033	(1,402)	1,315%
Net Profit	Baht Million	9,402	(5,235)	280%

Note : ⁽¹⁾ Net Sales excluded excise taxes

This year saw marked performance growth by IRPC Public Company Limited, with a net profit of Baht 9,402 million against the loss last year of Baht 5,235 million. In other words, the net profit rose by Baht 14,637 million. Accounting for this are mainly the rises in product price margins, most of which stemmed from depressed costs of crude oil and production fuels in line with crude oil prices. On average, the crude oil price dipped by 47%. One might say that the lube base oil business is on the rise, particularly asphalt, due to the surge in demand by the domestic market, dictated by the economic stimulus policy of the government. The polyolefins group of petrochemicals also saw healthier product price margins. IRPC posted market GIM of Baht 32,156 million (US\$13.99 per barrel), a rise of Baht 16,368 million (US\$6.36 per barrel). In addition, strategic plan implementation to raise corporate-wide efficiency under the DELTA Project successfully lowered expenses and accumulate profits as planned despite IRPC's net losses resulting from oil stocks and oil price hedging, amounting to Baht 3,415 million and its recorded forex losses unrealized of Baht 1,288 million in line with the weakened Baht as a result of IRPC's US\$403 million in long-term loans in the dollar denomination.

This year's non-recurring items consisted of Baht 2,823 million in reversing doubtful accounts due to the repayment by TPI Aromatics Public Company Limited (IRPC's debtor), which had sold land through property custodian officers, for Baht 3,878 million. As for matters dealing with fire insurance, IRPC received an additional Baht 1,305 million in compensation from insurance companies this year, which took the total compensation sum to Baht 3,015 million.

Operating Performance

1 Operating Performance by Business

1.1 Petroleum

Petroleum Market Overview

The average crude oil price in 2015 was USD 50.91 per barrel, decreasing by USD 45.70 per barrel when compared with USD 96.61 per barrel in 2014. The key driver was the global over supply from the sustain high production level of Shale oil in America, while OPEC and Non-OPEC still maintained the oil production level in order to protect the market share. Moreover, FED's announcement to hike the interest rate courted a stronger USD.

Outlook for 2016, the global oil over supply still has an impact on the crude price. OPEC have no intention to cut their oil production and Non-OPEC still keep

their oil production at the high level. Furthermore, US abolished the 40-year restriction on oil exports.

Petroleum Products Spread

(average price)	2015	2014	Change
Dubai Crude Oil (USD/bbl)	50.91	96.61	(47%)
Petroleum (USD/bbl)			
Naphtha – Dubai	1.7	(2.3)	177%
ULG95 – Dubai	18.3	14.3	28%
Gas Oil 0.05%S – Dubai	13.7	16.1	(15%)
FO180 3.5%S - Dubai	(5.0)	(8.3)	40%
Lube Base Oil (USD/MT)			
500SN - FO180 3.5%S	438	495	(12%)
150BS - FO180 3.5%S	777	665	17%
Asphalt - FO180 3.5%S	55	(32)	272%

The spread between petroleum products and raw material in 2015 compared with that in 2014 is summarized below.

- Naphtha - Dubai spread increased by 177% when compared with that in 2014. The demand became higher because of the usage of the product as feedstock for gasoline, plus the rising demand from the Petrochemical plants.
- ULG95 - Dubai spread increased by 28% as the demand was stronger because of the low Gasoline price. Also, there were both planned and unplanned maintenance shutdown in US.
- Gas Oil 0.05%S - Dubai spread went down by 15%. It was owing to the increasing supply especially from China, India and Middle East while the demand was weak as the weather was warmer than usual.

- Fuel Oil - Dubai spread increased by 40% as the decreasing product price along with the crude oil price provoked the increasing demand.
- Lube Base 500SN - fuel oil spread moved down by 12%. The demand became weaker due to the replacement of Group II lube base.
- Asphalt - fuel oil spread jumped by 272% as the fuel oil price was lower following the crude oil price, while the product price was stable due to the regional demand in Indonesia, Vietnam and Thailand.

Crude Intake and Capacity

Petroleum	2015	2014	Change
Crude Intake			
Million barrels	66.62	62.81	6%
Thousand barrels per day (KBD)	183	172	6%
Utilization Rate			
Refinery	85%	80%	6%
Lube Base Oil	103%	82%	25%

Note: Nameplate capacity of refinery is 215,000 barrel per day

In 2015, total production was 66.62 million barrels or 183 KBD with 85% of the utilization rate, increased by 6% from last year due to the VGOHT unit resumed the operation in April 2015. The utilization rate of

lube base oil plant 103%, rising by 25%. This was caused by an adequate feedstock as the VGOHT unit resumed the operation and the higher domestic demand of Asphalt.

Petroleum Sales

	Sales Volume (Million barrel)		Sales Value (Baht million)	
	2015	2014	2015	2014
Refinery	54.00	49.78	122,279	177,550
Lube Base Oil	8.09	7.91	21,016	28,107
Total	62.09	57.69	143,295	205,657

In 2015, net sales of petroleum businesses were Baht 143,295 million, falling by Baht 62,362 million or 30% when compared with Baht 205,657 million in 2014. This was caused by a decrease in the product

price for 38% while the sales volume increased by 4.40 million barrels or 8% from 57.69 million barrels in 2014 to 62.09 million barrels in 2015.

Petroleum Sales Breakdown

	2015		2014	
	Local	Export	Local	Export
Refinery	65%	35%	68%	32%
Lube Base Oil	39%	61%	34%	66%
Total	62%	38%	63%	37%

In 2015, the proportion of petroleum sales was 62% domestic and 38% export which in line with the last

year proportion. We mostly exported to Singapore, Malaysia and Laos.

Gross Refinery Margin

	Baht million		USD per bbl	
	2015	2014	2015	2014
Refinery	8,989	3,018	3.91	1.46
Lube Base Oil	5,257	3,111	2.29	1.50
Market GRM	14,246	6,129	6.20	2.96
Net Stock Gain/(Loss)	(2,359)	(6,399)	(1.03)	(3.10)
Accounting GRM	11,887	(270)	5.17	(0.14)

The Market GRM was Baht 14,246 million or USD 6.20 per barrel in 2015, uplifting by Baht 8,117 million or USD 3.24 per barrel when compared with that in 2014. The margin of the refinery business increased by USD 2.45 per barrel, arising from the higher product spreads and the lower cost of fuel used following the decline of crude oil price. Lube base oil business margin improved by USD 0.79 per barrel owing to the higher demand in this region such as Malaysia, Indonesia and especially Thailand which was supported by the government's stimulus policies.

In 2015, the net stock loss of Petroleum business was Baht 2,359 million or USD 1.03 per barrel. It was attributed to the stock loss of Baht 3,488 million or USD 1.52 per barrel, the reversal of LCM of Baht 2,305 million or USD 1.00 per barrel and the oil hedging loss of Baht 1,176 million or USD 0.51 per barrel. This brought about the Accounting GRM amounting to Baht 11,887 million or USD 5.17 per barrel, significantly increasing by Baht 12,157 million or USD 5.31 per barrel when compared with that in 2014.

1.2 Petrochemical

Petrochemical Market Overview

Petrochemical Products Spread

Average Price	2015	2014	Change
Naphtha (USD/MT)	491	861	(43%)
Olefins (USD/MT)			
Ethylene – Naphtha	613	534	15%
HDPE – Ethylene	261	159	64%
HDPE – Naphtha	874	693	26%
Propylene – Naphtha	283	384	(26%)
PP – Propylene	384	291	32%
PP – Naphtha	667	675	(1%)

Average Price	2015	2014	Change
Aromatics (USD/MT)			
BZ – Naphtha	194	354	(45%)
TOL – Naphtha	170	179	(5%)
MX – Naphtha	210	168	25%
Styrenics (USD/MT)			
SM – Naphtha	610	672	(9%)
ABS – Naphtha	973	1,027	(5%)
ABS – SM	363	354	3%
PS (GPPS) – Naphtha	776	827	(6%)
PS (GPPS) - SM	166	165	1%

- HDPE - Naphtha spread moved up by 26% as the product price remained stable at the high level owing to the tight supply while Naphtha price was going down following the crude oil price by 43%. While the spread PP - Naphtha in line with last year.
- Toluene - Naphtha spread decreased by 5% as the price remained low due to the weak demand.

Nonetheless, Mixed Xylene - Naphtha spread increased by 25% resulted from the tight supply.

- ABS-Naphtha spread and PS-Naphtha spread was lower by 5% and 6% respectively. It was due to China's economic slowdown provoked the weaker demand.

Petrochemical Capacity

Utilization Rate	2015	2014	Change
1. Olefins Group	90%	88%	3%
2. Aromatics and Styrenic Group	91%	90%	1%

In 2015, the utilization rate of Olefins was 90%, increasing by 3% because the PRP unit stopped the operation due to the shortage of the feedstock, Propylene, from Deep Catalytic Cracking (DCC) unit

which was shutdown because of the fire incident in VGOHT unit. While the utilization rate of Aromatics and Styrenics was 91%, the rate was in line with that in 2014.

Petrochemical Sales

	Sales Volume (Kton)		Sales Value (Baht million)	
	2015	2014	2015	2014
1. Olefins Group	791	720	30,794	35,311
2. Aromatics and Styrenic Group	633	597	22,317	28,542
Total	1,424	1,317	53,111	63,853

In 2015, net sales of petrochemical businesses were Baht 53,111 million, dropping by Baht 10,742 million or 17%, when compared to the last year's sales. This

was caused by the decrease of 25% in the product price while the sales volume was 1,424 KTA, increased by 107 KTA or 8%.

Petrochemical Sales Breakdown

	2015		2014	
	Local	Export	Local	Export
1. Olefins Group	67%	33%	68%	32%
2. Aromatics and Styrenic Group	47%	53%	50%	50%
Total	58%	42%	59%	41%

The proportion of Petrochemical sales was 58% domestic and 42% export. The export sales increased

by 1%. The Company exported mainly to Japan, Singapore and Hong Kong.

Product to Feed Margin (PTF)

	Baht million		USD per bbl	
	2015	2014	2015	2014
1. Olefins Group	10,903	5,155	4.74	2.49
2. Aromatics and Styrenics Group	4,517	2,068	1.93	1.00
Market PTF	15,420	7,223	6.71	3.49
Net Stock Gain/(Loss)	(1,057)	(2,151)	(0.46)	(1.04)
Accounting PTF	14,364	5,072	6.25	2.45

In 2015, the Market Product to Feed (Market PTF) was Baht 15,420 million or USD 6.71 per barrel, lifted up by Baht 8,197 million or USD 3.22 per barrel. The increase of Market PTF was attributed to Olefins for USD 2.25 per barrel and Aromatics & Styrenics for USD 0.93 per barrel according to the better polymer's

products spread and Delta project. While there was the net stock loss of Baht 1,057 million or USD 0.46 per barrel. Therefore, the Accounting PTF fell to Baht 14,364 million or USD 6.25 per barrel, up by Baht 9,292 million or USD 3.80 per barrel when compared with that in 2014.

1.3 Power Plant and Utility

Power Plant Capacity

	Utilization Rate			Sales (Baht Million)		
	2015	2014	Change	2015	2014	Change
Electricity	75%	77%	(3%)	1,924	2,076	(7%)
Steam	78%	78%	0%	1,107	1,150	(4%)
Others				158	232	(32%)
Total				3,189	3,458	(8%)

In 2015, net sales of power & utility businesses were Baht 3,189 million, dropping by Baht 269 million or 8% when compared to those in 2014 caused by a decrease in the product price following the decrease

of the feedstock price. Most customers are located in the IRPC industrial estate. The utilization rate of electricity 75% lower by 3%, resulted from the power plant's maintenance shutdown.

2. Total Operating Performance

2.1 Market Gross Integrated Margin

	Baht million		USD per bbl	
	2015	2014	2015	2014
Petroleum (GRM)	14,246	6,129	6.20	2.96
Petrochemical (PTF)	15,420	7,223	6.71	3.49
Power and Utilities	2,490	2,436	1.08	1.18
Market GIM	32,156	15,788	13.99	7.63

In 2015, the Market GIM was Baht 32,156 million or USD 13.99 per barrel, jumping by USD 6.36 per barrel when compared to the last year Market GIM of Baht 15,788 million or USD 7.63 per barrel which attributed to 1) an increase in the product spreads of petroleum and petrochemical products caused

by the lower cost of crude oil and fuel used in the production process which led to a rise of USD 5.31 per barrel in Market GIM. 2) Delta Project which led to a rise of USD 1.05 per barrel in Market GIM.

2.2 Accounting Gross Integrated Margin

	Baht million		USD per bbl	
	2015	2014	2015	2014
Petroleum (GRM)	11,887	(270)	5.17	(0.14)
Petrochemical (PTF)	14,364	5,072	6.25	2.45
Power and Utilities	2,490	2,436	1.08	1.18
Accounting GIM	28,741	7,238	12.50	3.49

In 2015, there were the stock loss of Baht 5,208 million or USD 2.27 per barrel, an offset by a reversal for LCM of Baht 2,969 million or USD 1.29 per barrel, and the oil hedging loss of Baht 1,176 million or

USD 0.51 per barrel. These led to the Accounting GIM amounting to Baht 28,741 million or USD 12.50 per barrel when compared with Baht 7,238 million or USD 3.49 per barrel in 2014.

3. Other incomes

Other incomes consist of sale of port service, tank service and others. In 2015 other incomes declined by Baht 715 million to Baht 2,643 million, mainly due to the decrease of insurance compensation of Baht 405 million, plus the decline of tax compensation exported products.

4. Operating Expenses

In 2015, the operating expenses amounting to Baht 13,144 million or USD 5.72 per barrel. The operating expenses therefore increased by Baht 2,249 million or 21%. A rise in the manpower, the insurance, the consultant fee, the maintenance and the donation expenses were also the main factor for the increase in the operating expenses.

5. Depreciation Expenses

Depreciation expenses amounting to Baht 5,457 million, increased by Baht 247 million when compared with those incurred in 2014. It was mainly due to the completion of the operational improvement and the expansion projects.

6. Financial Costs

In 2015, net financial costs were Baht 1,162 million, falling by Baht 180 million or 13% when compared with those in 2014. It was owing to a decrease of the interest payment caused by the increase in an interest capitalizing during construction.

7. Gain/Loss from Foreign Exchange

There were unrealized foreign exchange losses of Baht 1,288 million in 2015, while in 2014, there were unrealized foreign exchange losses amounting to Baht 70 million. The Company had USD-denominated debt of USD 403 million.

8. Gain/Loss from Impairments and Write-off of Assets

In 2015, there was gain from the impairments and a write-off of assets amounting to Baht 18 million, declining by Baht 281 million when compared with that in 2014. It was because there were refunded rental prepayment amounting to Baht 470 million, gains of Baht 65 million from TPI Plaza building sales, and an offset by an asset impairment relating to the damage from the fire incident in VGOHT unit amounting to Baht 267 million in 2014.

9. Gain/Loss from Investments

The profit in the investment dropped by Baht 274 million when compared with that in 2014, mainly owing to a decrease of equity values in associates.

10. Reversing Doubtful Account

In 2015, there were gains from reversing doubtful account of Baht 2,782 million mostly caused by TPI Aromatics Public Company Limited, who was the Company's debtor. The Company had received the debt repayment from TPI Aromatics Public Company Limited in 1Q15, which was Baht 2,823 million higher than the balances after offsetting of assets and liabilities in the consolidated statement of financial position.

Financial Positions

1. Assets

As at 31 Dec 2015, total assets were Baht 163,174 million, increasing by Baht 376 million from 31 December 2014. It was due to the following reasons:

- Account receivable decreased by Baht 2,250 million or 20% largely because of a decrease in the product prices. As at 31 Dec 2015, account receivable that was more than 3 months overdue amounted to Baht 82 million or 0.92% of the total account receivable or 0.04% of the total sales. This was incorporated in the provision for doubtful debt of Baht 82 million. The average collection period in 2015 was 18 days, decreasing by 3 days when compared with that at the end of 2014.
- Inventory decreased by Baht 4,038 million or 16% because the inventory volume at the end of 2015 rose from 7.41 million barrels at the end of 2014 to 8.93 million barrels. It was mainly due to an increase of crude oil intake for the production whereas the price of the inventory dropped by 38%. The inventory days were 44 days, decreasing by 1 days when compared with that at the end of 2014.
- Other current assets dropped by Baht 1,870 million or 25%. It was mainly due to an increase of Baht 1,567 million in cash at bank, offset by a decrease of

Baht 2,125 million in the refundable value added tax, a decrease of Baht 1,009 million in receivables from related parties and a decrease of Baht 303 million in other current assets.

- Non-current assets rose by Baht 8,534 million or 7% due to an increase in fixed assets, largely contributed from the UHV project. However, these were partially an offset by the depreciation and amortization expenses of Baht 5,457 million.

2. Liabilities

As at 31 Dec 2015, total liabilities were Baht 87,296 million, decreasing by Baht 7,598 million or 8% when compared with those stated at the end of 2014 due to the following reasons:

- Account payable fell by Baht 74 million as the falling of crude oil price to USD 40.71 per barrel in 4Q15 while the crude oil purchased was higher. The average payment period in 4Q15 was 59 days, increasing by 20 days when compared with that at the end of 2014.
- Other current liabilities dropped by Baht 7,109 million or 53%, which was largely due to a decrease of Baht 8,643 million in short-term loan, offset by an increase of Baht 587 million in other payable and an increase of Baht 947 million in other liabilities.

The details of long-terms debt are shown below.

(unit: Baht million)

	Dec 31, 2015	Dec 31, 2014	Change
USD Bonds	8,622	7,870	752
Thai Baht Bonds	22,623	27,615	(4,992)
USD Loan	5,959	5,765	194
Thai Baht Loan	16,296	10,694	5,602
Total	53,500	51,944	1,556
<u>less</u> current portion of long-terms loan	(4,265)	(7,701)	3,436
Net Outstanding Debt	49,235	44,243	4,992

- Long-terms loan including the loan to be repaid within one year increased by Baht 1,556 million, mainly consisted of the long-terms loan drawdown of Baht 8,000 million offset repaid for Thai Baht Bond by Baht 5,000 million, long-terms loan repayment of Baht 2,709 million and unrealized foreign exchange losses as a result of the depreciation of Thai Baht of Baht 1,253 million.
- Other non-current liabilities declined by Baht 1,971 million, which was mainly caused by a decrease of loans from TPI Aromatics by Baht 2,254 million, and an increase in the employee benefit obligations amounting to Baht 283 million

3. Shareholders' Equity

As at 31 Dec 2015, shareholders' equity amounted to Baht 75,878 million, which was higher than what was stated as at 31 December 2014 by Baht 7,974 million. This was mainly because of an increase in net profit amounting to Baht 9,402 million and an increase in the fair value of available-for-sale investment amounting to Baht 314 million while there was the dividend payment amounting to Baht 1,633 million and loss from actuarial gains and losses of Baht 113 million.

Statement of Cash Flow

As at 31 Dec 2015, the cash balance was Baht 3,576 million. Net cash flow increased by Baht 1,567 million, which was mainly contributed from net cash inflow of Baht 27,840 million from the operation consisted of EBITDA of Baht 17,033 million and cash inflow from

the changes in the operating assets and liabilities of Baht 10,807 million. While net cash outflow of Baht 11,271 million from investing activities mainly was for the Upstream for Hygiene & Value-added Products Project (UHV). Net cash outflow of Baht 15,002 million from financing activities mainly consisted of the repayments for short-terms loan of Baht 8,646 million, the repayments for Thai Baht Bond and long-terms loan of Baht 7,709 million, the interest payment of Baht 3,283 million, the dividend payment of Baht 1,633 million and the repayment for loans from related parties of Baht 1,520 million, while there was cash inflow from long-terms loan drawdown of Baht 8,000 million.

Liquidity and Capital Structure

In 2015, current ratio was 0.99 times, increasing from 0.94 times in 2014 mainly due to the falling of short-terms loan as the crude oil price continued to decline. The company did not have the liquidity situation because of the well preparation of sufficient liquidity for the operations.

At the end of 2015, Net Debt to Equity ratio was 0.66 times, decreasing from 0.87 times in 2014 due to the improvement of financial performance, plus the lower of financial debt. The company could make the payment on due date and could follow all of the Financial Covenant.

MARKET OVERVIEW AND INDUSTRY OUTLOOK

Product quality control, sales through distribution channels with maximum benefit,

and synergy with companies in the Group, while exploiting IRPC's integrated petrochemical production, complete with all required supportive factors, have resulted in IRPC's cost advantage,

making the business stay competitive amid price slumps.



1. Petroleum Product Market Overview and Competition

Crude Oil and Refined Product Market Overview

Thailand's import of energy totaled more than Baht 800,000 million this year, most of which was crude oil. The Dubai average price this year was USD50.9 per barrel, a severe drop from USD97.0 per barrel in 2014 to USD31 per barrel. With excessive supplies and resistance to cut down production from both OPEC and non-OPEC blocs, the market has been way oversupplied. With production from OPEC members at over 30 million barrels per day to maintain its market share above the non-OPEC members and the oversupply market, the crude oil price has been under heavy pressure.

This year, the domestic refined petroleum products totaled 62,626 million liters, equivalent to 172 million liters or 1,079,223 barrels per day, a rise of 10 million liters per day or 6% from the previous year. The overall import stood at 2,621 million liters, averaged to 7.2 million liters or 45,252 barrels per day, a drop by 5.0 million liters or 42% from 2014. These statistics include imports of propane and butane for LPG production but exclude basic gasoline for gasohol production of 735 million liters or 2.0 million liters per day.

Refined petroleum products accounted for 48%, the largest share of the overall domestic energy consumption. Other types of energy consumed this year were 20% electricity, 19% renewable energy, 8% natural gas, and 5% coal and lignite. The overall energy consumption this year grew by 2.3% year-on-year.

The overall domestic consumption of refined products was up by 2.0%, led by the rise of 13.5% on gasoline consumption following a series of downward retail price adjustment in line with the global oil price. The consumption of diesel went up by 3.8%, and 9.5% increase for aviation jet fuel after the tourism sector growth, particularly early this year. On the other hand, LPG consumption dropped by 11.4% equivalent to 545 thousand tons per month, since demand from transportation, household and petrochemical sectors fell sharply, with some LPG consumers turning to gasoline for price advantage.

Household consumption of LPG fell by 4.3%, a continuous drop reflecting a successful measure on LPG smuggling and LPG misuse to take advantage of price subsidy. Conversely, the industrial sector consumed 3.3% LPG more year-on-year. NGV consumption, on the other hand, became sluggish this year and dropped by 3.8%, with a tendency to fall further.

Major domestic refining operators included PTT, Esso, Bangchak, Shell, Chevron and others, with their respective market shares shown below.

Refining Operators	% Share
PTT	38%
Esso	11%
Bangchak	10%
Shell	9%
Chevron	7%
IRPC	4%
Other small operators	21%

Source: Department of Energy Business, Ministry of Energy (January-December 2015)

2015 Market Outlook

The crude oil price was continuously pressured by US shale oil, leading to the global oversupply. Opposing the strategy of production cut to stabilize the market, the OPEC decided to sustain its overall production at over 30 million barrels per day to retain its global

market share and push high-cost producers, such as US shale oil, to cut their production and out of the market eventually. In addition, the interest rate increase announcement by the US Federal Reserve (FED) leading to the strengthening of the US dollar and lifting of the ban on US oil exports for the last 40 years, encouraging more production from shale oil, have continuously pushed the market toward oversupply and therefore pushing down the long-term oil price.

2016 Market Forecast

The crude oil market continues to be pressured by the global oversupply. While the OPEC bloc sends no signal on production cuts, Iran has resumed its oil exports after the lifting of economic sanctions imposed by the UN.

The US, meanwhile, continues to produce all-out after the ban-lifting on oil exports enforced for the last 40 years, leading to a record-high strategic petroleum reserve by 26% from the 2014 level. Production from the Russian Federation will continue to stay high to compensate their economic loss from the falling oil price. These are the main factors contributing to the 0.5-2.0 million barrel-per-day market oversupply in

Factors affecting crude oil price in the world market



Source: Platts & Reuters



2016. Even with a forecast of 500,000 barrel-per-day production cut from the US within 2016, the long-term crude oil market continues to be pressured, since the cut is not sufficient to drive the market to an equilibrium.

IRPC customers or distribution channels

With emphases on quality control of all refined products to meet the standards defined by the Ministry of Commerce and on maximizing profits by distributing these products through the selected distribution channels, IRPC delicately sets its product prices to fit well with the market and deploys cooperation synergy among group members on sales strategies to maximize the profit.

This year, IRPC initiated the DELTA project with an introduction of the Athena Pricing Tool, a new product pricing analysis to enhance the development of new sales strategies, leading to a profit margin improvement to over Baht 1,000 million or USD30 million.

Customers or distribution channels of IRPC can be categorized as follows.

- **Industrial Sale** - This includes automotive companies, cargo vessels, buses, construction companies, and sales to affiliates.
- **Wholesales/Jobber** - These are large and small wholesalers and jobbers who resell products either in wholesale or retail.
- **Sale to traders under Article 7** - This includes large and medium-sized oil traders with oil depots and further distribute the products to end-users through their own networks.

- **Export** - These are sales to overseas markets by sea cargoes and by trucks. Singapore, Cambodia and Vietnam are the major markets for sea cargoes, while Indochinese countries, including southern China, Cambodia, Laos and Myanmar, are the major markets for truck transport. This year, IRPC exports accounted for 30% of total sales.

- **Bunker** - This is the sale of diesel, also known as automotive diesel oil (ADO) to ships and vessels harbored at the IRPC yard.

- **Fishery** - This is the sale of diesel to fishery associations in territorial waters, known as green diesel. IRPC's green diesel market share this year was 69%.

Sales Percentages of IRPC's Oil Products

Table listing sales percentages of IRPC's oil products

Distribution Channel	Percentage
1. Wholesales	31%
2. Exports (including Fishery)	41%
3. Sales to traders under Article 7	25%
4. Industry	3%

Source: Petroleum Business Division, IRPC

Strategies for competition

In addition to its pricing strategy, IRPC focuses on competitive price-scaling strategy to maintain its market share, expanding its customer base and increasing sales volumes, while maintaining appropriate profit margins. Other focuses and services that IRPC provides to its customers are as follows.

- **Oil depots** - IRPC runs five oil depots to serve customers nationwide, with the Rayong Oil Depot operating round-the-clock. The distribution point at Mae Klong Depot in Samut Songkhram province was launched to facilitate distribution and provide more services to customers in western and upper southern provinces.

- **Transport** - IRPC operates a fleet of trucks for product distribution to customers across the country. It also manages a jetty to serve customers who prefer marine loading.

- **Personnel** - IRPC has sales agents, sales co-ordinator, and a sales service department to serve customers. Its dispatch office takes purchase orders through SAP, the online and real-time system managing processing of interconnected data ensuring accuracy and consistent standard service to increase its service efficiency while reducing duplicate work. This online, real-time system and database also support the management and operating staff in their analysis, decision-making, and administration.

After the installation of the self-developed IRON (IRPC Oil On Net)-an electronic product distribution management system integrating the supply chain management efficiency and the Total Business Solution-IRPC is able to better respond to customer business transaction needs and increase its business efficiency, while maintaining its operability capacity to further support other applications in various phases to enhance sales in other distribution channels.

- **Quality control** - IRPC technicians are readily available to provide information and solutions to problems for customers, including making QC visits to customers' service stations and depots to instill confidence among all customers.

2. Petrochemical Market and Competition

Petrochemical Products and Market Competition

The export and import value of petrochemicals this year continued to fall further from 2014, primarily driven by volatile oil prices and foreign exchange, uncertain and fragile global economic recovery in Eurozone, the US and Asia, particularly China. Dependent on lower demand of the downstream plastic products and polymers, the petrochemical industry is set to follow the downward trend. The domestic economy

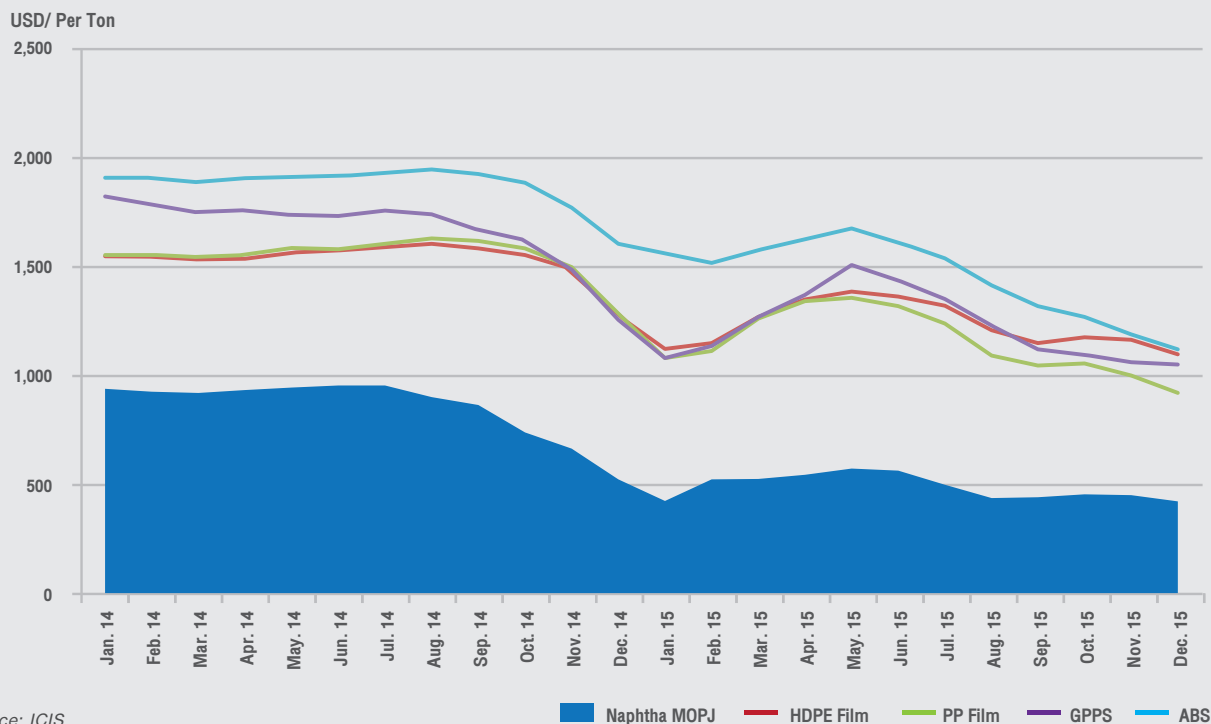
is expected to grow by 2.8% this year from 0.8% in 2014, while the average annual inflation fell to -0.9% following the slow global economic recovery and falling world's commodity prices. With the impacts of drought, the agro segment GDP this year is likely to fall below the target by shrinking 4.2%. Moreover, the household consumption rate grew 4.7%, while the unemployment rate is 0.8%. (information from office of the National Economic and Social Development Board (NESDB) as of February 2016).

Besides, the economy of key countries was sluggish this year, particularly the US and China, while economic recovery in the Eurozone and Japan was so slow. The sluggish economy of these key trade partners dictated a further sluggish economy in the Asian region. Combined with export contraction and falling inflation rates in many countries.

The US economy is projected to grow by 2.4% as in 2014, this driven by sluggish export and investments, while inflation remains low at 0.3%. The US FOMC (Federal Open Market Committee) of the Federal Reserve System (FED) therefore decided to maintain the policy rate at 0.0-0.25% in its October 27-28, 2015, meeting to stimulate economic growth. Meanwhile, the economic growth of the Eurozone was marked at 1.5% and continued to grow gradually with support from higher household spending and the manufacturing sector. However, the inflation rate remained low at 0.1%. The Chinese economy is set



Prices of feedstock and petrochemical products.



to expand at the lowest level in 25 years at 6.9% against 7.3% in 2014, following a volatile money market caused by declaration of asset investment, industrial manufacturing, and exports as well as the yuan devaluation in August 2015. The Chinese government therefore decided to cut the policy rate for the sixth time since November 2014 and reduce the mandatory reserves at commercial banks.

The Asian economy generally shrank this year due to sluggish exports and falling global commodity prices. The Malaysian economic growth was reported at 4.7%, a drop in line with sluggish private consumption. With the drop in exports, Indonesia was able to maintain its economic growth at 5.0% with rapid government spending and overall capital investments. The economic growth of Vietnam recorded 7%, supported by expansion of the real industrial sector, particularly for exports, including the service sector which continued to grow.

The Thai Baht continues to play a critical role in industrial growth. Following reports of gloomy economic growth of the US and China in October 2015, the Thai currency became stronger but later fell further again after news of possible delays of FED fund rate increase announcement. The Thai Baht exchange rate

in Q3/2015 stood at Baht 35.26 per USD, a drop by 5.92% from Q2, caused by the stronger US currency. With the devaluation of the Chinese Renminbi against the USD, the Chinese stock market went into a crash, following fear by investors on the Asian and Chinese economy.

Prices of monomers and polymers this year fluctuated with their raw materials, including crude oil and naphtha. When comparing prices of polymers between Jan-Nov 2015 to the same period in 2014, the price of polypropylene (PP) dropped by 25% to USD1,181 per ton, high-density polyethylene (HDPE) fell by 20% to USD 1,250 per ton, polystyrene (PS) down by 28% to USD 1,250 per ton, and acrylonitrile-butadiene-styrene (ABS) shrank by 22% to USD 1,491 per ton. For monomers, ethylene went down by 23% to average USD 1,105 per ton, propylene down by 39% to USD 786 per ton and styrene monomer dropped by 29% to USD 1,117 per ton.

Outlook for Thai petrochemical industry in 2016

The Thai petrochemical industry in 2016 is anticipated to grow at a more rapid pace than in 2015, following the expected higher GDP and industrial growth. The Office of the National Economic and Social Development

Board reported an economic growth projection for 2016 at 2.8 -3.8% based on several factors, including government spending and accelerating disbursement, a series of economic stimuli, gradual global economic recovery and higher exports from weakening Thai Baht leading to higher revenue and liquidity, slowly increasing domestic agricultural produce amid low oil price. Capital investments from the government on several megaprojects will significantly drive the demand for polymers, fostering growth for the petrochemical industry.

Next year's world economic growth is projected to grow by 3.4% according to the IMF (as of January 2016), a slight decrease at 0.2% predicted by themselves in October 2015. The lower in China economy and forecast stemmed from a continuously lower global commodity prices and the global money market volatility. The IMF expected the US economy to grow at 2.6%, a solid recovery after positive employment rates and higher domestic consumption, forcing the US Federal Reserve (FED) to retain the upward interest trend. The Eurozone economy is expected by the IMF to grow at a slower pace of 1.7%, with a special note of concern on unexpected factors affecting the Euro currency, particularly terrorist acts like the one in France, causing 128 fatalities on 13 November 2015. Similar violence could significantly hamper the Eurozone and global economy. The emerging markets and developing economies are set to grow at 6.3%, with China's projected growth to slow down from 6.9% to 6.3% and India to grow faster from 7.3% to 7.5% in 2016.

Then there is the ongoing state capital investment on infrastructure initiated this year, particularly on megaprojects and industrial clustering in the special economic zones along the border with neighbor countries under the "Eco-friendly Petrochemicals and Chemicals" super cluster jointly supervised by the Ministry of Industry and Board of Investment (BOI). The Chonburi and Rayong super cluster is charged with manufacturing and production of environmentally friendly chemical products and polymers, specialty chemicals and specialty polymers, as well as bioplastic-coated packaging. This super cluster is set to support the recovery and expansion of private investments, and to enhance innovations on the petrochemical industry, leading to more focuses on products with



Thai brands and technological R&D by local and foreign operators.

Nevertheless, there are some constraints to expansion of the petrochemical industry development in 2016. The weakening currencies of trade partners, including the EURO, Japanese yen and particularly Chinese renminbi, weakened by economic and monetary measures imposed by the Chinese government. These will significantly limit the export potential from Thailand and put pressure on global commodity price recovery.

Strategies for competition

Pricing strategy

Prices of polymers and plastic products are very sensitive to various factors, ranging from raw materials including crude oil, naphtha and monomers to demand and supply of domestic and global markets. IRPC's pricing policy is therefore formulated in line with these factors and pricing reference quoted by ICIS CFR South East Asia, as well as other internal factors such as feedstock and production costs. With a fully integrated petrochemical operation, IRPC can fully leverage its low-cost business position in synergy with the pricing policy to define its product prices competitively in the local and foreign markets. Other support operations, such as feedstock facilities and the deep-water port, also provide cost advantages to IRPC to compete even during a market downturn.

Product quality

As a pioneer in Thailand's petrochemical industry, IRPC possesses years of close cooperation with customers on product R&D. With ISO 9001 certification on all products, IRPC is very capable of providing reliability to customers on product quality with international standards, procurement and development of new plastic products to efficiently satisfy local and foreign customer needs.

With the ability to produce polymers of different grades, that is, natural, color compounds, and composites, which are colored plastic products mixed with additives to enhance their properties, IRPC can tailor generate products to fit specific needs of each customer, including parts of electrical appliance or automobiles. These specialty compounding and composites facilities are located within and next to other plastic polymers facilities, and IRPC can therefore easily manage the entire chain of production and tailor-made work orders from customers efficiently. In addition, IRPC provides technical services, including the presales selection of plastic materials and after-sales service on problem-solving and general advice.

All these processes are operated in parallel with the conservation of safety, occupational health and the environment under the company's policies on environmental protection and safety of employees and the communities. All IRPC products are ISO 14001 and TIS 18001-certified. Moreover, IRPC facilities producing ethylene, polyethylene, polypropylene and polystyrene are CSR-DIW certified (Standard for Corporate Social responsibility) by the Department of Industrial Works.

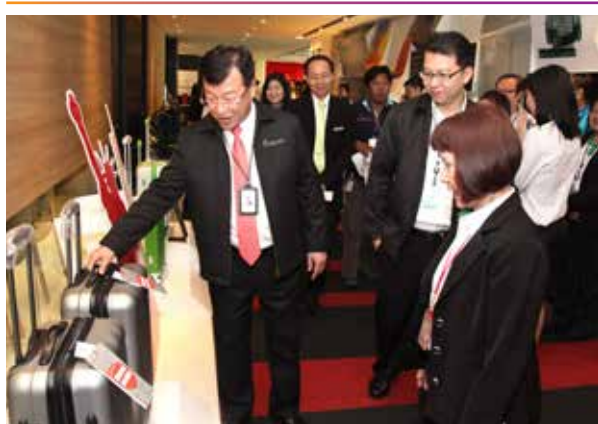
Product diversity

With a total plastic production capacity of over 800,000 KTA, IRPC products vary from high-density polyethylene (HDPE), polypropylene (PP), expandable polystyrene (EPS), polystyrene (PS), acrylonitrile-butadiene-styrene (ABS), to styrene-acrylonitrile (SAN), providing capability and flexibility to meet customers' needs. As some of these products are substitutable, HDPE can replace PP in molding work for household appliances, woven bags and plastic canvas, for instance; customers can select the use of plastic polymers based on types, prices and market supply, and IRPC can provide flexibility to customers on the selection. Product diversity also provides more business opportunities to IRPC to meet any local and foreign customers' demands and maintain its sales cost per unit to the lowest in the market.

Marketing strategy

IRPC continued with sales promotions, new product development and product exposition throughout this year. Together with Blue Light Industrial Co., Ltd., the Company launched the world's first Green ABS luggage under the brand of "CAGGIONI", which is now on sale in leading department stores.

Green ABS is an ABS mixed with a new combination of synthetic rubber and natural rubber up to 10-40%, making the final product stronger, more durable, firm and elastic, as well as resistant to abrasion. IRPC is the world's first Green ABS producer. The product is an example of innovation generated by IRPC under its chief policy focusing on R&D of environmentally friendly product specialty to meet customer needs and create more value for the product.



Launching the world's first luggage made from Green ABS under the CAGGIONI brand



Launching TrixTrack, plastic toys made from POLIMAXX Wood Plastic Composite, an innovation from IRPC

Moreover, together with Wonder World Products Co., Ltd., a world-renowned premier producer and marketer of wooden toys, IRPC developed an innovative POLIMAXX wood plastic composite toys including “TrixTrack”, wood plastic composite toys for children to generate creativity and self-development.

POLIMAXX wood plastic composite is one of the environmentally friendly innovative plastic polymers researched and developed by IRPC, based on the awareness of natural resource value. POLIMAXX is a mixture of quality wood materials and 20% of PP, PE and SAN to generate stronger, more durable and elastic product, while retaining the beauty of natural wood features. The molding process is simple, as the materials are very light and elastic and can be reused or recycled.

IRPC customers

Most of IRPC’s customers are sales agents. We sell no more than 30% of our sales volumes to a given agent and have no obligation to do so in the future, thereby averting risks of being dependent on any of these agents.

Distribution and distribution channels

Domestic sale

Recognizing that polymers are primary feedstock to production of domestic consumer products, IRPC defined the 2015 domestic sales with priority, varying with demand set by domestic customers but no less than 55% of the total sales. This domestic sale strategy is set to support the national economic development strategy in driving the economic growth. IRPC sells their products through 21 sales agents who are highly skillful and able to provide an entire range of services. All these agents are non-exclusive authorized distributors, some with more than 20 years of business relationship with IRPC. These distributors can enjoy the benefits of IRPC’s fully integrated petrochemical production and product diversity, and therefore can minimize marketing and administration costs, leading to continuously solid relationship. In addition, IRPC manages some direct sales to reliable customers with strong credit line and financial competency.

International sale

The international sales of IRPC’s polymers this year were made through overseas sales agents who possess years of close business relationship with IRPC. The export strategy focuses on its strengths in quality and product diversity, technical services and consultation on specific product development. Its agents have established a firm business network with end-customers in key markets with high polymer demand, including China, Indonesia, Turkey, Vietnam, and Australia. It has also expanded to other markets, including Africa, Europe, the US, the Middle East, and Australia. Currently, its products are sold in over 100 countries worldwide.

3. Port business and tank farm market and competition

Port business

With a projection of economic growth in 2016 by the Office of the National Economic and Social Development Board (NESDB) at 3.0-4.0%, led by mega-infrastructure project investment by the government, and a prediction of production expansion of the steel industry from plants in Rayong since late 2014, the demand for cargoes and logistics at deepwater ports are set to rise.

IRPC has recently introduced a total service solution to create more value to the port business. This new service is part of the port business expansion strategy for bulk cargo business groups, including iron steel, granite and sands.

Tank farm business

Considering higher domestic economic growth in 2016 and expansion of the petrochemical industry, the tank farm business for petrochemical products, especially for new customers or for new products, or both, is expected to rise. However, the new policy issued by the Ministry of Energy on reduction of the fuel reserves in late 2015, the business has been negatively affected, including those of IRPC. Our overall storage business in 2016 is expected to fall at the same level as of 2015.

To optimize value and maximize efficiency of its tank farm business, IRPC’s current strategy is to diversify its oil depots in Rayong, Phra Pradaeng and Ayutthaya to serve external customers.

4. Asset management business market and competition

Following the announcement of the Board of Investment (BOI) after their meeting on July 10, 2015, with approvals on 17 projects for a total value of more than Baht 40 billion, the overall capital investment is set to gradually recover, particularly to the super cluster group including 1) automotive and parts cluster, 2) electrical appliances, electronics and telecommunication equipment cluster, 3) eco-friendly petrochemicals and chemicals, 4) digital-based cluster, 5) food innopolis and 6) medical hub. The promotion of these super clusters was aimed to attract foreign investors to make Thailand a regional hub (center) for operations in the ASEAN region, supported by existing and newly developed infrastructures of Thailand and the integration of AEC. More investments in Thailand will significantly help develop industrial estates throughout the country, particularly those special economic zones in addition to the eastern economic area, which directly supports expansion of cross-border trades and investments.

Under the national economic policy and support from ASEAN member countries on free-trade agreements, including the lowering of import duties and cross-border investment privileges, more newly developed industrial estates have been continuously promoted, leading to more capital investments and trading activities. More clarity on investment privileges became available this year, enhancing more investments and trade not only among ASEAN members, but also attracting non-ASEAN foreign investors to invest in Thailand.

Land development of IRPC's Extended Eco-Industrial Zone (EEIZ)

IRPC has laid out a plan to develop a plot of 530-rai land, designated as the purple area, in 2016-2017 with infrastructure and utility systems to accommodate projects invested by itself and joint ventures with its customers. Each of these investments, however, must fit in with the principle concept of the eco-industry and Green industry.

Incentives for investors by IRPC Solutions Provider

With the infrastructure and utility systems for investors in the 530-rai land plot designated in purple, IRPC also boasts IRPC Solutions Provider, a special service for all investors and all invested projects by experts who specialize in each field of support functions. As the land is directly owned by IRPC, it holds all advantages to manage and provide services with full autonomy, particularly on the speed of services and convenience to investors.

The main marketing target of this asset management in Phase 2 is the focus on engineering and construction work, including the IT and Internet infrastructure, as well as storage facilities and warehousing, all of which are the basic needs and core structures for all investors. The total revenue this year from these service was Baht 25 million.

Utility services

IRPC is currently providing various types of utility services, including electrical, steam, filtered water, demineralized water, raw water, fire-fighting water, wastewater treatment, nitrogen, instrument air, and plant air to support and accommodate the needs from customers of the target industries. These services are readily sufficient with quality and standards meeting universal criteria.



