



**CREATING A SUSTAINABLE**  
**FUTURE**

**Annual Report and Sustainability Report 2015**

Padaeng Industry Public Company Limited

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# About PDI

Padaeng Industry Public Company Limited, or PDI, was founded April 10, 1981 and introduced at the Stock Exchange of Thailand with a registered capital of Baht 2,260 million. The Company has produced high quality zinc for over 30 years. It has specialized in producing special high-grade zinc ingot and zinc alloys used in the galvanizing and die-casting industries.

In 2014, PDI reassessed its business structure in anticipation of a shift towards Green Business, with the objective to increase eco-efficiency and to foster sustainable growth. The Company is structured around three businesses: PDI Energy - providing energy from renewable sources; PDI Materials - providing added value materials from recycling; and PDI Eco - providing raw materials from waste and eco management of waste.

## Our Products



### SHG Zinc Metal

consisting of 99.995% zinc. It is predominantly used in the field of corrosion protection. Zinc galvanized steel is widely used in construction, automotive and machinery parts.



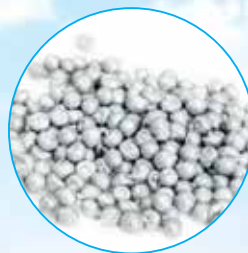
### Zinc Alloys

Zinc alloy is extensively used in various applications in automotive, electrical & construction industry



### Zinc Spheres

is SHG zinc in the form of spheres, which is used in electroplating industry such as autoparts and toy cars.



### Zinc Grains

also containing 99.995% of zinc in the form of small pellets for continuous electroplating process in automotive industry.





# Overall Business Operation of the Company



## Padaeng Industry Public Company Limited

Registered Capital Baht 2,260,000,000 Paid-up Capital Baht 2,260,000,000

*Nature of Business*

Mining and smelting of zinc ore as well as marketing of zinc metal and other by-products.

100%

### Padaeng Properties Co., Ltd. (PDP)

Registered Capital  
Baht 80,000,000  
Paid-up Capital  
Baht 80,000,000  
*Nature of Business*  
Land development and  
Real Estate with IEAT

100%

### PDI Materials Co., Ltd.

Registered Capital  
Baht 200,000,000  
Paid-up Capital  
Baht 200,000,000  
*Nature of Business*  
Distribution base metals  
and other by-products

51%

### PDI-CRT Co., Ltd.

Registered Capital  
Baht 52,000,000  
Paid-up Capital  
Baht 43,480,000  
*Nature of Business*  
Recycling materials

100%

### PDI Energy Co., Ltd.

Registered Capital  
Baht 350,000,000  
Paid-up Capital  
Baht 87,500,000  
*Nature of Business*  
Renewable energy operation

100%

### PDI Tak Solar One Co., Ltd.

Registered Capital  
Baht 10,000,000  
Paid-up Capital  
Baht 2,500,000  
*Nature of Business*  
Renewable energy operation  
(Solar)

100%

### PDI Tak Solar Two Co., Ltd.

Registered Capital  
Baht 10,000,000  
Paid-up Capital Baht 2,500,000  
*Nature of Business*  
Renewable energy operation  
(Solar)

100%

### PDI Surat Biomass Co., Ltd.

Registered Capital  
Baht 200,000,000  
Paid-up Capital Baht 50,750,000  
*Nature of Business*  
Renewable energy operation  
(Biomass)

35%

### Maesod Clean Energy Co., Ltd. (MCE)

Registered Capital Baht 675,000,000  
Paid-up Capital Baht 675,000,000  
*Nature of Business*  
Producing ethanol from sugarcane  
as an alternative energy source

100%

### PDI Eco Co., Ltd.

Registered Capital  
Baht 50,000,000  
Paid-up Capital  
Baht 12,500,000  
*Nature of Business*  
Waste management operation

100%

### Ton Sangkasi Pte., Ltd.

Registered Capital SIN\$ 10,000  
Paid-up Capital SIN\$ 10,000  
*Nature of Business*  
Mineral exploration, prospecting of  
base metals (Incorporate in Singapore)

100%

### Padaeng Industry (Laos) Co., Ltd.

Registered Capital USD 4,080,000  
Paid-up Capital USD 4,080,000  
*Nature of Business*  
Prospecting and mining for zinc in Laos

100%

### PDI Tak Eco Co., Ltd.

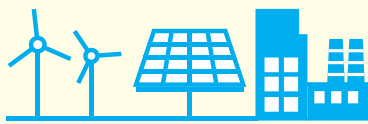
Registered Capital Baht 10,000,000  
Paid-up Capital Baht 2,500,000  
*Nature of Business*  
Waste management operation

51%

### Puthep Co., Ltd.

Registered Capital Baht 285,589,732  
Paid-up Capital Baht 285,589,732  
*Nature of Business*  
Prospecting and mining for copper  
and other (on the liquidation process)





## Corporate Strategies

In 2015, PDI continued to achieve its strategic objectives to operate its conventional zinc business in a profitable way, by keeping operational expenses under strict control and rigorously managing our complex zinc refining processes. In addition to this, by carefully managing the strategic hedging of our zinc sales, we have been able to exceed our goals, resulting in a robust financial standing marked by satisfactory profits. Despite all our efforts, the zinc business on itself can not sustain growth for PDI, mainly as the Mae Sod Mine will be depleted in 2016. PDI has therefore adjusted its business strategies and will cease conventional zinc business in favor of developing new sustainable businesses.

Consequently our current business structure has been gradually transformed into **PDI Materials** (metal business with focus on value-added materials from recycling), **PDI Eco** (industrial waste treatment services) and **PDI Energy** (renewable and alternative energy). A dedicated team, headed by the business development team, investigates and assesses investment prospects for each business group. These assessments are based on maximized return and minimal nuisance to the environment to ensure impact mitigation on society and communities. Meanwhile, the Company continues developing its personnel to facilitate emerging investment projects.