PERFORMANCE SUMMARY 2015



A “Leading Integrated Petrochemical Complex in Asia by 2020” vision was proclaimed by IRPC to enhance its capability, strengthen core businesses, pursue operational excellence and excellence in supply chain management with due regard for safety, health, society, communities, and the environment so that the corporation may be poised for international standards (products and services) to accommodate future market needs.

This year, IRPC defined business directions and strategies by improving production processes for maximum efficiency to grow its opportunities and profit from incremental production; logistics development; better management of port and product tanks; information system development for globalization; supply and development of advanced analytical tools for operation planning; product R&D and innovation focusing on strengthening the PP product line; management and land development to supplement value; and development of personnel capability so that operating personnel may become knowledgeable and skillful in their duties and executives may become more capable of business execution and leadership. To this end, it is essential to ensure understanding of corporate goals and cultivate i SPIRIT so that all may recognize their ownership of IRPC and together drive its growth sustainably with due regard for

balance between economic, social, and environmental aspects; corporate governance; and risk management. Achievement of the above-mentioned qualities is certain to turn IRPC toward corporate governance with sustainable growth.

Here are this year’s highlights of IRPC’s performance summary.

1. Economic

IRPC focuses on strengthening its core businesses, adapts its strategies to run businesses and make profits amid increasingly fierce business competition due to external pressure, including the global GDP this year of 3.1%, down from the estimated 3.8%, reflecting global economic slowdown, particularly in China, a key market. Also, this year’s Dubai crude oil

IRPC aims to be a business leader, with a minimum of 14% return on investment by 2020 by executing key strategies such as **DELTA, EVEREST, UHV, and a polypropylene debottlenecking** project, to **achieve long-term profit.**

price fell, hitting 10-year rock bottom at USD31 per barrel, resulting from shale oil output rise by the US, conflicts within OPEC, and catastrophes arising from global warming. All these have led to an imbalanced market supply/demand and a paradigm shift.

Below are the highlights of production operations.

1.1 Production operations

IRPC's goal is to raise production efficiency and maintain cost competitiveness. To this end, it relies on continuous processes with stability and lower maintenance downtime; efficient energy usage; flexible production planning that meets market needs; and cultivation of its safety culture, a continuing key operating factor for all its workforce. This year, IRPC has operated its VGOHT (Vacuum Gas Oil Hydro Treating Unit) as planned since April 12, enabling the importing of 67 million barrels of crude oil into refining processes, equivalent to an average refining capacity of 183,000 barrels per day (b/d), or roughly 85% of capacity against 80% last year (an average capacity of 172,000 b/d).

Below are the highlights of production operations.

1.1.1 Process and machinery efficiency improvement of the group of plants, totaling 94 projects, including the Advanced Process Control Project, designed to make process control accurate, yielding needed proportions of quality products, and cutting process energy consumption, which resulted in 500 million baht in long-term profits. Another instance is the Alarm Management Project, designed for greater vigilance and confidence in plant stability and safety.

1.1.2 Capacity expansion and value addition: IRPC grew its capacity for production units, namely the NHTU unit to cut the sulfur content in naphtha; the ISOM unit to raise gasoline octane value; and the BTX unit to accommodate HCN (heavy naphtha) from the UHV Project.

1.1.3 Production stability improvement: IRPC appointed the AIMC (Asset Integrity Management Committee) to review mistakes arising from operating machinery, and control, monitor, and report on operating outcomes to ensure plant readiness to accommodate continuous operation.

1.1.4 Energy management: IRPC's ability to systematically manage energy, while controlling and monitoring outcomes efficiently enabled it to control hydrocarbon compound losses from processes, cutting pollutant emissions. This was evident in the reduction in EII (energy intensity index), which achieved the 97.07% goal, equivalent to 245 million baht in saving out of 49 million gigajoules (13,000 million baht) this year.

1.1.5 Safety and hygiene: IRPC has laid down Process Safety Management; prepared a safety manual in line with MOC (management of change); educated the workforce in compliance; and promoted a Safety Awareness Program for all, including contractors working on its compound. As a result, its TRIR (total reportable injury rate) proved outstanding, with the goal (0.46 injury needing medical treatment per million man-hours) achieved.

1.1.6 Best-practice sharing with PTT Group: IRPC participated in best-practice sharing to strive for top-quartile performance. All PTT Group companies' performances successfully achieved operating KPIs with over 80% of their goals.

1.2 Key strategic project operation for business growth

Faced with a leapfrog growth goal to pursue business leadership with 14% in ROIC (return on invested capital) by 2020, IRPC forged cooperation and investment in new projects that align with its strategies, laws and regulations, and the changing environment. The investment hurdle rate has been set at 15%.

Below are the highlights of key strategic projects.



The **UHV Project** turns heavy oil of low value into a higher value product, increasing propylene production by **320,000 tons per year**

1.2.1 DELTA Project

This project aims to improve business operating efficiency in four key areas in pursuit of operational excellence. This year, a total benefit of 4,565 million baht was generated, detailed as follows:

Operational excellence: Introduced sophisticated software aided process management in the supply chain by maximizing process efficiencies and cutting overall production costs. Cases in point included the selection of crude oil grades and volumes yielding diverse products for maximum profit; adequate, suitable consumption of process fuels to minimize hydrocarbon losses in processes, and planning of machinery management to minimize unplanned shutdowns. This year a total of 1,943 million baht was generated.

Commercial excellence: Marketing excellence operation was achieved by adjusting sales strategies, quality improvement of products and services, and application of advanced software in analyzing returns on individual sales to individual customers. Findings were then compared and ranked, resulting in efficiency based on accurate data and maximizing profits. This year a total of 2,244 million baht was generated.

Procurement excellence: This was achieved through efficient management of equipment parts and inventory,

together with the procurement of raw materials, chemicals, and hardware at lower prices through the likes of expansion of networks of domestic suppliers to worldwide suppliers for more options in quality and prices. This year, a total of 378 million baht was generated.

HR excellence: This was achieved by improving human resource management for sophistication and completeness by international standards to serve as a tool for personnel capacity-building for competitiveness by reminding all to recognize their contribution to IRPC's bottom line and cultivating a work notion under the same set of corporate values of i-SPIRIT: Individual Ownership, Synergy, Performance Excellence, Innovation, Responsibility for Society, Integrity & Ethics; and Trust & Respect.

1.2.2 UHV (Upstream Project for Hygiene and Value-Added Products)

This project seeks to further competitiveness and foster sustainable growth by investing USD1,121 million to improve the quality of heavy oil of low value. Key products consist of propylene and heavy naphtha. Secondary ones consist of ethylene, butane, propane, LCO, light naphtha, hydrogen, sulfur, fuel gas, and CLO. Project construction period is approximately 3 Years and is under test plan preparation and commissioning, together with preparedness for safe

raw material feeding. Commercial start-up is expected in Q1/2016. The incremental volume of 320,000 tons per year of propylene will serve as raw material for the PP capacity expansion project, designed to add capability to the PP production line.

1.2.3 Fully Integrated Polypropylene Project

This project seeks to improve and expand PP capacity to 300,000 tons per year at a budget of USD236 million to grow competitiveness through product quality improvement to meet the needs of customers and accommodate market growth in Thailand and AEC, particularly high-growth industries, namely the automotive, electrical appliance, and food container industries. Two mini-projects make up this project:

- PPE (PP Expansion Project): Novolen's process technology will be applied to current technology with a capacity of 475,000 tons per year. Through additional investment in machinery and tools, capacity will grow by 160,000 tons per year to a total of 635,000 tons per year.
- PPC (PP Compounding Project): Technology from JPP (Japan Polypropylene Corporation)-single-step high-efficiency compounding technology-will find application here. JPP's propylene compound occupies the top market share in Japan. The company supplies products to leading automobile companies like Toyota, Mitsubishi, Honda, and Nissan. Thanks to this process, production is streamlined in response to strategies of auto-makers of cost reduction each year.

This year, IRPC signed construction agreements for these projects with SEG (Sinopec Engineering Group) and SEI (Sinopec Engineering Incorporation). The ongoing construction since May 2015 is due to be complete and commercial start-up is due for Q3/2017. The project was also tax-exempted, thanks to its BOI investment privileges.

1.2.4 Joint-venture project between IRPC Polyol and PCC Rokita SA

This project aims to jointly distribute PU (polyurethane) products with a focus on AEC market and China. PCC Rokita SA is experienced, with its own PU technology and core feedstock for PU in Poland, not to mention its extensive agents in many countries. A feasibility study of the joint venture is due for completion by Q1/2016.

1.2.5 EVEREST Project

A spinoff of the DELTA Project, EVEREST strives to analyze ways to add efficiency, plans, and management across the company. Operated jointly with leading world-class companies, it drives IRPC's incremental margin and organization health plans to ensure that IRPC maintains its competitiveness in a sustainable way. With a 20-24 month life, the project is entitled to project investment budget of no more than 10% of the project returns. Each investment project has up to two years in payback period.



Project to debottleneck polypropylene (PPE) production to increase production capacity to 635,000 tons per year



Project to expand production of polypropylene compounds and special-grade polypropylene to achieve a production capacity of 140,000 tons per year



IRPC has implemented the crucial EVEREST Project to raise its competence to create optimal benefit for IRPC, staff, and stakeholders.

1.3 Business operation

An IRPC goal is to grow its profits by requiring EBITDA growth at 10% as a result of four core businesses: petroleum, petrochemical, port and tank farm, and asset management. This year, its EBITDA amounted to 17,033 million baht, a ten-year high. The GIM (market gross integrated margin) of 32,156 million baht was a 104% gain over last year's 15,788 million baht, with a 16,368-million-baht increment, thanks to the rising margin in relation to Dubai crude, which dropped this year along with IRPC's fuel bills and IRPC's efficiency improvement project implementation.

Below are the highlights of business moves this year.

1.3.1 Petroleum business

IRPC focuses on fuel quality control in compliance with the standards of the Ministry of Commerce, selling through channels that provide maximum profits by fixing competitive prices for market circumstances; adjusting prices to compete and maintain its domestic market shares in 50-50% balance with exports; adding customers and sales volumes by maintaining marketing margins at suitable levels; cooperating with affiliates to optimize sales strategies; and developing the Athena Pricing Tool, which led to novel sales strategic development, adding some 1,000 million baht (USD30 million) in profits. As a result, this year's gross margin derived from production at market prices amounted to 14,246 million baht, a gain of 8,117 million baht from last year's 6,129 million baht. IRPC posted 62% of its income from domestic sales and 38% from exports-achieving the goal of strengthening its domestic customer base.

Below are the highlights of petroleum business achievements this year.

- Signed a sales agreement with Darby Trading Inc., a long-term agreement extension worth some USD28.5 million, to grow the slack wax markets to the US and Europe.
- Signed a long-term asphalt sales agreement 2017-2021 with Horizon Petroleum Limited to extend the joints, decade-long asphalt business, forge new marketing opportunities, and grow the customer base to accommodate the market's diverse needs.
- Built on cordial relations by welcoming representatives from Lao State Fuel Company (which exports oil by truck to Laos) to IRPC Refinery.
- Improved service quality through its five oil depots serving customers of all regions, with an additional service at Rayong Oil Depot, which is open 24 hours. In addition, IRPC added an oil sales outlet at Mae Klong Depot to accommodate customers in the Western Region and the upper South.
- Transported fuels by truck, marine vessel, and at its wharf to customers around the country
- Offered sales services by posting sales agents, sales coordinators, and sales service staff at customer service points and ticket-issuing points, where customers issue their orders through the SAP system, a database management system

In 2015, **IRPC achieves EBITDA** of Baht **17,033 million** for its four core **businesses, namely petroleum, petrochemical, port and tank farm, and asset management – the highest in a decade.**



linking data for on-line, real-time display that is accurate. Such data serve as a database for decision analysis and management for all executives and officers. Also, developed the iRON (IRPC Oil on Net) system, which administers the petroleum product distribution system electronically that combines the capability of the supply chain management with the Total Business Solution System to cater to customers' needs for transaction engagement and improve business efficiency, while relentlessly developing itself to accommodate sales through other channels.

- Conducted quality assurance by assigning technical officers to share knowhow and solve problems, in addition to conducting quality checks at service stations and oil depots, to ensure confidence in quality among customers.

1.3.2 Petrochemical business

With a goal to profit through production increments, IRPC focused on relentlessly promoting and supporting R&D to develop special-grade products, setting their sales proportions at 60% by 2020. This year the petrochemical business posted a gross margin from production at market prices of about 15,420 million baht, a 8,197-million-baht gain from last year's 7,223 million baht. Domestic sales accounted for 58% of the income. Sales of special-grade products this year rose by 40% from 35% last year, achieved through the following key strategies.

Pricing strategy: IRPC based its pricing on fundamental factors, including raw-material costs, market supply/demand in Thailand and world markets, and inventories. It focused on being a low-cost producer in an integrated petrochemical business, equipped with complete production support systems. This way, IRPC held the edge in costs, which enabled it to compete amid depressed market product prices.

Product quality strategy: Leveraging its accrued experience in merchandise development with customers, IRPC efficiently met customers' needs in Thailand and abroad. In addition, all IRPC polymers have achieved ISO 9001, ISO 14001, and TIS 18001, concretely echoing the policy of environmental care, health, and safety of employees and communities.

Product diversity strategy: With a combined capacity of 800,000 tons per year of various polymers, IRPC can truly satisfy customers' needs, while expanding business opportunities and cutting down on the average sales cost per unit in marketing.

Sales administration strategy: IRPC constantly staged sales promotional activities, developed products, and joined various exhibitions.

1. Below are the highlights of the petrochemical business this year.
 - Signed a joint-venture agreement between IRPC Polyol and PCC Rokita SA of Poland for distribution and sale of PU products with a focus on the AEC market and China

- Signed an MOU on production and a product supply agreement for ABS powder and resins with Asahi Kasei Chemicals Corporation (AKCC)
- Signed a propylene sales agreement with Marubeni Corporation, with, 156,000 tons of propylene supplied from the UHV Project for one year, worth 4,316 million baht
- Signed a joint-venture agreement between IRPC A&L, Nippon A&L Inc., and Sumi-Thai International Limited to grow the competitiveness of styrenics compounds, with a focus on growing the automotive market in AEC
- Joined a trade and product show (CHINAPLAS 2015) with PTT Group to promote the image of a petrochemical business leader with high caliber, grow its customer base, and promote polymer export on May 20-23 this year at Guangzhou, China

1.3.3 Port and tank farm business

IRPC's goal is to relentlessly improve the quality of its product tanks and port services to meet customers' diverse needs, with a focus on excellent, international standard, safe, and green management. This year the business generated 732 million baht.

Below are the highlights of the port and tank farm business this year.

- Signed a service agreement for premium-grade diesel tanks with PTT Plc
- Expanded Wharf 3 catering to petrochemical and liquid petroleum to grow its capability for more cargo transfer
- Donated 200-liter fire extinguisher tanks for diesel (20) and gasoline (20) to Infantry Regiment 112, Somdet Phra Nang Klao Fort, Chachoengsao province, to replace old ones
- Joined the "TILOG Logistix 2015 ASEAN+6 Logistic Connectivity" trade show dedicated to logistics, technology, and integrated solution, hosted by the Department of International Trade Promotion, Ministry of Commerce

- Joined the Rayong Oil Spill Exercise 2015 with the Center for Maintaining National Marine Interests, Zone 1, Royal Thai Navy, and PTT Global Chemical, Star Petroleum Refining, Thai Tank Terminal, and Siam Cement. This was a drill of the emergency plan for marine oil slicks to efficiently prepare personnel and equipment for emergencies, while minimizing impacts on the environment and communities.

1.3.4 Asset management business

IRPC's goal is to manage, study, and develop commercial land to supplement value to assets, while surveying land to verify ownership, transfer, and allocate public utilities to customers in its industrial zone.

Below are highlights of the business this year.

- Sold land under IRPC's ownership, generating 5 million baht: one detached house on a plot of land at Ban Taphong, Amphoe Mueang, Rayong, and four twin-unit detached houses at Amphoe Mueang, Rayong
- Sold IRPC Oil-owned land, generating 61 million baht: one empty plot, Amphoe Mae Tha, Lamphun, and a service station and training center on a plot of land in Amphoe Lat Lum Kaeo, Pathum Thani
- Provided the following services in support of investors' projects and businesses in its industrial zone: plant and machinery maintenance, configuration of IT systems, testing and analytical laboratory work, metrological center, warehousing, trailer weighing, and legally required safety training, and so on. This year it generated about 25 million baht.
- Provided public utility services to meet the needs of target industries and fully support businesses, generating 3,211 million baht.



IRPC aims for **business growth** along with the application of **sustainable value creation** to its R&D to create **value-added** products with a focus on **environment-friendly** products which can **respond to the quality of life** of modern consumers.

1.4 Innovation and R&D

IRPC's goal is to grow businesses in parallel with the sustainable application of the Creating Shared Value in the R&D (research and development) of special-grade or value-added products. To this end, it has set aside about 1% of the petrochemical business revenue (about 500 million baht) for investment in R&D and added research personnel at the master's and doctoral level so that researchers. IRPC's four-prong innovation and development strategy consists of product value addition (by entering the special-grade product market where quality is high in parallel with production cost management), technological and product development (including expansion to new businesses), profiting from intellectual properties, and forging of culture and development of innovation-compatible resources.

IRPC's Innovation Management Process is used in selecting, managing, and exploiting research work with potential for development. IRPC supports the idea of developing products with unconventional shapes and forms and promotes research cooperation with research universities and companies worldwide by focusing on developing green products, and supporting research on using natural materials and development of specialty products to add commercial value.

Below are the highlights for innovation and R&D this year.

1.4.1 Natural color compounds: Environmentally friendly ("green") polymers result from mixing basic polymers with colors extracted from nature instead of synthetic colors without changing polymer physical properties, under international quality assurance. This

year, IRPC joined Picnic Plast Industrial in developing plastic containers with natural colors (food box, spoon, fork, bowl, and so on), under the "Clip Pac" brand.

1.4.2 Green ABS: Resulting from the replacement of synthetic rubber by natural rubber, the first ever worldwide, Green ABS not only is "green", but provides Thai natural rubber farmers with income and cut monetary losses through imports. This year, IRPC joined hands with Bluelight Industrial (a leading domestic manufacturer of luggage and travel gear) in developing the "CAGGIONI" brand of luggage, made of Green ABS, whose key properties are durability, high resistance to bumps, and greater flexibility than common polymers.

1.4.3 Wood plastic composite: Containing wood powder, this polymer enjoys the outstanding properties of plastics and wood. The focus is on product development for use as containers, furniture items, and toys. This year, IRPC joined hands with Wonderworld Products, a major producer and seller of wooden toys, in developing innovative wood-plastic toy products. A "Trix Track" smart toy promoted by the companies supports brain development and creativity.

1.4.4 POLIMAXX BANBAX: Resisting and inhibiting bacterial growth, this polymer is produced with nanotechnology mixing anti-bacterial substances in plastic matrix, which allows the resistant inhibitor of bacteria remain and not leached, so the polymer answers consumers' call for hygienic qualities. POLIMAXX BANBAX has passed Japan's standard testing and can be blended with assorted plastics for application in a variety of industries, including food container, furniture, and sanitary ware industries. This

year, IRPC developed POLIMAXX BANBAX polymers for prostheses that contain anti-bacterial substances, and so fungi on prostheses will become a thing of the past. Besides, the invention reduces skin irritation and, thanks to its elasticity, fits users' shapes and does not attract fungi even when prostheses are worn for a long time.

1.5 IT operations

IRPC's goal is to improve IT operations by raising the efficiency of infrastructure and networks to accommodate IT expansion, command universal-standard management practices, ultra-high security, and promotion of technological application to all sectors of work. IRPC expands and improves ERP (Enterprise Resource Planning), a core system for application in IRPC affiliates, forges operational cooperation with PTT Group and develops MIS (Management Information System) for production, marketing, and financial tasks to promote administrative flexibility, decision-making, and adjustment of strategies to keep up with business changes. IRPC considers itself highly successful with IT management excellence, which promotes its standards and systematic IT application, which earned it a Thailand ICT Excellence Award 2015:

- Excise Integrated System: First prize (internal core process development project)
- Intelligence Port & Tank Service: Special-mention prize (internal core process development project).

1.6 Financial

IRPC's goal consists of efficient management of financial liquidity by securing capital at a suitable



Launching Trix Track – smart toys to support child development and creativity

cost of funds to sustain its operations and investment projects, together with adequate, regular disclosure of information to investors.

Below are the highlights of IRPC's financial moves this year.

1.6.1 Secured from domestic financial institutions 4,000 million baht over eight years in additional long-term loans for investment projects in baht denomination

1.6.2 Acquired short-term loans:

- Renewal and acquiring 32,400 million baht in committed line for DLCs (domestic letters of credit) to extend a crude oil payment period for PTT Plc for 90 days
- Renewal of the loan agreement between IRPC and PTT to efficiently manage financial liquidity among PTT Group companies. The loan limit was 5,000 million baht, and the credit line was 300 million baht.

1.6.3 Insurance: IRPC received 1,305 million baht in compensation for a fire set to VGOHT (Vacuum Gas Oil Hydro Treating Unit).

1.6.4 Activities for shareholders and investors, and awards of success

- Regular meetings with domestic and international investors, stock analysts, and fund managers to provide data, directions, and policies. The details are in the report of Corporate governance page 67-93
- Activities with SET (the annual "SET in the City") to publicize company information, and the quarterly Opportunity Day.
- "Corporate Governance Asia Recognition Awards 2015: Best Investor Relations by Company", presented by Hong Kong-based Corporate Governance Asia magazine in recognition of IRPC's transparent and fair disclosure of information.

1.7 Legal actions

IRPC's goal is to operate for due benefits in the administration of legal work, contracts, litigations, and public affairs.

Below are this year's IRPC legal highlights.

IRPC acquired land belonging to TPI Aromatics PCL, a debtor in a bankruptcy case. The meeting of the creditors unanimously decided to sell the debtor's land located at Tambon Taphong, Amphoe Mueang, Rayong, which consisted of 103 plots of about 1,000 rai in area, to IRPC, creditor No. 3, wearing the rights of the mortgage creditor, for 4,244 million baht. IRPC registered its transfer of ownership, effectively giving itself and its affiliates, together TPI Aromatics's creditors, repayment of 3,878 million baht and the ability to exploit the land.

1.8 Human resource administration

IRPC's goal is to recruit and select capable and conscientious people before developing them into more capable ones, while retaining its personnel to spend long, happy years of service. Also, it hopes to be able to use the right people on the right jobs, while promoting efficient work, which will lead IRPC to a series of successes to peers' acceptance and generate business returns.

Below are the highlights of HR administration this year.

1.8.1 Executive Leadership Development Program

(Ex-LDP): The program enhanced mastery of leadership under the development approach of core values and an efficient corporate culture. It also groomed corporate leaders for driving the businesses. This year saw 98 executives enroll in the program.

1.8.2 Middle Management Leadership Development

Program (MLDP): This program leveraged a development process where executives brainstormed and presented

business development projects. This year saw 72 executives pass this course.

1.8.3 IRPC Chemical Engineering Practice School

(I-ChEPs): This program, in its fourth consecutive year, developed a learning process by integrating chemical engineering knowledge to forge teamwork and rapport.

1.8.4 i SPIRIT

core corporate values were formally launched to forge common recognition and understanding to enable IRPC to achieve its goals, strengthening from the inside, which would lead to sustainable growth.

2. Social

IRPC is committed to running its businesses while highly valuing the responsibility to society, communities, and the environment. It cultivates a sense of volunteering among employees, who should be aware of doing business with responsibility, transparency, and fair benefit-sharing with all stakeholders. The ultimate aim is to raise the quality of life and improve society.

Below are this year's highlights of IRPC's social efforts.

2.1 Prosthesis Project:

IRPC donated 25 tons of POLIMAXX BANBAX polymers to the Prostheses Foundation of HRH the Princess Mother. Employees under IRPC's volunteer corps joined foundation members on their Amphoe Um Phang, Tak, visit to make prostheses for Karens.

2.2 IRPC Cubic Academy:

IRPC established a free-of-charge learning institution focusing on producing quality people and organizations in parallel with good governance for interested trainees. The academy's training



*IRPC Cubic Academy
Project – an educational institute
for a quality generation and
organization with corporate
governance in mind*



IRPC's Community
Sharing clinic provided services
for **4,787** patients this year and has
issued **7,925 IRPC Card**, a health
service card. For others, a mobile
medical unit **provided health**
services to **1,288 people**.

courses now number 14. This year two classes were completed, with 198 employees and 27 external trainees.

2.3 1 for 9 Project: With the Office for National Education Standards and Quality Assessment, Public Organization, IRPC developed innovative education by leveraging its potential and readiness to develop nine schools.

2.4 Community Scholarship Project: Scholarships were handed to needy students with good academic records in 89 communities, ranging from the primary level to the undergraduate level, totaling 311 scholarships, worth 2.2 million baht.

2.5 IRPC Community Network Learning Center Project: This project organized relations activities with communities, provided conference facilities, and held holiday activities for youths.

2.6 Wat Khrua Ta Phet Archeological Renovation Project: With Bureau of Fine Arts 3, Phra Nakhon Si Ayutthaya, under took temple conservation and renovation in 2009, with completion due this year. A ceremony was held, where a sacred offering was given to the temple, located within the compound of IRPC Oil Depot.

2.7 Sharing with Communities Project: In its fifth year, this project provided complementary basic medical care to communities around the industrial zone. This year, 4,787 took advantage of this project. Today, the number of IRPC Cardholders totals 7,925.

2.8 Mobile Clinic for Communities: With the Queen Sirikit Hospital, Naval Medical Department, launched a free monthly mobile clinic for communities, with 1,288 service users this year.

2.9 Lam Sai Yong Model Project: Under this project, five reservoirs saw dredging to improve water sources and improve lives of the residents of Ban Nong Yang, Tambon Lam Sai Yang, Amphoe Nang Rong, Buri Ram. As a result, the residents now have enough water for consumption during the dry season.

2.10 Hydroponics for Communities Project: This project first promoted vegetable patches and community education in 2009 and has to date supported 21 schools.

2.11 Community Enterprise Promotion Project: This project supports 100 vocational groups with a total of 1,311 members by arranging trainers for them and taking members on study tours for product development and distribution channel identification.

2.12 Boat Rope Job Creation Project: This project promoted the local economy through employment of wharf workers at the IRPC Port. More than 30 workers were employed, with some 3.2 million baht generated for communities each year.

2.13 A project to solve community floods and use heavy machinery to develop communities: This project included canal dredging, collection of water borne weeds, enlargement of waterways inside the industrial zone, and identification of measures to prevent and solve floods in communities.

2.14 Community Drinking Water Project: This project secured clean potable water for distribution to communities in the municipalities of Nakhon Rayong, Taphong, Choeng Noen, Ban Laeng, and Na Ta Khwan. Involved were 5,097 cups and 1,268 dozens of bottles of water.

2.15 Volunteers' Hearts for Community Development

Project: Activities included Big Cleaning, sand bag filling to prevent floods, volunteers' hearts improve Wat Ban Don School, youth camp for the prevention and solution to drug problems, and demonstration schools. Participating in these activities were 1,564 residents and 1,282 employees.

2.16 Adding Green Area, Community and Industry

Co-existence Project: With the Taphong tambon administrative organization, IRPC undertook the design of green areas, communities, and open space to maintain trees in the area and looking after its fertility. A total of 598 trees have to date been planted.

2.17 Community Tower Project: Such towers were built in three tambons (Taphong, Ban Laeng, and Choeng Noen), numbering seven, to promptly clarify or provide useful information about communities' concerns with a scope of 18 communities or about 13,800 residents.

2.18 Public Right to Know Project: Under this project, training was provided to local communities. In particular, the Local Public Health Volunteer Groups received proper information and understanding. Also, information about the UHV and CHP2 Projects was distributed to five classes of trainees, totaling 1,074 persons.

3. Environmental

Taking quality, safety, occupational health, and the environment seriously, IRPC has adopted international standards to constantly improve process efficiency and develop product quality, with a focus on keen

attention to the surroundings, reduction of pollutants, energy conservation, and efficient greenhouse gas (GHG) management in pursuit of a green industry under the CSR-DIW approach of the Ministry of Industry. All these are in tandem with the establishment of good surroundings that are safe for communities while cultivating safety and occupational health awareness and culture for its workforce

Below are the highlights of IRPC's environmental work this year.

3.1 Reduction of carbon dioxide emission: To achieve this, IRPC used natural gas in place of fuel oil in its processes in intermediate petrochemical plants and lube base oil plant.

3.2 Management of VOCs in the industrial zone: IRPC employed mobile activated carbon to absorb VOCs during turnarounds. In addition, extra vigilance for VOCs was undertaken with canister detectors.

3.3 Steady reduction of sulfur dioxide and particulates, while lowering nitrogen dioxide emission by about 960 tons per year.

3.4 Protection strip: IRPC planted 39 rai more (about 35,000 trees) to help sequester carbon dioxide by about 300 tons, equivalent to 2,800 tons of carbon dioxide equivalent (TOCE) per year, to add 11% to last year's ability.

3.5 By instituting a participatory environmental management system for project development in the industrial zone, IRPC cut environmental complaints by about 50% from last year.

**An additional
35,000 trees** were planted
around **IRPC Industrial Zone**,
enhancing carbon dioxide
sequestration to as much as
2,800 tons per year.



3.6 Projects undertaken to share knowledge and improve operating efficiency for IRPC's safety officers and contractors reduced accidents needing doctors' attention.

3.7 IRPC signed an MOU on EIZ town development with the municipality of Kitakyushu (Japan) and the Department of Industrial Works (DIW), whose essences are data exchange for the benefit of carbon reduction in Asia; joint publicity of efficient consumption of natural resources and energy under 3Rs; promotion of 3R activities; and promotion of business relations between the two countries.

3.8 A total of four plants (Ethylene, Cogeneration, Oil Refinery, and Lube Base Oil) have won the Eco-Factory Certification.

3.9 Below are this year's awards on quality, safety, health, and the environment:

- CSR DIW Awards 2015, presented by DIW: CSR-DIW Continuous Awards went to 11 plants, and one plant won the workplace committed to community development (good level).
- Thailand Quality Prize 2015, presented by the Technology Promotion Association (Thailand-Japan): The QCC Group of the Petrochemical and Refining Operation Group won a total of six prizes (four Golden and two Silver prizes).
- Carbon Footprint for Organization 2015: IRPC Port accepted a plaque and a certificate under the Green Supply Chain guideline for excellence of export industries, a first in Thailand.
- National Outstanding Workplace for Safety, Health, and Environment Award 2015: BTX Plant, Ayutthaya Oil Depot, Phra Padaeng Oil Depot, and Chumphon Oil Depot.
- Plaque of Honor (bronze level) under the Zero Accident Project, presented by the Department of Labour Protection and Welfare: Ayutthaya Oil Depot and Phra Padaeng Oil Depot.

4. Corporate governance

IRPC continuously focuses on improving its corporate governance (CG) practices under universal standards and the Stock Exchange of Thailand (SET) guidelines.

Below are this year's IRPC CG highlights.

4.1 Assessment of CG practices among Thai listed companies by the Thai IOD saw IRPC score 92%, regarded as excellent.

4.2 Assessment of AGM quality by Thai Investors Association saw IRPC score 94%, regarded as excellent.

4.3 Arrangement for minor shareholders to propose AGM agenda items and nominate directors for the upcoming AGM from September 25 to December 31, 2015.

4.4 Assessment of the Board of Directors by Governance Matters Thailand against the ASEAN CG Scorecard standard, which prescribes a minimum assessment every three years by an independent assessor.

4.5 Institution of a compliance unit, named Company Secretary and Compliance, Office of Corporate Affairs. Its mandate is to ensure IRPC's compliance with rules and requirements, preventing human errors concerning adherence to the law and CG alike.

4.6 Publication of the CG manual (revision 2) for employees' acknowledgment and implementation across the company. Also, through E-learning, campaigned on cultivating awareness of observing CG practices.

4.7 Requirement for all employees to file their conflicts of interest form through the intranet.

4.8 Development of "Corporate Citizenship", which consisted of cooperation in setting up a UN Global Compact Local Network in Thailand with other business entities in support of 17 Global Goals of the UN. Signed a document supporting UNICEF's Children's Rights and Business Principles (CRBP), which reminds the business sector that every entity can play a part in child stewardship through the social responsibility element of their own business processes.



4.9 Action taken by IRPC as a CAC (Thailand Private Sector Collective Action Coalition against Corruption) member: Training of the management and employees on anti-corruption, arranged as part of the training programs under the Personnel Group, continuing from last year. A total of 28 classes have undergone such training, numbering 2,872 or 56% of the workforce. Such training is ongoing. Also, the President and executives took part in activities on the Anti-corruption Day and in training to identify new ideas and strategies. IRPC achieved a Level 4 (Certified) assessment score from Thaipat Institute concerning Thai listed companies' anti-corruption. Finally, it is poised for CAC membership renewal in 2016 and improving its performance toward Level 5 (Extended). Incidentally, it plans to support CAC membership for its affiliates and business partners.

4.10 Communication with stakeholders: IRPC takes seriously communication and participation of each stakeholder group by leveraging diverse channels. Direct communication with target groups is done by the President. Then there were joint activities, communication through the mass media, seminars/training, and integrated activities among stakeholders, benefiting each group's needs. A case in point was the President's meeting investors jointly with the mass media.

4.11 IRPC joined hands with PTT Group in organizing a "PTT Group CG Day 2015" on August 25 under the "Shade of Sharing" theme, which focused on participation with business partners in running businesses with transparency and an anti-corruption mindset.

4.12 CG awards this year are as follows:

- Membership certification of DJSI: Emerging Market (Oil & Gas) for the second year in a row
- Board of the Year and Audit Committee of the Year, declared at the Board of the Year Awards 2015 event
- Thailand Sustainability Investment 2015
- Sustainability Report Awards, presented by SET
- ESG100 Award, presented by Thaipat Institute
- ASEAN Corporate Governance Awards, presented in Manila, the Philippines, in recognition of Thai listed companies among the Top 50 ASEAN PLCs against the ASEAN CG Scorecard 2015 criteria
- Corporate Governance Asia: 11th Corporate Governance Asia Recognition Awards 2015- The Best of Asia, presented by Corporate Governance Asia journal



IRPC receiving a Board of the Year Award and an Audit Committee of the Year Award from the Board of the Year Awards 2015

- Corporate Governance Asia (Investor Relations), presented by Corporate Governance Asia journal
- Asia Responsible Entrepreneurship Awards 2015 (Social Empowerment): "From Bench to Community Project"
- The Winner of the Golden Peacock Global Award for Excellence in Corporate Governance 2015, presented by the Institute of Directors (IOD) of India for the third year in a row
- The 6th Asia's Best Employer Award, received in Singapore.

5. Risk management

IRPC's focus is on risk management throughout the company. A policy was announced for the Board, executives, and employees to strictly implement. To this end, a Risk Management Steering Committee was appointed, chaired by the President. A Risk Management Committee consists of at least three Board directors to devise policies, steer, and guide IRPC's risk management to keep corporate risks manageable, while promoting and forging a risk management culture so that executives and employees may recognize and be knowledgeable about efficient application of the scope and standards.

Below are this year's highlights on IRPC's risk management.

5.1 Price volatility risks:

This concerns raw materials and products amid highly volatile crude oil prices and the slowdown in economies of the world and China in particular

Mitigation: Constantly, IRPC joined hands with PTT Group companies to cut costs by relying more on indigenous sources; proper inventory management; improvement of production management tools; and efficiency improvement in planning raw-material purchases, together with product processing and sales. In addition, IRPC's policy scope governs contracts on derivative trading, with set targets for prices, volumes, and periods for proper risk management in keeping with business plans under the oversight of the Hedging Committee and the Risk Management Committee.

5.2 Foreign currency exchange risks:

These risks affect revenue, raw-material costs, and loans invested in projects with the US dollar denomination.

Mitigation: IRPC's risk management approach strives to make the ratio of US dollar-denominated loans match its revenue structure together with the management of crude oil proportion and purchasing conditions. For instance, switching from the dollar to the baht in paying for the crude to ease the volatility or selling some dollars forward to accommodate baht-denominated payment.

5.3 Operation risks

Process or process support risks may affect IRPC's assets, personnel, or income opportunities. Below are mitigation measures for operation risks.

5.3.1 Plant reliability risks: This could arise when processing units age with continuous operation, wearing out machinery and equipment unless properly maintained.

Mitigation: Continually, IRPC takes risk management measures through its projects to improve the efficiency of machinery and equipment, with mini-projects such as the Zero Unplanned Shutdown Project; thorough inspection of plant machinery and equipment for risky spots; minimization of maintenance time through planning and management of contractors and back-up equipment for efficiency; and execution of the Operational Excellence Management System.

5.3.2 Safety risks: Facing employees, contractors, and third-party workers, these risks tend to result from negligence, lack of recognition for safety, or inadequate knowledge.

Mitigation: IRPC promotes its safety culture by devising policies and implementing various activities like Behavior-Based Safety. Safety journals are regularly prepared and publicized. Safety training is provided for all employees, contractors, and workers, and guidelines are given to supervisors, who must treat contractors like IRPC employees. Finally, an inspection team was appointed to strictly audit conformance to safety rules. Once incidents happen, IRPC will

appoint an investigation panel to identify causes, turn them into knowledge, and transfer such knowledge to employees to prevent recurrences.

5.3.3 Capital project risks: This concerns the UHV Project, a capital-intensive, critical project to add value and improve corporate competitiveness.

Mitigation: IRPC treats critical projects as a corporate risk to closely track progress so as to overcome problems promptly and ensure that the project can achieve all its goals, including project periods, budget administration, project quality, safety, and ongoing cooperation with government agencies and communities.

5.3.4 Environmental and community risks: With IRPC's processing units lying close to communities, communities may be affected without sound control systems.

Environmental risk mitigation: Strictly, IRPC focuses on conformance to safety and environmental laws and regulations, as well as TIS/OHSAS 18001 and ISO 14001 health and environmental management systems. It strives for VOC reduction and high-risk spots. To this end, teams are in place for instant analyses and problem-solving once abnormally high measurements are found. Finally, IRPC has cooperated with DIW in developing its industrial zone into an eco-industrial zone.

Community and social risk mitigation: Strictly and continuously, IRPC forges understanding and good relations, including construction and renovation of





public utilities, scholarship presentation, open houses, operation of site coordination centers for community activities, and joint emergency drills with communities and government agencies.

5.4 Organizational capability risks

These risks arising from employees' administration and performance must be modified to match greater business competition.

Mitigation: IRPC strengthens excellence in HR administration, while improving corporate competencies, including improvement of performance management system, career path management system, capability development system, and organizational restructuring for competitiveness.

5.5 Business continuity risks

These result from assorted threats to business operations and could bring losses, negative image, and harm to critical activities.

Mitigation: RPC introduced BCM (business continuity management), with formulation of BCPs (business continuity plans) in full, complemented by plan drills. Applied are BS 25999 and ISO 22301 as guidelines for preparedness for various crises.

5.6 Emerging risks

Over the next 3-5 years, these risks could arise from political, economic, social, environmental, legal, and technological changes, and so on, including

5.6.1 Emission management for future project risks:

These pertain to new projects that could arise over the next five years under new laws forbidding IRPC to release more pollutants than currently permitted, thus stunting business growth.

Mitigation: IRPC has appointed a team to investigate pollutant emission reduction from existing plants and develop manuals for the reduction of pollutants in risky activities, including application of clean technologies to new projects.

5.6.2 Risks arising from free-trade agreements and emerging trade regulations, like Trans-Pacific Partnership (TPP), which could adversely affect IRPC's current business opportunities and markets.

Mitigation: IRPC has investigated the impacts of each of its products and of product development to match and conform to changing legislation. It supports research on new, green, and energy-saving products.

HUMAN RESOURCE ADMINISTRATION



Envisioning itself as Asia's leader in the petrochemical and refinery business by 2020, IRPC is strongly committed to human resource development to achieve organizational excellence. IRPC therefore develops and enhances the capacity in operational excellence, commercial excellence and human resource excellence. Human resources are vital to its sustainable strength because success stems from all employees, who jointly attain good performance for the organization.

IRPC has been systematically developing the system of human resource management, by studying business directions and vision as a baseline to properly design the process of human resource administration. This enhances all employees' competence in working professionally, achieving the current IRPC mission, and serving IRPC vision in the future so that it may reach the full potential to compete with other leading companies. This year, IRPC implemented major projects as highlighted below:

1. Restructured the organization to become lean and modern. Every unit must enhance the capability and responsibility for developing work processes in parallel with human resources. As a result, IRPC successfully implemented knowledge management and added value in many aspects by effectively deploying the capacity of current employees.
2. Reviewed the human resource administration process for alignment with the directions of business.

First, IRPC analyzed the required workforce by reviewing, streamlining, and updating work processes. It also developed employees' professional competencies, performance management and the career path system. All activities were systematically interrelated and complemented one another. Performance was then monitored as a reference for IRPC to further formulate the annual policy.

3. Developed leaders at all levels and their competencies by taking them to training and on field trips to learn from organizations with good practice. IRPC also fostered the morality and ethics among the management to become role models for all employees.
4. Encouraged all employees to develop their competencies by giving awards and recognition. IRPC offered the Presidential Award on safety, value added to the organization, community relations and best employees.



RESEARCH AND DEVELOPMENT FOR EXCELLENCE



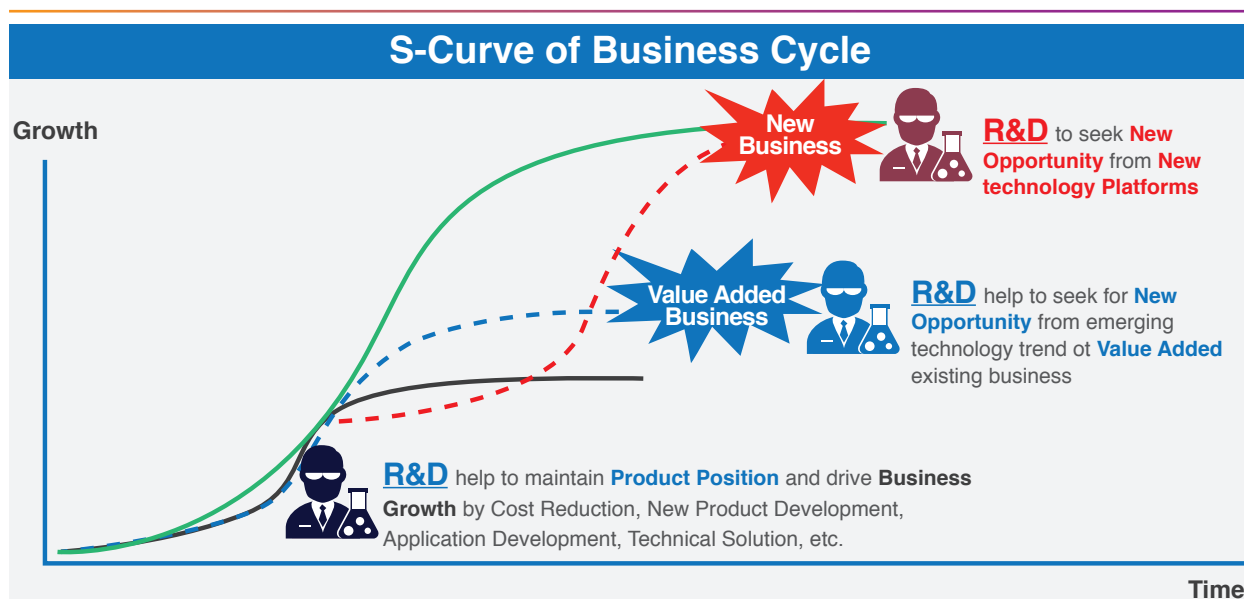
Research and development (R&D) is one of the business strategies. IRPC has always adopted to generate more value in both operations and marketing toward excellence. IRPC has continuously invested with resources in the last two years on the following.

1. R&D Budget Increase IRPC has continuously increased the R&D budget by tying the annual R&D expenditures in percentage to its income from the petrochemical business, plus an extra in a step-up manner until the R&D budget is stretched to 3% in 2026, which is close to the R&D budget allocated by leading high-tech production companies in the world, equivalent to more than Baht 1,500 million/year, five times more than the budget of the previous year. The R&D budget for 2016 is about 1% of the total income from the petrochemical business, or approximately Baht 500 million.

2. R&D Staffing All previous technological successes were created by researchers. With support from the organization, these innovations became marketable products and commercial patents for intellectual property protection, leading to higher competitive edge in the business world. In view of these facts,

IRPC has assigned a high priority to R&D staffing, especially on applicants from science and technology and with master's degrees and Ph.D's. The R&D staffing target exceeds 100 R&D personnel within five years beginning in 2015, bringing the ratio between the R&D to total staff closer to 7%, similar to the average ratio currently employed by the world's leading organizations.

3. R&D Facilities Expansion IRPC has allocated a capital budget to upgrade the current R&D office and expand it to an R&D center to meet the immediate business needs. A new exhibition center was erected in 2015 to demonstrate research works and masterpieces to visitors. This center is set to accommodate the business needs for the next five years, beginning in 2015. For the long term, a space larger than 10,000 square meters in a building designed for construction in IRPC's property in Rayong will serve as IRPC's second R&D center.



4. 10-Year R&D Roadmap Development A leading consulting firm was contracted to perform a study and develop a business model of the future market, consumer behavior, products of choices and preferred technologies. The study and its outcome are being used for the development of a 10-year R&D Roadmap, a business guide for IRPC to direct future research topics for production of high-value products with unique properties and environment-friendliness, matching customers' demand in the future. This R&D Roadmap is fully aligned with long-term marketing and business development plans, ensuring commercialization with the highest value. The 10-year R&D Roadmap can be simplified as follows.

- **Development of current products with technological expertise or the existing technological platform:** The current products were generated by IRPC's research team as specialty products to meet customers' demand at the time. These included HDPE for water and gas piping, and ultra-high-molecular-weight polyethylene (UHMW-PE) for engineering plastic work. IRPC was the pioneer producer of these specialties in Southeast Asia.
- **Development of special-grade products with new technology:** This is an advanced step from the current technology: technological modernization to produce special-grade products to meet customers' demand for products with unique properties, such as high-purity plastic products for consumers' safety and high quality of life in the food industry, or synthetic materials durable from scratches for the automotive industry to reduce the number of body and paint

repairs. These specialties are likely to generate returns of over 20% from the current products.

- **Development of new products with advanced technologies:** To cope with future industries including nanotechnology, IRPC has endorsed a plan to develop newly advanced technologies for future research and development of new products. Nanotechnology has been vastly talked about, whereas nano-synthetic materials have been rare. IRPC is therefore building a center of excellence for bringing future technologies, including nanotechnology, to production of specialties such as nano-additives for producing ultra-lightweight synthetic materials that are super durable. These materials can be used in the automotive industry, hygienic special-grade packaging, and the food and drug industry. These advanced technologies will not only certainly provide IRPC with the capability to produce special-grade products for future needs, but also directly enhance current products to be very unique and advanced, in other words a product upgrade. Moreover, the implementation of these advanced technologies would inevitably drive the entire production value chain to upgrade activities at every step, thereby benefiting everyone in the chain. IRPC has also focused on the creation of intellectual properties in support of national development.
- **Development of products from natural materials:** Fully aware of the value of natural resources, IRPC has emphasized its R&D on the use of natural materials such as oil palm, rubber, and natural fiber with certain chemical and plastic materials for production

of specialties. Some of these natural material-mixed specialties currently available in the market are Green ABS, Wood Polymer Composite and natural color compounds. Products under development include specialties for the lubricating oil industry, which can be applied to machinery in the food industry to secure consumers' safety. The success would save Thailand from import and concurrently promote the use of agricultural produce.

5. Long-term R&D IRPC has set a business target to generate profits from high-tech products of no less than 25% of the total revenue, with a preliminary average profit higher than 20% for each of these products by 2026. These products could be developed from either in-house technologies or an open innovation or external public technologies. To ensure timely response to the market, technological diversity, modernization and risk mitigation from technology development, IRPC has constantly restructured the R&D division to become compatible with other global leading organizations. Domestic and international technology experts have been appointed to help select proper technologies that are worth investment, profitable to shareholders, and truly beneficial to all stakeholders and Thailand.

Product highlights of 2015

Recognizing the needs for materials with special qualities and high value, this year IRPC conducted R&D on special-grade products with specific properties for certain industrial applications to satisfy customers' needs in various businesses, described as follows.

1. Polypropylene conductive products (PP C3104BKC grade):

Start with polypropylene (PP), which normally has insulator properties. Mix this PP with carbon black powder with an extraordinary structure and electrical conductivity to yield PP composites with good ion distribution quality. With a surface resistivity in the range of 103-104 ohm/sq., the product fits



extrusion sheets that needs distribution of static electricity in electronics containers to lessen the impact of static sparks on electronics appliances, which protects such appliances from ions resulting from appliances' movement within their containers. This way, manufacturers can minimize merchandise damage before the delivery to customers.

2. High-density polyethylene compounds:

A special additive provides resistance to sunlight, UV rays, pollution, and burn resistance. POLIMAXX C2307 B018 (Track-Resistant PE compound) was developed for high-voltage electrical appliances located outside buildings, like cable spacers for suspension line systems. As a rule, materials coated with plastic insulators are affected by severe, prolonged pollution-like moisture, dirt, manure, and UV rays. These forms of pollution effectively shorten the service lives and quality of appliance insulators, resulting in electrical short-circuiting.

3. Pipe-grade ABS (POLIMAXX EP601 8E83):

This product was developed for application in water pipe-molding with outstanding properties for use in a wide range of temperatures from -30 to 70 Celsius. The ABS product has high resistance to bumping and corrosion, while being environmentally friendly since it contains no heavy metal. In short, no toxic substances or polluting metals enter the liquid or water inside these pipes. This is another quality product from IRPC that fulfills the needs for water pipe application beyond the common HDPE pipe, which IRPC as the region's major polymer producer underscores its leadership for pipe-grade plastic production to truly meet every need of consumers.

POLYPROPYLENE CONDUCTIVE
POLIMAXX C3104BKC



ABS PIPE GRADE POLIMAXX EP601 8E83

4. Green ABS wood composite:

This is the world's only polymer in which a natural rubber solution replaces synthetic rubber. Today 10-40% of synthetic rubber has been displaced by natural rubber elements.

In addition, IRPC has introduced wood powder, a natural material, as part (10-20%) of the mixture. Green ABS wood composite is therefore an attempt to add value and demand for Thailand's para-rubber in support of rubber farmers. This move also cuts the use of raw materials from dwindling fossil sources, while reducing tree-felling, thanks to the wood substitute described above.

Today, IRPC has launched Green ABS Wood Composite Grade NRG350VC, with 10% natural rubber and 10% wood powder contents. Customers mold the product into decorative merchandise for sale abroad. The product was launched at the Maison fair in France in January 2016 and at the Avente fair in Germany in February 2016.

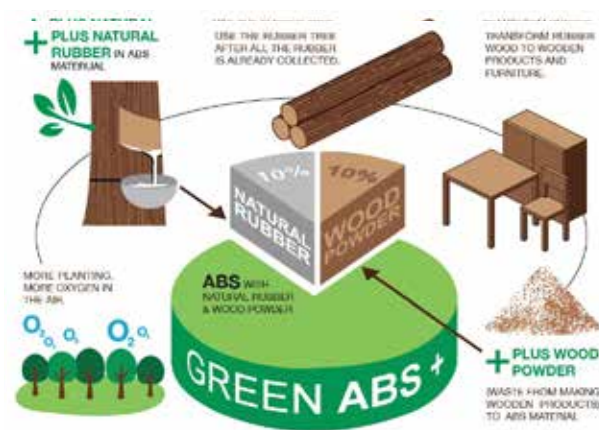
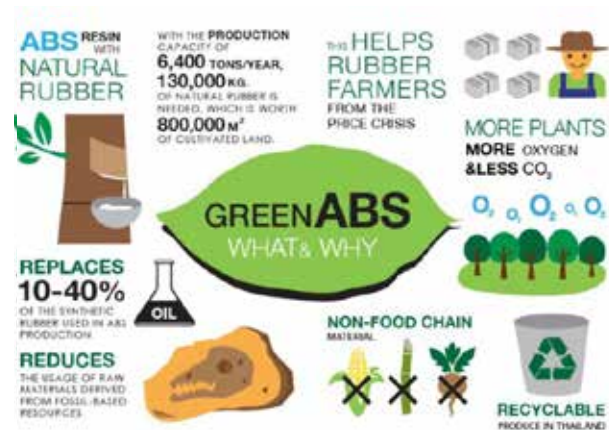
5. Pipe-grade High Density Polyethylene (HDPE)

For pressurized water and gas pipes: IRPC has developed special-grade products to add value to existing products. This new product features newly-developed catalysts and polymerization in the compounding process. All this R&D leads to a new-grade product for pressurized pipes, called PE100, which in all markets worldwide at a premium value, since it can be applied to water and gas transport.

This HDPE development stemmed from a choice of catalysts, process fine-tuning during polymerization in an HDPE plant for greater efficiency, machinery and process formulation improvement, and suitable reaction conditions. Certification has been granted for pressurized pipes by the likes of ISO, PIPA (Australia), GOST (Russia), SABS (Africa), PE100+ (Europe), and TIS (Thailand).

6. Wood Plastic Composite (WPC):

Natural fiber (wood powder) mixed with polymers to produce WPC can replace natural wood and plastics alike, for WPC is lighter than wood yet stronger than plastics. Part of the wood powder is regarded as not only waste in the wood and furniture industry, but



also renewable and biodegradable (a green quality). A WPC market survey found that worldwide, 1,620 kilotons/year of WPC is used, with an 18% annual growth rate.

In Thailand, there is an abundance of cheap wood powder from sawdust, regarded as waste in the wood and furniture industry. Also abundant are agricultural areas where fast-growing trees can be planted for wood powder. Regarded as a regional leader in plastic molding, with plenty of operators, Thailand therefore has an advantage in producing competitive WPC.

Recognizing this potential, IRPC is committed to WPC R&D so that quality products may constantly enter the market to replace plastics wholly based on petroleum. Finally, the resulting WPC is remarkably stronger than common plastics due to wood powder insertion and is environmentally friendly in line with IRPC's philosophy.

IRPC BUSINESS STRATEGIC ROADMAP

Leading Integrated Petrochemical Complex in Asia by 2020



Operational Efficiency Improvement, Asset Utilization Enhancement, Product and Service Improvement, Capacity and Products Expansion

Project Completion

- **CHP I:** Electricity +220 MW, Steam +420 T/hr
- **PRP:** Propylene +100 KTA
- **EURO IV:** Gasoline 15 KBD, Diesel 10 KBD, Jet 15 KBD
- **TDAE** +28 KTA, 150BS +25 KTA
- **EBSM** +60 KTA, ABS/SAN +60 KTA
- **Lube Blending** +60 M.Ltrs./year



Margin Improvement

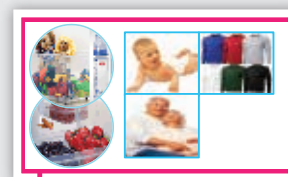


- **Operational Excellence**
- **Commercial Excellence**
- **Procurement & HR Excellence Benefit** +135 MUSD



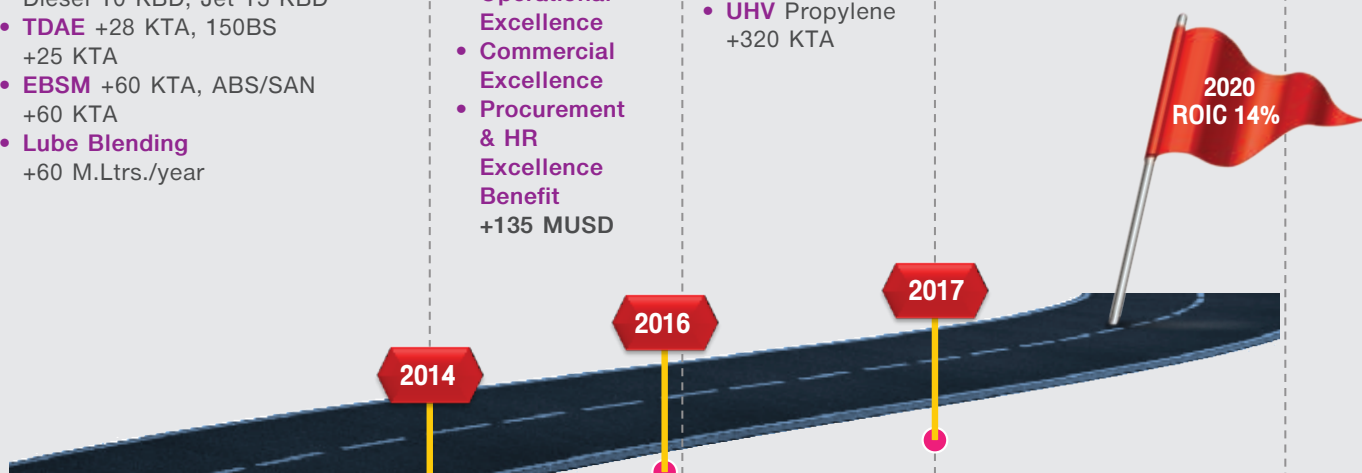
Incremental Margin Organization Health

- **Capability Building**
- **Owner mindset & Performance Orientation**
- **Cultural Changes**
- **UHV Propylene** +320 KTA



Fully Integrated PP

- **PP Expansion** +160 KTA
- **PP Compounding** +140 KTA
- **New investments through JV**
- **PX**
- **AA/SAP**



IRPC's vision is to become "A leading Integrated Petrochemical Complex in Asia by 2020" by making profit from businesses and emerging projects. By posting a 14% return on investment, IRPC approaches the top-quartile performance of the petrochemical business group by 2020, which is the same goal as that for PTT Group companies, which will enhance business competitiveness and sustained maintenance in tandem with communities, society, and the environment.

Thanks to such vision and goal, IRPC has undertaken major strategic projects over the years, including future key projects to ensure fulfillment of its vision.

“PHOENIX”: Era of rebirth and major investment program to spur change

This major strategic project involving some Baht 43,000 million with the key objective to raise IRPC's efficiency and its competitiveness, optimize its current asset utilization, improve the quality of its products and services, and debottleneck product lines with high potential. The following are key projects that have been completed.

- Upgrading of all fuel products into those of the EURO IV standard.
- Production of special-grade diesel based on palm oil (BHD, bio-hydrogenated diesel), a high-quality green, synthetic diesel.
- Construction and debottlenecking of TDAE (treated distillate aromatic extract oil) production to 50,000 tons per year and debottlenecking of the Bright Stock Unit to 120,000 tons per year.
- Debottlenecking of the EBSM unit to produce special-grade ABS, which could in turn raise styrene capacity to 260,000 tons per year.
- Expansion and upgrading of the lube-blending plant capacity to 6 million liters per month.
- UHV (Upstream Project for Hygiene and Value-added Products) to supplement value for cleaner products. This involves an upgraded refinery for higher capacity and conversion of low-value, heavy-oil quality into high-value products, with 320,000 tons per year of additional propylene.
- Two other key projects are the CHP 1 Project, designed to raise efficiency of power and steam generation into clean energy, cut carbon dioxide emissions, and mitigate environmental impacts; the PRP Project, designed to expand propylene capacity by 100,000 tons per year to add competitiveness and establish cost advantages, while taking the total propylene capacity to 412,000 tons per year.

“DELTA”: Era of strengthening from the inside out with excellent operational efficiency

Known as a project to maximize the efficiency of production processes and operation, this project expanded opportunities and forged incremental profits by striving for excellence in four key areas.

- Operational excellence: This relied on applying sophisticated software to help manage processes in the supply chain for maximum efficiency in production systems while lowering overall costs.

- Commercial excellence: This relied on modifying sales strategies, raising the quality of products and services, and applying sophisticated software to analyze job performance on the basis of accurate data for maximum profit.

- Procurement excellence: This relied on managing equipment parts and inventories efficiently, including procuring raw materials, chemicals, and hardware that are high in quality and lower in price through network expansion linking domestic sellers to sellers worldwide.

- HR excellence: This relied on improvement and upgrading of HR management for sophistication and completeness under international standards to in turn develop personnel capability for competitiveness. To this end, IRPC urged all to recognize their contribution to its bottom line and cultivated a work approach under the same corporate values. In all, the project contributed Baht 4,565 million to IRPC.

“EVEREST”: Era of greater capability and organization health development

This project adds efficiency, forges incremental benefits, and develops organization health by collaborating with a leading consultant of the world in developing comprehensive aspects of IRPC under the Best Practice approach. In place are processes to support and raise efficiency of software management, while instituting learning processes to upgrade personnel capability to continually accommodate efficiency improvement throughout the company. Focused on is the development of organization health in support of business execution for efficiency and sustainability. The goal is to achieve incremental profits from its commercial operation by Baht 3,500 million in 2016 and Baht 7,000 million in 2017. This would in turn drive IRPC's ROIC goal achievement of over 14%. Five aspects of business are focused on: production, marketing and sales, procurement, overall organizational management, and organization health development.

“Fully Integrated PP & Other Projects”: Era of leapfrog growth with robust production capability

This involves project execution to improve product quality and debottleneck the polypropylene process to 300,000 tons per year with an investment budget of some Baht 7,700 million to raise competitiveness, respond to current customers' needs, and accommodate future market growth, particularly that in high-growth industries, including automotive, electrical appliance, and food container industries. The project consists of two subprojects:

- PPE (PP Expansion): This involves 160,000 additional tons per year of PP from the current 475,000 tons per year, so that the new capacity would total 635,000 tons per year.



CORPORATE RESPONSIBILITY

- Sustainable Management
- QSHE Management
- Corporate Social Responsibility
- Social Enterprise

SUSTAINABLE MANAGEMENT

IRPC's business philosophy strives for **sustainable growth** with a focus on business growth in parallel with **stewardship of natural resources and the environment; forging of cordial relations; promotion of communities' quality of life**; local economic, social, and environmental support to enable it to co-exist happily with communities; and trust from stakeholder groups.



In late 2014, IRPC set up an Office of Sustainability Management to manage the corporate sustainability strategy, embracing economic, social, environmental, and corporate governance aspects. This year it appointed an IRPC Group Sustainable Business Operation Committee, chaired by the Executive Vice President (EVP) of the office, with EVPs and VPs from relevant units as members. The committee sets sustainability

policies and strategies and tables screened work plans for the endorsement of the Management Committee and the Board. Also, it oversees, monitors, supports, and promotes sustainable tasks to conform to the policies and strategies for excellence and sustainability of the organization, fitting the Leading Integrated Petrochemical Complex in Asia by 2020 vision.



ANNOUNCEMENT OF IRPC SUSTAINABILITY MANAGEMENT POLICY

IRPC is committed to its leadership in business conduct based on sustainable development. This is achieved by forging confidence among stakeholders through excellent, transparent operations, and continuously innovative development for sustainable future of society and the environment. For uniformity of conduct under international standards, below is the scope of sustainability management and operating policy:

1. Take into account balance between economic, social, and environmental aspects and include all stakeholders in the efforts for sustainable business growth.
2. Reduce operating impacts throughout the value chain together with achievement of business growth, embracing social, environmental, health, and safety aspects.
3. Develop strategies for growth that is environmentally friendly while paying due regard for a sustainable economy and environment.
4. Promote development of innovations and operating technologies for a sustainable future.
5. Transparently disclose obligations, standards, and performance on sustainability in pursuit of continuous improvement.
6. Cultivate in employees recognition of responsibility and due consideration for stakeholders to forge a sustainable operating culture.

To this end, all executives and employees must support, drive, and conform to this sustainability policy and management framework.

For your acknowledgment and compliance.

Announced on October 5, 2015



(Mr. Sukrit Surabotsopon)
President

IRPC has defined the IRPC Group Sustainability Management Policy to guide all units in a uniform direction under international standards. The policy scope includes challenging issues for the pursuit of sustainable business growth while generating value and shared value for all stakeholders related to IRPC's operations. Six essential elements are described below.

IRPC values and stresses sustainable business response to goals, with a Materiality Assessment that covers various issues significantly affecting itself and stakeholders in economic, social, and environmental aspects.

This year, the material aspects consist of

- **Supply chain management:** Business partners represent our key business allies, which is why IRPC values the promotion of their management in line with the sustainable guidelines for business partners. IRPC manages business-partner risks to prevent risks arising from procurement and enhance its own competitiveness.
- **Product responsibility:** IRPC takes seriously development of innovations that add value and worth to products together with growing marketing opportunities and addressing customers' varied needs by valuing research and development (R&D) of innovations and focusing on addressing needs through commercial excellence and R&D excellence for maximum customers' satisfaction.

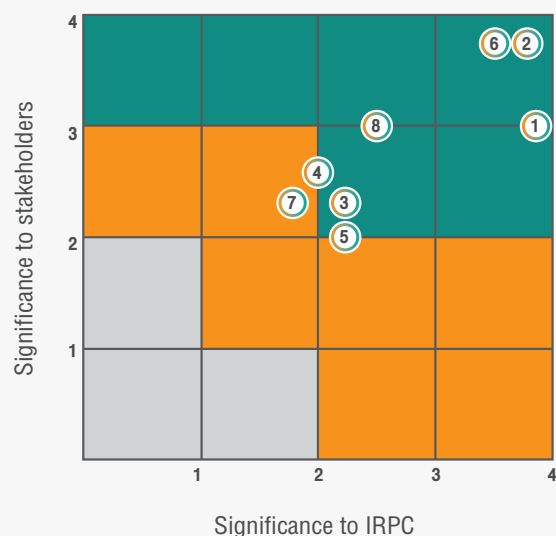
- **Adjustment to climate change:** Recognizing that IRPC's businesses relate to the consumption and production of fossil fuels, which release greenhouse gases (GHGs) to the atmosphere, IRPC is committed and expresses its desire to be part of the solution to climate change through improvement of energy consumption and continuous work improvement so that its production processes may be clean.
- **Green operation:** IRPC's goal is to consume natural resources most efficiently with minimized environmental impacts. It also sets a goal for all plants to be certified as eco-factories by 2020 in line with the Eco Factory concept of the Industrial Environmental Institute, Federation of Thai Industries. That way, it can form a foundation for development into an Eco Industrial Zone, as envisioned by the Department of Industrial Works (DIW).
- **Responsibility for water resources:** Since water is vital for the world population and since IRPC Industrial Zone lies in a precarious area for water shortage, IRPC must achieve maximum efficiency of water management by managing risks associated with its supply. To this end, it has developed plans and measures to prevent and resolve impacts of water consumption on communities and the environment.

- **Safe operation:** IRPC takes most seriously safety for both personnel and production processes. That is why it has promoted a safety culture and enhanced essential skills among employees and contractors, while leveraging safety management processes to prevent and address situations or risk factors concerning the safety of personnel and production processes.
- **Personnel capability development:** Recognizing that IRPC's success has its roots in the ability to recruit, develop, and retain capable people, IRPC is committed to improving its HR management systems to enhance people's capability and keep them engaged to the company. Three management approaches are relied on: improvement of HR management systems, personnel capability development, and retention of personnel in the long term.
- **Good corporate citizenship:** IRPC is committed to running its businesses with social responsibility around its industrial zone by focusing on promoting hygiene among the communities and investing in social development. The ultimate goals are in creation of shared value and concurrent growth with Thai society together with acceptance of IRPC's array of businesses.

Details about IRPC's management of materiality and performance outcomes appear in the Corporate Sustainability Report 2015.

Outcomer of Materiality Assessment 2015

1. Supply chain management
2. Product responsibility
3. Adjustment to climate change
4. Green operation
5. Responsibility for water resources
6. Safe operation
7. Personnel capability development
8. Good corporate citizenship





MEMBER OF
**Dow Jones
 Sustainability Indices**
 In Collaboration with RobecoSAM

In 2015, IRPC was chosen to join the membership of DJSI Emerging Market (Oil & Gas) for the second year in a row, a guarantee that IRPC is a global leader on sustainable development.

It also echoed our commitment to doing businesses with balanced emphasis (economic, social, and environmental) to address all needs of stakeholders.

These materiality issues have become the approach for defining strategies for ESG (Environmental, Social, and Governance) Enhancement and Sustainability Roadmap for 2016-2020. Also, they have framed the contents of IRPC's sustainability report for stakeholders' transparent acknowledgment of IRPC's operation.

The Sustainability Report of 2015 was applied from the principles of Sustainability Reporting Guideline: Oil and Gas Sector Disclosure, version 4, of GRI (Global Reporting Initiative) at the Core level, which represents the principles of sustainability reports universally accepted. IRPC won the Sustainability Report Award 2015 (Outstanding), named by a cooperative project of CSR Club, Thai Listed Companies Association, SEC, and Thaipat Institute for a third consecutive year.

In 2016, IRPC will define the performance indicators of various units supporting the goals of sustainable business to drive operation from all fronts and in turn enhance its capability in pursuit of the IRPC Vision.

Below are the aspects of success of IRPC's sustainability development, evident in the selection to DJSI membership.

Economic

IRPC commands transparent corporate governance, with a business code of conduct for the Board, executives, and employees to adopt as guidelines for treatment of all stakeholders. IRPC values anti-corruption, with a policy announced and education given to all employees to forge their awareness and proper application. Integrated risk management is in place, ranging from the Board to individual employees, under an international risk management approach, with risks ranging from environmental, social, to governance (ESG). In addition, IRPC has prepared itself for business by conducting a stress test to assess the impacts of crises and get emergency response plans ready to keep businesses running. Supply chain management is in place with due regard for ESG risks. Finally, IRPC commands development of products and services with high quality, catering to customers' needs through continuous innovation R&D, and production technologies catering to global dynamic change.



IRPC accepted Eco Factory awards for its ethylene, cogeneration, refinery, and lube base oil plants from Ms. Atchaka Sibunruang, Minister of Industry, at the BITEC International Trade & Exhibition Centre, Bang Na, Bangkok, at the annual "Eco Innovation and Solution 2015" technical seminar, hosted by the Industrial Environmental Institute, Federation of Thai Industries

Environmental

IRPC commands a proactive environmental quality monitoring system and transparently discloses data of such quality measurement. It has also defined strategies to handle climate change and has instituted diverse product R&D that is environmentally friendly and safe for consumers. Products on sale include Green ABS, Wood Plastic Composites, and Natural Pigment Color Compounds.

In addition, IRPC has promoted and encouraged production for economic, social, and environmental balance by ensuring that each plant commands a good ecological management system under the Eco Factory concept of the Industrial Environmental Institute, Federation of Thai Industries, to serve as a foundation for developing into an Eco Industrial Zone in line with the scope of eco-industrial development of DIW.

This year, IRPC has four plants winning eco-factory certification: ethylene, cogeneration, refinery, and lube base oil. Our goal is to have all plants achieve such certification by 2017.

Social

IRPC pays attention to processes to develop personnel capability, forge a culture for employees to recognize safety, and establish sustainability DNA among all its employees. These will result in employees with due regard for the environment and social impacts through the i SPIRIT corporate values-responsibility for society, integrity and ethics, and trust and respect. This year the

Office of Sustainability Management communicated the subject of sustainable development with all employees through major meetings, including Rayong Management Committee (extraordinary meeting), IRPC Cubic Academy, and Supplier Conference 2015. The office has set a goal for cultivating recognition among all employees by 2020. In addition, Eternity Awards were presented to units with outstanding recognition of sustainability through their project expansion with greater capacities and new projects. Finally, IRPC promoted stakeholder engagement through meetings where public views are shared and through annual community satisfaction, the lessons learned from which were continuously applied to grow business potential.



IRPC staged the 2015 Eternity Awards ceremony for units with outstanding recognition of sustainability

Continuous improvement and development of production processes

to increase energy efficiency while reducing greenhouse gas emissions to become one of the top-quartile organizations with high energy efficiency by 2020



With a vision to become a Leading Integrated Petrochemical Complex in Asia by 2020 and a business philosophy for sustainable growth focused on forging balance between economic, social, and environmental operations, the business units of IRPC and its affiliates recognize and highly value QSHE aspects of business to foster operational excellence, while catering to internal and external stakeholders. The company's integrated QSHE policy for all units is described below.

Quality: International standards are in force with a focus on improvement of processes and services as well as product quality development, with actions taken for continual production and work process efficiency improvement, all catering for customers' needs and satisfaction.

Environment: Besides conforming to relevant laws and regulations, as well as environmental protection measures and impact mitigation stated in EIA/EHIA reports, IRPC focuses on continual process improvement with due regard for the environment, covering control of waterborne and airborne pollution and that of industrial waste alike. IRPC focuses on the 3Rs (reduce, reuse, recycle), pollution reduction at sources, energy conservation, and greenhouse gas (GHG) emission management in pursuit of a low carbon society. It also promotes resource consumption

for maximum efficiency and effectiveness, while minimizing impacts arising from its activities.

Safety and occupational health: IRPC is committed to promoting a strong safety culture among all its workforce, including employees, contractors, communities, and other stakeholders. Assorted projects are managed, including i-CAREs, Enhancing Contractor Safety Management Improvement Program, and Process Safety Management (PSM), all of which lead to the Zero Accident goal. To this end, it relentlessly improves and wards off work hazards, while promoting the cultivation of awareness and work culture so that workers may recognize work safety and occupational health at all times.

QSHE Management Strategy

Under thorough operational excellence business conduct, IRPC regularly revises its vision and business plans by focusing on the 4Ps (process, partners, people, professional), as described below.

Process: Defined are measures to control, audit, and reduce risks related to work processes, ranging from project planning, operation, to the conclusion of operation. Constant work improvement is in place, as are pollution prevention at sources, energy management, improvement of processes, and introduction of green products. Applied is PTT Group OEMS (operational excellence management system), with management integrated with QSHE and IT systems for greater efficiency and effectiveness of QSHE management.

Partners: Emphasis is on strengthening QSHE and leadership in the petrochemical and refining industry through networking with all sectors (public, private, and community), including EIZ (Eco Industrial Zone) project operation, establishment of an environmental R&D center and forging of community knowledge, and relationship-building with all agencies to provide IRPC's views on QSHE regulation drafts and amendments.

People: QSHE awareness and culture are promoted among all stakeholders, ranging from employees, while the efficiency of coaching and communication is continually enhanced, including the promotion of BBS (behavior-based safety), safety talk and environment talk summary, and training on safety, occupational health, and the environment for employees, and energy conservation.

Professional: IRPC develops QSHE professionalism with a focus on KM (knowledge management), featuring lessons learned and best-practice sharing in pursuit



of QSHE operational excellence with acceptance by the business sector and industrial sector at large, together with acceptance by external agencies.

This year's key QSHE projects are summarized below.

Pollutant Release and Transfer Registers (PRTR)

PRTR is a voluntary project initiated by the Department of Industrial Works (DIW), Ministry of Industry, in conjunction with Japan International Cooperation Agency (JICA) to report operators' data, released and transferred volumes of pollutants/waste to air, soil, and water in pilot areas of Rayong. Since 2012, IRPC's petroleum business group has enlisted as a pilot project and joined in the preparation of a PRTR manual. In 2014, it took part in reporting PRTR of its petroleum and petrochemical groups by trial reporting of outcomes through DIW's electronics protocol.

This year, IRPC supported data preparation for the presentation and publicity of PRTR data from assorted sources in Rayong to promote knowledge and understanding among stakeholders, while heeding comments to evolve Thailand's PRTR formats and systems for efficient future operation. At the same time, IRPC identified improvement in pollutant and chemical management for its plants, promoted measures for efficient chemical consumption, identified measures to prevent and reduce losses of process feedstock and chemicals, and implemented measures/projects on pollutant reduction.

Greenhouse Gas Emission Reduction

Recognizing the needs and future impacts, IRPC relentlessly improved its processes to raise its energy consumption efficiency and cut GHG emission with a commitment to becoming a top-quartile energy consumer by 2020. To this end, it has defined directions for efficient energy consumption in parallel with GHG reduction.

IRPC also valued energy management and energy conservation, while promoting resource consumption for maximum efficiency and effectiveness in response to the public policy on energy conservation and energy-saving to cut its production costs and forge systematic, sustainable energy conservation, which would ease global warming and airborne pollutants through the participation of all employees.



This year's energy conservation (covering electricity and heat) consisted of carbon dioxide emission reduction through the consumption of natural gas in place of fuel oil in EBSM and lube base oil plants; efficient energy consumption through the VSD (variable speed drive) project; a project to replace ventilation fans to save energy consumption by cooling towers in cooling water processes; installation of motion switches for building lighting systems; a project to raise heat exchanger efficiency; a project to replace steam traps to cut steam losses; a project on switching process fuels to natural gas; and a project to improve gas turbine burners in power generation, which cuts nitrogen oxide emissions-this lowers the volume of system steam, saves steam generation fuels, and cuts GHG emissions.

In 2015, 39 rais of trees were planted, aggregated to **318,000 trees** which increased the ability to absorb more **carbon dioxide at 2,800 tons per year** or **11% higher than in 2014.**

Creation of Protection Strip

These Protection Strip buffer IRPC's industrial zone from surrounding communities. This year, IRPC planted more trees around its zone in addition to its previous strips planted since 1994. The Protection Strip Project has been in operation since 2011, featuring plans to regularly look after the trees. After all these years, there are 318,000 trees planted. In 2015, IRPC planted 35,000 trees or 39 rais which increased the ability to absorb more carbon dioxide at 300 tons or equal to 2,800 tons per year. Compared to 2014, more carbon dioxide can be absorbed approximately 11%, while easing airborne and noise impacts on surrounding communities, apart from producing a natural forest landscape.

Management of industrial-zone VOCs (volatile organic compounds)

IRPC values the management of the surroundings of its industrial zone by controlling airborne emission potentially harming human health, taking continual steps to improve its processes, and mounting a VOC emission inventory since 2009 to assess and identify management approaches for better local air quality. To this end, IRPC controls and cuts VOC emission by raising the efficiency of VOC cameras, which enabled it to efficiently cut emissions from sources and install tools to trap and cut emissions from sources.



Meeting of the "Community and Society Development Multilateral Committee, IRPC Industrial Zone, Rayong

This year, IRPC spent over 100 million baht on this project. It also applied the Mobile Activated Carbon to ease impacts in plant areas during maintenance turnarounds, absorbing VOCs during system decontamination periods, preventing emission, and instituting VOC vigilance by means of canisters stationed in these areas during such periods.

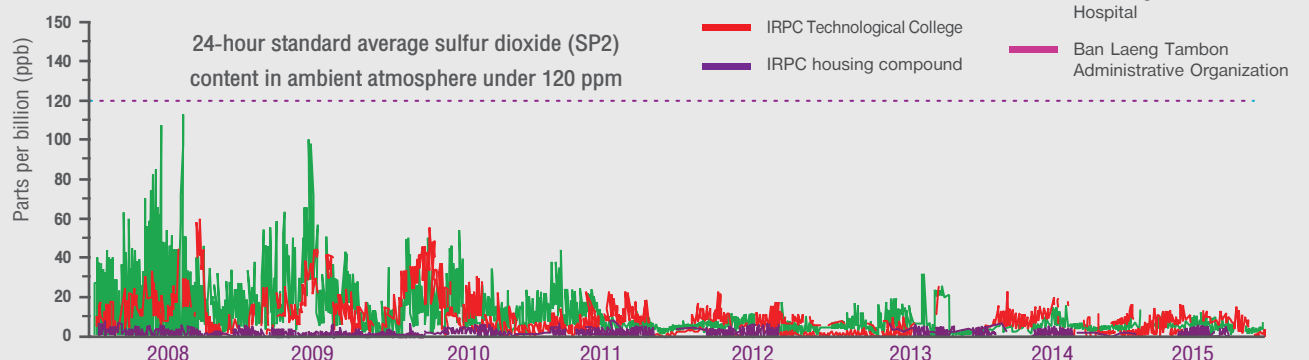
Complaint management

In place at IRPC is an efficient and effective system of complaint management. Not only does IRPC value the need to co-exist with communities and the surroundings, but it also institutes a system of participatory environmental management in project development in its industrial zone. This is done through the "Community and Society Development Multilateral Committee, IRPC Industrial Zone, Rayong" and the EIA/EHIA Monitoring Committee consisting

of representatives of the public sector, government agencies, experts, and company representatives. These panels provide comments and audit operation of projects and activities in the IRPC Industrial Zone to ensure confidence in IRPC's control and impact mitigation concerning its activities, while representing a communication channel among communities, government agencies, and plants to exert control at sources and avoid community impacts. IRPC also appointed another panel to handle the prevention and resolution of complaints, chaired by a senior executive, which found a steady decline in complaints this year, with environmental complaints dropping 50% from last year.

The emissions of sulfur dioxide, nitrogen dioxide, and particulates this year are all clearly superior to those of last year, thanks to the consumption of clean fuels and installation of clean-combustion equipment, which

Sulfur dioxide (SO₂) content around IRPC Industrial Zone



Source: IRPC's Environmental Management Division

IRPC's panel to handle the prevention and resolution of complaints, consisting of senior executives and relevant agencies, visits local communities to listen to impacts arising from IRPC's activities every month



steadily lowered the emission of sulfur dioxide and particulates, while lowering the emission of nitrogen dioxide by 920 tons a year.

Eco-Industrial Zone (EIZ)

IRPC is committed to becoming an EIZ under its five-year (2012-2017) development and strategic plan, the prototype for Rayong's EIZ development. To this end, IRPC prepared a detailed integrated action plan in line with its other policies or standards. It also signed an MOU (memorandum of understanding) for participation in DIW's EIZ project, whose operating scope is to assess the operating compatibility against EIZ town indicators of DIW and to develop a prototype for measuring the efficiency of waste management.

This year, four IRPC plants have achieved Eco Factory certification. IRPC plans to raise the number of certified

plants to over 80% in pursuit of EIZ achievement in 2017. Also, it signed an MOU on EIZ town development with the municipality of Kitakyushu (Japan) and DIW, whose essences are data exchange for the benefit of carbon reduction in Asia; joint publicity of efficient consumption of natural resources and energy under the 3Rs; promotion of 3R activities; and promotion of business relations between the two countries.

Cultivation of QSHE awareness and culture

To promote a strong safety culture for employees and affiliates' employees, as well as contractor employees, and to prevent process incidents, while limiting or curbing potential impacts among employees, companies, and surrounding communities, IRPC has adhered to forging a strong safety culture arising from all employees' psychological safety. This year, besides forging its ongoing BBS (behavior-based safety) work, IRPC ran the following projects.

i-CAREs: Here, all employees are galvanized under a "Cares" atmosphere, with two key characteristics: "proactive" point of view and "timely voice related to failures". Both represent part of the efforts to establish IRPC's safety culture.

Enhancing Contractor Safety Management Improvement Program: Because of the large number of contractor employees working among IRPC and its affiliates, posing assorted incident risks, IRPC launched projects to provide knowledge of work efficiency among safety officers and contractors' fire watchmen. Based on its monitoring, the performances of these fire watchmen have become more efficient, whereas the total reportable injury rates (TRIR) have dropped.

Total Injury Frequency Rate (TIFR) decreasing from **0.63 to 0.39** per million man-hours and total Lost Time Injury Frequency Rate (LTIFR) reducing from **6.67 to 0.59** per million man-hours against the same period last year – a noteworthy indicator of safety management



i-CARES Project – a project to promote safety at work by encouraging workers to take care of each other



Enhancing Contractor Safety Management Improvement Program

Process Safety Management (PSM): This undertaking consisted of a revision of the PSSR operating manual and revision against PSM and other system requirements for company safety management, including OEMS and TIS/OHSAS 18001, for further improvement so that outcomes of incident prevention may be improved to prevent recurrences. To this end, outcomes and measures obtained from incident root-cause analyses have turned into lessons learned for distribution to all. Each unit then learns from such incidents and considers its own nature of business, including risk factors at each site. Assessment of safety performance is carried out through injury statistics. TRIR and LTSR (lost time severity rate) for each million-man-hours serve as safety performance indicators for individuals; the number of chemical spills and fires, for safety

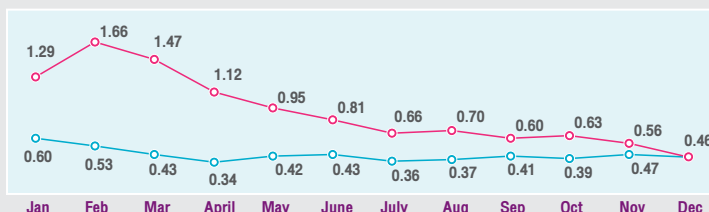
process management. IRPC managed another program in support of employees' good housekeeping so that the workplace may be safe, employees may report unsafe conditions, and remedial actions may be taken immediately.

In addition, activities promoting the strength of the QSHE culture featured these training courses for employees:

- Safety awareness training for target employees promoted safety awareness so that they may exercise greater care.
- Safety role model workshops featured 19 outstanding employees for safe work as safety role models for employees at large to emulate.

Comparison of Total Recordable Injury Rate (TRIR) and Lost Time Severity Rate (LTSR) between 2014 and 2015

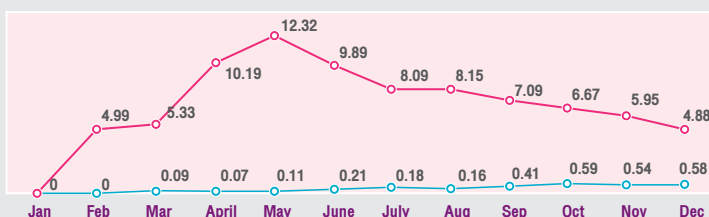
TRIR



—○— TRIR 2558
—○— TRIR 2557

TRIR = Number of injured personnel needing medical treatment and more

LTSR



—○— LTSR 2558
—○— LTSR 2557

LSTR = Number of days away from work per million man-hours

Source: IRPC's Quality, Safety and Health Department

- PSSR and PSSR checklist training for target employees so that they may master PSSR and PSSR checklist application.
- Training and clarification of building inspection under the Building Control Act so that employees may understand the guidelines for building inspection under the law and apply them to building modification for safety.
- Training on working with mercury for target employees so that they may master mercury matters and work safely.

Also, other safety training courses and seminars were provided under the training standard on safety and occupational health under annual personnel development plans. Finally, in conjunction with BSA, campaigns promoted safety and occupational health for outsourced employees.

Supporting QSHE communication and knowledge transfer

Relentlessly recognizing the value of QSHE communication and knowledge transfer, IRPC this year sponsored the 15th National Public Health Technical Conference under the topic of Public Health and the Environment in the 21st Century: Outlook and Systematic Management. The aims were to publicize the deeds of HRH Princess Maha Chakri Sirindhorn on her 60th birthday anniversary and to share new knowledge of development and management of public health and environmental, occupational health, and safety matters.

IRPC constantly values knowledge management by allowing employees to search, exchange, and share knowledge within the organization and groups so that



Safety awareness training.



Safety role model workshops.



Training and clarification of building inspection under the Building Control Act.



PSSR and PSSR checklist training.



Activities to promote safety and occupational health among outsourced workers



Training on working with mercury and work safely.

they may apply such knowledge to work development to grow the values of individuals and the organization in pursuit of a learning organization.

And to lend efficiency to the management of the environment, health, and safety so that they may be the fundamental operating system, all IRPC companies have conformed to ISO 9001, ISO 14001, and TIS 18001, with annual assessment and revision of management effectiveness.

QSHE Awards

IRPC values management with quality and due regard for stakeholders' satisfaction and needs-whether they are customers, business partners, shareholders, employees, communities, or society at large-while relentlessly valuing society and the environment. No wonder then that IRPC has garnered acceptance by communities as well as public and private agencies. These awards speak volumes for its continued commitment to improvement of all aspects of management for maximum efficiency. This year, IRPC earned the following QSHE awards:

- **CSR-DIW Award 2015:** Sponsored by DIW, Ministry of Industry, this project has seen enlistment by 12 registered IRPC plants, which later also won awards. They also underwent review by a panel of experts, which granted them DIW plaques and certificates, grouped as follows:

- 11 plants for CSR-DIW Continuous Awards.
- 1 plant for the award for commitment to community development at the "good" level.

This year's CSR-DIW Projects fell into two groups:

- Group 1: CSR-DIW Award, presented to those conforming to all seven key elements under the CSR-DIW standard.
- Group 2: CSR-DIW Continuous Award, presented to plants that won CSR-DIW Awards from 2008 to 2014 with continual social responsibility work done in the form of networks for sustainable development.

The CSR-DIW Project's goal is Green Culture, with a focus on Green Network operation in conducting quality activities for society and communities, marked by the sharing of knowledge, experience, and expertise in pursuit of sustainable development and international standards of social responsibility.

IRPC has undertaken CSR-DIW projects since 2009, with participation by a total of 23 plants run by IRPC and its affiliates, winning awards and certificates from 2009 to 2015, as summarized below.



Award	Plant	Year
CSR-DIW Award	PP	2009
CSR-DIW Award	ETP, PS	2010
CSR-DIW Continuous Award	PP	
CSR-DIW Award	HDPE, BTX	2011
CSR-DIW Continuous Award	PP, ETP, PS	
CSR-DIW for Beginner	AB	2012
CSR-DIW Award	CHP, LBOP, CON, EPS, IRPC POLYOL, PP, ETP, PS, HDPE, BTX	
CSR-DIW Continuous Award	PP, ETP, PS, HDPE, BTX	
CSR-DIW Network	ETP	
CSR-DIW in Supply Chain Award		
CSR-DIW Award	EBSM, CD1, PTK, DCC, ADU2, WWT1, 2, WW3, CCM, ABS-SAN, ACB, PP, ETP, PS, HDPE, BTX, CHP, LBOP, CON, EPS, IRPC POLYOL	2013
CSR-DIW Continuous, Advance 4 Award	PRP, Ban Khai Water Filtration Plant, UT1, PP, ETP, PS, HDPE, CD1, PTK, CHP, LBOP, ACB, WWT1, 2, WWT3, IRPC POLYOL	2014
CSR-DIW Award	PP, Ban Khai Water Filtration Plant,	2015
CSR-DIW Continuous Award	PS, ADU2, ETP, PRP, ACB, LOBE, PW, WWT1, 2, Polyol	



- **Carbon Footprint for Organization 2015 Award:**

On June 17 this year, IRPC's marine terminals have earned plaques and certificates for carbon footprint under the best-practice project for green supply chain of export industries, a first for Thailand. IRPC took this opportunity to take part in the Industrial Supply Chain Logistics Conference 2015 to share its experience, drive motivation, and establish awareness of environmental operation beneficial to business and export.

- **Participation of exhibition booth at the 2015 "Roi Duang Jai, Ruam Jai, Lod Loke Ron" (United Front against Global Warming) fair:**

On September 24 this year, IRPC won a certificate for carbon footprint, hosted by the Thailand Greenhouse Gas Management Organization (Public Organization) to honor assorted business operators and sectors that have exemplified management best practices and activities to lower their domestic GHE emission.