## Our Vision

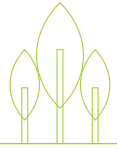
**PDI operates its business by fostering balanced concerns for the communities and the environment aiming to effectively safeguard our ecosystems.**

Driven by innovation and sustainable growth, we maximize added value for our clients, with respect to our people and the environment. We support the communities in which we operate and give the best possible return to our shareholders



## Corporate Strategies in 2016

In 2016, PDI remains committed to achieving its goals by carefully managing operational and investment expenses in line with the approved budgets. This will enable PDI to continue generating profits and assure a strong financial backbone for future diversification investments. With a dual focus on both profitably and corporate social responsibility, PDI confirms its pursuit of green sustainable businesses through the search, assessment and realization of concrete projects.



## Message from the Board of Directors



“ With a very strong commitment of management and staff, Padaeng Industry Public Company Limited has secured another successful and profitable year despite challenging conditions for Zinc in both the domestic and global markets. ”



With a very strong commitment of management and staff, Padaeng Industry Public Company Limited has secured another successful and profitable year despite challenging conditions for Zinc in both the domestic and global markets.

In the critical area of mapping a path to a sustainable future for the Company, PDI has made substantial progress in identifying new businesses and initiating a number of potential projects. We have started projects that will place the company on a strong and stable footing as we make the transition from being a pure mining and metals concern to becoming a diversified provider of value-added metals, renewable energy and waste management.

As we look to the future, we should not forget our past and a legacy that has shaped us, for it remains our duty to uphold PDI's good image.

PDI has always pride itself as a Thai company that abides by international standards. We have never compromised on applying best business practices. On the environmental, health and safety front, we have always ensured to apply the highest standards and minimized nuisance to the local communities.

In moving towards a markedly different future, PDI will hold true to these values that have made us a successful company for decades. We will build on our reputation as one of Thailand's most sustainable companies.

## Planning for the Future

At the dawn of 2015, PDI has - after carefully deliberating and exhausting all options - decided to shut the Mae Sod mine, since it will be fully depleted. As a consequence PDI will cease zinc operations by 2017.

It was a difficult choice to make as it entails a significant reduction in staff numbers. However in the face of depleting zinc ore and the absence of an alternate mine location in Thailand, PDI has no recourse but to suspend zinc activities and shift to develop other areas for sustainable growth.

We will therefore engage in new green businesses where PDI has strong advantages such as advanced innovative technologies, know-how and a highly skilled experienced professional workforce. We have already begun to train our people in these new areas.

As we make changes, we will at the same time, show respect to our departing staff by recognizing their years of service and contribution. They will receive a significant separation premium on top of the legal severance payment.

## Outstanding Results Achieved in 2015

For 2015, we are happy to conclude that we have delivered outstanding results from normal operations, as we look toward a future where our mine in Mae Sod will be closed.

Although PDI has weathered a negative climate where global zinc prices recorded its lowest level in the last 10 years, the company has still been able to record a consolidated profit of Baht 151 million, after impairment of all expected costs from ceasing the zinc activities.

Thailand's overall manufacturing industry grew merely 0.3 percent for the year. In the automotive sector where PDI derives much of its demand, growth has slowed significantly, adding pressure on performance and reduced revenues for the Company.

Amid these conditions, compounded by a markedly lower zinc price and weaker demand, PDI was nevertheless able to produce a positive outcome. These good results were achieved due to a number of developments and measures took.

Firstly, there was a significant drop in electricity prices that allowed us to make savings in the highly energy consuming zinc electro winning process.

A second reason for the good performance was the depreciation of the local currency against the US dollar. With a stronger dollar-baht rate - with PDI's sales conducted in the US currency - the Company was able to gain from the exchange rate.



Thirdly, PDI's hedging of the metal price paid off. Having locked in zinc sales at a favorable price during the earlier part of last year when levels were considerably higher, we made further gains.

### Focus on Green Business for Sustainable Growth

The Company has studied and adjusted its business direction to create growth focusing on green business: power from renewable energy (by PDI Energy Co., Ltd.), eco-waste management business (by PDI Eco Co., Ltd.) and value added metals from recycling (by PDI Materials Co., Ltd.).

Strategically, PDI will grow in three main areas: in materials where advanced materials will be recycled from metal containing industrial waste; in renewable energy such as wind, solar and biomass; and in eco-waste management creating revenues from waste handling and services.

In all these areas, PDI has the advantage of having access to the most advanced and trusted technologies. We have also reserved adequate capital and manpower to undertake there operations.

In recycling metal-containing materials, PDI will be able to produce high grade metal based products for sale in the premium market. The operation will also prove to be more beneficial and sustainable in recovering

zinc from industrial waste, than conventional zinc refining from mining concentrates. This innovative materials project in joint venture with a European leader in the field will be operated in Rayong, giving this site a second life.

In the area of energy, PDI is studying several VSPP biomass plants in different rural regions all over Thailand. The outcomes remain promising with the likelihood that energy production will start to contribute income to the Company soon. PDI has plans for solar and wind farms to generate over 100MW of electricity in Thailand but is also looking in other Asian countries.

The recent Paris Accord or COP 21 agreement will make renewables energy the preferred clean source of electricity in our effort to curb Climate Change and the burning of fossil fuels that produce dangerous carbon emissions. As such, renewables are becoming part of mainstream energy and PDI is securing a place in a high potential industry that will replace conventional power generation that pollute and compromise the safety to human health and the environment.

Finally PDI's eco waste management initiatives will embrace an industrial waste recycling plant in Tak province to tackle local industrial waste in the North of Thailand. We will deploy leading edge advanced technology in joint venture with a leader in this industry to recycle and dispose waste that can generate income for the company while servicing the respective industries in the region. The project preparation, such as obtaining necessary permits, starts in 2016 and its success will provide a second life to our Tak plant.

### Winning Recognition and Numerous Civic Awards

PDI has through the years won several international and national awards that reflect our strong commitment to environmental protection as well as workers safety while retaining very strong communities with people living near our operational sites.

Since decades PDI has established outstanding cooperation with local authorities and communities at our different operational plants in Mae Sot, Tak and Rayong, sharing a history of trusted relations. While we move forward into green business, we will keep our legacy of commitment to staff, customers and all stakeholders at the center of our vision.

The goodwill PDI has earned is priceless. It is an invaluable asset to the brands we carry and to new brands we will be creating in the future.

Our name today entails respect, trust and appreciation in the Kingdom as well as in neighboring countries. On the international stage, we are considered among the world's top ecologically sound and technologically advanced operators producing some of the world's highest quality products.