- **Thailand Quality Prize 2015:** On April 3 this year, the QCC group under the Petrochemical and Refining Operation Group took six awards (four golden and two silver) sponsored by the Technology Promotion Association (Thailand-Japan).

- **Awards presented by the Department of Labour Protection and Welfare:**

- National Outstanding Workplace for Safety, Health, and Environment 2015: BTX Plant.
- National Outstanding Workplace for Safety, Health, and Environment 2015: Ayutthaya, Phra Pradaeng, Mae Klong, Chumphon Oil Depots.
- National Outstanding Workplace Committee on Safety, Health, and Environment 2015: Ayutthaya Oil Depot.

- **Awards under the Zero Accident Campaign 2015:** Ayutthaya, Chomphon, Phra Padaeng, and Mae Klong Oil Depots.



IRPC Port accepting the Carbon Footprint for Organization Award for 2015



IRPC joining the "Cooperation to Reduce Global Warming 2015" event to encourage reduction of global warming, organized by the Ministry of Natural Resources and Environment



Accepting the Thailand Quality Prize 2015



Accepting a National Outstanding Workplace for Safety, Occupational Health, and Environmental Management Award for 2015



Accepting an award in the Zero Accident Campaign for 2015

CORPORATE SOCIAL RESPONSIBILITY (CSR)



President and children from "From Bench to community Project"

IRPC, in conducting its business, address to corporate governance in parallel with social and environmental responsibilities. It keeps a balance between economic, social, and environmental consideration to grow the business with sustainability. All groups of stakeholders are recognized under the concept of "Care, Share, and Respect".

The Board set directions and policies concerning social responsibilities, while having Corporate Social Responsibility (CSR) strategic campaigns included in IRPC's five-year strategy. An emphasis is placed on value co-creation between IRPC and stakeholders, which is respected as guidelines for the management and staff as well as subsidiaries in doing their CSR work. The guidelines can be summarized as follows:

1. Basing business conduct on corporate governance with a focus on integrity, fairness, transparency, and accountability, taking into account the benefit for stakeholders as well as fair treatment for all stakeholders
2. Conducting the business with fairness, avoiding any action that may trigger conflicts of interest, while promoting free trade without infringement on intellectual property or copyright. IRPC promotes anti-corruption and anti-graft by establishing an efficient whistleblowing process together with anti-corruption risk assessment, under which risks from doing CSR projects are included.
3. Respecting the internationally accepted human rights principle, the foundation for human resource development as well as treatment for customers and business partners
4. Taking responsibilities for consumers through control, development, and improvement of safety standards of products and services. IRPC provides accurate and sufficient information for consumers. However, it keeps consumers' data confidential, except with prior permission from the consumer to disclose such information.
5. Engaging in social and community development. Examinations, corrections, and improvements are encouraged to prevent the business or projects from producing negative impacts, directly or indirectly, on communities and society. Support is also given to projects or activities intended for the benefit of society or the environment by making use of skills, knowledge, and resources within the organization.

6. Taking care of the environment through appropriate environmental management with regular monitoring and assessment. Promotion is given to efficient use of resources with standard energy-saving method, reuse of resources, development of products and services without environmental impacts but are safe for use. Emergency response is prepared for dealing with potential environmental problems.

7. Doing an innovative business that can not only provide benefit, while raising competitiveness and value for IRPC, but can also benefit target groups, such as innovation in plastic products with anti-bacterial agents, which are good for consumers' hygiene

8. Making social and environmental reports under internationally accepted formats, and disclosing information regarding society and the environment to all stakeholders. IRPC assigns leaders of all business groups to give cooperation and encourage staff to drive this policy to success.

CSR work during 2015, carried out according to SETs Guidelines for Social Responsibility and Guidelines for CSR Report, is highlighted below:

1. Good Corporate Governance

IRPC strictly and continuously follows the corporate governance principle, as detailed on pages 67-93.

2. Fair Business Conduct

IRPC has its corporate governance and business ethics manual presented on the company's website. The manual contents are reviewed yearly. In 2015, the latest edition of the manual was introduced and given to all

concerned for behavioral reference, as detailed on pages 68.

3. Anti-Corruption

IRPC was admitted to the Private Sector Collective Action Coalition against Corruption (CAC) on April 4, 2014. The Board set a policy and measures on anti-corruption for implementation company-wide and in subsidiaries. Information about anti-corruption is regularly circulated among staff through IRPC's communication channels, as detailed on pages 69.

4. Respect for Human Rights

IRPC respects and promotes the human rights principle announced by the UN Global Compact (UNGC). The principle does not support discrimination, either similarity or difference, against race, religion, gender, age, education, and status, but honors the individual's right and protects personal information. Relevant detail in this regard is included in the Corporate Governance Manual under "Business Ethics". IRPC allocates budget to support UNGC's work on human rights every year. In 2015, it joined the pledge to promote Children's Rights and Business Principles (CRBP) in an event organized under the theme "Children Sustainability Forum: Business for the Future" by Thaipat Institute and UNICEF at the Stock Exchange of Thailand building. Also, the children's right Project was added as part of 2016 strategic planning.

CRBP was jointly developed by UNICEF, UN Global Compact, and Save the Children organization. Ten principles were proposed to the business sector so that children's rights are respected and promoted. The



IRPC vowed to promote Children's Rights and Business Principles (CRBP) at the "Sustainability in Children's Context: Business for Tomorrow" event.

proposal covers workplace, marketplace, communities and the environment. Children's rights are requested to be clearly included in the business sector's corporate governance policy and organization strategy as part of the core business, not just as occasional CSR events or projects.

Mr. Anand Panyarachun, UNICEF's Goodwill Ambassador, asked the various businesses joining the pledge to recognize that all organizations can take part in protecting children through their social responsibility actions to achieve sustainable development for children and for the business.

IRPC promotes children's rights without discrimination against those disabled and underprivileged so as to raise their quality of life and quality of education. Projects in this area of work include prostheses for Karen tribal children, scholarships for Muslim children in southern border provinces, and scholarships for children in tsunami-affected families.

In addition, IRPC has a policy to hire university students to work on various projects. For example, the Four U For U Club had students help run the "1 for 9" project, take pictures and movies in the project to restore Wat Krua Ta Phet Historical Site. Students from IRPC Technology College are also included in running IRPC's Repair, Rebuild, and Refill Happiness Volunteer Force Project.

5. Fair Labor Treatment

IRPC treats its workers fairly under the UN Global Compact. It provides healthy and hygienic workplaces, while regularly raising workers' competence and skills using the Individual Development Plan (IDP). The Performance Management System ensures fair, efficient performance assessment. Competitive staff welfare is also offered with welfare items even improved this year, such as higher OPD and dental allowances for staff parents. IRPC promotes staff's work-life balance and treats staff petitions or requests, raised through proper channels monitored by Internal Audit, fairly and transparently. Dialogues between IRPC and staff as well as staff representatives are encouraged. It respects staff's right to express their views without intervention in meetings chaired by the President. Information and opinions can be shared on various communication channels, some of which are provided for receiving staff opinions, such as the two-way communication Teammate Blog on the Intranet.



"President Town hall", in which staff were encouraged to exchange their views with the President.

6. Responsibility for Consumers

R&D on products for better health

IRPC conducts the refining and petrochemical business, with production of plastic pellets (polymers) as part of the business. All IRPC products must meet the specifications defined by customers while complying with laws and regulations concerning the environment. However, IRPC has a policy that aims to ensure that end-customers, must receive products of higher quality resulting from its continuous R&D and satisfied customer's need. One of the products from IRPC's R&D is POLIMAXX BANBAX, a special type of plastic with anti-bacterial properties produced at a nano-chemical factory that IRPC specifically invested in.

Besides, there are IRPC's Eco-friendly POLIMAXX Green ABS which help the rubber planters from rubber price falling, and POLIMAXX Wood Plastic Composite, an innovative product to promote cost-effective use of resources. These products are tested and passed European standard.

Efficient management of distribution channels

IRPC strives to boost the efficiency of its distribution channels, taking into account diverse customers' behavior and demand. It aims for customers' maximum satisfaction and pays attention to the best response to the needs of all customers. Information technology has been embraced for management of the database vital to each business unit to ensure efficient responses to customers' demand. IRPC Relationship Information System (IRIS) is an example IT system used for customer relationship management in the petroleum business. Business relationship with customers serves



Lam Sai Yong Model, a pilot project to fight drought

as a database for systematic analysis of customers' needs, requests, or complaints. Another example is CRM iAsset, launched this year for the management of customer relations in the asset management business. Customers' information is compiled for use with agencies concerned in managing complaints.

7. Social and Community Development

IRPC set its criteria for CSR project selection by analyzing the severity of possible impacts on society and itself, as well as the length of time that such impact from a particular project can last. This is to ensure optimal benefit from the budget as well as benefit for society, IRPC, and stakeholders, while the organization's image is enhanced.

Social and community development projects

Projects in this category have been carried out since IRPC's establishment. Below is the summary of projects executed during 2015.

Lam Sai Yong Model

The Lam Sai Yong Model Project was initiated in 2014 and continued into 2015. The project, initially named Building a Canal - Building Humans, was aimed to develop water sources and raise the quality of life of Nong Yang villagers in Sai Yong sub-district, Nang Rong district, Buri Ram province. The skills and experience that IPRC staff have gained in their water management around IPRC Industrial Zone were

applied to the project to provide the community with a water reservoir for making standard tap water. The water can be used for general consumption and for watering home-grown vegetables. This year's result showed that over 440 Nong Yang households, who had been affected by drought, benefited from the project. They had sufficient water through the dry season and better hygiene. They could make an average income of Baht 30,000 per month per household, an increase from that of 2014. The tangible results of the project were so impressive that IRPC decided to have it displayed on its 2016 calendar and other public relations media under the name "Lam Sai Yong Model Project". It is expected that the project would be a pilot model for drought relief. Other organizations will be invited to run such a project in arid areas around the country through the promotional slogan of "Just one organization and one water reservoir, national problem can be eased".

In 2015, IRPC had undertaken to promote children's rights which provide the opportunity for children with disability to improve the quality of life and education without discrimination, as seen in the prosthesis project for Karen children, and the scholarship for Muslim Children and Tsunami victims.

Development of public service structures

A number of projects have been implemented in Rayong province in true response to the demand of communities around IRPC Industrial Zone, providing

benefit to communities. Examples are sports ground at Moo 2, Choeng Noen sub-district; renovation of Nong Ta Pho multi-purpose pavilion at Moo 1, Choeng Noen sub-district; renovation of the bus shelter in front of Taphong Tambon Administrative Organization Office; construction of the office of village head club, Ban Laeng sub-district; renovation of Wat Chula Muni sermon hall; and renovation of the area in front of the main hall of Wat Noen Phutsa.

Employment for hawser hands

This supports the local economy through employment for hawser hands at IRPC Pier. Started in 2013, it has provided over 30 jobs for villagers, who are hired for handling hawsers in parallel with fishery. As much as 3.2 million baht in revenue per year was generated for community people, which brought about the forming of professional groups with strong ties and a strong community.

Promotion of community enterprises

IRPC provided support for 100 professional groups with 1,300 members in total. It brought in instructors to teach them to make community products more responsive to market demand in addition to arranging study visits to various places. The knowledge obtained can be applied to development of community products, product distribution, and packaging. Three pilot professional groups were, as a result, certified with various standards, such as the group specializing in growing chemical-free vegetables receiving a Community Product Standards Award, the farming women's group of Pluak Ket being selected as an Outstanding Community Enterprise, and the farming women's group of Yai Da receiving a Food and Drugs Administration label.

Hydroponic vegetables for community

In 2015, five schools, namely Wat Pluak Ket School, Ban Nok Jok School, Taksin Secondary School, Wat Pa Pradu School, and Rayong Wittayakom Paknam School were selected for receiving continuous support to prepare them to stand on their own feet.

Drinking water for community

IRPC produces drinking water for distribution to communities in the areas of Rayong, Thapong, Choeng Noen, Ban Laeng, and Na Ta Khwan municipalities. In 2015, a total of 244,656 units of drinking water in cups and 15,216 units in bottles were distributed.

Development of water sources to raise villagers' quality of life through the **Lam Sai Yong Model benefits **over 440 households**. Villagers now have sufficient water supply throughout the dry season and earns **30,000 baht** per household higher than **last year on average**.**

Volunteer spirit

Various forms of IRPC volunteer spirit projects were organized at places around IRPC Industrial Zone. Some examples are the Big Cleaning activity, making sand bags for flood relief, Wat Ban Don School development, youth camp against drugs at a demonstration school, and repainting of school building at Nurul Islam Masjid Nursery. In 2015, a total of 1,564 community people and 1,282 IRPC staff participated in various volunteer spirit projects, making a total of 6,083 volunteer hours.

Communication Projects

Community's public announcement system

IRPC constructed public announcement system (towers) at seven locations in three sub-districts near the factory, namely Taphong, Ban Laeng, and Choeng Noen. The system facilitates circulation of information, which helps relieve villagers' concerns, while giving information about occupational health and safety and emergency response measures. It also serves as a communication channel to alert people in an emergency. A total of 18 communities with 13,800 villagers benefit from the system.

Public Rights to Know

IRPC organized training for community people in Rayong province, particularly the Public Health Volunteer (VHV) group, to equip them with correct information. Training courses provided include gas emission from the flare stack in an emergency for safety reasons, UVH and CHPII projects concerning safety and occupational health, and chemicals in everyday life. A total of five training sessions were organized for 1,074 participants in 2015.



HRH Princess Maha Chakri Sirindhorn graciously inaugurated KVIS and VISTEC.

Fieldwork Coordination Center

IRPC's Fieldwork Coordination Center has been established since March 1, 2011, to monitor operating effects on communities. A workforce is sent out to observe effects from plants on communities, using enquiries into concerns of people residing in the communities with possible impacts from the construction of new projects. The center also takes charge of monitoring undesirable happenings. In 2015, the center joined UHV and CPHII projects in monitoring and providing regular information to villagers throughout the construction and trial run period.

Open House

IRPC arranges an annual Open House session, welcoming stakeholders to learn about its operations and environmental management. In 2015, it held altogether 15 sessions to give out information about its UHV and CPHII projects to 580 villagers from Choeng Noen, Ban Laeng, Taphong, and Na Ta Khwan villages, as well as teachers and students from surrounding schools.

Educational Support Projects

KVIS and VISTEC

IRPC is part of PTT Group founders of two science academies intended for developing the country's young talents in science and technology. Kamnoetvidya Science Academy (KVIS), the royal-bestowed name by HRH Prince Maha Chakri Sirindhorn carrying the

meaning of 'source of scientific knowledge', is an upper-secondary school (Mathayom 4-6 classes) intended to groom students excelling in science and mathematics. Vidyasirimedhi Institute of Science and Technology (VISTEC), also a royal-bestowed name, meaning 'an institute for scientific geniuses', provides higher education, at both graduate and postgraduate levels. These two institutes were designed to raise talented students to their utmost potential. VISTEC is targeted as a 'leading research university', creating excellent scientists and researchers with responsibilities for their professions. The institute is tasked with promoting science and technology research to raise Thailand's science competitiveness. KVIS and VISTEC are located on Highway 344, at Km. 66, in Pa Yup Nai sub-district, Wang Chan district, Rayong province.

1 for 9 Project

IRPC has run the "1 for 9 Project" with the Office for National Education Standards and Quality Assessment (Public Organization) (ONEQSA) since 2014, considered an innovation in academic development, according to IRPC's intention to conduct the business with social responsibility. The project has three objectives, namely development of academic quality and standards, development of the educational system quality assurance by giving assistance to nine educational institutes in moving their quality development cycle, and application of IRPC's competence and equipment into institute development. Companies and schools participating

in the project have jointly made development in four aspects, namely academic essence knowledge, ethics promotion, students' safety and occupational health, and schools' role in community and environmental development. The latter aspect is considered part of the government's project on "reducing classroom time, increasing study time".

- IPRC joins the "Four U For You Club", comprising volunteer students from Chulalongkorn University, Thammasat University, Mahidol University, and Silpakorn University, in holding an academic camp to promote mathematics, science, and English-learning among students of Prathom (primary) 4-6 classes from three schools, namely Thepsenanusorn School, Ritthikrai Suksa School, and Kalayawit School. About 900 students took part in the activity. The "Four U For You Club" also provided special tuition as part of the preparation for the national O-Net examination for 341 students of Mathayom (secondary) 6 level from four schools, namely the above-mentioned three schools and Beacon Yamsaard Ladprao School, with a focus on mathematics, science, and English with encouragement for students to develop their thinking process and analysis of questions.
- IPRC's Repair, Rebuild, and Refill Happiness Volunteer Corps, comprising IPRC staff with volunteer spirit as well as 100 teachers and students from IPRC Technology College, jointly check electrical appliances, electronic devices, computer sets, as well as tables and chairs, and playground equipment and repair them to ensure functional conditions. The project was carried out at four schools, namely Ban Nong Thong Lim School and Ban Nong Yang School in Lam Sai Yong sub-district, Nang Rong district, Buri Ram province, as well as Ban Klong Daeng Border Patrol Police School and Ban Hang Maew Border Patrol Police School in Chanthaburi province.

- IPRC promotes the role of schools in community and environmental development. This year, it took teachers in the "1 for 9 Project" and 50 ONEQSA staff on a study visit to IPRC operations. The project also covered arranging a visit to community enterprises with sufficiency economy and the organic farming group of Choeng Noen sub-district, Muang district, Rayong province. Visitors had a good chance to observe home-grown vegetable-planting, organic fertilizer-making, and effective micro-organism liquid making. The activities attracted teachers' interest since it was applicable for the school's social and environmental development projects.

IPRC Community Network Learning Center

This project strengthens ties with communities and the general public. Such activities as library service and youth activities on school holiday are among the project offerings. Different activities are held each month, including English teaching, cooking, quilting, taekwondo training by the Rayong Taekwondo Club, and ballroom dancing. The project started in 2010 at Choeng Noen sub-district, Rayong province. A total of 9,479 people took part in the various activities offered during 2015.

Scholarships

IPRC has carried out a scholarship program for needy students from primary to university levels since 2008. The project has been well cooperated by leaders of 89 Rayong communities in selecting students in their respective communities for the scholarships. The scholarships are divided into three levels, namely primary, secondary/vocational, and undergraduate. In Muang district, the scholarship presentation program was held on October 28, 2015, for 238 scholarships worth Baht 1,698,000 in total, and in Ban Khai district on November 22, 2015, for 74 scholarships worth Baht 528,000 in total.

IPRC joined the
"1 for 9 Project"
 by applying staff's competence
 to the development of the education
 quality assurance system, providing
 benefit to **nine educational
 institutes** in their development
 of the quality cycle.



Cultural promotion projects

Renovation of Wat Khrua Ta Phet historical site

Around 2011, ruins of an ancient temple were discovered on the compounds of IPRC's Ayutthaya Oil Depot. IPRC therefore liaised with Fine Arts Office 3 of Phra Nakhon Si Ayutthaya on the renovation of the ruined temple. The renovation work, with IPRC's sponsorship, was divided into two phases as detailed below:

Phase 1: archeological work

Fine Arts Office 3 carried out a detailed study to reach for clear and correct historical and archeological evidence. Studies were made into soil layer overlaying and the age of the ancient structure to search for evidence of the architectural properties of structures of different ages, as well as studies into the settlement of communities before the temple was built.

Phase 2: Landscape work

The restoration work of Wat Khrua Ta Phet ruins was based on archeological site conservation principles to ensure that the original shape, materials, and construction technique are preserved. The work is done in phases, namely restoration of the sanctuary, restoration of minor pagodas, and restoration of the walls surrounding the main pagoda.

It was discovered that Wat Khrua Ta Phet is over 300 years old, but the person who established the place could not be traced. The temple is situated in Pho Ain sub-district, Tha Rua district, on the east bank of the Pa Sak River. Historically, the temple was called by

many names by the locals. Some called it Wat Hua Phruan, while some called it Wat Moo after the old name of the community where people from Chanthaburi migrated to. Ancient locals made iron knives and gold items. It was a well-known community by the name of "Aranyik Village". It has been a well-developed community ever since through the early Rattanakosin era. As for Wat Khrua Ta Phet, it is the name that appeared on the title deed of the National Office of Buddhism and has been widely called until today.

To mark the completion of the restoration work in 2015, IPRC held a ceremony to pay homage to Wat Khrua Ta Phet Historical Site and to demonstrate the strong determination to conserve historical sites related to Buddhism which bear national significance. The ceremony was also auspicious for IPRC and surrounding communities as well as the general public. In 2016, IPRC has a plan to open a historical site restoration learning center, which will benefit the young generation and the interested public.

8. Environmental Management

IPRC has plans on environmental management at each production unit (CSR in Process) to minimize impacts on stakeholders. Key projects in this area of work implemented around IPRC Industrial Zone in Rayong province are:



Wat Khrua Ta Phet historical

IRPC President accepted a plaque from HRH Princess Maha Chakri Sirindhorn at the Protheses Foundation of HRH the Princess Mother in Chiang Mai province.



Expansion of green areas – community and industry standing side by side

In collaboration with Taphong Tambon Administrative Organization, IPRC drew a map showing green areas and community areas with free space according to the Office of Natural Resources and Environmental Policy and Planning's plan to increase green areas to ensure harmonious existence between the community and the industry. The project lasts from December 2015 until September 2016. In the initial stage, trees and soil in the 20 pilot projects will be restored, three of which are under IPRC responsibilities, namely Ratchamankhalaphisek Park, an area on Sukhumvit 3 Road in front of IPRC's Office, and an area to the south of IPRC. As many as 598 trees were planted in these areas. According to the 2015 performance summary, the working group on harmonious existence between the community and the industry reported that Thapong sub-district was selected as a pilot area and 49 plots of land of a combined area of 2,339 rai were

found to be suitable for the project. In the next stage, IPRC will join Taphong sub-district in doing community planning and carrying out joint development of green areas in Moo 4 of Taphong sub-district.

Protection Strip

The completion of the first phase in 2014, a total of 34,680 trees were planted in phase 2 during 2015 for a stretch of 2.29 kilometers. As a result of the efforts in the first and second phases, 276,340 trees were planted on 371 rai or a connected stretch of 13.14 kilometers, capable of sequestering 3,008 tons of carbon dioxide per year. IPRC will carry on the project to complete the planned 18.09 kilometers, or an entire area of 424 rai, by 2016. Another reforestation effort on 122 rai of land is also planned, which will contribute to more carbon dioxide sequestration for the community.

9. Innovation and Promotion of CSR Innovation From Bench to Community

IPRC has a project to donate POLIMAXX BANBAX polymers, made from PP (Polypropylene) polymers blended with an anti-bacterial agent, to the Protheses Foundation of HRH the Princess Mother to support the manufacturing of prostheses to raise the quality of life of the disabled while creating a shared value (CSV). IPRC, having carried out this project since 2011, donated 25 tons of polymers to the foundation in 2015. Moreover, IPRC Repair, Rebuild, and Refill Happiness Volunteer Crops, whose engineers and other staff had knowledge of electricity and electronics, was sent out to join the foundation in prosthesis-making during November 27 – December 2 this year at Um Phang Hospital, Um Phang district, Tak province. A total of



Help restoring historical site, Wat Khrua Ta Phet



Activities in the IRPC Cubic Academy, class 1 and class 2

151 patients, most of them Karens, were fitted with 232 prosthetic legs of both the normal type and the type made for doing agricultural work. Since 2011, a total 6,694 prosthetic legs have been assembled for 5,040 patients from 90 tons of polymers.

The project was given one of the Asia Responsible Entrepreneurship Awards (AREA Awards) and was honored as a case study at the 10th International Conference on Corporate Social Responsibility, organized by Institute of Directors of India.

IRPC Cubic Academy

Initiated in 2015, IRPC Cubic Academy is a new project intended for creating a learning organization and learning society with quality and ethical personnel. IRPC Cubic Academy developed six training courses with an emphasis on spurring business growth with sustainability. The training covers corporate governance, social contribution, communication, environmental conservation, promotion of good corporate image and social trust. The project has been conducted continuously and has

sharing knowledge other organizations. The students consist of employee and interested participants. IRPC provided training courses with no fee and publicized via media and internal communication.

The training is structured in the form of classroom lectures, exchange of opinions, workshops, and social activities. Course facilitators are knowledgeable people from within and outside IRPC. The four-month course, regularly held every Thursday during 13:00 -17:00 hours at the IRPC Office, is opened for 100 participants. The first batch, trained during May 7-August 2, ran a social project called "Planting Vegetables on a Dream Plot to Share" with an intention to put the sufficiency philosophy into practice in an educational institute participating in the "1 for 9 Project". The project brought pride to students who have learned from real practice.

The second batch, trained during September 3-December 25, 2015, ran a project called "Cubic, a Happy Booth" as part of the event organized to pay homage to Wat Khrua Ta Phet historical site at IRPC Oil Depot

on December 25, 2015. Proceeds from the activity went to the procurement of sanitaryware for donation to Um Phang Hospital for construction of toilets for resident Karen tribal people to raise public hygiene standards, which can help reduce the likelihood of a cholera outbreak in the area.

In 2016, IRPC Cubic Academy will still be carried on and even expanded with Advanced Cubic Academy and Cubic Academy Awards projects.

Community Health Project

IRPC arranged for making the database of communities located in windward areas by using a mathematical modeling of air pollution dispersion around IRPC Industrial Zone. The database will be useful for devising plans and measures to prevent, correct, and mitigate impacts from the operations. The attempt is intended for boosting confidence in IRPC's operations among 10,398 households (38,256 villagers). In the first year, a random survey will be conducted, covering 900 samples for health check to see if any sign of illness shows. Health checks will be further carried out on these people for another two years to confirm the results.

In addition, IRPC opened a Community Sharing clinic on the compounds of IRPC's Community Network Learning Center, providing free basic medical service to community people living around the zone. The clinic clocked its fifth year of operation in 2015, serving 5,179 patients during the year with 687 IRPC Card-a health card-issued, making the number of IRPC Cards now 7,967. The card can be used for receiving free medical treatment at the clinic and for receiving a fuel discount of Baht 0.50 per liter at IRPC service stations. Records of community people's health will be sent to Rayong Hospital to complement the public

Villagers' health records obtained from the Community Sharing Project are sent to Rayong Hospital to complement the latter's health database, integrated with the public sector's public hygiene network.



health database. This a social contribution project that is systematic and can be integrated into the government's public health network.

For those who are not convenient to visit this clinic, IRPC in collaboration with Queen Sirikit Hospital of the Naval Medical Department arranged a mobile unit to provide general medical and dental services, also free of charge, once a month. In 2015, the mobile unit served 1,288 patients in three sub-districts and two municipalities. Most of the patients are reportedly found with illnesses concerning muscles and bones, respiratory diseases, and gastroenteritis.

10. Sustainability Report

IRPC makes its Annual Report for shareholders and bases its Sustainability Report on the G4 Sustainability Reporting Guidelines which submitted together with the annual report to the shareholders in order to provide the company's operating performance to shareholders and investors. A report on Communication on Progress was also made for submission to UN Global Impact at the advanced level. IRPC also has a plan to make an Integrated CSR Report for 2015-2016. Details will in due time be uploaded to www.irpc.co.th.



Medical Mobile unit, activity under Community Health Project

INVESTMENT IN SOCIAL ENTERPRISES



Social Enterprise

IRPC Technological College (IRPCT) is a vocational institute wholly owned by IRPC, established in response to Rayong people's call for an institute where skilled workers are purposely produced for the nation's industrial sector. This is because Rayong is home to various industrial estates, where a large number of skilled workers are in high demand. The college was opened on June 1, 1995.

Established by the concept of 'college for the community', IRPCT has a 'school-factory' curriculum especially designed with the cooperation between the college and IRPC. Students are admitted for an internship at various IRPC and other Group companies' sites to familiarize themselves with modern tools and equipment. Graduates are therefore well trained in both theory and practice, thus fit for the labor markets in the country's Eastern and other regions as well as in neighboring AEC markets.

In addition to developing an efficient curriculum and learning method, IRPC promotes volunteer spirit among students and encourages them to run social activities according to their occupational interests, such

as Repair, Rebuild, and Refill Happiness Volunteer Corps and production of electricity leakage detection duck dolls during the Great Floods of 2011.

The government, in 2015, announced a move to drive the country by the "civil state" policy, which focuses on integration of the public, private, and civil sectors. These three sectors should support each other to reduce inequality, while raising the quality of human resources and national competitiveness, the



national economic target. Among the twelve sets of committee established to translate the policy into practice, one is that for upgrading the quality of vocational education. Sitting on the committee are representatives from 13 organizations in the private sector, IPRC included. IPRC's President was the assigned leader of a subcommittee titled "Quick Win Project: Database of Demand and Supply".

The direction of vocational education under the civil state policy is in line with that of IPRCT, which already has a plan to become a leading vocational college in Thailand by 2020. Below is the detail of the IPRCT's direction:

1. The college plans to launch two new disciplines and upgrade student quality using the Excellence Model in response to the demand by PTT Group's petrochemical and energy sectors and by leading industries. These two new disciplines, to start in 2016, are petrochemical and energy technique studies. The college aims to produce premium graduates using the Advanced Competency in Engineering (ACE) program for industrial chemistry (Chem ACE), petrochemical (Petro ACE), and energy technology (Energy ACE) studies. This is part of the student quality development under the joint investment and administration with IPRC.

2. The college plans to upgrade the quality of disciplines by turning into a Mini English Program or a full-fledged English Program. Academic cooperation will be formed with overseas institutes, such as an exchange program for students and staff as well knowledge-sharing among ASEAN countries, such as Myanmar, Cambodia, Laos, Vietnam, and the Philippines. This is considered part of preparedness for AEC integration and for attaining

From the core purpose behind founding of IPRC Technological College (IRPCT) which aimed at meeting the needs of Rayong Community, IPRC Public Company Limited has supported IRPCT to produce skillful students to fulfill Thailand's requirements in terms of potential labor force that would support local industry and the AEC. Additionally, it is our pride that IPRC Technological College and IPRC Public Company Limited will play a part in the State Public where private entities join the government to the increase the competitiveness of the country.



The Sub-working group meeting: Quick Win Project



IRPC Students (Age under 19 years) represented Thailand in a competition of 2015 WRO "World Robot Olympic" in designing, and writing program for robotic control "LEGO Education Mindstorms" at Doha, Qatar, and was ranked 7th in the world.



FINANCIAL STATEMENT

- Report of Board of Directors's
Responsibility for Financial Reporting
- Auditor's Report and Financial Statement
- Financial Statement

Appendix

- Compliance with Corporate Governance
- Compliance with Corporate
Social Responsibilities
- Abbreviations and Technical Terms



REPORT OF BOARD OF DIRECTORS'S RESPONSIBILITY FOR FINANCIAL REPORTING

Dear Shareholders,

The financial statements of IRPC Public Company Limited and its subsidiaries for the year ended on December 31, 2015, were prepared under the financial reporting standard enforced by the Federation of Accounting Professions under the Accounting Act, B.E. 2543 (2000), and the requirements of the Securities and Exchange Act, B.E. 2535 (1992) on the preparation and presentation of financial reports.

The Board is responsible for IRPC's and subsidiaries' financial reports, designed to promote confidence that the financial standing, performance outcomes, and cashflow statements are essentially correct. To this end, it instituted a sound internal control system, with accurate, complete, and adequate journal entries to maintain assets, prevent fraud, and significantly abnormal transactions. In preparing these financial reports, IRPC has adopted a suitable and consistently practiced accounting policy in line with its financial report standard. Essential data have been adequately disclosed in the notes to the financial statements. The external auditor has scrutinized and expressed its views on the financial statements of IRPC Public Company Limited and its subsidiaries in its report shown in this annual report.



(Mr. Tevin Vongvanich)

Chairman
IRPC Public Company Limited



(Mr. Sukrit Surabotsopon)

President
IRPC Public Company Limited

AUDITOR'S REPORT

To the shareholders and the board of directors of IRPC Public Company Limited

I have audited the accompanying consolidated and company financial statements of IRPC Public Company Limited and its subsidiaries and of IRPC Public Company Limited, which comprise the consolidated and company statements of financial position as at 31 December 2015, and the related consolidated and company income statements, statements of comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and a summary of significant accounting policies and other notes.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Thai Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with Thai Standards on Auditing. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Opinion

In my opinion, the consolidated and company financial statements referred to above present fairly, in all material respects, the consolidated and company financial position of IRPC Public Company Limited and its subsidiaries and of IRPC Public Company Limited as at 31 December 2015, and its consolidated and company results of operations and its cash flows for the year then ended in accordance with Thai Financial Reporting Standards.



Vichien Khingmontri
Certified Public Accountant (Thailand) No. 3977
PricewaterhouseCoopers ABAS Ltd.

Bangkok
9 February 2016

IRPC Public Company Limited
Statement of Financial Position
As at 31 December 2015

		Consolidated		Company	
		2015	2014	2015	2014
Notes		Baht	Baht	Baht	Baht
Assets					
Current assets					
Cash and cash equivalents	7	3,575,852,749	2,008,634,173	3,244,325,766	1,693,329,193
Trade accounts receivable - net	8	8,942,402,960	11,192,220,002	9,726,889,056	11,883,941,714
Amounts due from related parties - net	33	21,098,133	1,029,720,603	42,694,537	1,044,969,021
Short-term loans and interest receivables to related parties - net	33	-	-	3,825,155,093	650,874,034
Inventories - net	9	21,306,087,346	25,344,146,875	19,574,099,924	23,179,370,996
Other receivables	10	69,434,719	135,999,168	65,415,480	120,830,402
Refundable value added tax		953,231,502	3,077,804,594	915,705,770	2,960,358,056
Prepaid excise tax		118,439,231	144,366,282	118,439,231	144,366,282
Other current assets		997,773,811	1,209,010,571	890,276,060	1,115,047,741
Total current assets		35,984,320,451	44,141,902,268	38,403,000,917	42,793,087,439
Non-current assets					
Investments in subsidiaries - net	11	22,995,897	-	2,503,917,514	4,358,265,314
Interest in joint venture	11	3,073,160	-	-	-
Investments in associates - net	11	6,116,672,829	6,144,394,936	6,474,251,713	6,130,770,151
Other long-term investments - net	12	1,124,638,318	731,664,318	1,124,638,320	731,664,320
Loans and interest receivables to related parties - net	33	-	3,309,971,902	3,492,224,332	6,587,607,392
Transactions with the former company's management and entities relating to the former management - net	34	-	-	-	-
Investment properties - net	13	1,190,448,919	1,248,033,864	1,150,082,737	1,152,522,363
Property, plant and equipment - net	14	114,806,893,969	100,871,789,961	106,881,965,377	92,719,298,473
Intangible assets - net	15	1,121,939,839	1,331,028,979	1,115,231,817	1,328,916,310
Deferred tax assets - net	16	2,574,170,140	4,930,772,629	2,246,568,446	4,607,859,762
Other non-current assets - net	17	228,521,028	88,830,291	226,280,799	85,079,211
Total non-current assets		127,189,354,099	118,656,486,880	125,215,161,055	117,701,983,296
Total assets		163,173,674,550	162,798,389,148	163,618,161,972	160,495,070,735

The notes to the consolidated and company financial statements from pages 235 to 298 are an integral part of these financial statements.

IRPC Public Company Limited
Statement of Financial Position
As at 31 December 2015

		Consolidated		Company	
		2015	2014	2015	2014
Notes		Baht	Baht	Baht	Baht
Liabilities and shareholders' equity					
Current liabilities					
Short-term loans from financial institutions	18	203,941,150	8,846,585,173	133,268,729	8,792,329,452
Trade accounts payable	19	25,741,188,454	25,815,278,568	26,819,768,015	26,381,022,327
Amounts due to related parties	33	183,969,272	155,102,941	190,840,796	161,414,527
Loans and interest payables					
from related parties	33	22,637,823	-	22,637,823	168,977,723
Current portion of long-term loans and debenture					
due within one year	18	4,265,076,000	7,701,132,000	4,265,076,000	7,701,132,000
Other payables		2,525,029,725	1,938,164,837	2,407,422,106	1,845,778,505
Interest payables		398,634,247	485,448,139	398,634,247	485,447,710
Accrued bonus expenses		1,794,919,180	846,576,879	1,640,955,553	780,538,350
Advance receipts for goods		522,621,356	375,377,235	456,987,076	253,047,264
Other current liabilities		551,944,448	665,479,625	455,043,841	505,536,758
Total current liabilities		36,209,961,655	46,829,145,397	36,790,634,186	47,075,224,616
Non-current liabilities					
Long-term borrowings and debenture - net	18	49,235,326,451	44,243,337,309	49,235,326,451	44,243,337,309
Loans and interest payables					
from related parties	33	-	2,254,892,788	-	2,254,892,788
Employee benefit obligations	20	1,850,436,976	1,567,088,025	1,725,194,864	1,452,770,837
Total non-current liabilities		51,085,763,427	48,065,318,122	50,960,521,315	47,951,000,934
Total liabilities		87,295,725,082	94,894,463,519	87,751,155,501	95,026,225,550

The notes to the consolidated and company financial statements from pages 235 to 298 are an integral part of these financial statements.

IRPC Public Company Limited
Statement of Financial Position
As at 31 December 2015

		Consolidated		Company	
		2015	2014	2015	2014
	Notes	Baht	Baht	Baht	Baht
Liabilities and shareholders' equity (continued)					
Shareholders' equity					
Share capital	21				
Authorised shares		20,475,000,000	20,475,000,000	20,475,000,000	20,475,000,000
(Ordinary shares 20,475 million shares of par Baht 1)					
Issued and paid-up shares		20,434,419,246	20,434,419,246	20,434,419,246	20,434,419,246
(Ordinary shares 20,434.42 million shares of par Baht 1)					
Premium on share capital	21	28,554,212,397	28,554,212,397	28,554,212,397	28,554,212,397
Retained earnings					
- Appropriated for legal reserve	22	2,047,500,000	2,047,500,000	2,047,500,000	2,047,500,000
- Unappropriated		24,908,698,002	17,252,352,664	24,862,177,048	14,778,394,962
<u>Less</u> Treasury stock - ordinary shares					
- own shares held by a subsidiary	23	(124,282,649)	(124,282,649)	-	-
Premium on treasury stock - ordinary shares					
- own shares held by a subsidiary		15,177,080	15,177,080	-	-
Other components of shareholders' equity		(31,302,220)	(345,681,420)	(31,302,220)	(345,681,420)
Total equity attributable to the parent company		75,804,421,856	67,833,697,318	75,867,006,471	65,468,845,185
Non-controlling interests	24	73,527,612	70,228,311	-	-
Total shareholders' equity		75,877,949,468	67,903,925,629	75,867,006,471	65,468,845,185
Total liabilities and shareholders' equity		163,173,674,550	162,798,389,148	163,618,161,972	160,495,070,735

The notes to the consolidated and company financial statements from pages 235 to 298 are an integral part of these financial statements.

IRPC Public Company Limited
Income Statement
For the year ended 31 December 2015

		Consolidated		Company	
		2015	2014	2015	2014
	Notes	Baht	Baht	Baht	Baht
Sales	32, 33	214,171,787,898	281,589,437,340	222,510,721,953	293,071,434,062
Cost of sales	33	<u>(197,913,497,719)</u>	<u>(287,930,221,470)</u>	<u>(206,826,818,238)</u>	<u>(299,989,690,382)</u>
Gross profit (loss)		16,258,290,179	(6,340,784,130)	15,683,903,715	(6,918,256,320)
Other income - net	25	4,347,570,983	5,806,190,276	7,072,397,310	6,156,490,409
Selling expenses	33	<u>(1,207,106,327)</u>	<u>(1,103,256,870)</u>	<u>(1,381,266,635)</u>	<u>(1,262,855,546)</u>
Administrative expenses	26, 33	<u>(4,965,190,028)</u>	<u>(4,341,133,106)</u>	<u>(4,733,089,786)</u>	<u>(4,146,419,259)</u>
Profit (loss) from operations		14,433,564,807	(5,978,983,830)	16,641,944,604	(6,171,040,716)
Finance costs	28	<u>(2,480,814,797)</u>	<u>(1,493,650,272)</u>	<u>(2,499,973,129)</u>	<u>(1,531,545,471)</u>
Share of loss of investments in associates and interest in joint venture	11	<u>(183,798,787)</u>	<u>(138,544,260)</u>	-	-
Profit (loss) before income tax		11,768,951,223	(7,611,178,362)	14,141,971,475	(7,702,586,187)
Income tax	29	<u>(2,345,841,265)</u>	<u>2,397,751,749</u>	<u>(2,310,847,792)</u>	<u>2,491,344,928</u>
Net profit (loss) for the year		<u>9,423,109,958</u>	<u>(5,213,426,613)</u>	<u>11,831,123,683</u>	<u>(5,211,241,259)</u>
Profit (loss) attributable to:					
Owners of the parent		9,401,762,643	(5,234,637,216)	11,831,123,683	(5,211,241,259)
Non-controlling interests		<u>21,347,315</u>	<u>21,210,603</u>	-	-
Net profit (loss) for the year		<u>9,423,109,958</u>	<u>(5,213,426,613)</u>	<u>11,831,123,683</u>	<u>(5,211,241,259)</u>
Earnings (losses) per share	30				
Basic earnings (losses) per share		<u>0.46</u>	<u>(0.26)</u>	<u>0.58</u>	<u>(0.26)</u>

The notes to the consolidated and company financial statements from pages 235 to 298 are an integral part of these financial statements.

IRPC Public Company Limited
Statement of Comprehensive Income
For the year ended 31 December 2015

	Consolidated		Company	
	2015	2014	2015	2014
	Baht	Baht	Baht	Baht
Net profit (loss) for the year	9,423,109,958	(5,213,426,613)	11,831,123,683	(5,211,241,259)
Other comprehensive income (loss):				
<i>Items that will be reclassified to profit or loss</i>				
- Gains (losses) on revaluation available-for-sale investments	392,974,000	(241,474,000)	392,974,000	(241,474,000)
- Income tax relating to revaluation available-for-sale investments	(78,594,800)	48,294,800	(78,594,800)	48,294,800
Total	314,379,200	(193,179,200)	314,379,200	(193,179,200)
<i>Items that will not be reclassified to profit or loss</i>				
- Losses on changes in actuarial assumptions	(140,756,377)	(194,724,628)	(140,756,377)	(188,463,965)
- Income tax relating to actuarial revaluation	28,151,275	38,854,381	28,151,275	37,692,793
Total	(112,605,102)	(155,870,247)	(112,605,102)	(150,771,172)
Other comprehensive income (loss) for the period, net of tax	201,774,098	(349,049,447)	201,774,098	(343,950,372)
Total comprehensive income (loss) for the year	9,624,884,056	(5,562,476,060)	12,032,897,781	(5,555,191,631)
Total comprehensive income (loss) attributable to:				
Owners of the parent	9,603,536,741	(5,583,686,663)	12,032,897,781	(5,555,191,631)
Non-controlling interests	21,347,315	21,210,603	-	-
	9,624,884,056	(5,562,476,060)	12,032,897,781	(5,555,191,631)

The notes to the consolidated and company financial statements from pages 235 to 298 are an integral part of these financial statements.

IRPC Public Company Limited
Statement of Changes in Shareholders' equity
For the year ended 31 December 2015

	Shareholders of the Parent										Consolidated
	Other components										
	of shareholders' equity										
	Other comprehensive										
	income										
Issued and paid-up share capital	Premium on share capital	Legal reserve	Retained earnings	Available-for-sale investments	Shares held by the subsidiaries	Premium on treasury stock	shareholders of the Parent	Non-controlling interests	shareholders' equity	Total	
Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	
Balance at 1 January 2014	20,434,419,246	28,554,212,397	2,047,500,000	24,683,897,749	(152,502,220)	(124,282,649)	15,177,080	75,458,421,603	68,174,466	75,526,596,069	
Dividends paid	-	-	-	(2,041,037,622)	-	-	-	(2,041,037,622)	(19,156,758)	(2,060,194,380)	
Net profit (loss) for the year	-	-	-	(5,234,637,216)	-	-	-	(5,234,637,216)	21,210,603	(5,213,426,613)	
Other comprehensive loss for the year	-	-	-	(155,870,247)	(193,179,200)	-	-	(349,049,447)	-	(349,049,447)	
Balance at 31 December 2014	20,434,419,246	28,554,212,397	2,047,500,000	17,252,352,664	(345,681,420)	(124,282,649)	15,177,080	67,833,697,318	70,228,311	67,903,925,629	
Balance at 1 January 2015	20,434,419,246	28,554,212,397	2,047,500,000	17,252,352,664	(345,681,420)	(124,282,649)	15,177,080	67,833,697,318	70,228,311	67,903,925,629	
Dividends paid	-	-	-	(1,632,812,203)	-	-	-	(1,632,812,203)	(18,048,014)	(1,650,860,217)	
Net profit for the year	-	-	-	9,401,762,643	-	-	-	9,401,762,643	21,347,315	9,423,109,958	
Other comprehensive income (loss) for the year	-	-	-	(112,605,102)	314,379,200	-	-	201,774,098	-	201,774,098	
Balance at 31 December 2015	20,434,419,246	28,554,212,397	2,047,500,000	24,908,698,002	(31,302,220)	(124,282,649)	15,177,080	75,804,421,856	73,527,612	75,877,949,468	

The notes to the consolidated and company financial statements from pages 235 to 298 are an integral part of these financial statements.