Our Mae Sod mine has received the Green Mining Awards since 2010. It was also awarded the prestigious Certificate of Excellence for His Majesty the King's Vetiver Awards 2015. PDI launched vetiver planting at its mine to prevent soil erosion and promote water conservation.



By doing so, we pay tribute to His Majesty the King's concept of sustainability to curb one of the Kingdom's more pressing problems. Now in its 13<sup>th</sup> year, the program at the mine drew hundreds of volunteers. PDI chairman presides over the yearly related events with its top management and Tak provincial leaders, officials and community members.

The planting forms part of PDI's "Mae Sod Rehabilitation Plan". Today, more than 70 per cent of the work has been completed after the plan was started in 1993.

## Stock Exchange of Thailand Endorsement

The Company obtained the Thailand Sustainability Investment Award 2015 from the Stock Exchange of Thailand where the Company was announced as one of 51 listed companies that had passed sustainability assessment standards based on environmental, social and corporate governance.

The SET rating is in many ways, a valuable endorsement of PDI as one of the country's most stable and well performing listed companies worth investing among local and foreign funds as well as individuals.

In 2015, PDI was honored by several major awards for our corporate social responsibility contributions:

- ESG 100 Recognition Certificate (top 100 of most outstanding companies in Environmental, Social and Governance [ESG] from the Thaipat Institute.
- CSR-DIW Continuous Awards from the Department of Industrial Work (DIW).

- Eco Factory Certification from the Federation of Thai Industries (FTI).

The Company joined the Private Sector Collective Action Coalition Against Corruption or CAC and assimilated the guideline of anti-corruption in its business model. The Company aims to be accepted for its compliance in year 2016.

In disseminating its plan to close the mine, PDI announced to continue to support the local communities in various ways. As PDI is developing new businesses in Tak, it needs continued support from the local people. Our community relations team has provided support and attended local events while conducting efforts to provide proper understanding about our projects and our intentions.

## Conclusion: Time to Make a Smooth Transition

In 2015, PDI recorded a profitable year and at the same time, made much headway in our search for potential green businesses.

The Company explored new mineral resources but was unable to locate an alternative site to replace our depleted Mae Sod mine. As we close the site,

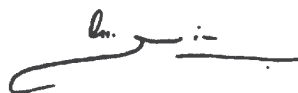
PDI will return it in pristine condition by restoring the environment in preparation for its redevelopment under His Majesty the King's project.

The closure does not mean an end of PDI but merely the close to one chapter in our company's history. We have begun a new and exciting chapter with a systematic drive to build sustainable businesses.

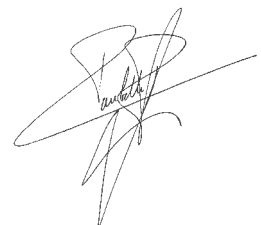
Already our three main areas: materials from recycling; renewable energy and waste management-show much promise. These are sunrise industries that promise to generate considerable revenues and sustainable profitability.

PDI is confident to take this direction as we have innovative technology, sufficient capital and a motivated and experienced manpower to make this change.

Our reputation and name will continue to be respected and trusted because of our strict adherence to good corporate governance, transparency, integrity and an unfailing commitment to society and to the Kingdom of Thailand.



**Arsa Sarasin**  
Chairman of the Board



**Francis Vanbellen**  
Managing Director



# Key Figures



## Revenue Structure

The Company's total revenue for the consolidated financial statement is classified by types of product (2013 - 2015)

Product	2013		2014		2015	
	million Baht	% of Total revenue	million Baht	% of Total revenue	million Baht	% of Total revenue
Zinc metal (SHG)	2,097.85	38.40	2,542.60	45.21	2,165.95	39.55
Zinc alloy	2,844.17	52.06	2,887.50	51.34	2,359.73	43.09
Sulphuric acid	173.68	3.18	96.00	1.71	90.02	1.64
Other revenue	347.88	7.36	98.18	1.74	861.05	15.72
<b>Total revenue</b>	<b>5,463.57</b>	<b>100.00</b>	<b>5,624.28</b>	<b>100.00</b>	<b>5,476.75</b>	<b>100.00</b>

## Direct Economic Value Generated

	2013	2014	2015
	million Baht	million Baht	million Baht
<b>Direct economic value generated</b>	<b>5,463.57</b>	<b>5,624.28</b>	<b>5,476.75</b>
- Revenues	5,463.57	5,624.28	5,476.75
<b>Direct economic value distributed</b>	<b>5,364.38</b>	<b>5,015.14</b>	<b>4,967.60</b>
- Operating costs	4,861.81	4,399.79	4,004.49
- Employee wages and benefits	476.06	518.46	722.59
- Payment to providers of capitals	9.30	74.59	98.01
- Payment to government	1.80	3.09	113.36
- Community Investment	15.41	19.21	29.15
<b>Economic value retained</b>	<b>348.09</b>	<b>1,080.30</b>	<b>120.17</b>



## Key Figures and Ratios

### Consolidated

	End of Year	2013	2014	2015
Total revenues	(million Baht)	5,464	5,624	5,477
Gross profit	(million Baht)	290	852	785
Net profit (loss)	(million Baht)	-522	461	151
Net profit (loss) per share	(Baht)	-2.31	2.04	0.67
Net profit (loss) per total revenue	%	-9.55	8.20	2.75
Total asset	(million Baht)	5,236	5,550	5,105
Total liabilities	(million Baht)	2,294	2,225	1,524
Total shareholders' equity	(million Baht)	2,942	3,325	3,581
Return on assets	%	-9.20	8.55	2.83
Return on equity	%	-14.90	13.85	4.24
Return on capital employed	%	-19.06	19.27	13.17
Debt to equity ratio	(Times)	0.78	0.67	0.43
Book value per share	(Baht)	13.02	14.71	15.84
Dividend per share	(Baht)	0.30	0.40	0.20

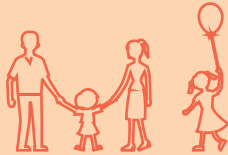
## Tax Policy

PDI maintains a good corporate governance tax policy complying with tax legislation, rules and regulations whilst assuring the best achievable return to the company. The accounting department is responsible for managing tax payments or refunds in a transparent and integer way, in line with PDI's policy and business ethics practices.