IRPC Public Company Limited
Statement of Changes in Shareholders' equity
For the year ended 31 December 2015

Company										
	Notes	Other components of shareholders' equity								
		Issued and paid-up share capital		Premium on share capital		Retained earnings		Other comprehensive income		
		Baht		Baht		Legal reserve	Unappropriated	Available-for-sale investments	Total shareholders' equity	
		Baht		Baht		Baht	Baht	Baht	Baht	
Balance at 1 January 2014		20,434,419,246		28,554,212,397		2,047,500,000		22,183,827,856		73,067,457,279
Dividends paid	31	-		-		-		(2,043,420,463)		(2,043,420,463)
Net loss for the year		-		-		-		(5,211,241,259)		(5,211,241,259)
Other comprehensive loss for the year		-		-		-		(150,771,172)		(343,950,372)
Balance at 31 December 2014		20,434,419,246		28,554,212,397		2,047,500,000		14,778,394,962		65,468,845,185
Balance at 1 January 2015		20,434,419,246		28,554,212,397		2,047,500,000		14,778,394,962		65,468,845,185
Dividends paid	31	-		-		-		(1,634,736,495)		(1,634,736,495)
Net profit for the year		-		-		-		11,831,123,683		11,831,123,683
Other comprehensive income (loss) for the year		-		-		-		(112,605,102)		201,774,098
Balance at 31 December 2015		20,434,419,246		28,554,212,397		2,047,500,000		24,862,177,048		75,867,006,471

The notes to the consolidated and company financial statements from pages 235 to 298 are an integral part of these financial statements.

IRPC Public Company Limited
Statement of Cash Flows
For the year ended 31 December 2015

	Notes	Consolidated		Company	
		2015 Baht	2014 Baht	2015 Baht	2014 Baht
Cash flows from operating activities					
Profit (loss) before income tax		11,768,951,223	(7,611,178,362)	14,141,971,475	(7,702,586,187)
Adjustments to reconcile net profit (loss) to net cash provided by operating activities					
- Depreciation		5,199,342,893	4,959,203,564	4,742,065,798	4,543,489,210
- Amortisation		256,997,492	250,723,385	256,704,577	250,337,948
- Interest income	25	(30,010,701)	(82,023,302)	(219,050,006)	(274,963,151)
- Dividends income	25	(26,865,378)	(38,337,252)	(2,302,230,599)	(258,637,030)
- Bad debts and doubtful accounts (reversal)		(2,782,089,606)	3,716,078	(2,725,846,352)	3,894,042
- Allowance for declining in value of inventories (reversal)		(2,891,140,155)	3,295,616,283	(2,891,178,177)	3,288,606,123
- Unrealised gains on exchange rate		(9,855,401)	(24,009,262)	(10,010,554)	(22,973,914)
- Reversal of allowance for doubtful debts of transactions with the former company's management and entities relating to the former management					
- Deposit from a long-term building rental agreement	25	-	(470,000,000)	-	(420,140,000)
- Loans to the former company's management	25	-	(3,289,189,780)	-	(3,287,299,780)
- Provision for impairment of other long-term investments	25	-	3,289,189,780	-	3,287,299,780
- Reversal of impairment of investment in a subsidiary (under liquidation process)	25	-	-	(22,995,837)	-
- Gains from sales of investment in a subsidiary and an associate	25	-	(50,000,000)	(190,857,453)	(50,000,000)
- Gains from disposal of other long-term investments	25	-	(166,905,594)	-	(78,499,594)
- (Gains) losses from disposals of fixed assets and investment properties	25	249,864,582	(253,316,175)	241,083,724	(252,458,707)
- Allowance for (reversal of) impairment of fixed assets and investment properties - net		(267,607,500)	256,990,117	(267,047,500)	267,048,080
- Share of loss of investments in associates and interest in joint venture - equity method	11	183,798,787	138,544,260	-	-
- Finance costs	28	2,480,814,797	1,493,650,272	2,499,973,130	1,531,545,471
- Gains on actuarial revaluation - other long-term benefits		-	(52,198,948)	-	(43,469,964)
- Employee benefit expenses	20	161,582,579	149,176,717	148,803,425	140,264,855
		14,293,783,612	1,799,651,781	13,401,385,651	921,457,182
Changes in operating assets and liabilities					
- Trade accounts receivable		2,216,320,104	9,602,977,038	2,122,918,284	10,404,769,587
- Inventories		6,929,199,685	6,158,602,595	6,496,449,249	6,213,302,159
- Other receivables		66,575,425	248,122,154	55,732,362	255,503,077
- Amounts due from related parties		1,008,622,471	(992,873,152)	1,002,274,483	(992,812,842)
- Refundable value added tax		2,124,573,093	(1,169,097,215)	2,044,652,286	(1,193,751,147)
- Prepaid excise tax		25,927,051	(52,705,849)	25,927,051	(52,705,849)
- Other current assets		223,796,078	(460,468,329)	274,936,324	(415,164,261)
- Trade accounts payable		(75,298,258)	(10,522,168,185)	438,042,309	(11,030,168,816)
- Other payables		113,844,932	275,919,957	65,310,989	284,497,578
- Amounts due to related parties		28,866,332	114,865,873	29,426,269	115,344,537
- Accrued bonus expenses		948,342,301	(218,322,121)	860,417,202	(203,769,978)
- Advance receipts for goods		147,244,121	(29,575,264)	203,939,812	(148,187,014)
- Other current liabilities		(116,091,614)	36,890,901	(50,492,917)	(43,372,830)
- Employee benefits paid	20	(18,990,005)	(23,857,425)	(17,135,775)	(23,165,255)
Net cash provided by operating activities		27,916,715,328	4,767,962,759	26,953,783,579	4,091,776,128
- Income tax paid		(76,663,346)	(171,863,226)	(50,164,558)	(124,130,568)
Cash flows from operating activities		27,840,051,982	4,596,099,533	26,903,619,021	3,967,645,560

The notes to the consolidated and company financial statements from pages 235 to 298 are an integral part of these financial statements.

IRPC Public Company Limited
Statements of Cash Flows
For the year ended 31 December 2015

		Consolidated		Company	
		2015	2014	2015	2014
	Notes	Baht	Baht	Baht	Baht
Cash flows from investing activities					
Interest received		700,439,448	82,023,302	799,696,192	270,027,984
Dividends received		26,865,378	62,637,251	2,302,230,599	258,637,030
Net proceeds (payments) on short-term loans to related parties		168,200,000	-	(3,175,000,000)	(20,330,000)
Net proceeds (payments) on long-term loans to related parties		5,298,698,194	(17,158,990)	5,286,530,712	(17,158,990)
Proceeds from reduction of registered share capital of subsidiaries	11	-	-	1,875,000,000	-
Payments for investing in joint venture and an associate	11	(406,687,104)	(301,632,173)	(401,800,000)	(301,637,691)
Proceeds from disposals of a subsidiary and an associate		251,519,528	288,530,394	251,519,528	141,900,394
Payments for purchases of fixed assets and investment properties		(17,219,166,418)	(22,104,032,193)	(16,953,685,472)	(21,573,667,697)
Proceeds from disposals of fixed assets and investment properties		96,375,684	581,402,641	37,015,297	548,504,892
Proceeds from cancellation of a long-term rental agreement		-	470,000,000	-	420,140,000
Payments for purchases of intangible assets		(47,908,353)	(65,300,452)	(43,020,085)	(63,529,008)
Increase in other non-current assets		(139,690,736)	(36,307,296)	(141,201,588)	(36,465,579)
Net cash used in investing activities		(11,271,354,379)	(21,039,837,516)	(10,162,714,817)	(20,373,578,665)
Cash flows from financing activities					
Interest paid and financing costs		(3,282,580,482)	(2,418,997,741)	(3,308,711,813)	(2,452,874,009)
Dividends paid		(1,632,812,203)	(2,041,037,622)	(1,634,736,495)	(2,043,420,463)
Net proceeds from derivatives settlement		(192,937,644)	112,443,606	(192,937,644)	112,443,606
Proceeds (payments) on short-term loans from related parties		(1,519,940,000)	-	(1,688,140,000)	146,800,000
Net proceeds (payments) on short-term loans from financial institutions		(8,645,622,684)	8,698,912,077	(8,655,843,679)	8,788,694,399
Payments on long-term loans from financial institutions and debenture		(7,709,538,000)	(9,000,000,000)	(7,709,538,000)	(9,000,000,000)
Proceeds from long-term loans from financial institutions	18	8,000,000,000	3,000,000,000	8,000,000,000	3,000,000,000
Proceeds from debentures issuance		-	15,000,000,000	-	15,000,000,000
Payments on finance lease		-	(3,995,990)	-	(3,995,990)
Dividends paid to non-controlling interests	24	(18,048,014)	(19,156,758)	-	-
Net cash generated from (used in) financing activities		(15,001,479,027)	13,328,167,572	(15,189,907,631)	13,547,647,543
Net increase (decrease) in cash and cash equivalents		1,567,218,576	(3,115,570,411)	1,550,996,573	(2,858,285,562)
Cash and cash equivalents at beginning of the year		2,008,634,173	5,124,204,584	1,693,329,193	4,551,614,755
Cash and cash equivalents at end of the year		3,575,852,749	2,008,634,173	3,244,325,766	1,693,329,193
Non-cash transactions					
Accounts payable - purchases of fixed assets		1,156,772,480	684,468,450	1,135,658,165	640,023,316
Other long-term investments from debt to equity swap		-	3,289,189,780	-	3,287,299,780

The notes to the consolidated and company financial statements from pages 235 to 298 are an integral part of these financial statements.

IRPC Public Company Limited
Notes to the consolidated and company financial statements
For the year ended 31 December 2015

1 General information

IRPC Public Company Limited (“the Company”) is a public company incorporated and resident in Thailand. The address of the Company’s registered office is 299 Moo 5, Sukhumvit Road, Choengnuea District, Aumprur Muang, Rayong Province. The Company and subsidiaries’ office is at 555/2 Energy Complex, Building B, 6th floor, Vibhavadi Rangsit Road, Chatuchak, Khet Chatuchak, Bangkok 10900.

The Company is listed on the Stock Exchange of Thailand. For reporting purposes, the Company and its subsidiaries are referred to as ‘the Group’.

The Group is engaged in petrochemicals and petroleum with its products being plastic resins, refinery products, lubricant base oil and other petrochemical products.

These consolidated and company financial statements were authorised for issue by the Board of Directors on 9 February 2016.

2 Accounting policies

The principal accounting policies applied in the preparation of these consolidated and company financial statements are set out below:

2.1 Basis of preparation

The consolidated and company financial statements have been prepared in accordance with Thai generally accepted accounting principles under the Accounting Act B.E. 2543, being those Thai Accounting Standards issued under the Accounting Profession Act B.E. 2547, and the financial reporting requirements of the Securities and Exchange Commission under the Securities and Exchange Act.

The consolidated and company financial statements have been prepared under the historical cost convention except the measurement of available-for-sale investments at fair value, which has been explained in the relevant accounting policies.

The preparation of financial statements in conformity with Thai generally accepted accounting principles requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group’s accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 4.

An English version of the consolidated and company financial statements has been prepared from the statutory financial statements that are in the Thai language. In the event of a conflict or a difference in interpretation between the two languages, the Thai language statutory financial statements shall prevail.

2 Accounting policies (continued)

2.2 New financial reporting standards and revised financial reporting standards

- a) New financial reporting standards and revised financial reporting standards which are effective on 1 January 2015 are as follows:

TAS 1 (revised 2014)	Presentation of financial statements
TAS 2 (revised 2014)	Inventories
TAS 7 (revised 2014)	Statement of cash flows
TAS 8 (revised 2014)	Accounting policies, changes in accounting estimates and errors
TAS 10 (revised 2014)	Events after the reporting period
TAS 11 (revised 2014)	Construction contracts
TAS 12 (revised 2014)	Income taxes
TAS 16 (revised 2014)	Property, plant and equipment
TAS 17 (revised 2014)	Leases
TAS 18 (revised 2014)	Revenue
TAS 19 (revised 2014)	Employee benefits
TAS 20 (revised 2014)	Accounting for government grants and disclosure of government assistance
TAS 21 (revised 2014)	The effects of changes in foreign exchange rates
TAS 23 (revised 2014)	Borrowing costs
TAS 24 (revised 2014)	Related party disclosures
TAS 26 (revised 2014)	Accounting and reporting by retirement benefit plans
TAS 27 (revised 2014)	Separate financial statements
TAS 28 (revised 2014)	Investments in associates and joint ventures
TAS 29 (revised 2014)	Financial reporting in hyperinflationary economies
TAS 33 (revised 2014)	Earnings per share
TAS 34 (revised 2014)	Interim financial reporting
TAS 36 (revised 2014)	Impairment of assets
TAS 37 (revised 2014)	Provisions, contingent liabilities and contingent assets
TAS 38 (revised 2014)	Intangible assets
TAS 40 (revised 2014)	Investment property
TFRS 2 (revised 2014)	Share-based payment
TFRS 3 (revised 2014)	Business combinations
TFRS 5 (revised 2014)	Non-current assets held for sale and discontinued operations
TFRS 6 (revised 2014)	Exploration for and evaluation of mineral resources
TFRS 8 (revised 2014)	Operating segments
TFRS 10	Consolidated financial statements
TFRS 11	Joint arrangements
TFRS 12	Disclosure of interests in other entities
TFRS 13	Fair value measurement
TSIC 10 (revised 2014)	Government assistance - No specific relation to operating activities
TSIC 15 (revised 2014)	Operating leases - Incentives
TSIC 25 (revised 2014)	Income taxes - changes in the tax status of an entity or its shareholders
TSIC 27 (revised 2014)	Evaluating the substance of transactions involving the legal form of a lease
TSIC 29 (revised 2014)	Service concession arrangements: Disclosures
TSIC 31 (revised 2014)	Revenue - barter transactions involving advertising services
TSIC 32 (revised 2014)	Intangible assets - Web site costs
TFRIC 1 (revised 2014)	Changes in existing decommissioning, restoration and similar liabilities
TFRIC 4 (revised 2014)	Determining whether an arrangement contains a lease
TFRIC 5 (revised 2014)	Rights to interests arising from decommissioning, restoration and environmental rehabilitation funds

2 Accounting policies (continued)

2.2 New financial reporting standards and revised financial reporting standards (continued)

- a) New financial reporting standards and revised financial reporting standards which are effective on 1 January 2015 are as follows: (continued)

TFRIC 7 (revised 2014)	Applying the restatement approach under TAS29 (revised 2014) Financial reporting in hyperinflationary economies
TFRIC 10 (revised 2014)	Interim financial reporting and impairment
TFRIC 12 (revised 2014)	Service concession arrangements
TFRIC 13 (revised 2014)	Customer loyalty programmes
TFRIC 14	TAS 19 - The limit on a defined benefit asset, minimum funding requirements and their interaction
TFRIC 15 (revised 2014)	Agreements for the construction of real estate
TFRIC 17 (revised 2014)	Distributions of non-cash assets to owners
TFRIC 18 (revised 2014)	Transfers of assets from customers
TFRIC 20	Stripping costs in the production phase of a surface mine

The Group has applied the aforementioned financial reporting standards from 1 January 2015. However, the application of those financial reporting standards has no significant impacts to the financial statements being presented, except the following accounting standards:

TAS 1 (revised 2014), the main change is that a requirement for entities to group items presented in “other comprehensive income” (OCI) on the basis of whether they are potentially reclassifiable to profit or loss subsequently (reclassification adjustments). The amendments do not address which items are presented in OCI but the Group must refer to the relevant financial reporting standards. The Group has reclassified the items in OCI as required by this standard.

TFRS 13 aims to improve consistency and to reduce complexity by providing a precise definition of fair value and a single source of fair value measurement and disclosure requirements for use across TFRSs. This standard has no impact to the group, except for disclosure.

- b) Revised financial reporting standards which are effective on 1 January 2016 and the Group are not early adopted are as follows:

TAS 1 (revised 2015)	Presentation of financial statements
TAS 2 (revised 2015)	Inventories
TAS 7 (revised 2015)	Statement of cash flows
TAS 8 (revised 2015)	Accounting policies, changes in accounting estimates and errors
TAS 10 (revised 2015)	Events after the reporting period
TAS 11 (revised 2015)	Construction contracts
TAS 12 (revised 2015)	Income taxes
TAS 16 (revised 2015)	Property, plant and equipment
TAS 17 (revised 2015)	Leases
TAS 18 (revised 2015)	Revenue
TAS 19 (revised 2015)	Employee benefits
TAS 20 (revised 2015)	Accounting for government grants and disclosure of government assistance
TAS 21 (revised 2015)	The effects of changes in foreign exchange rates
TAS 23 (revised 2015)	Borrowing costs
TAS 24 (revised 2015)	Related party disclosures
TAS 26 (revised 2015)	Accounting and reporting by retirement benefit plans
TAS 27 (revised 2015)	Separate financial statements
TAS 28 (revised 2015)	Investments in associates and joint ventures
TAS 29 (revised 2015)	Financial reporting in hyperinflationary economies
TAS 33 (revised 2015)	Earnings per share
TAS 34 (revised 2015)	Interim financial reporting

2 Accounting policies (continued)

2.2 New financial reporting standards and revised financial reporting standards (continued)

- b) Revised financial reporting standards which are effective on 1 January 2016 and the Group are not early adopted are as follows: (continued)

TAS 36 (revised 2015)	Impairment of assets
TAS 37 (revised 2015)	Provisions, contingent liabilities and contingent assets
TAS 38 (revised 2015)	Intangible assets
TAS 40 (revised 2015)	Investment property
TAS 41	Agriculture
TFRS 2 (revised 2015)	Share-based payment
TFRS 3 (revised 2015)	Business combinations
TFRS 4 (revised 2015)	Insurance contracts
TFRS 5 (revised 2015)	Non-current assets held for sale and discontinued operations
TFRS 6 (revised 2015)	Exploration for and evaluation of mineral resources
TFRS 8 (revised 2015)	Operating segments
TFRS 10 (revised 2015)	Consolidated financial statements
TFRS 11 (revised 2015)	Joint arrangements
TFRS 12 (revised 2015)	Disclosure of interests in other entities
TFRS 13 (revised 2015)	Fair value measurement
TSIC 10 (revised 2015)	Government assistance - No specific relation to operating activities
TSIC 15 (revised 2015)	Operating leases - Incentives
TSIC 25 (revised 2015)	Income taxes - changes in the tax status of an entity or its shareholders
TSIC 27 (revised 2015)	Evaluating the substance of transactions involving the legal form of a lease
TSIC 29 (revised 2015)	Service concession arrangements: Disclosures
TSIC 31 (revised 2015)	Revenue - barter transactions involving advertising services
TSIC 32 (revised 2015)	Intangible assets - Web site costs
TFRIC 1 (revised 2015)	Changes in existing decommissioning, restoration and similar liabilities
TFRIC 4 (revised 2015)	Determining whether an arrangement contains a lease
TFRIC 5 (revised 2015)	Rights to interests arising from decommissioning, restoration and environmental rehabilitation funds
TFRIC 7 (revised 2015)	Applying the restatement approach under TAS29 (revised 2015) Financial reporting in hyperinflationary economies
TFRIC 10 (revised 2015)	Interim financial reporting and impairment
TFRIC 12 (revised 2015)	Service concession arrangements
TFRIC 13 (revised 2015)	Customer loyalty programmes
TFRIC 14 (revised 2015)	TAS 19 - The limit on a defined benefit asset, minimum funding requirements and their interaction
TFRIC 15 (revised 2015)	Agreements for the construction of real estate
TFRIC 17 (revised 2015)	Distributions of non-cash assets to owners
TFRIC 18 (revised 2015)	Transfers of assets from customers
TFRIC 20 (revised 2015)	Stripping costs in the production phase of a surface mine
TFRIC 21	Levies

The Group will apply the aforementioned financial reporting standards from 1 January 2016. The Group's management assessed and determined that the application of those financial reporting standards has no significant impact to the financial statements being presented.

2 Accounting policies (continued)

2.3 Group accounting - Investment in subsidiaries, associates and interest in joint ventures

(1) Subsidiaries

Subsidiaries are all entities (including structured entities) over which the group has control. The group controls an entity when the group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the group. They are deconsolidated from the date that control ceases.

The Group applies the acquisition method to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair value of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity interest issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. On an acquisition-by-acquisition basis, the Group recognises any non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's net assets.

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is re-measured to fair value at the acquisition date; any gains or losses arising from such re-measurements are recognised in profit or loss.

Any contingent consideration to be transferred by the group is recognised at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration that is deemed to be an asset or liability is recognised either in profit or loss or as a change to other comprehensive income. Contingent consideration that is classified as equity is not re-measured, and its subsequent settlement is accounted for within equity.

The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired is recorded as goodwill. If the total of consideration transferred, non-controlling interest recognised and previously held interest measured is less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the difference is recognised directly in profit or loss.

Intercompany transactions, balances and unrealised gains or losses on transactions between Group companies are eliminated. Unrealised losses are also eliminated. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

In the company's separated financial statements, investments in subsidiaries are accounted for at cost less impairment. Cost is adjusted to reflect changes in consideration arising from contingent consideration amendments. Cost also includes direct attributable costs of investment.

A list of the Group's principal subsidiaries and the effect from the acquisition and disposal of subsidiaries have been disclosed in Note 11.

(2) Transaction and non-controlling interests

The Group treats transactions with non-controlling interests as transactions with equity owners of the Group. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

2 Accounting policies (continued)

2.3 Group accounting - Investment in subsidiaries, associates and interest in joint ventures (continued)

(3) Disposal of subsidiaries

When the Group ceases to have control, any retained interest in the entity is re-measured to its fair value, with the change in carrying amount recognised in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities.

(4) Associates

Associates are all entities over which the Group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting. Under the equity method, the investment is initially recognised at cost, and the carrying amount is increased or decreased to recognise the investor's share of the profit or loss of the investee after the date of acquisition. The group's investment in associates includes goodwill identified on acquisition.

If the ownership interest in an associate is reduced but significant influence is retained, only a proportionate share of the amounts previously recognised in other comprehensive income is reclassified to profit or loss where appropriate.

The Group's share of its associates' post-acquisition profits or losses is recognised in the profit or loss, and its share of post-acquisition movements in other comprehensive income is recognised in other comprehensive income. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. When the Group's share of losses in an associate equals or exceeds its interest in the associate, including any other unsecured receivables, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate.

The group determines at each reporting date whether there is any objective evidence that the investment in the associate is impaired. If this is the case, the group calculates the amount of impairment as the difference between the recoverable amount of the associate and its carrying value and recognises the amount adjacent to share of profit/(loss) of associates in the income statement.

Unrealised gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in the associates. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

Accounting policies of associates have been changed where necessary to ensure consistency with the policies adopted by the Group. Dilution gains and losses arising in investments in associates are recognised in the profit or loss.

In the company's separated financial statements, investments in associates are accounted for at cost less impairment. Cost is adjusted to reflect changes in consideration arising from contingent consideration amendments. Cost also includes direct attributable costs of investment.

A list of the Group's principal associates and the effects acquisitions and disposals of associates is set out in Note 11.

2 Accounting policies (continued)

2.3 Group accounting - Investment in subsidiaries, associates and interest in joint ventures (continued)

(5) Joint arrangements

The group has applied TFRS11 to all joint arrangements as of 1 January 2015. Under TFRS11 investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations each investor. The company has assessed the nature of its joint arrangements and determined them to be joint ventures. Joint ventures are accounted for using the equity method.

Under the equity method of accounting, interest in joint ventures are initially recognised at cost and adjusted thereafter to recognise the group's share of the post-acquisition profits or losses and movements in other comprehensive income. When the group's share of losses in a joint venture equals or exceeds its interest in the joint ventures (which includes any long-term interest that, in substance, form part of the group's net investment in the joint ventures), the group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the joint ventures.

Unrealised gains on transactions between the group and its joint ventures are eliminated to the extent of the group's interest in the joint ventures. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

2.4 Foreign currency translation

(a) Functional and presentation currency

Items included in the financial statements of each of the group's entities are measured using the currency of the primary economic environment in which the entity operates ('the functional currency'). The consolidated financial statements are presented in Thai Baht, which is the company's functional and the group's presentation currency.

(b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are re-measured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the profit or loss.

When a gain or loss on a non-monetary item is recognised in other comprehensive income, any exchange component of that gain or loss is recognised other comprehensive income. Conversely, when a gain or loss on a non-monetary item is recognised in profit and loss, any exchange component of that gain or loss is recognised in profit and loss.

2.5 Cash and cash equivalents

In the consolidated and company statement of cash flows, cash and cash equivalents includes cash on hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less and bank overdrafts. In the consolidated and company statement of financial position, bank overdrafts are shown within borrowings in current liabilities.

2 Accounting policies (continued)

2.6 Trade accounts receivable

Trade accounts receivable are carried at the original invoice amount and subsequently measured at the remaining amount less any allowance for doubtful receivables based on a review of all outstanding amounts at the year-end. The amount of the allowance is the difference between the carrying amount of the receivable and the amount expected to be collectible. Bad debts are written-off during the year in which they are identified and recognised in profit or loss within administrative expenses.

2.7 Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined by the weighted average method.

The cost of purchase comprises both the purchase price and costs directly attributable to the acquisition of the inventory, such as import duties and transportation charges, less all attributable discounts, allowances or rebates. The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs and related production overheads (based on normal operating capacity). It excludes borrowing costs.

Net realisable value is the estimate of the selling price in the ordinary course of business, less the necessary costs of completion and selling expenses. The Group recognises allowances for obsolete, slow moving and defective inventories by considering the future use of those inventories.

2.8 Other investments

The Group classifies investments other than investments in subsidiaries and associates into the two categories which are (1) available-for-sale investments and (2) general investments. The classification is dependent on the purpose for which the investments were acquired. Management determines the appropriate classification of its investments at the time of the purchase and re-evaluates such designation on a regular basis.

- (1) Investments intended to be held for an indefinite period of time, which may be sold in response to liquidity needs or changes in interest rates, are classified as available-for-sale; and are included in non-current assets unless management has expressed the intention of holding the investment for less than 12 months from the statement of financial position date or unless they will need to be sold to raise operating capital, in which case they are included in current assets.
- (2) Investments in non-marketable equity securities are classified as general investments.

All categories of investment are initially recognised at cost, which is equal to the fair value of consideration paid plus transaction cost.

Available-for-sale investments are subsequently measured at fair value. The fair value of investments is based on quoted bid price at the close of business on the statement of financial position date by reference to the Stock Exchange of Thailand. The unrealised gains and losses of available-for-sale investments are recognised in other comprehensive income.

General investments are carried at cost less impairment loss.

A test for impairment is carried out when there is a factor indicating that an investment might be impaired. If the carrying value of the investment is higher than its recoverable amount, impairment loss is charged to the income statement.

On disposal of an investment, the difference between the net disposal proceeds and the carrying amount is charged to the income statement. When disposing of part of the Group's holding of a particular investment in debt or equity securities, the carrying amount of the disposed part is determined by the weighted average carrying amount of the total holding of the investment.

2 Accounting policies (continued)

2.9 Investment property

Property that is held for long-term rental yields or for capital appreciation or both, and that is not occupied by the companies in the consolidated Group, is classified as investment property. Investment property also includes property that is being constructed or developed for future use as investment property.

Investment property of the Group is land and building held for long-term rental yields or for capital appreciation, including certain land which is currently undetermined for future use.

Investment property is measured initially at its cost, including related transaction costs and borrowing costs. Borrowing costs incurred for the purpose of acquiring, constructing or producing a qualifying investment property are capitalised as part of its cost. Borrowing costs are capitalised while acquisition or construction is actively underway and cease once the asset is substantially complete, or suspended if the development of the asset is suspended.

After initial recognition, investment property is carried at cost less any accumulated depreciation and any accumulated impairment losses.

Land is not depreciated. Depreciation on other investment properties which are buildings is calculated using the straight line method to allocate their cost to their residual values over their estimated useful lives for 20 to 40 years.

Subsequent expenditure is capitalised to the asset's carrying amount only when it is probable that future economic benefits associated with the expenditure will flow to the Group and the cost of the item can be measured reliably. All other repairs and maintenance costs are expensed when incurred. When part of an investment property is replaced, the carrying amount of the replaced part is derecognised.

2.10 Property, plant and equipment

Land and land improvement is stated at cost less allowance for impairment. Plant and equipment are initially recorded at cost and subsequently stated at historical cost less accumulated depreciation. Costs include directly attributable expenses in acquiring such asset.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to profit or loss during the financial period in which they are incurred.

Land and land improvement is not depreciated.

Depreciation on other assets is calculated on the straight-line method or units of production to allocate their costs to their residual values over their estimated useful life, as follows:

	Depreciation rates
Buildings and building improvements	20 - 40 years
Machinery and pipes	20 - 30 years
Other machinery	Unit of production
Tools and factory equipment	10 years
Furniture, fixtures and office equipment	5 - 10 years
Vehicles	5 - 10 years

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

The asset's carrying amount is written-down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Gains or losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised within 'Other (losses)/gains - net' in profit or loss.

2 Accounting policies (continued)

2.11 Intangible assets

Intangible assets are dredging expenses, computer program and computer development expenses which are stated at cost less accumulated amortisation and impairment loss.

Dredging expenses is expenditure paid to prepare the undersea area around the jetty.

Intangible assets of the Group are definite life assets which are amortised on a straight-line basis over the estimated useful lives of the assets. Amortisation is charged to the income statement.

	Amortisation rates
Dredging expenses	10 - 20 years
Deferred charges: Computer programs and computer development expenses	5 - 10 years

2.12 Impairment of assets

Assets that have an indefinite useful life, for example goodwill, are not subject to amortisation and are tested annually for impairment. Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the carrying amount of the assets exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest level for which there are separately identifiable cash flows. Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at each reporting date.

2.13 Leases - where a Group company is the lessee

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to profit or loss on a straight-line basis over the period of the lease.

Leases of property, plant or equipment where the Group has substantially all the risks and rewards of ownership are classified as finance leases. Finance leases are capitalised at the inception of the lease at the lower of the fair value of the leased property and the present value of the minimum lease payments.

Each lease payment is allocated between the liability and finance charges so as to achieve a constant rate on the finance balance outstanding. The corresponding rental obligations, net of finance charges, are included in other long-term payables. The interest element of the finance cost is charged to profit or loss over the lease period so as to achieve a constant periodic rate of interest on the remaining balance of the liability for each period. The property, plant or equipment acquired under finance leases is depreciated over the shorter period of the useful life of the asset and the lease term.

Leases - where a Group company is the lessor

When assets are leased out under a finance lease, the present value of the lease payments is recognised as a receivable. The difference between the gross receivable and the present value of the receivable is recognised as unearned finance income. Lease income is recognised over the term of the lease using the net investment method, which reflects a constant periodic rate of return. Initial direct costs are included in initial measurement of the finance lease receivable and reduce the amount of income recognised over the lease term.

Assets leased out under operating leases are included in property, plant and equipment in the statement of financial position. They are depreciated over their expected useful lives on a basis consistent with other similar property, plant and equipment owned by the Group. Rental income (net of any incentives given to lessees) is recognised on a straight-line basis over the lease term.

2 Accounting policies (continued)

2.14 Borrowings and debentures

Borrowings and debentures are recognised initially at the fair value, net of transaction costs incurred. Borrowings and debentures are subsequently stated at amortised cost using the effective yield method; any difference between proceeds (net of transaction costs) and the redemption value is recognised in profit or loss over the period of the borrowings.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw-down occurs. To the extent that there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalised as a pre-payment for liquidity services and amortised over the period of the facility to which it relates.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the end of reporting date.

2.15 Borrowings costs

General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognised in profit or loss in the period in which they are incurred.

2.16 Current and deferred income taxes

The tax expense for the period comprises current and deferred tax. Tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case the tax is also recognised in other comprehensive income or directly in equity, respectively.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of reporting period in the countries where the Company and the subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax is recognised, using the liability method, on temporary differences arising from differences between the tax base of assets and liabilities and their carrying amounts in the statement of financial position. However, the deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred income tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised. Deferred income tax is provided on temporary differences arising from investments in subsidiaries, associates and joint arrangements, except where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

2 Accounting policies (continued)

2.17 Employee benefits

The Group has both defined contribution plans and defined benefit. A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. A defined benefit plan is a pension plan that is not a defined contribution plan. Typically defined benefit plans define an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation.

- **Defined contribution plans**

- **Provident fund**

- The Group pays contributions to a separate fund which is managed by an external fund manager in accordance with the provident fund Act. B.E. 2530. The Group has no further payment obligations once the contributions have been paid. The contributions are recognised as employee benefit expense when they are due.

- **Defined benefit plans**

- **Retirement benefits**

- Under Labour Laws applicable in Thailand and the Group's employment policy, all employees completing 120 days of service are entitled to severance pay on termination or retrenchment without cause or upon retirement age of 60. The severance pay will be at the rate according to number of years of service as stipulated in the Labour Law which is currently at a maximum rate of 300 days of final salary. In addition, the Group has a policy to reward gold to the employees upon retirement.

- **Other long-term benefits**

- The Group has a policy to reward gold to employees who have provided their services to the Group at their 10, 20 and 30 year anniversaries.

The liability recognised in the statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period together with adjustments for unrecognised past-service costs. The defined benefit obligation is calculated by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using market yield of government bonds that have terms to maturity approximating to the terms of the related pension liability. The estimated future cash flows shall reflect employee salaries, turnover rate, mortality, length of service and others.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to other comprehensive income in the period in which they arise.

Past-service costs are recognised immediately in profit or loss.

2.18 Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made. Where the Group expects a provision to be reimbursed, the reimbursement is recognised as a separate asset but only when the reimbursement is virtually certain.

2 Accounting policies (continued)

2.19 Treasury stock

Treasury stock is carried at cost and shown as a deduction from total shareholders' equity. Gains on disposal of treasury stock are determined by referring to its carrying amount and are taken to "Premium on treasury stock". Losses on disposal of treasury stock are determined by referring to its carrying amount and are taken to "Premium on treasury stock" and "Retained earnings" consecutively.

2.20 Revenue recognition

Sale of goods and services rendered

Revenue comprises the fair value of the consideration received or receivable for the sale of goods and service in the ordinary course of the Group's activities including excise tax, municipal tax and oil fund. Revenue is shown net of returns, rebates and discounts, and after eliminating sales within the Group. Revenue from sales of goods is recognised when significant risks and rewards of ownership of the goods are transferred to the buyer. Service income is recognised as services are provided.

Interest and dividend income

Interest income is recognised using the effective interest method. Dividends are recognised when the right to receive payment is established.

Other income

Other income is recognised in the income statement on an accrual basis.

2.21 Government grants

Government grants are recognised at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Government grants relating to income are deducted in reporting the relating costs over the period necessary to match them with the costs that they are intended to compensate.

2.22 Dividends

Dividends are recorded in the consolidated and company's financial statements in the period in which they are approved by the shareholders of the Company and the related companies. Interim dividends are recorded in the consolidated and company's financial statements in the period in which they are approved by the Board of directors' of the Company and the subsidiaries.

2.23 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as Chief Executive Officer that makes strategic decisions.

Segment information is presented in respect of the Group's business segments which is based on the Group's management and internal reporting structure (See more information in Note 6).

3 Financial risk and pricing risk management regarding raw materials and products

3.1 Financial risk factors

The Group's activities expose it to a variety of financial risks: market risk (including currency risk, fair value interest rate risk, cash flow interest rate risk and price risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the financial performance of the Group, if possible. The Group uses derivative financial instruments which are forward foreign exchange contracts and interest rate swap contracts to protect certain exposures. In execution of the afore mentioned derivative transactions, it should be in line with the policies determined by the Board of Directors. Management is approved to execute the transactions according to the table of authority of the Group and has to report the results to the Board of Directors.

3.1.1 Foreign exchange rate risk

The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures primarily with respect to US Dollars as well as US Dollar bonds which the Group has entered into foreign currency forward contracts to mitigate risk from exchange rate fluctuation.

3.1.2 Interest rate risk

The Group's income and operating cash flows are substantially independent of changes in market interest rates. The Group has interest rate risk arising from borrowings and debentures with floating and fixed interest rates. The Group uses interest rate swap contracts by agreeing with the counterparties to exchange, at specified intervals, the difference between fixed contract rates and floating rate interest amounts calculated by reference to the agreed notional principal amounts.

3.1.3 Credit risk

The Group has no significant concentrations of credit risks. The Group has policies in place to ensure that sales of products and services are made to customers with an appropriate credit history. Derivative counterparties and cash transactions are limited to high-credit quality financial institutions. The Group has policies that limit the amount of credit exposure to any one financial institution.

3.1.4 Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash and marketable securities, the availability of funding and the ability to manage risk. Due to the dynamic nature of the underlying business, the Group's treasury aims at maintaining flexibility in funding by keeping committed credit lines available.

3.2 Pricing risk factors regarding raw materials and products

The Group has managed the pricing risks of raw materials and products by setting up the Hedging Committee so as to manage risk exposures following policies approved by the Board of Directors. The Hedging Committee identifies, evaluates and hedges product risks by working closely with the Group's operating units under the approved framework. The Group uses financial instruments such as crack spread swap contracts, time spread swap contracts and crude oil and petroleum products swap contracts to minimise its exposure to the fluctuation in oil prices and products. In execution of the aforementioned derivative transactions, it should be in line with the policies determined by the Board of Directors. The Hedging Committee is authorised to execute the transactions according to the specified policies.

Crude oil price fluctuation risk

The Group is exposed to oil price risk from substantial fluctuations in oil prices which arise from the movement of oil prices in the world market. The Group uses crack spread swap contracts, time spread swap contracts and crude oil and petroleum products swap contracts to minimise its exposure to the fluctuation of oil prices in its business operations.

3 Financial risk and pricing risk management regarding raw materials and products (continued)

3.3 Accounting for derivative financial instruments

The Group is a party to derivative financial instruments, which mainly comprise foreign currency forward contracts, interest rate swap agreements, and commodity derivatives. Such financial instruments are not recognised in the financial statement on inception but only when they are settled according to the contract terms.

Foreign currency forward contracts protect the Group from movements in exchange rates by establishing the rate at which a foreign currency asset will be realised or a foreign currency liability settled. Any increase or decrease in the amount required to realise the asset or settle the liability is offset by a corresponding movement in the value of the forward exchange contract. The gains and losses on the derivative instruments which relate to borrowings are offset for financial reporting purposes and are recognised as finance costs in the income statement, whereas the gains and losses on the derivative instruments which relate to trading business are offset for financial reporting purposes and are recognised as other income - net in the income statement.

Interest rate swap agreements protect the Group from movements in interest rates. Any difference to be paid or received on an interest rate swap agreements is recognised as a component of interest revenue or expense over the period of the agreements. Gains and losses on early termination of interest rate swap contracts or on repayment of the borrowings are presented as part of finance costs in the income statement.

Crack spread swap contracts, time spread swap contracts and crude oil and petroleum products swap contracts protect the Group from movements in crude oil price by establishing the agreed price. The difference between the price at contract settlement date and agreed price will be recognised as realised gains and losses in the income statement under other income - net at settlement date.

3.4 Fair value estimation of derivatives for disclosure in the financial statement

The fair value of publicly traded derivatives is based on quoted market prices at the financial position date. The fair value of forward foreign exchange contracts and the interest rate swap contracts is determined by the market rate of each agreement which is calculated by financial institutions dealing with the Group at the financial position date. The fair values of commodity derivatives are calculated by the offering selling and buying price at the statement of financial position date quoted by the financial institutions of the Group at the financial position date. Details of derivatives are disclosed in Note 35.

4 Critical accounting estimates and judgments

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are outlined below.

4.1 Impairment of short-term loans to related parties, amount due from related parties and investment in subsidiaries, associates and other long-term investments

The Group estimates the possibility of the recoverability of loans to and receivables from related parties by considering the ability of settlement. For the investments in subsidiaries, associates and other long-term investments, the Group reviews whether the investments have suffered any impairment. The recoverable amounts have been determined based on their expected future cash flow.

4 Critical accounting estimates and judgments (continued)

4.2 Recognition of deferred tax assets

The recognition of deferred tax assets is based upon whether it is probably that sufficient taxable profits will be available in the future against which the reversal of temporary differences can be deducted. The Group has determined the future taxable profits by referencing to the latest available financial forecasts. The recognition, therefore, involves judgement regarding the future financial performance of the Group in which the deferred tax assets have been recognised.

4.3 Employee benefits

The present value of the defined benefit plans depend on a number of factors that are determined on an actuarial basis using a number of assumptions. The assumptions used include the discount rate, salary increase rate and turnover. Any changes in these assumptions will have an impact on the carrying amount the employee benefit obligations. Additional information is disclosed in Note 20.

5 Capital risk management

The Group's objectives of capital management are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares, or sell assets to reduce debt.

6 Segment information

Segment information is presented in respect of the Group's business segments which are based on the Group's management and internal reporting structure.

The Group's main business segments are:

Petrochemical products	Olefins, aromatics that are raw materials used in the production of plastic resins
Petroleum products	Refinery oil, lubricant oil, asphalt
Other business segments	Power plant, jetty and other utilities

The accounting policies for the operating segments are in accordance with the summaries accounting policies above.

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6 Segment information (continued)

	Consolidated			
	Petrochemical products	Petroleum products	Other businesses	Total
	Baht million	Baht million	Baht million	Baht million
For the year ended 31 December 2015				
Sales	53,112	156,935	4,125	214,172
Operating profit	6,244	5,133	200	11,577
Unallocated other income				2,856
Finance costs				(2,480)
Share of loss of investment in associates and interest in joint venture				(184)
Income tax				(2,346)
Net profit for the year				9,423

	Petrochemical products	Petroleum products	Other business segment	Elimination entries	Total
	Baht million	Baht million	Baht million	Baht million	Baht million
Segment fixed assets	27,165	21,885	16,774	87	65,911
Unallocated fixed assets					48,896
Segment other assets	11,205	20,325	6,463	(6,201)	31,792
Unallocated other assets					16,575
Consolidated total assets					163,174

	Consolidated			
	Petrochemical products	Petroleum products	Other businesses	Total
	Baht million	Baht million	Baht million	Baht million
For the year ended 31 December 2014				
Sales	63,853	213,341	4,395	281,589
Operating profit (loss)	(1,589)	(5,674)	651	(6,612)
Unallocated other income				634
Finance costs				(1,494)
Share of loss of investment in associates				(139)
Income tax				2,398
Net loss for the year				(5,213)

	Petrochemical products	Petroleum products	Other business segment	Elimination entries	Total
	Baht million	Baht million	Baht million	Baht million	Baht million
Segment fixed assets	26,321	22,422	16,709	10	65,462
Unallocated fixed assets					35,409
Segment other assets	13,014	25,338	3,928	(2,818)	39,462
Unallocated other assets					22,465
Consolidated total assets					162,798

6 Segment information (continued)

Geographic information

The Group's revenue from external customers approximately 60% is generated in the country. Revenue attributed to foreign counties are mainly from countries in Asia Pacific. In addition, most non-current assets of the Group are located in Thailand.

Major customers

The Group has no revenue from transactions with a single external customer that amounts to 10% or more of the Group's revenue. Therefore, the Group does not present the information about major customers.

7 Cash and cash equivalents

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Cash on hand	1	1	-	-
Current accounts	1,847	1,397	1,611	1,166
Savings accounts	1,728	611	1,633	527
Total	3,576	2,009	3,244	1,693

As at 31 December 2015, current accounts and savings accounts bear interest at rates between 0.04% and 1.45% per annum (2014: 0.10% and 1.40% per annum). Cash and cash equivalents are mainly in Thai Baht.

8 Trade accounts receivable - net

	Note	Consolidated		Company	
		2015	2014	2015	2014
		Baht million	Baht million	Baht million	Baht million
Trade accounts receivable					
- Other parties		6,165	7,295	5,985	7,053
- Related parties	33	2,859	3,976	3,822	4,899
Total		9,024	11,271	9,807	11,952
Less Allowance for doubtful debts		(82)	(79)	(80)	(68)
Net		8,942	11,192	9,727	11,884

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8 Trade accounts receivable - net (continued)

Aging analysis of trade accounts receivable as at 31 December 2015 and 2014 is as follows:

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Other parties				
Current	5,848	7,185	5,673	6,968
Overdue				
- less than 3 months	235	38	232	24
- over 3 months but less than 12 months	55	-	55	-
- over 12 months	27	72	25	61
	317	110	312	85
	6,165	7,295	5,985	7,053
<u>Less</u> Allowance for doubtful debts	(82)	(72)	(80)	(61)
Net	6,083	7,223	5,905	6,992
Related parties				
Current	2,851	3,969	3,814	4,892
Overdue				
- less than 3 months	8	-	8	-
- over 3 months but less than 12 months	-	2	-	2
- over 12 months	-	5	-	5
	8	7	8	7
	2,859	3,976	3,822	4,899
<u>Less</u> Allowance for doubtful debts	-	(7)	-	(7)
Net	2,859	3,969	3,822	4,892
Net	8,942	11,192	9,727	11,884

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9 Inventories - net

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Raw materials	5,952	5,886	5,722	5,489
Work in process	19	21	11	10
Finished goods	11,632	16,233	10,565	14,960
Chemicals and fuel oil	945	863	697	634
Spare parts and repair materials	1,914	1,995	1,763	1,838
Goods in transit	844	346	816	248
Net	21,306	25,344	19,574	23,179

According to the Ministry of Energy's regulations, the Company is required to reserve crude oil at 6%, liquid petroleum gas and petroleum products at 1% of the total production output of each period (2014: reserve crude oil, liquid petroleum gas and petroleum products at 6% and lube base oil at 5% of the total production output of each period).