# 2015 Highlights



## Society

- Announced to join CAC (Private Sector Collective Action Coalition against Corruption) to conform to the anti-corruption guidelines and participate in the certification process by December 2016.
- Implemented PDI sustainable guidelines for suppliers by incorporating four key issues: business ethics, human rights, occupational health and safety and environmental management.
- Social Contribution **4.46 MB**



## Environment

- Further decreased water consumption with **8%** and increased water recycled with **46%**.
- Further reduced energy consumption with **9,823** gigajoules, reducing GHG discharges with **1,601** tons, or carbon dioxide equivalent.
- **70%** Progress of the total mine rehabilitation target area of **1,040** rai, contributing to absorb **1,077** tons of carbon dioxide yearly.
- Mae Sod mine achieved the Certificate of Excellence of the King of Thailand Vetiver Awards and Green Mining Continuous Award.
- Rayong Plant achieved the Eco Factory certificate





## Economy

### Finance

Strong Financial Position Confirmed with Consolidated results remain positive.

2013  
**-522**  
MB

2014  
**+461**  
MB

2015  
**+151**  
MB

- Despite worsening global and local zinc market conditions
  - causing extreme low zinc prices and decreasing sales volumes
  - gross profit remained satisfactory and decreased **only 8%** to **785 MB**.
- Net cash position (including short term deposits) at year end remains strong at **1,201 MB**.
- Debt to Equity Ratio reached its lowest level in 5 years at **0.43**.
- Gains from strategic hedging of zinc metal and USD currency exchange reached **114 MB**.
- Dividend per Share slightly adjusted to Baht **0.20**.



### Operations

- Continuous optimized raw material feed by maximizing Mae Sod feed share.
- Reduced chemicals consumption in operations, saving **30 MB** costs.
- Further improved energy costs with **26 MB**, thanks to optimized and reduced unit prices.





# Integrated Sustainability Reporting

PDI has combined its annual and sustainability report in one document, by implementing the references of the Global Reporting Initiatives (GRI, G4). The integrated report demonstrates the performance results for 2015 and updates the latest forecast on the 2016 company operations, including ongoing activities.

For 2015, PDI reported sustainability data covering more key GRI indices than previous year, by applying the Stock Exchange of Thailand (SET)'s criteria for sustainability assessment of listed companies as a guideline to improve the report's comprehensiveness, linking good governance, economic, social and environmental aspects. PDI has prepared this report in Thai and English as printed documents, on CD, and as website contents, downloadable at [www.padaeng.com](http://www.padaeng.com). If you wish to request a printed version and/or CD, please contact the Communication, Padaeng Industry Public Company Limited, 191/18-25 CTI Tower, 26<sup>th</sup> Floor, Ratchadaphisek Road, Khlong Toei, Bangkok 10110, Tel. 0-2695-9499, Fax 0-2695-9495.

## The Scope of this Report

This report presents the operating data of Padaeng Industry Public Company Limited alone, not including its subsidiaries or related companies. PDI plans to report operating data of these other related companies once it has fully implemented its new business structure.

## The Reliability of this Report

This report was verified by a third party for the accuracy of its financial statements and to ensure that the environmental data contained were in fact the data submitted to the appropriate government agencies. PDI assures that other key data included in this report are accurate and abide by SET's standards. PDI will arrange for certification of its sustainability report by a third party as soon as it has implemented its new business structure.

## Sustainable Development in 2015

Since PDI's definition of its operating framework in pursuit of sustainable development under international standards in 2012, its business has not only achieved the goals for each period, but also sustained excellent balanced operations between social, economic and environmental aspects, while remaining committed to its code of conduct and to good governance. All these have galvanized PDI's approach and practice along a truthful and sustainable path creating value for the corporation and the society at large, reflecting the PDI Way.



In 2015, PDI focused on three major aspects of operations:



### Social

To benefit and add value to employees and society in a sustainable manner



### Environmental

To commit to ecological and environmental management best practices



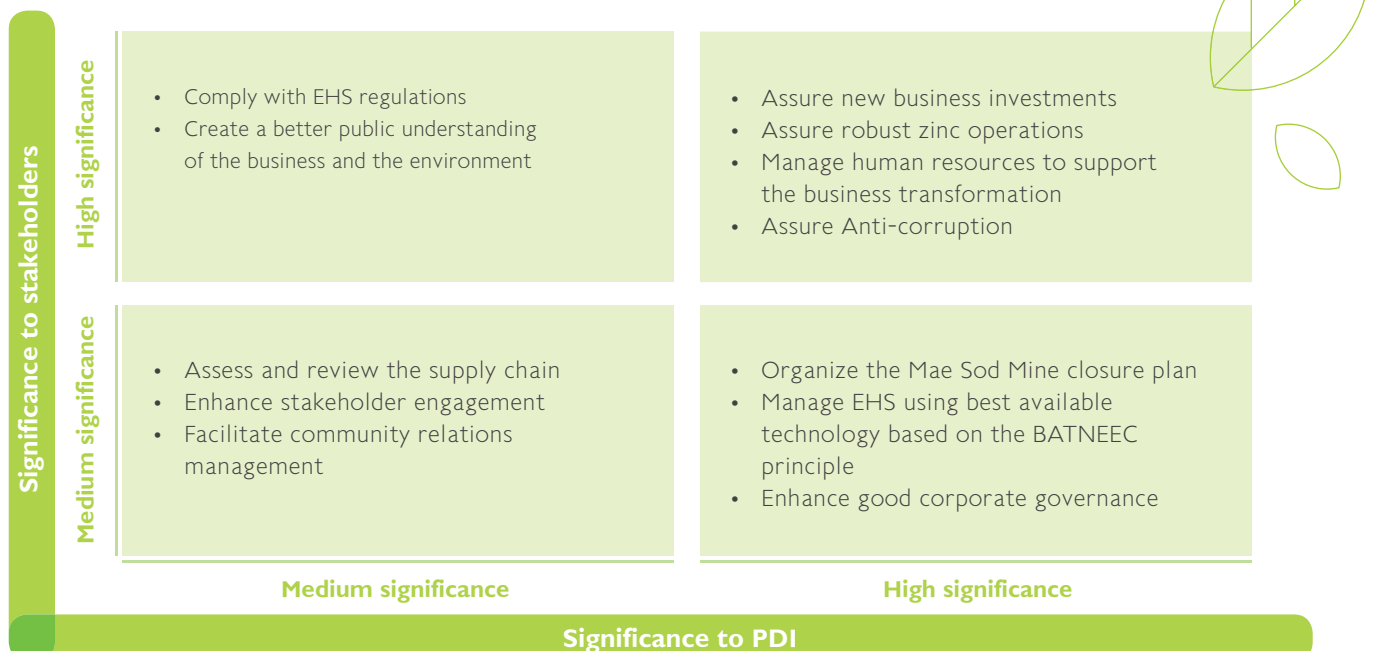
### Economic

To assure sustainable growth in the green industry

## Stakeholder Engagement

PDI has decided to transform into new business whilst maintaining its strengths in the zinc business during the ceasing of its operations by addressing issues crucial to the Company and its stakeholders in social, economic and environmental domains aligned with PDI's sustainability targets for 2015-2016. Several meeting have been organized with people in charge at company policy level through the C-CSR Steering Committee and at operating level of each business unit.

## Materiality Matrix





## Management for Sustainability

Since 2013 – 2015 PDI started preparing itself to anticipate the challenges from its diversification from conventional zinc business to new green business, guided by the vision, strategy and operational plan, and the supporting sustainability values. It was therefore crucial for PDI to create a proper understanding amongst all stakeholders on the upcoming changes to gain support and dedicated cooperation during the transition period.

In this transition period, PDI organized various communication events with numerous stakeholder target groups. In 2015, PDI completed a satisfaction survey amongst all employees to better understand their views, concerns and suggestions. In doing so the change process was improved and ultimately resulted in better understanding and buy-in of our people.



- The Thailand Sustainability Investment Awards 2015 from the Stock Exchange of Thailand (SET) for one of 51 listed companies that have passed the assessment process in sustainability on environmental, social and governance (ESG) aspects and recommended for investors who preferably aim at long-term returns.

- The Certificate of ESG 100 Recognition 2015 from the Thaipat Institute, for the top 100 most outstanding companies in Environmental, Social and Governance (ESG).





## Expectations and Actions Taken with Stakeholders During 2015

Stakeholder Groups	Stakeholder Classification	Needs/ Expectations	Actions Taken
1. Employees	PDI people and family	<ul style="list-style-type: none"> <li>Fair compensation and welfare</li> <li>Job security</li> <li>Career growth</li> <li>Safe workplace and good work environment</li> <li>Personal development</li> </ul>	<ul style="list-style-type: none"> <li>Arranged staff meetings called “People Information Session” twice a year with the managing director to give key updates to staff</li> <li>Increased communication channels between management and staff through video, messages from the managing director, management meetings, and site managers’ monthly meetings</li> <li>Organized quarterly meetings of the welfare committee/environment, health, and safety committee</li> <li>Issued bi-weekly bulletin: “Padaeng Hotline”</li> </ul>
2. Customers	–	<ul style="list-style-type: none"> <li>Timely delivery of high quality products and services at fair prices</li> <li>Providing additional services to help raise customers’ potential</li> </ul>	<ul style="list-style-type: none"> <li>Organized scheduled visits to customers to provide technical support</li> <li>Arranged training, seminars and customer relations activities</li> <li>Communicated with customers through the PDI Newsletter and COEZinc website and via social media portals, such as the COEZinc Facebook page</li> <li>Administered annual customer satisfaction surveys</li> </ul>
3. Society	Business partners Communities Government agencies Local authorities NGOs The media	<ul style="list-style-type: none"> <li>Fair business deals with equal treatment of all parties</li> <li>Disclosure of factual information</li> <li>Participation in raising community members’ quality of life</li> <li>Highest standards of environmental protection</li> </ul>	<ul style="list-style-type: none"> <li>Staged “Open House” sessions</li> <li>Implemented planned activities to raise community members’ quality of life</li> <li>Arranged multiple press conferences yearly</li> <li>Provided information about new investments via media releases and brochures</li> <li>Established the Padaeng Mine Environmental Management Network</li> <li>Forwarded summaries of work results, as prescribed by the EIA, to the sub-district health promotion hospital as well as to sub-district and district public health offices</li> <li>Assessed business partners’ while maintaining communication to ensure understanding of sustainability guidelines</li> </ul>
4. Shareholders / investors	Major shareholders Minor shareholders Financial institutions Analysts	<ul style="list-style-type: none"> <li>Fair returns on short-term and long-term investments; business growth</li> <li>Transparent management with disclosure of information about the business and organizational movements</li> <li>Stimulating involvement from minor shareholders</li> </ul>	<ul style="list-style-type: none"> <li>Organized AGM</li> <li>Organized Quarterly analyst meetings</li> <li>Published the Annual and Sustainability Report</li> <li>Communicated via the company website</li> <li>Submitted business result reports to SET</li> </ul>