As at 31 December 2015, the inventories included a minimum mandatory reserve on crude oil, liquid petroleum gas, and petroleum product amounting to Baht 2,990 million and Baht 2,987 million in the consolidated and company financial statements, respectively (2014: Baht 6,572 million and Baht 6,530 million in the consolidated and company financial statements, respectively). These amounts were net of allowance for net realisable value.

The cost of inventories recognised as expense and included in 'cost of sales' amounting to Baht 177,926 million and Baht 186,984 million in the consolidated and company income statements, respectively (2014: Baht 274,163 million and Baht 286,350 million in the consolidated and company income statements, respectively).

As at 31 December 2015, Inventories are presented net of allowance for net realisable value. The allowance for net realisable value are Baht 682 million and Baht 649 million in the consolidated and company statements of financial position, respectively (2014: Baht 3,573 million and Baht 3,540 million in the consolidated and company statements of financial position, respectively). During the year 2015, the allowance (reversal) for net realisable value amounting to Baht (2,891) million were recognised in the consolidated and company income statements (2014: Baht 3,296 million and Baht 3,289 million in the consolidated and company income statements, respectively).

10 Other receivables

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Receivables from Excise Department and Oil Fund	13	92	13	91
Others	56	44	52	30
Total	69	136	65	121

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11 Investments in subsidiaries, associates - net and interest in joint venture

Movement of investments in subsidiaries, associates and interest in joint venture for the years ended 31 December 2015 and 2014 are as follows:

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Opening net book amount	6,144	6,006	10,489	10,187
Share of loss of associates and interest in joint venture - equity method	(184)	(139)	-	-
Dividend from associates	-	(25)	-	-
Reduction of registered share capital of a subsidiary	-	-	(1,875)	-
Subsidiaries under liquidation process	23	-	-	-
Disposal in a liquidated subsidiary	-	-	(3)	-
Reversal of impairment of investment in a subsidiary	-	-	23	-
Additional in joint venture and an associate	407	302	402	302
Disposal of investment in an associate	(247)	-	(58)	-
Closing net book amount	<u>6,143</u>	<u>6,144</u>	<u>8,978</u>	<u>10,489</u>

Movements of investments in subsidiaries, associates and interest in joint ventures for the year ended 31 December 2015 are as follows:

- (1) Thai ABS Co., Ltd which is the Company's subsidiary reduced its registered share capital by Baht 1,875 million. (From the registered share capital 250 million shares at par value of Baht 10 per share to 62.5 million shares at par value of Baht 10). No change in investment proportion held by the Company.
- (2) IRPC Polyol Co., Ltd., a subsidiary, invested in ordinary shares of IRPC PCC Co., Ltd. at 499,998 ordinary shares at par value of Baht 10 each, and purchased at Baht 10 each, totalling Baht 5 million, equivalent to 49.99% of total authorized shares of IRPC PCC Co., Ltd. IRPC PCC Co., Ltd. was registered with the Ministry of Commerce on 25 February 2015.
- (3) IRPC Clean Power Company Limited, which is an associate of the Company, called for the additional paid-up at Baht 3.32 per share. The Company paid for additional paid-up shares at the same proportion of investment, totalling Baht 402 million.
- (4) At the Annual Shareholders' meetings of the Thai Polyurethane Industry Company Limited, IRPC Energy Company Limited, and TPI Internet Portal Company Limited on 9 April 2015, they were resolved to liquidate the three companies which have already ceased their operations. The companies registered for the dissolution with the Ministry of Commerce on 25 June 2015. Commencing from the date of registration for dissolution, the financial information of these three subsidiaries were excluded from the consolidated financial information. On 23 December 2015, Thai Polyurethane Industry Company Limited completed the registration for the liquidation. The remaining companies are in the liquidation process which is part of legal procedures. The investments of these subsidiaries are recognised at fair value, resulting in reversal of impairment of investment of Baht 23 million.
- (5) The Company disposed of its total investment in an associate, PTT Polymer Marketing Co., Ltd. for Baht 247 million net, on 29 June 2015.

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11 Investments in subsidiaries, associates – net and interest in joint venture (continued)

a) Details of investments in subsidiaries, associates and interest in joint venture as at 31 December 2015 and 2014 are as follows:

	Paid-up capital		Cost method		Equity method		Impairment		Net		Dividend income	
	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million	Baht million	Baht million	Baht million	Baht million	Baht million	Baht million	Baht million	Baht million
Subsidiaries under bankruptcy process												
TPI Aromatics Public Company Limited	-	4,100	-	4,100	-	-	-	(4,100)	-	-	-	-
R.Solution Co., Ltd. (Below Baht 1 million)	-	-	-	-	-	-	-	-	-	-	-	-
(formerly IRPC Service Co., Ltd.)	-	-	-	4,100	-	-	-	(4,100)	-	-	-	-
Subsidiaries under liquidation process												
Rayong Tank Terminal Co., Ltd.	-	-	1,000	1,000	-	-	(1,000)	(1,000)	-	-	-	-
IRPC Energy Co., Ltd.	-	-	2,757	-	-	-	(2,734)	-	23	-	-	-
TPI Internet Portal Co., Ltd.	-	-	-	-	-	-	-	-	-	-	-	-
(Below Baht 1 million)	-	-	-	-	-	-	-	-	-	-	-	-
Joint venture												
IRPC PCC Co., Ltd.	10	-	5	-	3	-	-	-	3	-	-	-
	-	-	5	-	3	-	-	-	3	-	-	-
Active associates												
PTT Polymer Marketing Co., Ltd.	-	40	-	58	-	235	-	-	-	235	-	23
PTT Energy Solutions Co., Ltd.	150	150	30	30	43	39	-	-	43	39	-	2
UBE Chemicals (Asia) Public Co., Ltd. (note 11 d)	10,739	10,739	5,300	5,300	4,753	4,938	-	-	4,753	4,938	-	-
IRPC Clean Power Co., Ltd. (note 11 d)	2,336	1,516	1,144	743	1,321	932	-	-	1,321	932	-	-
	-	-	6,474	6,131	6,117	6,144	-	-	6,117	6,144	-	25
Total investment in subsidiaries, associates and interest in joint venture			10,236	11,231	6,120	6,144	(3,734)	(5,100)	6,143	6,144	-	25

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11 Investments in subsidiaries, associates - net and interest in joint venture (continued)

b) The Group's share of assets, liabilities, revenues, and share of profits (losses) of its associates according to the percentage of shareholding are as follows:

Associates	Business	Incorporated countries	Assets (Baht million)	Liabilities (Baht million)	Revenue (Baht million)	Share of profits (losses) (Baht million)	% Interest held
As at 31 December 2015							
Joint venture							
IRPC PCC Co., Ltd.	Sales of Petrochemical products	Thailand	15	12	28	(2)	49.99
Associates							
PTT Energy Solutions Co., Ltd.	Engineering consulting	Thailand	84	40	106	3	20.00
UBE Chemicals (Asia) Public Co., Ltd. (note 11 d)	Produce and sales of petrochemical	Thailand	3,667	656	2,963	(185)	25.00
IRPC Clean Power Co., Ltd (note 11 d)	Manufacturing and sales of electricity and steam	Thailand	4,363	3,245	129	(13)	48.99
As at 31 December 2014							
Associates							
PTT Polymer Marketing Co., Ltd.	Sales of plastic resin	Thailand	2,222	1,987	22,592	34	25.00
PTT Energy Solutions Co., Ltd.	Engineering consulting	Thailand	85	42	111	6	20.00
UBE Chemicals (Asia) Public Co., Ltd. (note 11 d)	Produce and sales of petrochemical	Thailand	3,918	761	3,593	(177)	25.00
IRPC Clean Power Co., Ltd (note 11 d)	Manufacturing and sales of electricity and steam	Thailand	2,007	1,274	-	(3)	48.99

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11 Investments in subsidiaries, associates - net and interest in joint venture (continued)

c) Details of investments in subsidiaries and associates as at 31 December 2015 and 2014 are as follows:

	Business	Ownership interest		Paid-up capital		Cost method		Impairment		Net		Dividend income		Company
		2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	
		(%)	(%)	Baht million	Baht million	Baht million	Baht million	Baht million	Baht million	Baht million	Baht million	Baht million	Baht million	
Subsidiaries														
- Active subsidiaries														
Tha ABS Co., Ltd. and a subsidiary	Manufacturing and sales of plastic resin	99.99	99.99	625	2,500	625	2,500	-	-	625	2,500	2,012	40	
- IRPC A&L Co., Ltd.	Manufacturing and distributing petrochemical product	59.94	59.94											
IRPC Oil Co., Ltd. and a subsidiary	Sales of oil products and gas	99.99	99.99	2,000	2,000	2,000	2,000	(718)	(718)	1,282	1,282	160	150	
- Rak Phasuk Co., Ltd.	Oil vessel renting	99.99	99.99											
(formerly TPI Oil (2001) Co., Ltd.)														
IRPC Polysty Co., Ltd.	Manufacturing and sales of polystyrene	99.99	99.99	300	300	300	300	-	-	300	300	-	6	
IRPC Technology Co., Ltd.	Vocational school	99.99	99.99	750	750	750	750	(476)	(476)	274	274	-	-	
- Subsidiary under bankruptcy process														
TPI Aromatics Public Co., Ltd.	Manufacturing and sales of petrochemical products	-	99.99	-	4,100	-	4,100	-	(4,100)	-	-	-	-	
R. Solution Co., Ltd.	Service for security	99.50	99.50	-	-	-	-	-	-	-	-	-	-	
(formerly IRPC Service Co., Ltd.)														
(Below Baht 1 million)														
- A subsidiary under liquidation process														
Rayong Tank Terminal Co., Ltd.	Rental service for chemical tank	99.99	99.99	-	-	1,000	1,000	(1,000)	(1,000)	-	-	-	-	
Tha Polyurethane Industry Co., Ltd.	Manufacturing and sales of polyurethane	-	99.99	-	2	-	2	-	-	-	2	-	-	
IRPC Energy Co., Ltd.	Manufacturing and sales of electricity	99.99	99.99	2,757	2,757	2,757	2,757	(2,754)	(2,757)	23	-	-	-	
TPI Internet Portal Co., Ltd.	Sales of oil products	99.99	99.99	-	-	-	-	-	-	-	-	-	-	
(Below Baht 1 million)														
Total subsidiaries						7,432	13,409	(4,928)	(9,051)	2,504	4,358	2,172	196	
Associates														
PTT Polymer Marketing Co., Ltd.	Sales of plastic resin	-	25.00	-	40	-	58	-	-	-	58	-	23	
PTT Energy Solutions Co., Ltd.	Engineering consulting	20.00	20.00	150	150	30	30	-	-	30	30	-	2	
UBC Chemicals (Asia) Public Co., Ltd.	Produce and sales of petrochemical	25.00	25.00	10,739	10,739	5,300	5,300	-	-	5,300	5,300	-	-	
IRPC Clean Power Co., Ltd.	Manufacturing and sales of electricity and steam	48.99	48.99	2,336	1,516	1,144	743	-	-	1,144	743	-	-	
Total associates						6,474	6,131	-	-	6,474	6,131	-	25	
Total investment in subsidiaries and associates						13,906	19,540	(4,928)	(9,051)	8,978	10,489	2,172	221	

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11 Investments in subsidiaries, associates - net and interest in joint venture (continued)

(d) Associates that are significant to the Group

Set out below are the associates of the group as at 31 December 2015 which are material to the group. The associates as listed below have share capital consisting solely of ordinary shares, which are held directly by the group; the country of incorporation or registration is also their principal place of business.

Nature of investment in associates in 2015 and 2014:

Name of entity	Place of business/ country of incorporation	% Ownership of interest	Nature of relationship	Measurement method
UBE Chemicals (Asia) Public Co., Ltd.	Thailand	25.00%	Sales and purchase of goods	Equity method
IRPC Clean Power Co., Ltd.	Thailand	48.99%	Sales of steam and electricity to Group	Equity method

There are no quoted market price available for UBE Chemicals (Asia) Public Co., Ltd. and IRPC Clean Power Co., Ltd.'s shares. There are no contingent liabilities relating to the group's interest in the associates.

Summarised financial information for associates which are significant to the Group

Set out below are the summarised financial information for UBE Chemicals (Asia) Public Co., Ltd. and IRPC Clean Power Co., Ltd. which are accounted for using the equity method.

	UBE Chemicals (Asia) Public Co., Ltd.		IRPC Clean Power Co., Ltd.	
	31 December 2015	31 December 2014	31 December 2015	31 December 2014
	Baht million	Baht million	Baht million	Baht million
Current portion				
Cash and cash equivalents	260	362	235	182
Other current assets (exclude cash and cash equivalents)	4,542	4,816	509	66
Total current assets	4,802	5,178	744	248
Financial liabilities (excluding trade payables)	1,365	1,719	-	-
Other current liabilities (including trade payables)	1,117	1,172	209	146
Total current liabilities	2,482	2,891	209	146
Non-current portion				
Non-current assets	9,867	10,493	8,161	3,849
Financial liabilities (non-current)	-	-	6,223	2,455
Other liabilities	143	154	191	-
Total non-current liabilities	143	154	6,414	2,455
Net assets	12,044	12,626	2,282	1,496

11 Investments in subsidiaries, associates - net and interest in joint venture (continued)

(d) Associates that are significant to the Group (continued)

Summarised financial information for associates which are significant to the Group (continued)

Set out below are the summarised financial information for UBE Chemicals (Asia) Public Co., Ltd. and IRPC Clean Power Co., Ltd. which are accounted for using the equity method. (continued)

Summarised statement of comprehensive income

	UBE Chemicals (Asia) Public Co., Ltd.		IRPC Clean Power Co., Ltd.	
	31 December 2015	31 December 2014	31 December 2015	31 December 2014
	Baht million	Baht million	Baht million	Baht million
Revenue	11,852	14,533	263	-
Cost of sales	(10,688)	(13,124)	(197)	-
Other income (expense)	37	(159)	(46)	2
Selling and administrative expense	(1,034)	(1,161)	(16)	(9)
Depreciation and amortisation	(885)	(775)	(21)	-
Interest income	3	3	1	2
Interest expense	(21)	(13)	(9)	-
Loss from continuing operations	(736)	(696)	(25)	(5)
Income tax expense	154	148	-	-
Post-tax loss from continuing operations	(582)	(548)	(25)	(5)
Other comprehensive income	-	-	-	-
Total comprehensive income	(582)	(548)	(25)	(5)
Dividend received from an associate	-	-	-	-

The information above reflects the amounts presented in the financial statements of the associates (and not The Group's share of those amounts) adjusted for differences in accounting policies between the group and the associates.

The financial statements of UBE Chemicals (Asia) Public Co., Ltd. are during 1 April to 31 March which is different from the financial period of the Group. However, the above information are adjusted to the same accounting period of the Group. The financial statements of IRPC Clean Power Co., Ltd has the same accounting period as the Group.

Reconciliation of summarised financial information

Reconciliation of the summarised financial information presented to the carrying amount of its interest in associates.

Summarised financial Information

	UBE Chemicals (Asia) Public Co., Ltd.		IRPC Clean Power Co., Ltd.	
	31 December 2015	31 December 2014	31 December 2015	31 December 2014
	Baht million	Baht million	Baht million	Baht million
Opening net assets at 1 January	12,626	13,174	1,496	885
Issue of share capital during the year	-	-	820	616
Loss for the year	(582)	(548)	(34)	(5)
Other comprehensive income	-	-	-	-
Closing net assets at 31 December	12,044	12,626	2,282	1,496
Interest in associates (%)	25.00	25.00	48.99	48.99
Carrying value at 31 December	3,011	3,157	1,118	733

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12 Other long-term investments - net

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Marketable equity securities				
- available-for sales	1,442	1,442	1,442	1,442
<u>Less</u> Allowances for revaluation of investments	(338)	(731)	(338)	(731)
	1,104	711	1,104	711
General investments (equity)				
- cost method	4,061	4,061	4,059	4,059
<u>Less</u> Allowances for impairment	(4,040)	(4,040)	(4,038)	(4,038)
	21	21	21	21
Net	1,125	732	1,125	732

Movement of other long-term investments for the year ended 31 December 2015 are as follows:

	Consolidated		
	General investments - cost method	Available-for-sale securities	Total
	Baht million	Baht million	Baht million
Opening net book amount	21	711	732
Changes in fair value	-	393	393
Closing net book amount	21	1,104	1,125

	Company		
	General investments - cost method	Available-for-sale securities	Total
	Baht million	Baht million	Baht million
Opening net book amount	21	711	732
Changes in fair value	-	393	393
Closing net book amount	21	1,104	1,125

The fair value of available-for-sales investments is based on quoted bid price on the statement of financial position date by reference to the Stock Exchange of Thailand.

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13 Investment properties - net

The Group has investment properties which are land that mostly has not been determined for the purpose of use, and major buildings which are for rent presented in the consolidated and company financial statements as follows:

	Consolidated		
	Land	Buildings	Total
	Baht million	Baht million	Baht million
As at 31 December 2013			
Cost	1,624	88	1,712
<u>Less</u> Accumulated depreciation	-	(60)	(60)
<u>Less</u> Allowance for impairment	(365)	-	(365)
Net book amount	<u>1,259</u>	<u>28</u>	<u>1,287</u>
For the year ended 31 December 2014			
Opening net book amount	1,259	28	1,287
Disposals - net	(38)	(8)	(46)
Depreciation	-	(3)	(3)
Reversal of impairment	10	-	10
Closing net book amount	<u>1,231</u>	<u>17</u>	<u>1,248</u>
As at 31 December 2014			
Cost	1,586	50	1,636
<u>Less</u> Accumulated depreciation	-	(33)	(33)
<u>Less</u> Allowance for impairment	(355)	-	(355)
Net book amount	<u>1,231</u>	<u>17</u>	<u>1,248</u>
For the year ended 31 December 2015			
Opening net book amount	1,231	17	1,248
Disposals – net	(44)	(13)	(57)
Depreciation	-	(1)	(1)
Reversal of impairment	1	-	1
Closing net book amount	<u>1,188</u>	<u>3</u>	<u>1,191</u>
As at 31 December 2015			
Cost	1,542	19	1,561
<u>Less</u> Accumulated depreciation	-	(16)	(16)
<u>Less</u> Allowance for impairment	(354)	-	(354)
Net book amount	<u>1,188</u>	<u>3</u>	<u>1,191</u>

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13 Investment properties - net (continued)

			Company
	Land	Buildings	Total
	Baht million	Baht million	Baht million
As at 31 December 2013			
Cost	1,490	21	1,511
<u>Less</u> Accumulated depreciation	-	(15)	(15)
<u>Less</u> Allowance for impairment	(329)	-	(329)
Net book amount	<u>1,161</u>	<u>6</u>	<u>1,167</u>
For the year ended 31 December 2014			
Opening net book amount	1,161	6	1,167
Disposals - net	(9)	(4)	(13)
Depreciation	-	(1)	(1)
Closing net book amount	<u>1,152</u>	<u>1</u>	<u>1,153</u>
As at 31 December 2014			
Cost	1,481	3	1,484
<u>Less</u> Accumulated depreciation	-	(2)	(2)
<u>Less</u> Allowance for impairment	(329)	-	(329)
Net book amount	<u>1,152</u>	<u>1</u>	<u>1,153</u>
For the year ended 31 December 2015			
Opening net book amount	1,152	1	1,153
Disposals - net	(2)	(1)	(3)
Closing net book amount	<u>1,150</u>	<u>-</u>	<u>1,150</u>
As at 31 December 2015			
Cost	1,479	1	1,480
<u>Less</u> Accumulated depreciation	-	(1)	(1)
<u>Less</u> Allowance for impairment	(329)	-	(329)
Net book amount	<u>1,150</u>	<u>-</u>	<u>1,150</u>

During 2015, the Group reversed allowance for impairment of Baht 1 million in the consolidated financial statements. (2014: Baht 10 million in the consolidated and company financial statements, respectively) due to sales of land.

Amounts recognised in profit and loss that are related to investment properties are as follows:

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Rental income	37	40	35	37

13 Investment properties - net (continued)

The fair values of investment properties as at 31 December 2015 and 2014 are as follows.

	Consolidated		Company	
	2015	2014	2015	2014
	Baht	Baht	Baht	Baht
	million	million	million	million
Land	1,612	1,651	1,560	1,560
Buildings	23	31	1	8
	1,635	1,682	1,561	1,568

The fair values of investment properties as disclosed above are from the appraisal of independent valuers by using market approach in the year 2012 which the environment and the assumptions used for the assessment have not been changed significantly from the current year.

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14 Property, plant and equipment - net

	Consolidated							
	Land and land improvement Baht million	Buildings and building improvements Baht million	Machinery and pipes Baht million	Tools and factory equipment Baht million	Furniture, fixtures and office equipment Baht million	Vehicles Baht million	Assets under construction Baht million	Total Baht million
As at 31 December 2013								
Cost	4,680	25,861	87,428	2,191	909	730	15,764	137,563
Less Accumulated depreciation	-	(11,784)	(39,545)	(1,370)	(590)	(587)	-	(53,876)
Allowance for impairment	(181)	(162)	(203)	-	-	-	-	(546)
Net book amount	4,499	13,915	47,680	821	319	143	15,764	83,141
For the year ended 31 December 2014								
Opening net book amount	4,499	13,915	47,680	821	319	143	15,764	83,141
Additions	-	11	152	140	28	41	22,864	23,236
Disposals - net book value	(20)	-	(261)	-	-	(1)	-	(282)
Reclassification	-	357	1,865	74	8	-	(2,304)	-
Depreciation charge	-	(887)	(3,795)	(150)	(98)	(26)	-	(4,956)
Allowance for impairment	-	-	(267)	-	-	-	-	(267)
Closing net book amount	4,479	13,396	45,374	885	257	157	36,324	100,872
As at 31 December 2014								
Cost	4,660	26,229	89,184	2,382	941	741	36,324	160,461
Less Accumulated depreciation	-	(12,671)	(43,340)	(1,497)	(684)	(584)	-	(58,776)
Allowance for impairment	(181)	(162)	(470)	-	-	-	-	(813)
Net book amount	4,479	13,396	45,374	885	257	157	36,324	100,872

IRPC Public Company Limited
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14 Property, plant and equipment - net (continued)

	Consolidated							
	Land and land improvement Baht million	Buildings and building improvements Baht million	Machinery and pipes Baht million	Tools and factory equipment Baht million	Furniture, fixtures and office equipment Baht million	Vehicles Baht million	Assets under construction Baht million	Total Baht million
As at 31 December 2014								
Cost	4,660	26,229	89,184	2,382	941	741	36,324	160,461
Less Accumulated depreciation	-	(12,671)	(43,340)	(1,497)	(684)	(584)	-	(58,776)
Allowance for impairment	(181)	(162)	(470)	-	-	-	-	(813)
Net book amount	4,479	13,396	45,374	885	257	157	36,324	100,872
For the year ended 31 December 2015								
Opening net book amount	4,479	13,396	45,374	885	257	157	36,324	100,872
Additions	4,224	14	103	75	15	-	14,724	19,155
Disposals - net book value	(8)	(3)	(278)	-	-	-	-	(289)
Reclassification	73	895	3,613	299	30	-	(4,910)	-
Depreciation charge	-	(917)	(3,984)	(177)	(93)	(27)	-	(5,198)
Reversal allowance for impairment	-	-	267	-	-	-	-	267
Closing net book amount	8,768	13,385	45,095	1,082	209	130	46,138	114,807
As at 31 December 2015								
Cost	8,949	27,119	92,317	2,732	965	683	46,138	178,903
Less Accumulated depreciation	-	(13,572)	(47,019)	(1,650)	(756)	(553)	-	(63,550)
Allowance for impairment	(181)	(162)	(203)	-	-	-	-	(546)
Net book amount	8,768	13,385	45,095	1,082	209	130	46,138	114,807

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14 Property, plant and equipment - net (continued)

	Company							
	Land and land improvement Baht million	Buildings and building improvements Baht million	Machinery and pipes Baht million	Tools and factory equipment Baht million	Furniture, fixtures and office equipment Baht million	Vehicles Baht million	Assets under construction Baht million	Total Baht million
As at 31 December 2013								
Cost	4,044	22,445	78,496	1,737	815	548	14,355	122,440
Less Accumulated depreciation	-	(9,760)	(35,415)	(1,049)	(537)	(420)	-	(47,181)
Less Allowance for impairment	-	-	(189)	-	-	-	-	(189)
Net book amount	4,044	12,685	42,892	688	278	128	14,355	75,070
For the year ended 31 December 2014								
Opening net book amount	4,044	12,685	42,892	688	278	128	14,355	75,070
Additions	-	6	148	128	21	41	22,397	22,741
Disposals - net book value	(20)	-	(261)	-	-	(1)	-	(282)
Reclassification	-	339	1,689	29	7	-	(2,064)	-
Depreciation charge	-	(844)	(3,461)	(129)	(89)	(20)	-	(4,543)
Allowance for impairment	-	-	(267)	-	-	-	-	(267)
Closing net book amount	4,024	12,186	40,740	716	217	148	34,688	92,719
As at 31 December 2014								
Cost	4,024	22,790	80,072	1,873	838	559	34,688	144,844
Less Accumulated depreciation	-	(10,604)	(38,876)	(1,157)	(621)	(411)	-	(51,669)
Less Allowance for impairment	-	-	(456)	-	-	-	-	(456)
Net book amount	4,024	12,186	40,740	716	217	148	34,688	92,719

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14 Property, plant and equipment - net (continued)

	Company							
	Land and land improvement Baht million	Buildings and building improvements Baht million	Machinery and pipes Baht million	Tools and factory equipment Baht million	Furniture, fixtures and office equipment Baht million	Vehicles Baht million	Assets under construction Baht million	Total Baht million
As at 31 December 2014								
Cost	4,024	22,790	80,072	1,873	838	559	34,688	144,844
Less Accumulated depreciation	-	(10,604)	(38,876)	(1,157)	(621)	(411)	-	(51,669)
Allowance for impairment	-	-	(456)	-	-	-	-	(456)
Net book amount	4,024	12,186	40,740	716	217	148	34,688	92,719
For the year ended 31 December 2015								
Opening net book amount	4,024	12,186	40,740	716	217	148	34,688	92,719
Additions	4,224	3	85	70	11	-	14,520	18,913
Disposals - net book value	(8)	-	(267)	-	-	-	-	(275)
Reclassification	73	682	2,874	3	25	-	(3,657)	-
Depreciation charge	-	(867)	(3,633)	(136)	(83)	(23)	-	(4,742)
Allowance for impairment	-	-	267	-	-	-	-	267
Closing net book amount	8,313	12,004	40,066	653	170	125	45,551	106,882
As at 31 December 2015								
Cost	8,313	23,475	82,467	1,946	855	500	45,551	163,107
Less Accumulated depreciation	-	(11,471)	(42,212)	(1,293)	(685)	(375)	-	(56,036)
Allowance for impairment	-	-	(189)	-	-	-	-	(189)
Net book amount	8,313	12,004	40,066	653	170	125	45,551	106,882

As at 31 December 2015, the Group has no asset under finance leases in the consolidated and company financial statements (2014: Nil).

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14 Property, plant and equipment - net (continued)

Borrowing costs of Baht 1,490 million and Baht 1,464 million in the consolidated and company financial statements, respectively (2014: Baht 887 million and Baht 852 million in the consolidated and company financial statements, respectively) arising from financing specifically for the construction of new factories, were capitalised during the year and are included in 'Additions'. Capitalisation rates between 4.07% and 5.75% were used to calculate the borrowing costs of the loans used to finance the project.

Depreciation charge for the years ended 31 December 2015 and 2014 is as follows:

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Depreciation charge for plant and equipment				
- Cost of sales	5,004	4,770	4,654	4,451
- Administrative expenses	194	186	88	92
	5,198	4,956	4,742	4,543
Depreciation charge for investment properties				
- Administrative expenses	1	3	-	1
Total	5,199	4,959	4,742	4,544

15 Intangible assets - net

Intangible assets presented in the consolidated and company financial statements are as follows:

	Consolidated		
	Dredging expenses	Computer software and computer development	Total
	Baht million	Baht million	Baht million
As at 31 December 2013			
Cost	2,640	1,060	3,700
<u>Less</u> Accumulated amortisation	(1,815)	(369)	(2,184)
Net book amount	825	691	1,516
For the year ended 31 December 2014			
Opening net book amount	825	691	1,516
Additions	-	64	64
Amortisation	(142)	(107)	(249)
Closing net book amount	683	648	1,331
As at 31 December 2014			
Cost	2,640	1,124	3,764
<u>Less</u> Accumulated amortisation	(1,957)	(476)	(2,433)
Net book amount	683	648	1,331
For the year ended 31 December 2015			
Opening net book amount	683	648	1,331
Additions	-	46	46
Amortisation	(142)	(113)	(255)
Closing net book amount	541	581	1,122
As at 31 December 2015			
Cost	2,640	1,170	3,810
<u>Less</u> Accumulated amortisation	(2,099)	(589)	(2,688)
Net book amount	541	581	1,122

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15 Intangible assets - net (continued)

Intangible assets presented in the consolidated and company financial statements are as follows: (continued)

	Company		
	Dredging expenses	Computer software and computer development	Total
	Baht million	Baht million	Baht million
As at 31 December 2013			
Cost	2,640	1,060	3,700
<u>Less</u> Accumulated amortisation	(1,815)	(369)	(2,184)
Net book amount	825	691	1,516
For the year ended 31 December 2014			
Opening net book amount	825	691	1,516
Additions	-	62	62
Amortisation	(142)	(107)	(249)
Closing net book amount	683	646	1,329
As at 31 December 2014			
Cost	2,640	1,122	3,762
<u>Less</u> Accumulated amortisation	(1,957)	(476)	(2,433)
Net book amount	683	646	1,329
For the year ended 31 December 2015			
Opening net book amount	683	646	1,329
Additions	-	41	41
Amortisation	(142)	(113)	(255)
Closing net book amount	541	574	1,115
As at 31 December 2015			
Cost	2,640	1,163	3,803
<u>Less</u> Accumulated amortisation	(2,099)	(589)	(2,688)
Net book amount	541	574	1,115

Total amortisation of Baht 255 million has been included in the costs of sales and administrative expenses for Baht 152 million and Baht 103 million, respectively in the consolidated and company income statements for the year ended 31 December 2015 (2014: Baht 249 million has been included in the costs of sales and administrative expenses for Baht 151 million and Baht 98 million,, respectively).

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16 Deferred income taxes

The analysis of deferred tax assets and deferred tax liability is as follows:

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Deferred tax assets:				
Deferred tax assets to be recovered within 12 months	25	20	25	20
Deferred tax assets to be recovered after more than 12 months	2,172	5,118	2,385	4,795
	<u>2,737</u>	<u>5,138</u>	<u>2,410</u>	<u>4,815</u>
Deferred tax liabilities:				
Deferred tax liabilities to be settled within 12 months	84	84	84	84
Deferred tax liabilities to be settled after more than 12 months	79	123	79	123
	<u>163</u>	<u>207</u>	<u>163</u>	<u>207</u>
Deferred tax assets - net	<u>2,574</u>	<u>4,931</u>	<u>2,247</u>	<u>4,608</u>

The gross movement and the deferred income tax account is as follows:

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
As at 1 January	4,931	2,374	4,608	2,031
Charged/(credited) to profit or loss	(2,307)	2,470	(2,311)	2,491
Charged/(credited) to other comprehensive income	(50)	87	(50)	86
As at 31 December	<u>2,574</u>	<u>4,931</u>	<u>2,247</u>	<u>4,608</u>

The movement in deferred tax assets and liabilities during the year is as follows:

	Consolidated				
	Employee benefit obligations	Receivables and investment impairment	Tax losses	Others	Total
	Baht million	Baht million	Baht million	Baht million	Baht million
Deferred tax assets					
As at 1 January 2014	257	1,610	429	420	2,716
Charged/(credited) to profit or loss	17	(104)	2,391	31	2,335
Charged/(credited) to other comprehensive income	39	-	-	48	87
As at 31 December 2014	313	1,506	2,820	499	5,138
Charged/(credited) to profit or loss	27	(1,505)	(894)	21	(2,351)
Charged/(credited) to other comprehensive income	28	-	-	(78)	(50)
As at 31 December 2015	<u>368</u>	<u>1</u>	<u>1,926</u>	<u>442</u>	<u>2,737</u>

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16 Deferred income taxes (continued)

	Consolidated
	Fixed assets
	Baht million
Deferred tax liabilities	
As at 1 January 2014	342
Charged/(credited) to profit or loss	(135)
As at 31 December 2014	207
Charged/(credited) to profit or loss	(44)
As at 31 December 2015	163

The movement in deferred tax assets and liabilities during the year are as follows:

	Company				
	Employee benefit obligations	Receivables and investment impairment	Tax losses	Others	Total
	Baht million	Baht million	Baht million	Baht million	Baht million
Deferred tax assets					
As at 1 January 2014	239	1,468	422	244	2,373
Charged/(credited) to profit or loss	14	(104)	2,396	50	2,356
Charged/(credited) to other comprehensive income	38	-	-	48	86
As at 31 December 2014	291	1,364	2,818	342	4,815
Charged/(credited) to profit or loss	26	(1,363)	(1,052)	34	(2,355)
Charged/(credited) to other comprehensive income	28	-	-	(78)	(50)
As at 31 December 2015	345	1	1,766	298	2,410

	Company
	Fixed assets
	Baht million
Deferred tax liabilities	
As at 1 January 2014	342
Charged/(credited) to profit or loss	(135)
As at 31 December 2014	207
Charged/(credited) to profit or loss	(44)
As at t 31 December 2015	163

The Group has total tax losses of Baht 13,745 million to carry forward against future taxable profits. Tax losses amounting to Baht 3,394 million Baht 9,543 million and Baht 808 million will expire in 2017, 2019 and 2020, respectively. The Group has recognised deferred tax assets for tax losses amounting to Baht 9,639 million, no deferred tax asset is recognised for the remaining tax loss of Baht 4,106 million. The Group has considered whether the realisation of the related tax benefit through the future taxable profits is probable.

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17 Other non-current assets - net

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Deposits for land	131	128	131	128
<u>Less</u> Allowance for impairment	(128)	(128)	(128)	(128)
	3	-	3	-
Others	226	89	223	85
Net	229	89	226	85

18 Borrowings

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Current liabilities				
Unsecured short-term loans from financial institutions	204	8,847	134	8,793
Current portion of long-term loans due within one year	4,265	2,701	4,265	2,701
Current portion of debentures due within one year	-	5,000	-	5,000
Total short-term loans	4,469	16,548	4,399	16,494
Non-current liabilities				
Unsecured debentures				
- US Dollar	8,628	7,881	8,628	7,881
<u>Less</u> Discount on debentures	(6)	(10)	(6)	(10)
Net	8,622	7,871	8,622	7,871
- Thai Baht	22,640	22,640	22,640	22,640
Total debentures	31,262	30,511	31,262	30,511
Long-term loans from financial institutions	18,047	13,793	18,047	13,793
Total debentures and long term loans	49,309	44,304	49,309	44,304
<u>Less</u> Deferred debentures issuance costs and deferred financing fee	(74)	(61)	(74)	(61)
Total debentures and long-term loans	49,235	44,243	49,235	44,243
Total borrowings	53,704	60,791	53,634	60,737

Short-term loans

As at 31 December 2015, unsecured short-term loans from financial institutions amounting to Baht 204 million and Baht 134 million in the consolidated and company financial statements, respectively, bearing interest rates of between 0.62% and 0.65% per annum and 0.62% per annum respectively with maturities of 1 - 3 months (2014: Baht 8,847 million and Baht 8,793 million in the consolidated and company financial statements bearing interest at rates between 0.50% and 2.15% per annum with maturities of 1 - 3 months).

18 Borrowings (continued)

Long-term loans

- (1) The Company entered into a long-term loan contract for Baht 10,000 million with five local financial institutions for capital expenditure projects. Accounts are withdrawn according to the progress of the projects. The unsecured long-term loans are for a period of eight years with an interest rate not exceeding the maximum of a six-month fixed deposit market rate plus a certain margin for the facility of Baht 5,400 million (Facility A) and at the rate of THBFIX six-month plus a certain margin for the facility of Baht 4,600 million (Facility B). The interest will be paid at the end of every month whereas the principal repayment is separated into 10 semi-annually instalments, starting from 30 June 2012 (the last business day of the 42nd month from the loan agreement date). As at 31 December 2015, the loans were fully drawn down.
- (2) The Company entered into the following loan agreements with three local and foreign financial institutions to finance the Group's projects.
 - Unsecured loans with facilities of US Dollars 100 million are for a period of 8 years with an interest at LIBOR plus a certain margin per annum. The interest will be paid every 3 months or 6 months whereas the principal repayment is separated into 10 semi-annually instalments, starting from 10 July 2015 (42nd month from the loan agreement signing date). As at 31 December 2015, the loans were fully drawn down.
 - Unsecured loans with facilities of Baht 3,700 million are for a period of 8 years with an interest rate of THB FIX three-month plus a certain margin per annum. The interest will be paid every 3 months whereas the principal repayment is paid every 6 months and separated into 10 semi-annually instalments, starting from 31 July 2015 (the last business day of the 42nd month from the first drawn down). As at 31 December 2015, the loans were fully drawn down.
 - Unsecured loans with facilities of US Dollars 75 million are for a period of 6 years with an interest rate at LIBOR plus a certain margin per annum. The interest will be paid every 1 month or 3 months or 6 months. The principal is to be repaid by 10 January 2018. As at 31 December 2015, the loans were fully drawn down.
- (3) The Company entered into the following loan agreements with local financial institutions to finance to Group's projects.
 - Unsecured loans with facilities of Baht 10,000 million with three local financial institutions are for a period of 8 years with the interest rate of the average maximum six-month fixed deposit rate of four commercial banks plus a certain margin per annum. The payment of interest is monthly whereas the principal repayment is separated into 12 semi-annually installments, starting from June 2016. As at 31 December 2015, the loans of Baht 8,000 million were drawn down.
 - Unsecured loans with facilities of Baht 3,000 million with a local financial institution are for a period of 8 years with the interest rate of the six-month fixed deposit rate of an individual plus a certain margin per annum. The payments of interest and principal are semi-annually and separated into 10 semi-annually installments, starting from 30 September 2017 (42nd month from the loan agreement date). As at 31 December 2015, the loans were fully drawn down.

18 Borrowings (continued)

Debentures

Debentures as at 31 December 2015 are as follows:

- (1) The Company issued USD unsecured and non-subordinated debentures with a total face value of US Dollars 250 million at the discounted price of 99.323% of the face value, for the net amount of US Dollars 248.31 million. The debentures bear interest at the fixed rate of 6.375% per annum, payable semi-annually starting from 25 November 2007. The debentures will mature on 25 May 2017.
- (2) The Company issued Thai Baht unsecured and non-subordinated debentures with a total face value of Baht 10,000 million. The Company offered these debentures to financial institution investors in two tranches, Baht 7,000 million and Baht 3,000 million as follows:

	Baht 7,000 million	Baht 3,000 million
Maturity	7 years	10 years
Fixed interest rate per annum (%)	5.05	5.29
Payment of interest	Semi-annually	Semi-annually
Redemption date	2 July 2014	2 July 2017

Under the terms of the debentures, the Company has to comply with certain conditions as stipulated, such as not creating any future lien or other security interest of the Company and its principal subsidiaries; consolidation, amalgamation, merger and sale of assets require the debenture holders' consent and maintaining direct and indirect ownership interest of PTT Public Company Limited.

- (3) On 24 August 2012, the Company issued Tranche 1 debentures amounting to Baht 5,000 million with a fixed interest rate at 4.35% per annum, and maturity date on 24 August 2015 and Tranche 2 debentures amounting to Baht 5,000 million with a fixed interest rate at 4.76% per annum, and maturity date on 24 August 2018. Interest is payable semi-annually for both Tranche 1 and 2 debentures. The first interest payment period is on 24 February 2013 with the final interest payment on the maturity dates of each Tranche.

Under the terms of the debentures, the Company has to comply with certain conditions as stipulated therein, such as not creating any future lien or other security interest of the Company and its principal subsidiaries, maintaining direct and indirect ownership interest of PTT Public Company Limited and maintaining certain financial ratios as stipulated in the requirements of the debenture's issuer.

- (4) On 9 May 2014, the Company issued debentures which are non-subordinated, unsecured with a debenture holders' representative in the name-registered certificate, totalling Baht 15,000 million. The details are as follows:
 - Tranche 1 debentures amounting to Baht 1,366 million and Tranche 4 debentures amounting to Baht 3,380 million with a fixed interest rate at 3.96% per annum, and redemption date on 9 May 2017;
 - Tranche 2 debentures amounting to Baht 1,944 million and Tranche 5 debentures amounting to Baht 1,420 million with a fixed interest rate at 4.50% per annum, and redemption date on 9 May 2019; and
 - Tranche 3 debentures amounting to Baht 2,940 million and Tranche 6 debentures amounting to Baht 3,950 million with a fixed interest rate at 4.96% per annum, and redemption date on 9 May 2021

Interest is payable on semi-annual for all six tranches of debentures. The first interest payment period is on 9 November 2014 with final interest payments at the redemption dates of each Tranche.

Under the terms of the debentures, the Company has to comply with certain conditions as stipulated, such as not creating any future lien or other security interest of the Company and its principal subsidiaries, maintaining direct and indirect ownership interest of PTT Public Company Limited in the Company and maintaining certain financial ratios as stipulated in the requirements of the debenture's issuer.

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18 Borrowings (continued)

The interest rates on the loans and debentures of the Group and the Company are as follows:

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
- Short-term loans and debentures at fixed rates	31,449	44,296	31,379	44,242
- Long-term loans at floating rates	22,255	16,495	22,255	16,495
Total	53,704	60,791	53,634	60,737
	Consolidated		Company	
	2015	2014	2015	2014
Effective interest rates (%)				
- Short-term loans from financial institutions	0.62 - 0.65	0.50 - 2.15	0.62	0.50 - 2.15
- Debentures	3.960 - 6.375	3.960 - 6.375	3.960 - 6.375	3.960 - 6.375
- Long-term loans from financial institutions	1.607 - 3.917	1.366 - 4.308	1.607 - 3.917	1.366 - 4.308

Maturity of long-term loans from financial institutions and debentures is as follows:

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Within 1 year	4,265	7,701	4,265	7,701
Later than 1 year but no later than 5 years	39,459	35,163	39,459	35,163
Later than 5 years	9,776	9,080	9,776	9,080
Total	53,500	51,944	53,500	51,944

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18 Borrowings (continued)

The movement of long-term loans from financial institutions and debentures for the year ended 31 December 2015 can be analysed as follows:

	Consolidated/ Company Baht million
Opening net book amount	51,944
Amortisation of deferred financing fees	18
Recognition of discount on debentures	5
Proceed from long-term loans	8,000
Financing costs of for long-term loans	(31)
Repayment of loans and debentures	(7,687)
Unrealised losses on exchange rate	1,251
Closing net book amount	<u>53,500</u>

Fair value

The carrying amounts and fair values of debentures in the consolidated and company financial statements are as follows:

	Carrying amount		Fair value	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
- US Dollar	8,622	7,871	8,980	8,335
- Thai Baht	22,640	27,640	23,741	28,517
Total	<u>31,262</u>	<u>35,511</u>	<u>32,721</u>	<u>36,852</u>

The fair values of debentures of Thai Baht are calculated by applying the latest reference yield rate referred from the Thai Bond Market Association used in calculating discounted cash flows. Fair values of US Dollar debentures are calculated by applying the latest closing bid price from the International Bond Market.

The carrying amounts of short-term borrowings with fixed interest rate approximate their fair values because of their short-term maturities. The long-term loans from financial institutions have floating interest rates; thus, the fair values approximate the carrying amounts.

Credit facilities

The Group has credit facilities from the commercial banks totalling Baht 55,682 million with the money market interest rates. As at 31 December 2015, the Group has outstanding credit facilities of Baht 35,565 million

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19 Trade accounts payable

	Note	Consolidated		Company	
		2015	2014	2015	2014
		Baht million	Baht million	Baht million	Baht million
- Related parties	33	24,913	25,060	26,140	25,897
- Other parties		828	755	680	484
Total		25,741	25,815	26,820	26,381

20 Employee benefit obligations

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Statements of financial position				
Retirement benefits	1,737	1,451	1,619	1,344
Other long-term benefits	113	116	106	109
	1,850	1,567	1,725	1,453
Income statements				
Retirement benefits	150	137	138	129
Other long-term benefits	12	12	11	11
	162	149	149	140

The movement in the employee benefit obligations over the year are as follows:

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Opening book amount	1,567	1,299	1,453	1,191
Current service costs	90	83	82	79
Interest cost	70	64	65	59
Amortisation of unrecognised past service cost	2	2	2	2
Losses from changes in financial assumptions	140	142	140	145
Benefits paid	(19)	(23)	(17)	(23)
Closing book amount	1,850	1,567	1,725	1,453

Total current service costs and interest cost are charged in the income statements.

Of the total charge, Baht 97 million and Baht 65 million (2014: Baht 90 million and Baht 59 million) were included in cost of sales and the administrative expenses in the consolidated income statement, respectively.