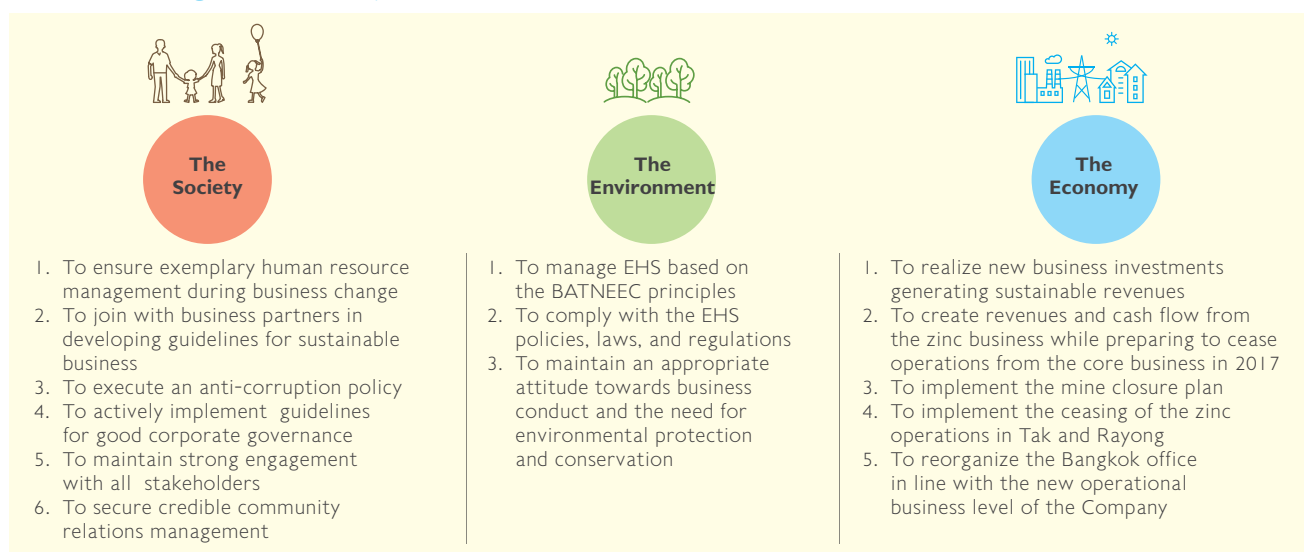


## Sustainability Progress Update

Project	Targets	2015 Results	2016 Plan
<b>Economic Projects</b>			
1. New investments	<ul style="list-style-type: none"> <li>To focus on added value materials, renewable energy, waste management and recycling businesses to create positive investment returns</li> <li>To obtain 10%-15% return on investment and fast revenue recognition</li> </ul>	<ul style="list-style-type: none"> <li>Various green business projects are in their final stage of feasibility study</li> <li>PDI Energy studies several biomass projects for investment or take-over.</li> <li>PDI Energy prepared solar projects in Tak and a wind energy projects in Korat. Both are pending power purchase agreements (PPA) approval.</li> <li>PDI Eco entered started negotiating a joint venture in industrial waste management in Tak with a leading foreign company.</li> <li>PDI Materials signed a joint venture called PDI-CRT Company, to extract metals from industrial waste, using an innovative environmentally-friendly technology, in Rayong.</li> </ul>	<ul style="list-style-type: none"> <li>Execute high-potential projects</li> <li>Realize company acquisitions for sustainable profit</li> <li>Execute PDI Energy projects</li> <li>Prepare EHIA for industrial waste management in Tak</li> <li>Finalize feasibility of the PDI-CRT project</li> </ul>
2. Zinc production	<ul style="list-style-type: none"> <li>To sustain profitable zinc operations until the ceasing of the conventional zinc business</li> </ul>	<ul style="list-style-type: none"> <li>Operational profits closed positive despite the negative business climate from the global and domestic economic slowdown affecting our zinc metal markets.</li> </ul>	<ul style="list-style-type: none"> <li>Maintain zinc production and sales at 70,000 tons/year to sustain positive results at reasonable zinc prices</li> </ul>
3. Mine closure plan	<ul style="list-style-type: none"> <li>To complete the "Mine Closure and Environmental Rehabilitation Plan"</li> </ul>	<ul style="list-style-type: none"> <li>Restored the mining area as planned while keeping stakeholders informed about the closure plan using video, brochures, newspapers, and the company website</li> <li>Disseminated news on the mine closure and environmental rehabilitation via Bangkok and upcountry media channels</li> </ul>	<ul style="list-style-type: none"> <li>Implement the closure of the mine accordingly the plan and keep stakeholders informed of business movements</li> <li>Implement the environmental rehabilitation program subsequent to the closure</li> </ul>
<b>Environmental Projects</b>			
1. Environmental, health, and safety management under the BATNEEC principle	<ul style="list-style-type: none"> <li>To implement the best global available environmental supportive technologies</li> </ul>	<ul style="list-style-type: none"> <li>Prepared projects in full compliance with laws and international standards</li> <li>Received various awards, including recognition as an eco-industrial factory</li> </ul>	<ul style="list-style-type: none"> <li>Continue the existing approach</li> <li>Further optimize energy consumption and create value from waste</li> </ul>
<b>Social Projects</b>			
1. Human resource management for business change	<ul style="list-style-type: none"> <li>To increase knowledge of new businesses</li> <li>To adhere to human rights policies</li> </ul>	<ul style="list-style-type: none"> <li>Implemented projects for human potential development</li> <li>Achieved broader staff engagement through internal communication</li> <li>Conducted staff satisfaction survey on internal communication and work environment during business change</li> </ul>	<ul style="list-style-type: none"> <li>Formulate the human resource development plan to support the business change</li> <li>Maintain the internal communication momentum whilst further enhancing staff engagement</li> </ul>

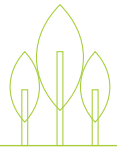
Project	Targets	2015 Results	2016 Plan
<b>Social Projects</b>			
		<ul style="list-style-type: none"> <li>Introduced an innovated compensation policy</li> </ul>	<ul style="list-style-type: none"> <li>Organize an occupational skills development plan to support redundant staff for their future after the ceasing of zinc operations</li> </ul>
2. Community engagement	<ul style="list-style-type: none"> <li>To implement community engagement programs for a better environment and to enhance quality of life</li> </ul>	<ul style="list-style-type: none"> <li>Joined the Community Partnership Association in community engagement sessions in Muang Map Ta Phut and Ban Chang municipalities, Rayong</li> <li>Established a community network called "Padaeng Mine Environment Conservation Network"</li> <li>Collected suggestions and concerns from communities at new investment areas</li> <li>Participated in community activities associated to religion, culture, and quality of life improvement</li> </ul>	<ul style="list-style-type: none"> <li>Improve communication and integrate it in the community engagement programs</li> <li>Provide the community with information concerning the Mae Sod Mine closure plan</li> <li>Provide the community with information concerning the new business</li> <li>Lead activities to encourage participation from community members in promoting environmental preservation</li> </ul>
3. Anti-corruption	<ul style="list-style-type: none"> <li>To obtain recognition by Thailand's Private Sector Collective Action Coalition against Corruption (CAC) by December, 2016</li> </ul>	<ul style="list-style-type: none"> <li>Announced a new code of conduct and anti-corruption policy, and informed stakeholders using various communication channels</li> <li>Participated in CAC</li> </ul>	<ul style="list-style-type: none"> <li>Organize activities under the framework of anti-corruption for the certification process</li> </ul>
4. Supply chain management	<ul style="list-style-type: none"> <li>To develop PDI's sustainability guidelines with business partners</li> </ul>	<ul style="list-style-type: none"> <li>Improved business partner assessment processes to ensure compliance with PDI's reviewed code of conduct aligned with policies on the EHS as well as policies on human rights and anti-corruption.</li> <li>Developed the PDI Supplier Code of Conduct for initial implementation with major partners while rolling out communication programs</li> </ul>	<ul style="list-style-type: none"> <li>Provide business partners with information and guidelines on sustainability</li> <li>Keep track of business partners through continuous assessments</li> </ul>