Of the total charge, Baht 87 million and Baht 62 million (2014: Baht 82 million and Baht 58 million) were included in cost of goods sold and administrative expenses in the company income statement, respectively.

The significant assumptions used for calculating employee benefit obligations according to the actuarial technique as at the consolidated and company statements of financial position are as follows:

	2015	2014
Discount rate as at 31 December	3.4%	4.4%
Salary increase rate	4.5% - 7.5%	5% - 8%
Turnover rate	0% - 2%	0% - 2%

20 Employee benefit obligations (continued)

	Impact on defined benefit obligation		
	Change in assumption	Increase in assumption	Decrease in assumption
Discount rate	1%	Decrease by 13%	Increase by 16%
Salary growth rate	1%	Increase by 15%	Decrease by 13%

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as when calculating the pension liability recognised within the statement of financial position.

The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous year.

Through its defined benefit retirement benefit plans and other long-term benefits plans, the Group is exposed to a number of risks, the most significant of which are detailed below:

Changes in bond yields

A decrease in Government bond yields will increase plan liabilities.

The weighted average duration of the defined benefit obligation is 19 years.

The Group use the cash flows from operating activities to pay the retirement and other long-term benefits.

Expected maturity analysis of retirement and other long-term benefits:

				Consolidated
	Less than a year Baht million	Between 1-5 years Baht million	More than 5 years Baht million	Total Baht million
Retirement benefits	29	152	1,556	1,737
Other long-term benefits	20	33	60	113
Total	49	185	1,616	1,850

				Company
	Less than a year Baht million	Between 1-5 years Baht million	More than 5 years Baht million	Total Baht million
Retirement benefits	29	150	1,440	1,619
Other long-term benefits	19	29	58	106
Total	48	179	1,498	1,725

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21 Share capital and premium on share capital

	Number of shares Million shares	Ordinary shares Baht million	Premium on share capital Baht million	Total Baht million
Balance as at 31 December 2014	20,434	20,434	28,554	48,988
Issued shares	-	-	-	-
Balance as at 31 December 2015	20,434	20,434	28,554	48,988

As at 31 December 2015, the total authorised number of shares was 20,475 million shares with a par value of Baht 1 per share. The shares of 20,434 million shares were issued and fully paid-up.

22 Legal reserve

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Balance as at 1 January 2014	2,048	2,048	2,048	2,048
Appropriation during the year	-	-	-	-
Balance as at 31 December 2014	2,048	2,048	2,048	2,048
Appropriation during the year	-	-	-	-
Balance as at 31 December 2015	2,048	2,048	2,048	2,048

Under the Public Company Act of B.E. 2535, the Company is required to set aside a statutory reserve of at least 5% of its net profit after accumulated deficit is brought forward (if any) until the reserve reaches not less than 10% of the registered capital. The legal reserve is non-distributable.

The legal reserve has been fully provided to comply with the law since 2007.

23 Treasury stock - Company's shares held by a subsidiary

	Consolidated	
	2015	2014
	Baht million	Baht million
IRPC Oil Company Limited	124	124
Total	124	124

As at 31 December 2015, the Company's ordinary shares of 23,828,400 have been held by IRPC Oil Company Limited, (2014: 23,828,400 shares). These shares are stated at costs and presented in the statements of financial position as a deduction of total shareholders' equity.

The subsidiary plans to dispose of the Company's shares when returns are higher than its costs.

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24 Non-controlling interests

	Consolidated	
	2015	2014
	Baht million	Baht million
Beginning balance	70	68
Share of net profit	22	21
Dividends paid	(18)	(19)
Ending balance	<u>74</u>	<u>70</u>

25 Other income - net

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Interest income	30	82	219	275
Dividend income	27	38	2,302	259
Gains on exchange rate	896	1,002	894	998
Gains (losses) on commodity derivative instruments	(1,176)	1,725	(1,176)	1,725
Tax refund from custom duty	133	219	133	219
Reversal of allowance for doubtful debts of transactions with former company's management and relating entities				
- Deposit from a long-term building Rental agreement	-	470	-	420
- Loans to former company's management	-	3,289	-	3,287
Provision for impairment of other long-term investments	-	(3,289)	-	(3,287)
Reversal of impairment of investment in a subsidiary under liquidation process	-	-	23	-
Gains from disposals of investments in subsidiaries and associates	-	50	191	50
Gains from disposals of other long-term investments	-	167	-	78
Gains (losses) from disposals of fixed assets and investment properties	(250)	253	(241)	252
Reversal of provision from impairment of fixed assets and investment properties	268	10	267	-
Allowance for impairment of assets from fire incident	-	(267)	-	(267)
Reversal of allowance for doubtful accounts and write-off bad debts	2,823	-	2,766	-
Insurance claims	1,313	1,710	1,313	1,710
Others	284	347	381	437
Total	4,348	5,806	7,072	6,156

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26 Administrative expenses

	Note	Consolidated		Company	
		2015	2014	2015	2014
		Baht million	Baht million	Baht million	Baht million
Staff costs		3,066	2,549	2,948	2,457
Consultants' fees		281	538	288	430
Depreciation	14	195	189	88	93
Rental		150	188	168	181
Advertising		55	75	54	74
Doubtful accounts		40	4	41	4
Directors' remuneration		29	34	20	31
Others		1,149	764	1,126	876
Total		4,965	4,341	4,733	4,146

27 Staff costs

		Consolidated		Company	
		2015	2014	2015	2014
		Baht million	Baht million	Baht million	Baht million
Salary and wages		3,629	3,443	3,290	3,128
Overtime		588	521	520	460
Bonus		2,072	1,121	1,897	1,023
Provident fund and social security		361	349	333	322
Employee benefits		162	149	149	140
Others		1,431	1,181	1,266	1,054
Total		8,243	6,764	7,455	6,127

Staff costs of Baht 5,177 million and Baht 4,507 million have been included in the costs of sales in the consolidated and company income statements for the year ended 31 December 2015, respectively (2014: Baht 4,215 million and Baht 3,670 million in the consolidated and company income statements, respectively).

Staff costs of Baht 3,066 million and Baht 2,948 million have been included in administrative expenses in the consolidated and company income statements for the year ended 31 December 2015, respectively (2014: Baht 2,549 million and Baht 2,457 million in the consolidated and company income statements, respectively).

28 Finance costs

		Consolidated		Company	
		2015	2014	2015	2014
		Baht million	Baht million	Baht million	Baht million
Interest expenses		981	1,515	1,007	1,549
Losses from exchange rate from borrowings and interest payable		1,289	70	1,282	74
(Gains) loss from foreign currency forward contracts and interest rate swap contracts		193	(112)	193	(112)
Financing fees		18	21	18	21
Total		2,481	1,494	2,500	1,532

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29 Income tax

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Income tax for the year	39	72	-	-
Deferred income tax	2,307	(2,470)	2,311	(2,491)
	<u>2,346</u>	<u>(2,398)</u>	<u>2,311</u>	<u>(2,491)</u>

As at 31 December 2015, the Company has a loss carried forward which can be utilised as a tax benefit so there is no income tax for the year in the company income statement. The income tax for the year in the consolidated income statement is calculated from the taxable net profit of subsidiaries at 20% per annum.

The tax on the Group's profit before tax differs from the theoretical amount that would arise using the basic tax rate as follows:

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Profit (loss) before tax	11,769	(7,611)	14,142	(7,703)
Tax calculated at a tax rate of 20%	2,354	(1,522)	2,828	(1,540)
Tax effect of:				
Associates' results reported net of tax	37	28	-	-
Income subject to tax	115	53	115	30
Income not subject to tax	(189)	(119)	(614)	(145)
Income subject to tax exemption	(112)	(69)	(112)	(69)
Expenses not deductible for tax purpose	143	34	96	36
Expenses not subject to tax	(2)	(2)	(2)	(2)
Tax losses from previous accounting period recognised as deferred income tax	-	(801)	-	(801)
Income tax	<u>2,346</u>	<u>(2,398)</u>	<u>2,311</u>	<u>(2,491)</u>

30 Earnings (losses) per share

Basic earnings (losses) per share of shareholders of the parent are calculated by dividing the net profit (loss) attributable to shareholders of the parent by the weighted average number of ordinary shares in issue during the year, excluding treasury shares.

	Consolidated		Company	
	2015	2014	2015	2014
Net profit (loss) attributable to ordinary shareholders of the parent (Baht million)	9,402	(5,235)	11,831	(5,211)
Weighted average number of ordinary shares in issue during the year less shares of the parent held by a subsidiary (Million shares)	<u>20,410</u>	<u>20,410</u>	<u>20,434</u>	<u>20,434</u>
Basic earnings (losses) per share of shareholders of the parent (Baht)	<u>0.46</u>	<u>(0.26)</u>	<u>0.58</u>	<u>(0.26)</u>

In the consolidated financial statements, the weighted average numbers of ordinary shares in issue during the year are deducted by 24 million shares of the parent that are held by a subsidiary.

There are no dilutive potential ordinary shares in issue during the years presented, so no diluted earnings per share is presented.

31 Dividends

At the Company's Annual Shareholders' Meeting on 3 April 2015, it approved a dividend payment for the operating result of 2014 at Baht 0.08 per share for 20,434 million shares, totalling to Baht 1,635 million. Dividends were paid on 30 April 2015 (2014: a dividend payment for the operating result of 2013 at Baht 0.10 per share, totalling to Baht 2,043 million).

32 Promotional privileges

By virtue of the provisions of the Industrial Investment Promotion Act of B.E. 2520, the Company and a subsidiary have been granted privileges by the Board of Investment relating to the manufacture of Acetylene Black, Compounded Plastic, The cogeneration and steam power plant project ('CHP'), Propylene project ('PRP'), Blown Film project, Recovery from Purge Gas at PP Plant project, EBSM Upgrading for ABS Specialties project ('EBSM'), Multi Product Pipeline project ('MPPL') and HDPE Catalyst Commercialisation project ('Jet Mill') and Investment project in Industrial area. The privileges granted include:

- (a) exemption from payment of import duty and tax on materials and necessary parts including machinery as approved by the Board
- (b) exemption from payment of corporate income tax on the net profit derived from certain operations for a period of five to eight years from the date on which the income is first derived from such operations
- (c) a 50 % reduction in the normal corporate income tax rate on the net profit derived from certain operations for a period of five years commencing from the expiry date in (b) above, and
- (d) the double deduction of logistics, electricity and water expenses for a period of ten years since income is first derived from such operations.

As promoted companies, the Company and the subsidiary must comply with certain terms and conditions prescribed in the promotional certificates.

Revenues from sales are classified into the promoted business and the non-promoted business and presented in the financial statements for the years ended 31 December 2015 and 2014 as follows:

	Company		
	BOI	Non-BOI	Total
	Baht million	Baht million	Baht million
2015			
Revenues from sales - Overseas	702	68,546	69,248
- Domestic	5,230	148,033	153,263
Total	5,932	216,579	222,511
2014			
Revenues from sales - Overseas	1,754	89,535	91,289
- Domestic	4,673	197,109	201,782
Total	6,427	286,644	293,071

The revenues from sales under BOI and non-BOI are not disclosed for the consolidated financial statements because the revenues from sales of a BOI granted subsidiary are sales to the Company for the total amount.

33 Related party transactions

Enterprises and individuals that directly, or indirectly through one or more intermediaries, control, or are controlled by, or are under common control with, the Company, including holding companies, subsidiaries and fellow subsidiaries are related parties of the Company. Associates and individuals owning, directly or indirectly, an interest in the voting power of the Company that gives them significant influence over the enterprise, key management personnel, including directors and officers of the Company and close members of the family of these individuals and companies associated with these individuals also constitute related parties.

In considering each possible related party relationship, attention is directed to the substance of the relationship, and not merely the legal form.

PTT Public Company Limited is the major shareholder of the Company as at 31 December 2015 and 2014, holding 38.51%. The other major shareholders are the Government Savings Bank, Government Pension Fund and Thai NVDR Company Limited.

The pricing policies for particular types of transactions are explained below:

Transactions	Pricing policies
Sales of goods	Market price
Purchases of goods	According to the explanation below
Selling and administrative expenses which mainly are a throughput fee and tank farms rental	Contractually agreed prices
Interest income and interest expenses	<u>Short-term</u> - the weighted average interest rates one month and average interest rates six month of borrowing between commercial banks (BIBOR) adjusted by certain margins. <u>Long-term</u> - the weighted average interest rates of fixed deposits for four domestic commercial banks and the Minimum Lending Rate (MLR) adjusted by certain margins.
Directors' remuneration (meetings, bonus)	The rate approved by the Board of Directors and shareholders

Purchases of goods from a major shareholder - the major shareholder has provided services relating to the purchasing and payment process of goods. The purchase price includes a service fee charged by the major shareholder approximates the price which the Group has procured on its own. In addition, the Company has also entered into derivative instruments with the major shareholder to protect the pricing risk regarding raw materials and products. Purchases of goods from subsidiaries are based on cost plus a certain margin.

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33 Related party transactions (continued)

Significant transactions with related parties are summarised as follows:

(a) Sales and purchases of goods, services rendered and received

Transactions during the years ended 31 December 2015 and 2014 are as follows:

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Sales				
- Major shareholder	19,806	28,444	19,475	28,067
- Subsidiaries	-	-	18,204	24,495
- Other related parties	32,150	49,071	32,066	49,037
Purchases				
- Major shareholder	128,922	175,327	128,921	175,325
- Subsidiaries	-	-	13,815	17,126
- Other related parties	26,247	70,934	24,967	69,175
Selling and administrative expenses				
- Major shareholder	50	53	49	53
- Subsidiaries	-	-	239	229
- Other related parties	1,569	1,009	1,458	917
Interest income, dividend received and other income - net				
- Major shareholder	20	454	20	454
- Subsidiaries	-	-	2,500	521
- Other related parties	1,116	1,728	1,113	1,725

Other income - net in relation to derivative instruments to protect the pricing risk regarding raw materials and products are presented only the amounts realised within the year.

(b) Trade accounts receivable from related parties - net

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Major shareholder	866	1,099	845	1,045
Subsidiaries	-	-	1,014	982
Other related parties	1,993	2,877	1,963	2,872
	2,859	3,976	3,822	4,899
<u>Less</u> Allowance for doubtful debts	-	(7)	-	(7)
Net	2,859	3,969	3,822	4,892

33 Related party transactions (continued)

Significant transactions with related parties are summarised as follows: (continued)

(c) Amounts due from related parties - net

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Other receivables and reimbursement				
Major shareholder	13	23	13	23
Subsidiaries	-	-	33	29
Other related parties	69	1,068	50	1,048
	82	1,091	96	1,100
<u>Less</u> Allowance for doubtful debts	(61)	(61)	(53)	(55)
Net	21	1,030	43	1,045

(d) Short-term loans to and interest receivables from related parties - net

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Short-term loans and interest receivables				
Subsidiaries	-	-	3,825	651
<u>Less</u> Allowance for doubtful debts	-	-	-	-
Net	-	-	3,825	651
A subsidiary under bankruptcy process				
- Advances	56	56	56	56
- Short-term loans and interest receivables	145	145	145	145
<u>Less</u> Allowance for doubtful debts	(201)	(201)	(201)	(201)
Net	-	-	-	-
Total - Net	-	-	3,825	651

Average interest rates of short-term loans to related parties are between 2.06% and 2.14% per annum (2014: 2.59% and 2.68% per annum). Items that have been provided an allowance for doubtful debt have stopped charging interest.

33 Related party transactions (continued)

Significant transactions with related parties are summarised as follows: (continued)

(e) Loans to and interest receivables from related parties - net

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Long-term loans and interest receivables				
Subsidiaries	-	-	3,492	3,494
<u>Less</u> Allowance for doubtful debts	-	-	-	-
Net	-	-	3,492	3,494
A subsidiary under bankruptcy process				
- Advances	-	73	-	73
- Short-term loans and interest receivables	-	1,252	-	403
- Long-term loans and interest receivables	-	5,415	-	5,331
<u>Less</u> Allowance for doubtful debts	-	(3,430)	-	(2,714)
Net	-	3,310	-	3,093
Total - net	-	3,310	3,492	6,587

Average interest rate of long-term loans to related parties is at 4.98% per annum (2014: 5.23% per annum).

On 2 February 2015, the Company purchased 103 plots of land of TPI Aromatics Public Company Limited amounting to Baht 4,244 million from the auction arranged by Custodian officer following the resolution of the Creditors' meeting in January 2015. Money received from sales of land of TPI Aromatics Public Company Limited amounting to Baht 3,878 million was settled to the Group. The settlements were to the Company, who is secured creditors, amounting to Baht 1,776 million (both principal and cumulative interest at the rate of 7.50% per annum up to the date the Creditors passed the resolution for the auction). The remaining amounting to Baht 2,102 million were settled to other creditors in the Group according to each creditor's proportion previously filed to the Custodian officer. The Group received such settlement on 17 April 2015. As a result, for the year ended 31 December 2015, the Group had reversed the allowance for doubtful debts amounting to Baht 2,823 million and Baht 2,766 million (which were included cumulative interests of the secured creditors amounting to Baht 620 million) in the consolidated and company financial statements, respectively.

On 14 May 2015, the Central Bankruptcy Court ordered to close the case. The Custodian officer finished the process about the assets and the liabilities of TPI Aromatics Public Company Limited. Then, the Company wrote-off all assets and liabilities of TPI Aromatics Public Company Limited from the consolidated and company statements of financial position.

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33 Related party transactions (continued)

Significant transactions with related parties are summarised as follows: (continued)

(f) Trade accounts payable to related parties

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Major Shareholder	22,758	22,752	22,758	22,752
Subsidiaries	-	-	1,322	981
Other related parties	2,155	2,308	2,060	2,164
Total	24,913	25,060	26,140	25,897

(g) Amounts due to related parties

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Other payables and reimbursement				
Major shareholder	4	57	4	57
Subsidiaries	-	-	14	14
Other related parties	180	98	173	90
Total	184	155	191	161

(h) Loans from and interest payables to related parties

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Short-term loans and interest payables				
Subsidiaries	23	-	23	169
Total	23	-	23	169
A subsidiary under bankruptcy process				
Loans and interest payables	-	2,255	-	2,255
Total	-	2,255	-	2,255

(i) Directors' and management's remuneration

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Salaries and other short-term benefits	157	96	147	85
Total	157	96	147	85

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34 Transactions with the former management and entities relating to the former management - net

The Group had transactions with the former management of Mr. Prachai Liaopairattana and his family and the entities relating to the former management; previously, the related parties of the Group. Most of the outstanding balances related to amounts incurred in the past between the Group and the former management and the entities relating to the former management. The allowances for impairment have been fully setup.

Transactions with the former management and the entities relating to the former management as at 31 December 2015 and 2014 can be summarised as follows:

	% of investment		Consolidated		Company	
	2015	2014	2015	2014	2015	2014
			Baht million	Baht million	Baht million	Baht million
Investments						
Pornchai Enterprise Co., Ltd.	23.65	23.65	1,119	1,119	1,117	1,117
TPI EOEG Co., Ltd.	36.31	36.31	829	829	829	829
TPI Holding Co., Ltd.	35.00	35.00	1,416	1,416	1,416	1,416
Thai Special Steel Industry Plc.	16.24	16.24	673	673	673	673
			4,037	4,037	4,035	4,035
<u>Less</u> Allowance for impairment			(4,037)	(4,037)	(4,035)	(4,035)
Net			-	-	-	-

The Group has common share investments in the following companies Pornchai Enterprise Co., Ltd. at 23.65%; TPI EOEG Co., Ltd. At 36.31%; TPI Holding Co., Ltd. at 35.00% and Thai Special Steel Industry Plc. at 16.24%. These companies are incorporated and domiciled in Thailand. However, the Group has not been able to control, direct or govern these four companies. The Group has fully provided the allowance for impairment to those investments.

35 Financial instruments

(a) As at 31 December 2015 and 2014, the Group has the following financial assets and liabilities in foreign currencies:

	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Assets				
US Dollar	4,050	4,860	4,020	4,786
Euro	49	27	49	27
Total	4,099	4,887	4,069	4,813
Liabilities				
US Dollar - Debentures	8,628	7,881	8,628	7,881
US Dollar - Loans	5,982	5,795	5,982	5,795
US Dollar	146	228	101	58
Euro	7	6	4	2
Others	6	-	2	-
Total	14,769	13,910	14,717	13,736

35 Financial instruments (continued)

(b) The Group has the following significant contracts related to financial instruments:

Interest rate swap contracts

On 18 March 2010, the Company entered into two interest rate swap contracts for Baht long-term loans with the two financial institutions, totalling Baht 2,200 million to swap the floating interest rate at THBFIX 6-month per annum to a fixed interest rate. The contracts will be effective for a period of 7 years commencing 30 December 2009. As at 31 December 2015, the outstanding balances under the interest rate swap contracts are Baht 440 million (2014: Baht 880 million).

Cross currency interest rate swap

The Company entered into a cross currency interest rate swap of debentures amounting to Baht 2,640 million to swap principals from Thai Baht to US Dollars at an exchange rate as specified in the contract and to swap the fixed interest rate on Thai Baht principals to a fixed interest rate on US Dollar principals. The contract is effective from 2 July 2012 to 2 July 2017 which is the maturity date of the related debentures. As at 31 December 2015, the outstanding balances under the cross currency interest rate swap contracts are Baht 2,640 million (2014: Baht 2,640 million).

The Company entered into a cross currency interest rate swap of debentures amounting to Baht 5,000 million to swap principals from Thai Baht to US Dollars at an exchange rate as specified in the contract and to swap the fixed interest rate on Thai Baht principals to a fixed interest rate on US Dollar principals. The contract is effective from 24 August 2012 to 24 August 2018 which is the maturity date of the related debentures. As at 31 December 2015, the outstanding balances under the cross currency interest rate swap contracts are Baht 5,000 million (2014: Baht 5,000 million).

Commodity derivatives

The Company has entered into Crack Spread Swap Contracts with PTT Public Company Limited and several financial institutions in order to swap the spread of the average floating price of crude oil and petroleum products at each settlement period to the fixed price. As at 31 December 2015, the outstanding balances under such contracts were at 1.65 million barrels (2014: 5.22 million barrels).

The Company has entered into Crude Oil Swap Contracts with PTT Public Company Limited and financial institutions in order to swap the average floating price of crude oil of the settlement months to the range of fixed price. As at 31 December 2015, the outstanding balances under such contracts were at 4.58 million barrels (2014: 1.30 million barrels).

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35 Financial instruments (continued)

(c) Fair values

The carrying amounts of cash and cash equivalents, short-term investments, trade accounts receivable and other short-term receivables, trade accounts payable, other payables, short-term loans from financial institutions, short-term loans to related parties and short-term loans from related parties approximate their fair values due to the short maturity period.

The carrying amounts of long-term loans to related parties approximate their fair values due to floating interest rates.

Fair values of long-term loans from financial institutions and debentures have been disclosed in Note 18.

Fair values of financial derivative instruments as at the date of the financial position are as follows:

	Consolidated and Company	
	2015	2014
	Baht million	Baht million
Financial derivative instruments		
Unfavourable	(1,175)	(660)
Commodity derivative instruments		
Favourable	-	145
Unfavourable	(4,079)	(1,617)

The fair values of financial derivative instruments, which are cross currency swap contracts and interest rate swap contracts, are the market price which calculated by the financial institution of the Group as at the statement of financial position date. The fair values of commodity derivative instruments are the average quoted bid price and quoted selling price from the financial institutions that provided the services to the Group as at the statement of financial position date.

36 Commitments, contingent liabilities, and significant agreements

(a) Capital expenditure commitments

As at 31 December	Consolidated		Company	
	2015	2014	2015	2014
	Baht million	Baht million	Baht million	Baht million
Contracted but not recognised in the financial statements				
- Purchase agreements for machinery and construction	11,144	12,081	10,966	11,897
- Consultation agreements	78	48	78	48
Total	11,222	12,129	11,044	11,945

36 Commitments, contingent liabilities, and significant agreements (continued)

(b) Non-cancellable operating lease commitments

As at 31 December	Consolidated		Company	
	2015 Baht million	2014 Baht million	2015 Baht million	2014 Baht million
Office building rental agreements:				
- Within 1 year	86	82	86	82
- Later than 1 year but not later than 5 years	7	7	7	7
	93	89	93	89
Land lease agreements:				
- Within 1 year	1	1	1	1
- Later than 1 year but not later than 5 years	1	1	1	1
- Later than 5 years	5	5	5	5
	7	7	7	7
Total	100	96	100	96
Other commitments:				
Outstanding letters of credits	13	27	13	25

(c) Contingent liabilities

As at 31 December	Consolidated		Company	
	2015 Baht million	2014 Baht million	2015 Baht million	2014 Baht million
Contingent liabilities:				
- Bank guarantees	1,299	2,472	1,297	2,472

(d) The Company's tank farms and land expropriated for road construction

Some of the Company's tank farms are located in a yellow zone (low density residential zone) and a light green zone (recreational & environmental reserved zone) and some are under the road project, Kor3 and Gor9, under the Ministerial Regulation on Town and Country Planning of Rayong Province B.E. 2006. Such plots of land were restricted from construction of factories, oil and gas tanks. At the present time, the Town and Country Planning Committee, Department of Public Works and Town and Country Planning has considered modifying the Rayong town plan. The Company has requested that the yellow zone and the light green zone be modified to a purple zone (industrial zone) in order to operate oil and gas tank farms and to alter the construction plan of two public roads to be away from the Company's area. Failure of these modifications may affect the impairment of the operating assets.

As at 31 December 2015, for the progress of the modification of the Rayong town plan, the Committee has finished reviewing the draft of the Ministerial Regulations regarding Rayong Town Plan (revised 4) and will send back to Rayong Province officer to further process.

36 Commitments, contingent liabilities, and significant agreements (continued)

(e) Other significant agreements with related parties and other entities

Sales/Purchase of Refined Oil Agreement from a depot, Chumporn province

The Company entered into a Sales/Purchase of Refined Oil Agreement from the depot in Chumporn province with PTT Public Company Limited. The Company agrees to sell refined oil from its depot in Chumporn province at a quantity and pricing rates as defined in the agreement. The agreement is effective for a period of 1 year with a maturity date of 31 December 2015. The Company has extended the contract to 31 December 2016. The new terms and conditions are stipulated in the new agreement.

Crude and Feedstock Supply Agreements

The Company has entered into Crude and Feedstock Supply Agreements with PTT Public Company Limited. The contracts shall be effective for a period of 1 year with maturity date on 31 December 2015. The purchase quantity and pricing structure of crude and feedstock supply are as stipulated in the contracts. The Company has renewed the agreement to 31 December 2016 with the terms and conditions as specified in the renewal agreement.

Gas Sale and Purchase Agreement

On 9 June 2009, the Company entered into a Gas Sale and Purchase Agreement with PTT Public Company Limited (PTT) for the quantity and price as specified in the agreement. The agreement is effective for a period of 10 years starting from the date gas is delivered by PTT and the date the Company is in receipt. The agreement can be extended under the conditions stipulated in the agreement.

Sales and Purchase of Petroleum products

The Company entered into sales and purchases of petroleum products with a related party, with agreed volumes and prices as detailed in the agreement. The contract is for a period of 15 years from the effective date specified in the agreement and will end in February 2028, unless both parties agree to terminate the contract before the expiry date.

Power Sale and Purchase Agreement

The Company entered into a Power Sale and Purchase Agreement with the Electricity Generating Authority of Thailand (EGAT) for generating the electricity according to the agreement. The agreement term is 25 years. The Company transferred the rights and obligations under the agreement to an associate.

Power and Steam Purchase Agreement

The Company entered into a Power Purchase Agreement and Steam Purchase Agreement with a related party to purchase electricity and steam according to the agreements. The term of the Power Purchase Agreement is 25 years, and the term of the Steam Purchase Agreement is 27 years.

Various Service Agreements

The Company entered into a Utilities Service Agreement, Project Management Agreement and Operation and Maintenance Service Agreement with a related party in relation to the power plant project. The Company will supply utilities, act as project management for the construction project, provide maintenance services and operate the machine and equipment at the power plant. The service fees are stipulated in the agreements.

37 Significant claims and legal proceedings

As at 31 December 2015, the Company was involved in significant legal proceedings that can be divided into the following three groups.

(1) Labour cases regarding the former management which is Liaopairattana family

Labour cases where Mr. Prateep Liaopairattana and Mr. Pramuay Liaopairattana have sued the Company for a monetary claim of alleged unfair termination totalling Baht 243.17 million. The Court has viewed that the counterparts are able to reach the conclusion from the negotiation. Then, the Court has made a new mediation on 21 August 2015. On 16 October 2015, the plaintiffs accepted the compensation amounting to Baht 14.4 million and the interest amounting to Baht 5.4 million. Thus, the case was ended.

As at 31 December 2015, the Company already paid the compensation and interest amounting to Baht 19.8 million..

(2) Civil lawsuits which are:

(2.1) *Claim for cancellation of Olefins sales agreement with Thai Olefins Public Company Limited (Presently, this company has become PTT Global Chemical Public Company Limited) - Red Cases No. 5155-5156/2547*

In the case between the Company and Thai Olefins Public Company Limited (Thai Olefins), as the 364th creditor of the Company, in which Thai Olefins has sought the Company's settlement for damages arising from the cancellation of the sales agreement for the sum of Baht 4,461.26 million plus interest at MOR plus 2% to the Custodian Officer. On 27 December 2004, the Central Bankruptcy Court ruled that the 364th creditor was entitled to receive Baht 259.82 million from the Company, plus interest at MOR plus 2% of the said principal since the date on which the Plan Administrator (at that time, Effective Planner Company Limited) cancelled the agreement, i.e., 14 February 2001. The Company and the 364th creditor subsequently filed separate appeals for different reasons to the Supreme Court, which is now considering the case. The Company took the view that the damages on cancellation of the sales contract by the Plan Administrator that the Central Bankruptcy Court had ordered the Company to pay was unfair to the Company (which was under the rehabilitation plan at that time). Also, the Company took the view that no damages had been incurred by such creditor. Therefore, as at 31 December 2015, the Company had not made any provision in the statement of financial position.

37 Significant claims and legal proceedings (continued)

As at 31 December 2015, the Company was involved in significant legal proceedings that can be divided into the following three groups (continued).

(2) Civil lawsuits which are: (continued)

(2.2) Bankai Industrial Estates –Black Case No. Sor. 8/2554 (Red Case No. Sor. 13/2555)

Mr. Setha Pituthecha and the other 386 plaintiffs filed a lawsuit to the Industrial Estate Authority of Thailand as the 1st defendant and Industrial Estate Authority Commission as the 2nd defendant requesting the Court to dismiss the announcement of the Industrial Estate Authority Commission with regard to the establishment of the General Industrial Estate in Rayong (at Bankai) dated 20 April 2011 on 19 October 2011. The Administrative Court ordered IRPC Public Company Limited to be the 3rd defendant because it is a private company working together with the Industrial Estate Authority of Thailand in operating the Rayong Industrial Estate (Bankai) which is being operated under the Eco-industry and emphasises on those environmental-friendly and creativity.

Progress of the cases for the year ended 31 December 2015:

- On 31 August 2012, the Rayong Administrative Court ruled to withdraw the announcement of the establishment of the General Industrial Estate in Rayong (at Bankai) on the grounds that at the time the Industrial Estate Authority Commission approved the project, the environmental impact assessment report had not yet been approved. However, the Industrial Estate Authority Commission is able to further approve such report to allow the Industrial Estate Authority of Thailand and IRPC Public Company Limited to establish the Industrial Estate and to re-establish the General Industrial Estate in Rayong (at Bankai).
- Currently, the case is in the process whereby the Industrial Estate Authority of Thailand, who is the direct defendant, further filed an appeal to the Supreme Administrative Court. However, this has no impact to the Company's plan because the Industrial Estate Authority of Thailand (IEAT) has dismissed the previous announcement regarding the Industrial Estate in Rayong (at Bankai) according to the Court's ruling. In addition, it also furthered the approval process for the project and announced that the Company's land is in the new Industrial Estate and accurate in accordance with the ruling of the Rayong Administrative Court.
- In January 2014, the Plaintiff filed a petition to the Supreme Administrative Court requesting for urgent consideration by asking to temporarily protect public benefits and the environment prior to the Court's judgement. The Plaintiff claimed that the Company continued the construction over disputed land which violated the judgement of the Administrative Court while this case was being considered by the Supreme Administrative Court. Following the facts, after the Administrative Court's judgement, the Company has done everything according to the sentences. So the Company's project was approved and further announced in the Government Gazette mentioning that the Company's plots of land are legally part of the new industrial estate. Thus, the petition of the plaintiff was illegal. The Company has not done anything to violate the judgement of the Administrative Court. The Company has filed an objection to the Supreme Administrative Court which is currently being considered by the Court.

37 Significant claims and legal proceedings (continued)

As at 31 December 2014, the Company was involved in significant legal proceedings that can be divided into three groups as follows: (continued)

(2) Civil lawsuits which are: (continued)

(2.3) Claim for damages from breach of contract - Black Case No. 649/2556

Thong Lon Fah Company Limited (the Plaintiff) has filed a petition to the Company claiming damages of Baht 32.81 million. The Company filed testimony and counterclaimed damages of Baht 28.99 million against the Plaintiff.

Progress of the case for the year ended 31 December 2015:

On 22 July 2015, the Provincial Court of Rayong sentenced to dismiss the petition of the plaintiff and ordered the plaintiff to pay for damages to the Company as the defendant approximately Baht 27 million. The case is under the enforcement.

(3) Other lawsuits which are:

(3.1) Natural Resources and Environmental Policy and Planning Office (Black Case No. Sor. 16/2555)

Mr. Noi Jaitang and the other 92 plaintiffs filed a lawsuit to the Natural Resources and Environmental Policy and Planning Office as the 1st defendant, the Expert Committee analysing the environmental impact of industry and infrastructure as the 2nd defendant, and IRPC Public Company Limited as the 3rd defendant regarding the illegal acts of the administrative agencies and the government agencies on Bankai case. The plaintiffs has requested the Court to consider the following:

- 1) To cancel the EIA or E/HIA reports of the Rayong Industrial Estates at Bankai, Rayong which are of the Industrial Estate Authority of Thailand and IRPC Public Company Limited;
- 2) To let the defendants to cancel the orders and resolutions of the EIA or E/HIA reports of the Rayong Industrial Estates at Bankai, Rayong which are of the Industrial Estate Authority of Thailand and IRPC Public Company Limited;
- 3) To let the defendants to execute following all relevant laws and regulations prior to process any actions at Bankai, Rayong; and
- 4) To let the defendants to carry on or to let the claimants carry on the Strategic Environmental Assessment at all Rayong areas and get approval from the National Environment Commission and stakeholders.

The Company as the 3rd defendant has to provide the testimony to the Court within 30 days from the acknowledgement date (due on 22 July 2015). However, the Company has requested for the extension to the Court up to 16 November 2015. And the Company provided the testimony on 13 November 2015. The case is during the consideration of the Rayong Provincial Administration Court.

38 Post statement of financial position event

a) Dividend payment

At the Company's Board of Directors' meeting on 9 February 2016, it approved a dividend payment for the operating result of 2015 at Baht 0.22 per share, amounting to Baht 4,496 million. However, the approval for the dividend payment shall be proposed to the Annual Shareholders' Meeting for the year 2016 for further consideration and approval.

b) Entire business transfer of Thai ABS Company Limited

At the Company's Board of Directors' Meeting on 9 February 2016, the Board approved the restructuring of the Group through the Entire Business Transfer (EBT) of Thai ABS Company Limited to the Company. Total assets, liabilities, and rights and obligation of Thai ABS Company Limited will be transferred to the Company. However, the approval for the Entire Business Transfer shall be proposed to the Annual Shareholders' Meeting for the year 2016 for further consideration and approved.

COMPLIANCE WITH CORPORATE GOVERNANCE

No.	Rules and Guidelines	Annual Report (Part)	(Page)	Additional Documents
Rights of Shareholders				
A01	Does the company offer other ownership rights beyond voting? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights - Responsibilities of the Board 	71-75 81	<ul style="list-style-type: none"> Annual General Meeting of Shareholders 2015
A02	Is the decision on all form of director remuneration approved by the shareholders annually? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights • Management Structure - Directors' Remuneration 	71-72 130-131	<ul style="list-style-type: none"> Annual General Meeting of Shareholders 2015 (P. 6-7) Minutes of Shareholder's Meeting 2015 (P. 19-20)
A03	How is the remuneration of the board presented to the shareholders? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights • Management Structure - Directors' Remuneration 	71-72 130-131	<ul style="list-style-type: none"> Minutes of Shareholder's Meeting 2015 (P. 19-20)
A04	Does the company allow shareholders to elect board members individually? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - On the meeting date 	73	<ul style="list-style-type: none"> Minutes of Shareholder's Meeting 2015 (P. 16-19)
A05	Does the company disclose that it has appointed an independent party scrutineer /inspectors) to count and/or validate the votes at the AGM? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - On the meeting date 	73	<ul style="list-style-type: none"> Minutes of Shareholder's Meeting 2015 (P. 2)
A06	Are there any opportunity provided to shareholders to propose agenda item, or submit questions before the AGM? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Equitable treatment of shareholders 	74	<ul style="list-style-type: none"> SET Website Corporate Website
A07	Does the company publicly disclose policies to encourage the company's shareholders to attend the AGM? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights: On the meeting date 	72-73	<ul style="list-style-type: none"> Annual General Meeting of Shareholders 2015
Quality of Notice to call Shareholders' Meeting(s)				
A08	Does each resolution in the most recent AGM deal with only one item, i.e., there is no bundling of several items into the same resolution? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights: Quality of Meeting Notice 	71	<ul style="list-style-type: none"> Annual General Meeting of Shareholders 2015 (P. 1-9)
A09	Appointment of directors, providing their names and backgrounds. IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights: Quality of Meeting Notice 	71	<ul style="list-style-type: none"> Annual General Meeting of Shareholders 2015 (P. 7-8)
A10	Appointment of auditors, providing (1) their name(s), (2) profile, (3) fees IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights: Quality of Meeting Notice 	72	<ul style="list-style-type: none"> Annual General Meeting of Shareholders 2015 (P. 3-4 ,16-31)
A11	Dividend (1) policy and explanation and (2) amount IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights: Quality of Meeting Notice 	72	<ul style="list-style-type: none"> Annual General Meeting of Shareholders 2015 (P. 2-3)
A12	Objective and reason for each item on the shareholders' meeting agenda IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights: Quality of Meeting Notice 	71	<ul style="list-style-type: none"> Annual General Meeting of Shareholders 2015 (P. 1-9)
A13	Director's comments and opinion for each agenda item IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights: Quality of Meeting Notice 	71	<ul style="list-style-type: none"> Annual General Meeting of Shareholders 2015 (P. 1-9)

No.	Rules and Guidelines	Annual Report (Part)	(Page)	Additional Documents
Assess the Quality of Minutes of Shareholders' Meeting				
A14	Voting method and vote counting system IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights: After the AGM 	74	<ul style="list-style-type: none"> Minutes of Shareholder's Meeting 2015 (P. 3)
A15	Do the AGM minutes record that there was an opportunity for shareholders to ask questions/ raise issues? Also, is there record of questions and answers? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights: After the AGM 	74	<ul style="list-style-type: none"> Minutes of Shareholder's Meeting 2015 (P. 3-27)
A16	Meeting resolution with voting results for each agenda item, including both "for" and "against" vote tallies IRPC: Yes IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights: After the AGM 	74	<ul style="list-style-type: none"> Minutes of Shareholder's Meeting 2015 (P. 3-27)
A17	Is a name list of board members attending the AGM available in the AGM minutes? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights: After the AGM 	73	<ul style="list-style-type: none"> Minutes of Shareholder's Meeting 2015 (P. 1)
A18	Does the company make publicly available by the next working day the result of the votes taken during the most recent AGM for all resolutions? IRPC: Yes / Disclose on the meeting date	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights: After the AGM 	74	<ul style="list-style-type: none"> SET Website
A19	Did the Chairman of the Board attend the AGM? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights: After the AGM 	74	<ul style="list-style-type: none"> Minutes of Shareholder's Meeting 2015 (P. 1)
A20	Did the CEO / President / Managing Director attend the AGM? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights: After the AGM 	74	<ul style="list-style-type: none"> Minutes of Shareholder's Meeting 2015 (P. 1)
Attendance of the Board Committee Chairs				
A21	Did the Chairman of the Audit Committee attend the AGM? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights : On the meeting date 	73	<ul style="list-style-type: none"> Minutes of Shareholder's Meeting 2015 (P. 1)
A22	Did the Chairman of the Compensation / Remuneration Committee attend the AGM? IRPC: No (Due to the urgent business)	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights : On the meeting date 	73	<ul style="list-style-type: none"> Minutes of Shareholder's Meeting 2015 (P. 1)
A23	Did the Chairman of the Nomination Committee attend the AGM? IRPC: No (Due to the urgent business)	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights : On the meeting date 	73	<ul style="list-style-type: none"> Minutes of Shareholder's Meeting 2015 (P. 1)
A24	Did the company organize the most recent AGM in an easy to reach location? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights : On the meeting date 	72	<ul style="list-style-type: none"> Minutes of Shareholder's Meeting 2015 (P. 1)
Does the company have anti-takeover defenses?				
A25	Is cross shareholding apparent? IRPC: No	<ul style="list-style-type: none"> Business Structure and Shareholding 	97	
A26	Is pyramid holding apparent? IRPC: No	<ul style="list-style-type: none"> Business Structure and Shareholding 	97	
A27	Do Board members hold more than 25% of the outstanding shares? (Bonus) IRPC: No	<ul style="list-style-type: none"> Management Structure - Board of Directors 	136-137	
A28	What is the proportion of outstanding shares that are considered "free float"? IRPC: 46.91 (as of 26 February 2015)			<ul style="list-style-type: none"> SET Website
A29	Were there additional AGM/EGM agenda item(s) that were not included in the notice to call the meeting? (Penalty) IRPC: No additional items apart from those specified in the notice?	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights: On the meeting date 	73-74	<ul style="list-style-type: none"> Minutes of Shareholder's Meeting 2015 (P. 28)
A30	Did the company fail or neglect to offer equal treatment for share repurchases to all shareholders? (Penalty) IRPC: No, there was no share repurchasing			<ul style="list-style-type: none"> SET Website

No.	Rules and Guidelines	Annual Report (Part)	(Page)	Additional Documents
A31	Is there evidence of barriers that prevent shareholders from communicating or consulting with other shareholders? (Penalty) IRPC: No			• SET Website
A32	Did the company fail to disclose the existence of shareholders agreement? (Penalty) IRPC: No			• Form 56-1
Equitable Treatment of Shareholders				
B01	Does the company offer one - share, one - vote? IRPC: Yes	• Corporate Governance Report - Equitable Treatment of Shareholders	74	• Minutes of Shareholder's Meeting 2015 (P. 3) • Articles of Association (Corporate Website)
B02	Where the company has more than one class of shares, does the company publicise the voting rights attached to each class of shares? IRPC: No	• Corporate Governance Report - Equitable Treatment of Shareholders	74	• Minutes of Shareholder's Meeting 2015 (P. 3)
B03	Does the company have any mechanism to allow minority shareholders to influence board composition? IRPC: Yes	• Corporate Governance Report - Equitable Treatment of Shareholders	74	• Corporate Governance Handbook • Corporate Website
B04	Has the company established a system to prevent the use of material inside information and inform all employees, management, and board members of this system? IRPC: Yes	• Corporate Governance Report - Equitable Treatment of Shareholders	75	• Corporate Governance Handbook
B05	Does the company provide a rationale / explanation for related-party transactions affecting the corporation BEFORE conducting related-party transactions that require shareholders' approval? IRPC: Yes	• Corporate Governance Report - Equitable Treatment of Shareholders	74-75	• SET Website
B06	Does the company disclose that RPTs are conducted in such a way to ensure that they are fair and at arms' length? IRPC: Yes	• Corporate Governance Report - Equitable Treatment of Shareholders • Connected Transactions	74-75 109-113	• SET Website
B07	Assess the level of business interconnections which may lead to possible conflicts of interest (tunneling) through an economic grouping, that is under the influence of the controlling shareholders. IRPC: The Company and its affiliates and PTT group doing the business in the same category, there are some connected transactions between the Company and PTT group which is normal the business operations.	• Connected Transactions	109-113	
B08	Does the company facilitate voting by proxy? IRPC: Yes	• Corporate Governance Report - Shareholders' Rights: On the meeting date	71-72	• Annual General Meeting of Shareholders 2015 (P.11-13, 43-52) • Corporate Website
B09	Does the notice to shareholders specify the documents required to give proxy? IRPC: Yes	• Corporate Governance Report - Shareholders' Rights: On the meeting date	71-72	• Annual General Meeting of Shareholders 2015 (P.11-13, 43-52) • Corporate Website
B10	Is there any requirement for a proxy appointment to be notarized? IRPC: No	• Corporate Governance Report - Shareholders' Rights: On the meeting date	71-72	• Annual General Meeting of Shareholders 2015 (P.11-13, 43-52) • Corporate Website
B11	How many days in advance does the company send out the notice of general shareholder meetings? IRPC: 22 Days	• Corporate Governance Report - Shareholders' Rights: On the meeting date	71	• Annual General Meeting of Shareholders 2015
B12	Did the company post the notice to call the shareholders' meeting at least 30 days in advance on its website? IRPC: 33 Days	• Corporate Governance Report - Shareholders' Rights: On the meeting date	71	• SET Website • Corporate Website
B13	Does the company use cumulative voting in the election of board members? (Bonus) IRPC: NO	• Corporate Governance Report - Shareholders' Rights : On the meeting date	74-75	

No.	Rules and Guidelines	Annual Report (Part)	(Page)	Additional Documents
B14	Did the company also send out the English translation of the notice to all Shareholders Meetings to foreign shareholders? (Bonus) IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Shareholders' Rights: On the meeting date - Equitable Treatment of Shareholders 	71 74	<ul style="list-style-type: none"> Annual General Meeting of Shareholders 2015 Corporate Website
B15	Were there any related-party transactions that can be classified as financial assistance to non-subsidiary companies? (Penalty) IRPC: No			
B16	Have there been any cases of insider trading involving company directors and/or management in the past year? (Penalty) IRPC: No	<ul style="list-style-type: none"> Corporate Governance Report - Equitable Treatment of Shareholders 	75	<ul style="list-style-type: none"> SET Website
B17	Has there been any non-compliance case regarding related-party transaction in the past year? (Penalty) IRPC: No violation	<ul style="list-style-type: none"> Corporate Governance Report - Equitable Treatment of Shareholders 	75	<ul style="list-style-type: none"> SET Website
B18	Has there been any non-compliance case regarding the buy and sale of company's asset? (Penalty) IRPC: No violation	<ul style="list-style-type: none"> Corporate Governance Report - Equitable Treatment of Shareholders 	74-75	<ul style="list-style-type: none"> SET Website
B19	Does the company have a policy requiring directors and key officers to notify the board or its delegate at least one day before they deal in the company shares? (Bonus) IRPC: The Company has set the policy to notify the Board regularly.	<ul style="list-style-type: none"> Corporate Governance Report - Equitable Treatment of Shareholders 	75	<ul style="list-style-type: none"> Corporate Governance Handbook
Role of Stakeholders				
C01	Does the company have a separate corporate responsibility (CR) report/ section or sustainability report/section? IRPC: Yes	<ul style="list-style-type: none"> Corporate Social Responsibilities 	207	<ul style="list-style-type: none"> Sustainability Development Report
C02	Does the company have a policy pertaining to the workplace safety and sanitation? IRPC: Yes	<ul style="list-style-type: none"> QSHE Management 	197	<ul style="list-style-type: none"> Sustainability Development Report
C03	Does the company have a policy for the employee's compensation and welfare benefits? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Stakeholders' Roles: Employees 	77-78	
C04	Does the company provide a provident fund for its employees? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Stakeholders' Roles: Employees 	77-78	
C05	Does the company have a policy and guidelines for the employee development program to enhance their knowledge and potential? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Stakeholders' Roles: Employees 	77-78	<ul style="list-style-type: none"> Sustainability Development Report
C06	Does the company have a policy preventing human rights violations? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Good Corporate Citizenship: Human Rights 	91-92	<ul style="list-style-type: none"> Corporate Governance Handbook
C07	Does the company have a policy for the treatment of the customers? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Stakeholders' Roles: Customers / Consumers 	76	<ul style="list-style-type: none"> Corporate Governance Handbook
C08	Does the company have a policy for the treatment of the business competitors? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Stakeholders' Roles: Competitors 	77	<ul style="list-style-type: none"> Corporate Governance Handbook
C09	Does the company have a policy for the treatment of the business partners /trading partners? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Stakeholders' Roles: Business partners 	76-77	<ul style="list-style-type: none"> Corporate Governance Handbook
C10	Does the company have a policy for the treatment of the creditors? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Stakeholders' Roles: Creditors 	77	<ul style="list-style-type: none"> Corporate Governance Handbook
C11	Does the company have a policy preventing violations of the software copyright and intellectual property? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Recognition of commercial patents and intellectual property 	78	<ul style="list-style-type: none"> Corporate Governance Handbook

No.	Rules and Guidelines	Annual Report (Part)	(Page)	Additional Documents
C12	Does the company have a policy against corruption and a preventive measure for commercial bribery? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Good Corporate Citizenship: Anti-corruption Practices 	92-93	<ul style="list-style-type: none"> Corporate Governance Handbook Corporate Website
C13	Does the company have a corruption risk assessment procedure in place to determine the extend of the risk of corruption to the business? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Good Corporate Citizenship: Anti-corruption Practices 	91-93	<ul style="list-style-type: none"> Corporate Governance Handbook
C14	Does the company put in place an internal compliance and control program to prevent and monitor a corruption risk? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Good Corporate Citizenship: Anti-corruption Practices 	91-93	<ul style="list-style-type: none"> Corporate Governance Handbook
C15	Does the company have the procedures to monitor and enforce the anti-corruption policy? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Good Corporate Citizenship: Anti-corruption Practices 	91-93	<ul style="list-style-type: none"> Corporate Governance Handbook
C16	Have the company been educating its employees on the anti-corruption policy and procedures? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Good Corporate Citizenship: Anti-corruption Practices 	91-93	<ul style="list-style-type: none"> Sustainability Development Report
C17	Does the company have a policy for the community services? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Good Corporate Citizenship: Society and Community 	78-79	<ul style="list-style-type: none"> Corporate Governance Handbook
C18	Does the company organize social activities or take part in the community development program? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Good Corporate Citizenship: Society and Community 	78-79	<ul style="list-style-type: none"> Sustainability Development Report
C19	Does the company have a business operations policy conforming to environmental standards? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Good Corporate Citizenship: Environment and Natural Resources 	79-80	<ul style="list-style-type: none"> Sustainability Development Report
C20	Does the company encourage the utilization of its resources efficiently? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Good Corporate Citizenship: Environment and Natural Resources 	79-80	<ul style="list-style-type: none"> Sustainability Development Report
C21	Does the company have a training program to educate its employees about the environmental issues? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Good Corporate Citizenship: Environment and Natural Resources 	79	<ul style="list-style-type: none"> Sustainability Development Report
C22	Does the company provides channel for stakeholders to communicate any concerns to the board? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Information Disclosure and Transparency 	80-81	<ul style="list-style-type: none"> Corporate Website
C23	Does the company have procedures for complaints by stakeholders concerning illegal (including corruption) and unethical behavior? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Good Corporate Citizenship: Anti-corruption Practices 	92-93	<ul style="list-style-type: none"> Corporate Website
C24	Does the company have a policy or procedures to protect an employee/ person who reveals illegal/ unethical behavior from retaliation? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Good Corporate Citizenship: Anti-corruption Practices 	92-93	<ul style="list-style-type: none"> Corporate Governance Handbook
C25	Does the company provide contact details via the company's website or Annual Report which stakeholders (e.g. customers, suppliers, general public etc.) can use to voice their concerns and/or complaints for possible violation of their rights? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Good Corporate Citizenship: Anti-corruption Practices 	92-93	<ul style="list-style-type: none"> Corporate Governance Handbook Sustainability Development Report
C26	Does the company have a reward/compensation policy that accounts for the performance of the company beyond short-term financial measures? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Stakeholders' Roles: Employees 	77-78	
C27	Has there been any violations of any laws pertaining to labour/ employment/ consumer/ insolvency/ commercial/ competition or environmental issues?(Penalty) IRPC: No	<ul style="list-style-type: none"> Corporate Governance Report - Good Corporate Citizenship : Labor Rights 	92	<ul style="list-style-type: none"> Sustainability Development Report

No.	Rules and Guidelines	Annual Report (Part)	(Page)	Additional Documents
C28	Has the company faced any sanctions by regulators for failure to make announcements within the requisite time period for material events? (Penalty) IRPC: No			• SET Website

Disclosure and Transparency

Does the company have a transparent ownership structure?

D01	Breakdown of shareholding structure IRPC: Yes	• Business Structure and Shareholding	97	
D02	Is it easy to identify beneficial ownership? IRPC: Yes	• Business Structure and Shareholding	97	
D03	Does the company disclose the direct and indirect (deemed) shareholdings of directors ? IRPC: Yes	• Business Structure and Shareholding	136	
D04	Does the company disclose the direct and indirect (deemed) shareholdings of senior management? IRPC: Yes	• Management Structure	136-137	

Please assess the quality of the Annual Report, in particular, the following: (5-21)

D05	Does the Annual Report contain a statement confirming the company's full compliance with the code of corporate governance and where there is non-compliance, identify and explain reasons for each such issue? IRPC: Yes/ Disclosure practices	• Corporate Governance Report	66-93	
D06	Corporate Objective/Long Term Goal IRPC: Yes	• Performance Summary 2015	165-182	
D07	Financial performance IRPC: Yes	• Performance Summary 2015	165-182	
D08	Non-financial performance indicators (e.g. market positioning) IRPC: Yes	• Key Performance	86	
D09	Business operations and competitive position IRPC: Yes	• Market Overview and Industry Outlook	156-160	
D10	Corporate group structure (N/A for a company that does not belong to a corporate grouping) IRPC: Yes	• Business Structure and Shareholding	97	
D11	Key Risks IRPC: Yes/ Disclosure	• Internal Control	179-181	• Form 56-1
D12	Dividend policy IRPC: Yes	• Corporate Governance Report - Dividend Payment Policy	72	
D13	Details of whistle-blowing policy IRPC: Yes	• Corporate Governance Report - Good Corporate Citizenship : Anti-corruption Practices	92-93	
D14	Board member background IRPC: Yes	• Board of Directors	28-41	
D15	Identification of Independent Directors IRPC: Yes	• Board of Directors • Management Structure	28-41 116	
D16	Basis of the board remuneration IRPC: Yes	• Management Structure - Directors' Remuneration	130-131	• Corporate Governance Handbook
D17	Basis of the key executives remuneration IRPC: Yes	• Management Structure - Directors' Remuneration	132-133	• Corporate Governance Handbook
D18	Disclosure of individual directors' remuneration IRPC: Yes	• Management Structure - Directors' Remuneration	131	
D19	Number of board of directors/ commissioners meetings held during the year IRPC: Yes	• Management Structure - Meeting Attendance	126	

No.	Rules and Guidelines	Annual Report (Part)	(Page)	Additional Documents
D20	Board meeting attendance of individual directors IRPC: Yes	<ul style="list-style-type: none"> Management Structure Meeting Attendance 	126	
D21	Training and continuing education programs attended by each director in the last year. IRPC: Yes/ Disclosure	<ul style="list-style-type: none"> Corporate Governance Report Development of the Board and the Management Board of Directors 	89-90 28-41	
D22	Does the company fully disclose details of related-party transactions in public communications? IRPC: Yes	<ul style="list-style-type: none"> Connected Transactions 	109-113	
D23	Does the company have a specific policy requiring directors to report their shareholding and transactions of company shares to the board of directors? IRPC: Yes	<ul style="list-style-type: none"> Connected Transactions 	109-113	
D24	Does the company disclose trading in the company's shares by insiders? IRPC: Yes	<ul style="list-style-type: none"> Connected Transactions 	109-113	
D25	Does the company have a policy requiring directors to report possible conflicts of interest? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Information Disclosure and Transparency 	80-81	
D26	Does the company disclose its policy covering the review and approval of material/significant RPTs by board/Audit Committee? IRPC: Yes/ Strictly compliance to SET regulations	<ul style="list-style-type: none"> Corporate Governance Report Information Disclosure and Transparency Connected Transactions 	80-81 109-113	
D27	Does the company perform an annual audit using independent and reputable auditors? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Audit Fee 	91	
D28	Are audit fees disclosed? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Audit Fee 	91	
D29	Are the non-audit fees disclosed? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Audit Fee 	91	
D30	Are there any accounting qualifications in the audited financial statements apart from the qualification on uncertainty of economic situation? IRPC: The financial statement was audited and certified unconditionally.	<ul style="list-style-type: none"> Financial Statement 	224-225	
Does the company offer multiple channels of access to information? Multiple channels include:				
D31	Annual report IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Information Disclosure and Transparency 	80-81	<ul style="list-style-type: none"> Corporate Website
D32	Quarterly reporting IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Information Disclosure and Transparency 	80-81	<ul style="list-style-type: none"> SET Website
D33	Company website IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Information Disclosure and Transparency 	80-81	<ul style="list-style-type: none"> Corporate Website
D34	Analyst briefing(s)/ Opportunity Day IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Information Disclosure and Transparency 	80-81	<ul style="list-style-type: none"> Corporate Website
D35	Press conference(s)/ press briefing(s) IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Information Disclosure and Transparency 	80-81	<ul style="list-style-type: none"> Corporate Website
D36	Was the financial report disclosed in a timely manner during the past year? IRPC: No	<ul style="list-style-type: none"> Corporate Governance Report Information Disclosure and Transparency 	80-81	<ul style="list-style-type: none"> SET Website

No.	Rules and Guidelines	Annual Report (Part)	(Page)	Additional Documents
Does the company have a website, disclosing up-to-date information? The website should include information on:				
D37	Business operations IRPC: Yes	• Nature of Business	98-99	• Corporate Website
D38	Financial statements IRPC: Yes	• Corporate Governance Report - Information Disclosure and Transparency	80-81	• Corporate Website
D39	Press Release IRPC: Yes	• Corporate Governance Report - Information Disclosure and Transparency	80-81	• Corporate Website
D40	Shareholding structure IRPC: Yes	• Corporate Governance Report - Information Disclosure and Transparency	80-81	• Corporate Website
D41	Organization structure IRPC: Yes	• Corporate Governance Report - Information Disclosure and Transparency	80-81	• Corporate Website
D42	Corporate group structure (N/A for a company that does not belong to a corporate grouping) IRPC: Yes	• Corporate Governance Report - Information Disclosure and Transparency	80-81	• Corporate Website
D43	Information on the board of directors and management IRPC: Yes	• Corporate Governance Report - Information Disclosure and Transparency	80-81	• Corporate Website
D44	Information on the investor relations IRPC: Yes	• Corporate Governance Report - Information Disclosure and Transparency	80-81	• Corporate Website
D45	Company's constitution (company's by-laws, memorandum and articles of association) IRPC: Yes	• Corporate Governance Report - Information Disclosure and Transparency	80-81	• Corporate Website
D46	Downloadable annual report IRPC: Yes	• Corporate Governance Report - Information Disclosure and Transparency	80-81	• Corporate Website
D47	Notice to call shareholders' meeting IRPC: Yes	• Corporate Governance Report - Information Disclosure and Transparency	80-81	• Corporate Website
D48	Minutes of annual general meeting IRPC: Yes	• Corporate Governance Report - Information Disclosure and Transparency	80-81	• Corporate Website
D49	Does the company provide contact details for a specific Investor Relations person or unit that is easily accessible to outside investors? IRPC: Yes	• Corporate Governance Report - Information Disclosure and Transparency	80-81	• Corporate Website
D50	Was there any record of sanctions by the SEC requiring the company to revise its financial statements during the past year? (Penalty) IRPC: No	• Corporate Governance Report - Information Disclosure and Transparency	80-81	• Corporate Website
Board Responsibilities				
E01	Does the Board of Directors have the company's own written corporate governance rules that clearly describes its value system and board responsibilities? IRPC: Yes	• Corporate Governance Report - Corporate Governance Policy - Responsibilities of the Board	67-68 81	• Corporate Governance Handbook • Corporate Website
E02	Does the Board of Directors provide a code of ethics or code of conduct and disclosed all details? IRPC: Yes	• Corporate Governance Report - Corporate Governance Policy - Responsibilities of the Board	67-68 81	• Corporate Governance Handbook • Corporate Website
E03	Does the company disclose that all directors, senior management and employees are required to comply with the code? IRPC: Yes	• Corporate Governance Report - Corporate Governance Policy - Responsibilities of the Board	67-68 81	• Corporate Governance Handbook • Corporate Website

No.	Rules and Guidelines	Annual Report (Part)	(Page)	Additional Documents
E04	Does the company disclose how it implements and monitors compliance with the code of ethics or conduct? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Corporate Governance Policy - Responsibilities of the Board 	67-68 81	<ul style="list-style-type: none"> Corporate Governance Handbook Corporate Website
E05	Does the Board of Directors have a corporate vision/ mission? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Responsibilities of the Board 	82-83	
E06	Has the board of directors reviewed the company's vision and mission during the last 5 years? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Responsibilities of the Board 	82-83	<ul style="list-style-type: none"> Corporate Governance Handbook
E07	Does the board of directors state a policy that limit of five board seats in publicly-listed companies that a director can hold? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Responsibilities of the Board 	82	<ul style="list-style-type: none"> Corporate Governance Handbook
E08	Does the Board of Directors states a policy that limit of three board seats in publicly-listed companies that a director can hold? (Bonus) IRPC: Board of Directors set a policy that limit of five board seats in publicly-listed companies	<ul style="list-style-type: none"> Corporate Governance Report - Responsibilities of the Board 	82	<ul style="list-style-type: none"> Corporate Governance Handbook
E09	Does the Board of Directors states a policy that address the board positions in other firms held by the company's President/ Managing Director/CEO? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Responsibilities of the Board 	82	<ul style="list-style-type: none"> Corporate Governance Handbook
E10	Does the Board of Directors have a term limit of nine years or less for independent directors? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Responsibilities of the Board 	82	<ul style="list-style-type: none"> Corporate Governance Handbook
E11	Does the Board of Directors have a term limit of six years or less for independent directors? (Bonus) IRPC: a term limit of nine years	<ul style="list-style-type: none"> Corporate Governance Report - Responsibilities of the Board 	82	
E12	Does the Company have any independent directors who have served for more than nine years? (Penalty) IRPC: No	<ul style="list-style-type: none"> Corporate Governance Report - Responsibilities of the Board 	82	
E13	Did the company fail to disclose the identity of the independent directors? (Penalty) IRPC: No	<ul style="list-style-type: none"> Management Structure 	116	
E14	Is any of the directors or senior management a former employee or partner of the current external auditor (in the past 2 years)? (Penalty) IRPC: No	<ul style="list-style-type: none"> Board of Directors and Executives 	32-59	
E15	Does the company have any independent directors who serve on more than five boards of publicly-listed companies? IRPC: No	<ul style="list-style-type: none"> Board of Directors 	32-41	<ul style="list-style-type: none"> Corporate Governance Handbook
E16	Does the company have any executive directors who serve on more than two boards of publicly-listed companies outside of the group? IRPC: No	<ul style="list-style-type: none"> Board of Directors and Executives 	41	
E17	Does at least one non-executive director have prior working experience in the major industry the company is operating in? IRPC: Yes	<ul style="list-style-type: none"> Board of Directors 	32-41	<ul style="list-style-type: none"> Corporate Governance Handbook
E18	Does the SET/SEC have any evidence of non-compliance with SET/SEC rules and regulations during the past year? IRPC: No			<ul style="list-style-type: none"> SET Website
E19	Does the company have a compliance unit? (Bonus) IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report 	69-70	
E20	Does the Board of Directors have an internal audit (I/A) operation established as a separate unit in the company? IRPC: Yes	<ul style="list-style-type: none"> Organization Structure 	42	

No.	Rules and Guidelines	Annual Report (Part)	(Page)	Additional Documents
E21	Identify to whom does the internal audit function reports to. IRPC: The office of internal audit reports directly to the Audit Committee.	<ul style="list-style-type: none"> Corporate Governance Report Responsibility of the Board Organization Structure 	84 42	
E22	Is the head of internal audit identified or, if outsourced, is the name of the external firm disclosed? IRPC: Yes/ Internal management	<ul style="list-style-type: none"> Corporate Governance Report Responsibility of the Board Management Structure 	84 121	
Assess the quality of the Audit Committee Report in the Annual Report				
E23	Meeting attendance IRPC: Yes	<ul style="list-style-type: none"> Management Structure Meeting Attendance 	126	
E24	Internal control IRPC: Yes	<ul style="list-style-type: none"> Report of the Audit Committee 	62-63	
E25	Related Party Transaction IRPC: Yes	<ul style="list-style-type: none"> Business Structure Connected Transactions 	109-113	<ul style="list-style-type: none"> Corporate Governance Handbook
E26	Proposed auditors Appointment IRPC: Yes	<ul style="list-style-type: none"> Report of the Audit Committee 	60-63	
E27	Financial report review IRPC: Yes	<ul style="list-style-type: none"> Report of the Audit Committee 	60-63	
E28	Regulatory Compliance IRPC: Yes	<ul style="list-style-type: none"> Report of the Audit Committee 	60-63	
E29	Overall concluding opinion IRPC: Yes	<ul style="list-style-type: none"> Report of the Audit Committee 	60-63	
E30	Does the company disclose a board of directors diversity policy? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Nomination and Appointment of Director Management Structure Nomination of Director 	83 123	<ul style="list-style-type: none"> Corporate Governance Handbook
E31	Does the company disclose the criteria used in selecting new directors? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Nomination and Appointment of Director Management Structure Nomination of Director 	83 123	<ul style="list-style-type: none"> Annual General Meeting of Shareholders 2015 (P.4-5)
E32	Does the company disclose the process followed in appointing new directors? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Nomination and Appointment of Director Management Structure Nomination of Director 	83 123	<ul style="list-style-type: none"> Annual General Meeting of Shareholders 2015 (P.4-5)
E33	Does the Nominating Committee undertake the process of identifying the quality of directors aligned with the company's strategic directions? (Bonus) IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Nomination and Appointment of Director Management Structure Nomination of Director 	83 123	<ul style="list-style-type: none"> Annual General Meeting of Shareholders 2015 (P.4-5) Corporate Governance Handbook
E34	Does the company use professional search firms or other external sources of candidates when searching for candidates to the board of directors? (Bonus) IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Nomination and Appointment of Director Management Structure Nomination of Director 	83 123	<ul style="list-style-type: none"> Annual General Meeting of Shareholders 2015 (P.4-5) Corporate Governance Handbook
E35	Does the company provide orientation to new directors? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Responsibilities of the Board: Director's orientation 	89	<ul style="list-style-type: none"> Corporate Governance Handbook
E36	Does the company have a policy that encourages directors to attend on-going or continuous professional education programs? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Responsibilities of the Board: Development of the Board 	89-90	<ul style="list-style-type: none"> Corporate Governance Handbook
E37	Have board members participated in the professional/ accredited directors' training? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Responsibilities of the Board: Development of the Board Board of Directors 	89-90 31-41	

No.	Rules and Guidelines	Annual Report (Part)	(Page)	Additional Documents
E38	Does the Board of Directors encourage at least one director to regularly attend the continuing development programs or seminar for the directors in the last year? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Responsibilities of the Board: Development of the Board Board of Directors 	89-90 31-41	
E39	How many board meetings were held in the past year?	<ul style="list-style-type: none"> Management Structure 	126	
E40	What is the attendance performance of the board members during the past 12 months?	<ul style="list-style-type: none"> Management Structure 	126	
E41	Does the company require a minimum quorum of at least 2/3 for board decisions? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Responsibilities of the Board: Board Meetings 	85-86	<ul style="list-style-type: none"> Corporate Governance Handbook
E42	Are the board of directors meetings scheduled before or at the beginning of the year? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Responsibilities of the Board: Board Meetings 	85-86	
E43	Has each of the directors attended at least 75% of all the board meetings held during the year? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Responsibilities of the Board: Board Meetings 	85-86	
E44	Are board papers for board of directors meetings provided to the board at least five business days in advance of the board meeting? IRPC: At least 5 - 7 Days	<ul style="list-style-type: none"> Corporate Governance Report Responsibilities of the Board: Board Meetings 	85-86	
E45	Are there any meeting of non-executive directors in the absence of the management? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Responsibilities of the Board: Board Meetings 	85-86	
E46	Does the Board of Directors provide a risk management policy? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Risk Management Committee Performance Summary Risk Management Performance 	85 179	
E47	Does the company disclose the internal control procedures and risk management systems it has in place? IRPC: Yes	<ul style="list-style-type: none"> Performance Summary Risk Management Performance 	179-181	
E48	Does the Annual Report disclose that the board of directors has conducted a review of the company's material controls and risk management systems? IRPC: Yes	<ul style="list-style-type: none"> Performance Summary Risk Management Performance 	179-181	
E49	Does the Annual Report contain a statement from the board of directors/commissioners or Audit Committee commenting on the adequacy of the company's internal controls/risk management systems? (Bonus) IRPC: Yes	<ul style="list-style-type: none"> Report of the Audit Committee 	60-63	
E50	Does the company disclose how key risks are managed? IRPC: Yes	<ul style="list-style-type: none"> Internal Control Performance Summary Risk Management Performance 	62 179-181	
E51	Does the Board of Directors state a policy on conflicts of interest? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Information Disclosure and Transparency 	80	<ul style="list-style-type: none"> Corporate Governance Handbook
E52	Does the Board of Directors clearly distinguish the roles and responsibilities of the board and those of the management? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Segregation of Chairman and the President 	83	<ul style="list-style-type: none"> Corporate Governance Handbook
E53	Are the types of decisions requiring board of directors' approval disclosed? IRPC: Yes	<ul style="list-style-type: none"> Management Structure 	120	
E54	Does the Board of Directors conduct an annual self-assessment? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Assessment of the Board Performance 	86	
E55	Does the company disclose the process followed in conducting the board assessment? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report Assessment of the Board Performance 	86	

No.	Rules and Guidelines	Annual Report (Part)	(Page)	Additional Documents
E56	Does the company disclose the criteria used in the board assessment? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Assessment of the Board Performance 	86	
E57	Is an annual performance assessment conducted of individual director? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Assessment of the Board Performance 	86	
E58	Does the company disclose the process followed in conducting the individual director assessment? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Assessment of the Board Performance 	86	
E59	Does the company disclose the criteria used in the individual director assessment? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Assessment of the Board Performance 	86	
E60	Is an annual performance assessment conducted of the Board Committees? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Assessment of the Board Performance 	86-87	
E61	Does the Board of Directors conduct an annual performance assessment of the No. 1 Management (CEO/President /Managing Director)? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Assessment of the Board Performance 	86-87	
E62	Does the Board of Directors have a CEO succession plan in place? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Succession Plan 	90	
E63	Does the company disclose its remuneration (fees, allowances, benefit-in-kind and other emoluments) policy (i.e. the use of short term and long term incentives and performance measures) for its executive directors and CEO? IRPC: Yes	<ul style="list-style-type: none"> Management Structure 	132	
E64	Is there disclosure of the fee structure for non-executive directors? IRPC: Yes	<ul style="list-style-type: none"> Management Structure 	130-131	
E65	Do the shareholders or the Board of Directors approve the remuneration of the executive director and/or the senior executives? IRPC: Yes	<ul style="list-style-type: none"> Management Structure 	130-132	
E66	Does the Board of Directors appoint a company secretary? IRPC: Yes	<ul style="list-style-type: none"> Management Structure 	129	<ul style="list-style-type: none"> Corporate Governance Handbook
E67	Is the company secretary educated or trained in legal, accountancy or company secretarial practices? IRPC: Yes, the Company Secretary has been trained in the related field	<ul style="list-style-type: none"> Management Structure 	129	
E68	Is the Chairman an independent director? IRPC: No, but appointed due to the knowledge, ability and experience in petroleum and petrochemical industries	<ul style="list-style-type: none"> Board of Directors Management Structure 	32 116	
E69	Is the Chairman also the CEO/President/Managing Director? IRPC: No	<ul style="list-style-type: none"> Corporate Governance Report - Responsibilities of the Board 	83	<ul style="list-style-type: none"> Corporate Governance Handbook
E70	Are the role and responsibilities of the Chairman disclosed? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Responsibilities of the Board: Management Structure 	83-84 120	<ul style="list-style-type: none"> Corporate Governance Handbook
Does the board appoint Audit committees with independent members to carry out various critical responsibilities such as:				
E71	Does the Board appoint the Audit Committee? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Audit Committee Management Structure : Audit Committee 	84 121	
E72	Are responsibilities of the Audit Committee clearly defined? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Audit Committee Management Structure : Audit Committee 	84 121	
E73	Is there disclosure of details and qualifications of the Audit Committee? IRPC: Yes	<ul style="list-style-type: none"> Board of Directors 	32-41	

No.	Rules and Guidelines	Annual Report (Part)	(Page)	Additional Documents
E74	Are all members of the Audit Committee independent directors? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Audit Committee • Management Structure 	84 116	
E75	Did the Audit Committee meet at least four times during the year? IRPC: Yes	<ul style="list-style-type: none"> • Management Structure - Meeting Attendance 	126	
E76	Is the attendance of members at Audit Committee meetings disclosed? IRPC: Yes	<ul style="list-style-type: none"> • Management Structure - Meeting Attendance 	126	
E77	Does at least one of the independent director of the Audit Committee have accounting expertise (accounting qualification or experience)? IRPC: Yes	<ul style="list-style-type: none"> • Board of Directors 	32-41	
E78	Does the Audit Committee have primary responsibility for recommendation on the appointment and removal of the external auditor? IRPC: Yes	<ul style="list-style-type: none"> • Corporate Governance Report - Audit Committee • Management Structure : Audit Committee 	84 121	• Corporate Governance Handbook
E79	Does the appointment and removal of the internal auditor require the approval of the Audit Committee? IRPC: Yes	<ul style="list-style-type: none"> • Corporate Governance Report - Audit Committee • Management Structure : Audit Committee 	84 121	• Corporate Governance Handbook
Compensation / Remuneration Committee				
E80	Does the Board appoint Remuneration Committee? IRPC: Yes	<ul style="list-style-type: none"> • Corporate Governance Report - Nomination and Remuneration Committee • Management Structure 	84 122	
E81	Are duties and responsibilities of the Remuneration Committee clearly defined? IRPC: Yes	<ul style="list-style-type: none"> • Corporate Governance Report - Nomination and Remuneration Committee • Management Structure 	84 122	• Corporate Governance Handbook
E82	Does the Remuneration Committee consist mainly of independent directors (more than 50%) IRPC: Yes (2 out of 3 of Directors)	<ul style="list-style-type: none"> • Corporate Governance Report - Nomination and Remuneration Committee • Management Structure 	84 122	
E83	Are all members of the Remuneration Committee IRPC: Yes	<ul style="list-style-type: none"> • Corporate Governance Report - Nomination and Remuneration Committee • Management Structure 	84 122	
E84	Does the Remuneration Committee meet at least 2 times a year? IRPC: Yes	<ul style="list-style-type: none"> • Corporate Governance Report - Nomination and Remuneration Committee • Management Structure - Meeting Attendance 	84 126	
E85	Is there disclosure of the rates at which individual members of the Remuneration Committee attend its meeting? IRPC: Yes	<ul style="list-style-type: none"> • Management Structure - Meeting Attendance 	126	
E86	Does the Company appoint the Nomination Committee? IRPC: Yes	<ul style="list-style-type: none"> • Corporate Governance Report - Nomination and Remuneration Committee • Management Structure 	84 122	
E87	Are duties and responsibilities of Nomination Committee clearly defined? IRPC: Yes	<ul style="list-style-type: none"> • Corporate Governance Report - Nomination and Remuneration Committee • Management Structure 	84 122	• Corporate Governance Handbook
E88	Are all members of the Nomination Committee independent directors? (Bonus) IRPC: Yes (2 out of 3 of Directors)	<ul style="list-style-type: none"> • Corporate Governance Report - Nomination and Remuneration Committee • Management Structure 	84 116	
E89	Does the Remuneration Committee consist mainly of independent directors (more than 50%) IRPC: Yes (2 out of 3 of Directors)	<ul style="list-style-type: none"> • Corporate Governance Report - Nomination and Remuneration Committee • Management Structure 	84 116	

No.	Rules and Guidelines	Annual Report (Part)	(Page)	Additional Documents
E90	Is Chairman of the Nomination Committee an independent director? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Nomination and Remuneration Committee Management Structure 	126	
E91	Is there disclosure of the rates at which individual members of the Nomination Committee attend its meeting? IRPC: Yes	<ul style="list-style-type: none"> Management Structure - Meeting Attendance 	126	
E92	Does the Nomination Committee meet at least 2 times a year? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Nomination and Remuneration Committee - Management Structure 	84 124	
E93	Does the Board set up CG Committee? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Sub - Committees Management Structure : Risk Management 	84 124	<ul style="list-style-type: none"> Corporate Governance Handbook
E94	Does the Board of Directors appoint the Risk Management Committee (either at the Board or management level)? IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Sub - Committees Management Structure : Risk Management 	85 124	<ul style="list-style-type: none"> Corporate Governance Handbook
E95	Does the board of directors comprise of at least five members and no more than 12 members? IRPC: 15 persons	<ul style="list-style-type: none"> Management Structure 	116	<ul style="list-style-type: none"> Corporate Governance Handbook Articles of Association (Corporate Website)
E96	Does the board of directors comprise of at least five members and no more than 12 members? (Bonus) IRPC: No	<ul style="list-style-type: none"> Corporate Governance Report 	67-93	
E97	How many board members are non-executive directors? IRPC: 14 out of 15 persons (93.34% of the Board)	<ul style="list-style-type: none"> Management Structure 	116	
E98	Among the Board of Directors, how many are independent directors? IRPC: 6 Independent Directors (40% of the Board)	<ul style="list-style-type: none"> Management Structure 	116	
E99	Does the Board of Directors provide the definition of 'independence' for identifying independent directors in public communications? IRPC: Yes	<ul style="list-style-type: none"> Management Structure : Independent Directors 	117-118	<ul style="list-style-type: none"> Corporate Governance Handbook
E100	Are the independent directors independent of management and major/substantial shareholders? IRPC: Yes	<ul style="list-style-type: none"> Management Structure : Independent Directors 	117-118	<ul style="list-style-type: none"> Corporate Governance Handbook
E101	Does the company have a separate Board of Director's report describing their responsibilities in reviewing the firm's financial statements? IRPC: Yes	<ul style="list-style-type: none"> Report of Board of Director's Responsibility for Financial Reporting 	223	
E102	Does the company provide an employee stock options scheme with the exercise period over 3 years and the strike price above the market price at the time of the award?(Bonus/Penalty) IRPC: No	<ul style="list-style-type: none"> Corporate Governance Report 	67-93	
E103	Did the company sign the declaration of the Private Sector Collective Action Coalition Against Corruption? (Bonus) IRPC: Yes	<ul style="list-style-type: none"> Corporate Governance Report - Good Corporate Citizenship : Anti-corruption Practices 	92-93	
E104	Has the company had any non-compliance cases regarding fraud/ethics in the past year? (Penalty) IRPC: No	<ul style="list-style-type: none"> Corporate Governance Report - Good Corporate Citizenship : Anti-corruption Practices 	92-93	
E105	Have there been any instances where non-executive directors have resigned and raised any issues of governance-related concerns? (Penalty) IRPC: No	<ul style="list-style-type: none"> Corporate Governance Report 	67-93	
E106	Have there been major corporate scandals that point to weak board of directors oversight? (Penalty) IRPC: No	<ul style="list-style-type: none"> Corporate Governance Report 	67-93	

COMPLIANCE WITH CORPORATE SOCIAL RESPONSIBILITIES

Compliance with Corporate Social Responsibilities	Page
IRPC operates its business in a sustainable manner by developing business growth to go hand in hand with taking care of good society and environment under the Corporate Governance	
IRPC appointed the corporate governance committee	124
IRPC provides disclosure of the remuneration of senior executives	132
IRPC provides disclosure of the remuneration of employee	282
IRPC provides disclosure of the payment to auditors	91
IRPC establishes risk management strategies and policies	125
IRPC establishes the anti-corruption policies	92
IRPC establishes the whistle blowing guideline	93
IRPC provides a channel for stakeholders to report to the responsible person/authority	93
IRPC joins the anti-corruption network	92
IRPC set a policy that supports the development of the company's business innovations	172-175
IRPC improves and further develops the company's products and work process which lead to the development and social innovations	172-175
IRPC establishes a policy of sustainable management	192
IRPC establishes an environmental stewardship Policy	197-198
IRPC promotes efficient and sustainable use of natural resources	192-194
IRPC takes an action to control and prevent a pollution incident	198-201
IRPC takes an action in greenhouse gas emission reduction	198
IRPC set a policy of corporate social responsibility	207
IRPC respects human rights and has a fair treatment to all workers	208-209
IRPC clearly expressed its intention not to violate human rights	208
IRPC run a project program improve the employee's competencies	182
IRPC provides supports and assistance to communities to promote sustainable self-reliance	210-215
IRPC identifies the company's key stakeholders	75-79
IRPC provides stakeholders an opportunity to participate with the company	75-77
IRPC has a report that concerns disclosure of social and environmental operation	198-200

ABBREVIATIONS AND TECHNICAL TERMS

Abbreviation	Full Name	Description
ABS	Acrylonitrile Butadiene Styrene	Polymers with high resistance to bumping. Slow-burning, non-self-extinguishing white powders, formed by the reaction among polybutadiene, styrene, and acrylonitrile: bulk, emulsion, or suspension. Its use is in transport equipment; home appliances such as refrigerators, sewing machines; electrical appliances, including computers, TVs, radios, telephones; pipes and joints for construction work; containers; furniture; luggage; boat hulls; and mobile homes.
	Green ABS	PC's first-ever environmentally friendly product derived from substituting natural rubber for synthetic rubber in the production of ABS
ACN	Acrylonitrile	Clear, colorless, volatile, fragrant, and flammable liquid, produced from propylene by the reaction with ammonia and air, which is the best method due to its low cost. ACN, a highly reactive chemical, readily polymerizes or co-polymerizes into various synthetic fibers and plastics. In addition, it is feedstock for acrylic acid, acrylamide, and different amines. There is no direct use for ACN but that as a chemical for ABS and SAN production.
	Aromatic	A hydrocarbon compound whose structure resembles six carbon atoms forming a ring, consisting of single and double bonds in alternate. Its chemical properties differ from saturated and unsaturated hydrocarbons. Aromatics are in high demand of petroleum and petrochemical industries.
ADU	Atmospheric Distillation Unit	An oil refining unit that separates oils by different dew points into LPG, gasoline, naphtha, gas oil, and diesel. ADU separates crude oil by fractionating distillation at atmospheric pressure, using different boiling points of hydrocarbon compounds in the crude, which then yields various distilled products, namely LPG, gasoline, kerosene, diesel, and fuel oil.
AS / SAN	Acrylonitrile Styrene	A polymer developed to superior quality to polystyrene. It is heat-resistant, not easily broken, and as hard and transparent as polystyrene, but less expensive. It normally contains 20-30% of acrylonitrile for better impact resistance. It is more resistant to hydrocarbons and oil. If there is a higher proportion of ACN, it will withstand more heat, but will also be harder to mold. AS/SAN is used instead of polystyrene when more strength is required for household products such as glasses and jugs.
ATB	Atmospheric Tower Bottoms	Heavy oil received at the bottom section of the ADU tower and can be further cracked or used as fuel oil. For ATB, the residues at the bottom after light oil are extracted are dark brown, heavy (0.92 kilogram/liter), containing molecules of large hydrocarbon compounds, with about 5% of sulfur.
bbl	Barrel	A volumetric measurement unit in the petroleum industry for crude oil and oil products.
BD	Butadiene	A non-saturated hydrocarbon gas by-product from the steam cracking process of naphtha or gas oil in the C4 fraction or mixed-C4 stage. It is separated from mixed-C4 by extractive distillation using solvents with polar and boiling-point differently from butadiene, which will not dissolve butane and butene. Some plants produce butadiene from butane and butene by dehydrogenation. Butadiene is used to manufacture rubber, SBR rubber for car tires, SBR latex for rug pads, and ABS plastics. It also yields chemicals such as hexamethylenediamine for nylon production. There is no direct use for butadiene.

Abbreviation	Full Name	Description
Benzene	Upstream Project for Hygiene & Value Added Products	A colorless, flammable, and carcinogenic liquid produced from the catalytic reforming process of naphtha, and the hydro-dealkylation process of toluene. It is a component of pyrolysis gasoline, a by-product from steam-cracking of naphtha or gas oil. It is used as feedstock for ethylbenzene, cumene, cyclohexane, and nitrobenzene. Uses include industrial solvents, mixtures in various products, including cosmetics, perfumes, nail paint removers, lacquer, dry cleaning agents, paints, stain removers, and varnish.
BTX	Ben Zene, Toluene and Mixed Xylene	A mixture of aromatic hydrocarbons: benzene, toluene, and xylene, produced from reformat in the catalytic reforming process and pyrolysis gasoline in the stream cracking process. It is added to gasoline to improve the octane number, or distilled to separate benzene, toluene, and xylene-three of the seven primary petrochemical substances used as feedstock in various petrochemical production lines, or as solvents.
EBSM	Ethylbenzene StyrenMonomer Plant	A manufacturing unit of ethylbenzene and styrene monomers, based on benzene and ethylene as feedstock.
EPS	Expanded Poly styrene	Polystyrene foam is produced by adding pentane gas to polystyrene. The foam has low density because there are a number of internal pores of gas bubbles, created by a foam catalyst in the polymer. Foam can be categorized by the shape of cells. Non-connected pores are called closed cells, whereas connected pores, allowing gas circulation, form open cells. Polymer foam is widely used as food containers, packing materials, and heat insulators.
ETP	Ethylene Plant/ Olefin Plant	A manufacturing unit of ethylene and propylene based on naphtha and liquefied petroleum gas (LPG) as feedstock.
GO	Gas Oil	A product of crude oil distillation, with a boiling point of 250-350 C, and C15-C25 hydrocarbons in a single-chained structure. It is used as fuel for diesel engines and olefins feedstock.
HDPE	High Density Polyethylene	A polyethylene polymer with high density, between 0.94-0.96 grams per cubic centimeter. It has the least number of branches in the polyethylene family, thus highly crystallized, with a high melting point, and strong. It is mainly used to produce containers like bottles, nets, bags, electrical appliance components by blow molding, or pipes made by extrusion.
HIPS	High Impact Polystyrene	Polystyrene added with rubber particles such as polybutadiene to make it highly impact-resistant. Without rubbers, it is brittle. Rubber content can be up to 20%, enabling it to withstand 3.5 joules of impact. It has low glass transition temperature, suitable for impact-bearing uses such as refrigerators and furniture.
KTA	Kilotons per annum	A quantity measurement unit equivalent to one thousand tons per year.
LR	Long Residue	Residues of ADU, used to produce lube oil.
MEG	Mono Ethylene Glycol	Colorless, clear liquid made from ethylene, itself used as polyethylene terephthalate feedstock, its direct use is to reduce the freezing point and increase the boiling point of water and to retain moisture. Ethylene glycol is used in car coolant to prevent water from freezing in cold-weather countries and prevent water from boiling in warm-weather ones. Other uses include those in pumps; industrial heating and cooling systems; solar energy systems; hydraulic oil for automotive brake and shock absorbent systems; ink for printing, ball pens and rubber stamps; coating for fibers, papers and hides; cosmetics; and wood stain.
PE	Polyethylene	An orderly structured polymer synthesized from polyethylene monomers.

Abbreviation	Full Name	Description
PP	Polypropylene	A polymer synthesized from propylene by coordinated polymerization, resulting in a highly organized and crystallized structure.
PS	Polystyrene	A polyolefin thermoplastic made from styrene. It is hard, brittle, low-moisture absorbent, non-conductive, non-chemical reactive, resistant to acids and bases, and has high tensile strength but a low melting point. It is soluble in aromatic solvents, easily formed by injection molding. Additives are usually added to enhance its properties. Uses include tanks, bottles, food containers, toys, rulers, outer TV frames, refrigerator components, automotive internal parts, and protective packaging. PS is a translucent, clear thermoplastic. It is distinctively hard, not flexible and brittle, moisture- and water-repellent, insulator-like, and has a low melting point.
	Propylene	A colorless, flammable, slightly aromatic C3 unsaturated hydrocarbon gas. Sometimes called propene, it consists of refinery-grade, chemical-grade, and polymer-grade propylenes.
RAE	Residue Aromatic Extract	An aromatics oil product used in the manufacturing of tires and synthetic rubber. Its properties are fairly similar to those of TDAE. IRPC innovates three grades of RAEs to suit customers' needs, well recognized by leading companies, both domestic and international.
TDAE	Treated Distillate Aromatic Extract	An aromatics oil product used in the manufacturing of tires and synthetic rubber. IRPC innovates the production of aromatic products with a PCA value lower than the international standard, not carcinogenic and causing mutation in human beings.
ULTRAMO	Acetylene Black	A carbon product produced by burning acetylene gas. Its texture is very fine, used in batteries, tire-fillers, ink, and polymer products.
	Bivalves Settlement Resistance HDPE Pipe Grade/ Marine Pipe	A special pipe-grade polyethylene capable of withstanding puncture or demolition by shells in coastal areas or estuaries.
	Endurance (Ultra High Molecular Weight Polyethylene, UHMW-PE,)	A polyethylene product with heavy molecular weight. It is opaque, cloudy white with a slippery surface, tough, and resistant to chemical corrosion.
	Impact modifier-MBS	A key filler added to enhance the impact resistance of plastics
	POLIMAXX	Trademark of IRPC's petrochemical product group
	Polyolefins	Thermoplastics produced by polymerization of non-saturated monomers. For example, polyethylene produced from ethylene, polypropylene produced from propylene, polyvinyl chloride produced from vinyl chloride, polystyrene produced from styrene, polyisobutene produced from isobutene, polybutene from butene-1, butene-2, and isobutene. These plastics are tough and flexible, with a melting point of 100-245 C. Uses include bags, fibers, plumbing pipes, sewage pipes, automotive and refrigerator components, tanks, medical equipment, and lamps. Polyolefins are polymers produced by polymerizing olefins.
UHV	Upstream Project for Hygiene & Value Added Products	A project to enhance the production capacity of propylene products, fostering competitiveness of the petroleum business and growing the petrochemical and value-added product businesses.



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