## PDI's Management Objectives for Sustainability, 2016 - 2017





# Society



## Human Resources Management

In 2015 PDI's human resource management team continues to reinforce its deployed policies in preparation of the future business diversification by focusing on:

- Competence development preparing PDI staff for the new businesses
- Development of compensation and welfare systems
- Improvement of communication efficiency
- Organizing support programs for the transition from zinc mining and refining operations into renewable energy, recycling and value added materials businesses.

## Employment

In the process of identifying new businesses for investment, PDI adopted a hiring freeze policy in 2015, with exceptions to recruit people with relevant business expertise or experience in our new investment targets. Our total workforce at the four PDI sites, including 3 foreign employees, totaled 834 at the end of 2015, 85% of whom were native to Tak and other provinces. The majority of our employees are male, which is reflective of the staffing pool specialized for the mining and metal processing industries. Employees with university degrees represent 15% of our staff and 38% have vocational training at college level. The average age of our employees is 46 and their average period of service reaches 19 years. The 2015 turnover rate remained low at 3%.





## Compensation and Benefits Management

PDI remains committed to offer a high quality of life for our employees, with fair attractive compensation rates. To continue motivating a competent and well-performing staff, our compensation, benefit and welfare management systems continuously realigned with the changes within the Company. Examples include the innovation of the bonus system and the modification of the physical check-up plan to accommodate employees with increased risk factors for various health issues. In addressing the diversities in age, gender and current working modes, the age group eligible for physical check-ups was changed from 40-49 to 35-49, while mammogram screening was included on the check-up list for all female staffs.

## Preparation of Human Resource Management for Future Challenges

### Employee Care

To mitigate the impact of the imminent 2017 closure of the Mae Sod Mine, a support program for employees was designed and implemented since early 2015, with a PDI - provided budget exceeding Baht 1,000,000. Based on a survey of employees' needs, the program includes occupational training courses in agricultural product processing, online sales, entrepreneurs training in how to set up and manage a company, air conditioning repair, motorcycle repair, cooking, and language skills in both English and Burmese. As part of the program, study excursions were arranged for employees to several sites recognized as models of good agricultural practice, including the Sufficiency Economy Learning Center at Ban Saraphi, Samut Songkhram province; the Sufficiency Economy Learning Center at the Khao Kling Temporary Prison, Phetchaburi province; the Indigenous Chicken Workgroup at the Huai Hong Khrai Royal Development Study Center, Chiang Mai province; and the Song Salueng Natural Farming Center, Rayong province.

PDI also organized information sharing sessions on social security benefits, tax planning and the purchase of life and health insurance to optimize employees' savings. We are profoundly concerned about employee needs in starting their new careers, especially for those who may be considered too old to re-enter the labor market. Therefore, after completing the workforce reduction program, PDI announced the detailed list of employees to be terminated in September 2015, to provide them enough time to plan and prepare their future occupation after termination. All employees were carefully informed in employment termination programs, which include legally imposed severance contributions and additional separation premium payments. Currently, employees of the Mae Sod Mine feel more relieved and assured about how to manage their lives after the end of their work with PDI. As a consequence, PDI has managed to continue its zinc production targets as planned.





Due to the Company's ceasing of zinc operations and the global shrinking market situation for metal commodities, PDI had to speed up the restructuring of its business. This caused some uncomfortable feelings about job security, which to a certain extent affect the positive working climate amongst employees in all PDI offices, who wanted more certainty about the Company's short and long-term future. In response, PDI engaged a specialized consultant to set-up interviews, design and collect data from opinion surveys, compile employee recommendations and organize focus groups. With consultant data and conclusions in-hand, PDI produced video media to communicate with employees, to clarify major issues and concerns. Recognizing that the video media represents the managing director's message, employees now have a clearer understanding of the Company's direction and any upcoming changes.

## Organizational Changes and People Development

HR has conducted a study in organizational changes and employee development corresponding to the new business strategy and the fast changes in the business, which resulted in some clear actions:

1

Knowledge sharing on best practices adopted by leading private companies regarding a number of issues, which include organizational changes, compensation and benefits management, employment and the transfer of employees to new businesses.

2

Plan for organizational changes at the Tak office (zinc refinery) and the Rayong office (ore roaster) to prepare for their respective transitions to new businesses.

3

Organize training courses for employees for competency development to support the transition phase, with an emphasis on English business communication skills. Therefore, English language classes were organized for staff at the Bangkok and Tak offices, enabling them to communicate more effectively in English. Also, other training courses were provided to support each employee's work, including project management, change management, leadership development and job coaching and motivation. Arrangement was made for the attendance of PDI executives to the Director Certification Program (DCP) organized by the Thai Institute of Directors (IOD). Under this program, participants discuss the duties and responsibilities of directors in corporate governance and in the improvement of collaboration between the management and the board.

Organize training for executives, managers and employee representatives, who have a crucial role in communicating with employees about the current challenging situation of the company, future projects and expected changes within the company. After their training, participants will be able to clearly outline the communication flow for collaboration among employees during the transition phase to foster a better work environment.

In 2015 PDI allocated Baht 4.3 million for personnel development by organizing seven courses of training. The 2015 average reached 38 training hours per person. To further enhance employees' skills and work quality, a corporate training plan has been formulated for 2016. Embracing four main training courses, the plan focuses on advanced communication courses for the transition phase and on business English courses. The latter helps the employees as these English language skills have become a basic business skill in all of Thailand while meeting the needs of the Company in both its current situation and its future business direction.

For PDI's human resource management, 2016 will be a vital year. A working group has been appointed to study and formulate a plan for the structural reorganization of departments and offices to prepare for the future business transition, taking into account the staffing requirements of each department and to commence selection of the employees who will continue working with PDI into the future. The Company also needs to take care of the majority of employees, who will be dismissed during the transition phase and who need to prepare for new careers. PDI has the vital mission of fostering confidence in and taking care of employees, who are crucial for its operations. As our business has to adapt to meet the demands of current and future challenges, both transition execution and fostering understanding among all employees and all stakeholders are crucial for a successful progression into new business.

## Awareness Enhancement on Business Code of Conduct

PDI launched its new Business Code of Conduct this year, with information and training provided to all employees. The code of conduct was revised mid-2015 to include the anti-money laundering policy. Recognizing the impact of the anti-money laundering emphasis in the current economic situation, PDI is committed to complying with all relevant regulatory and legal obligations. All employees are required to observe relevant laws and regulations as well as PDI's policy. Their duty is to conduct business with reliable, law-abiding trade partners, who refrain from using money obtained from any illegal financing source. PDI informed all related persons about the revised policy and disseminated the adjusted code of conduct to all.

## Labor Practice and Human Rights

PDI announced its human rights policy in 2015 and clarified the policy to employees and outsiders, especially business partners. Throughout the year, the Company maintained fair and equal treatment of employees, without discrimination by age, gender or level of responsibility, while focusing on quality of life for all employees at all PDI sites.



### Number of Employees by Level of Responsibilities (2013-2015)

Level	2013	2014	2015
Executive	12	11	12
Managerial	32	47	47
Supervisory	177	314	311
Operational	579	402	387
Temporary Worker	88	82	77
<b>Total</b>	<b>888</b>	<b>856</b>	<b>834</b>

### Number of Employees in 2015 by Education and Level of Responsibilities

Level	Bachelor Up	Certificate-Diploma	Below Certificate	Total
Executive	12	0	0	12
Managerial	43	4	0	47
Supervisory	69	203	39	311
Operational	0	105	282	387
Temporary Worker	0	8	69	77
<b>Total</b>	<b>124</b>	<b>320</b>	<b>390</b>	<b>834</b>

### Number of Employees in 2015 by Age Group

Age	PDI-Bangkok	PDI-Tak	PDI-Mae Sod	PDI-Rayong	Total
< 30	2	12	14	7	35
30 - 50	45	223	147	61	476
>50	27	242	35	19	323

### Retention Rate of Return to Work after Parental Leave

Parental Leave Condition	No. of Employee
Currently continue working for less than 12 months	2
Currently continue working for 12 months	1
Still in parental leave period	0

Note: 1. Employee takes parental leave and return to work is 100% rate  
2. Parental leave is granted to only female employee according to Thai Labor Law

### Compensation Ratio of Female Comparing to Male Employee

Level	
Executive	1.00
Managerial	0.76
Supervisory	1.12
Operational-Line Function	1.22
Operational-Supporting Function	0.94

### Number of New and Departed Employees in 2015 by Level of Responsibilities

Level	New Employees	Departed Employees
Executive	0	0
Managerial	1	2
Supervisory	1	6
Operational	0	13
Temporary Worker	2	5
<b>Total</b>	<b>4</b>	<b>26</b>

### Ratio of Male Promotion in 2015

% of Male Promoted	% of Male Not Promoted
1.4	98.6

### Ratio of Female Promotion in 2015

% of Female Promoted	% of Female Not Promoted
2.9	97.1

### Average Training Hours per Person by Level of Responsibilities (2013-2015)

Level	2013	2014	2015
Executive	52	57	28
Managerial	32	82	100
Supervisory	21	20	53
Operational	6	6	27
Temporary Worker	7	6	0
	<b>11</b>	<b>16</b>	<b>38</b>

Note: including the occupational training for Mae Sod employees

### Training Expenses (2013-2015)

Year	million Baht
2013	5.2
2014	7.0
2015	4.3





## Occupational Health and Safety

PDI remains dedicated to assure excellent occupational health and safety management policies across the organization. From prevention to remediation and situational management, our occupational health and safety management system (OSHAS/TIS 18001) is our guiding management tool. With applications defined under GRI-G4 (Global Reporting Initiative – Guideline 4), PDI designed and implemented multiple occupational health and safety activities appropriate for the specific work conditions of each site. Key action drivers are stimulating an active occupational health & safety involvement, providing adequate personal protective equipment (PPE), managing the complaint system, encouraging engagement by employees and contractors and training and developing occupational health & safety awareness for all employees at all levels.

Every employee has the authority to manage and control their personal occupational health & safety settings and are encouraged to refuse risky or unsafe work instructions. Employees are also empowered to set what they consider to be the proper frequency for occupational health and safety assessments. In the absence of an organized labor union within PDI, the Company encouraged and established a joint employer-employee welfare committee to take care of benefits and welfare, as well as the occupational health and safety of all employees. This engagement has been very well accepted and participants are enabled to cooperate effectively and efficiently.

### PDI Environment, Occupational Health and Safety Committee (EHS Committee)

Fully committed to comply with formal rules and regulations, PDI established the Environment and Occupational Health and Safety Committee (EHS Committee), with committee members elected by employees from all offices. The Company provided all crucial training to all committee members.





## Operating Performance

PDI has been very active in occupational health and safety activities throughout 2015. Participation in various events was encouraged, including competing for “The Most Outstanding Operator on Safety, Occupational Health and the Environment” during the Ministry of Labour’s National Safety Week, ; competing for the “most safe workplace” under the “Workplace Safety Project in Honor of HRH Princess Maha Chakri Sirindhorn’s 60<sup>th</sup> Birthday” organized by the Department of Labor Protection and Welfare; and involvement in the “Disease-free, Safety, Happy Body and Mind Program,” sponsored by the Bureau of Risk Communication and Health Behavior Development, Department of Disease Control, and the Ministry of Public Health. Additionally, promotions and awareness campaigns on work safety and vehicle accident protection were organized at the Mae Sod Mine to prevent and control accidents, leading to a zero-accident organization.

As part of a program initiated in 2014, PDI continued organizing internal contests between business units in outstanding programs for occupational health and safety, and campaigns calling for input from employees on quality, occupational health, safety and environmental programs and activities. Through 2015, these programs were promoted to stimulate employees and service contractors to become fully aware and to take up responsibility for quality, occupational health, safety and environmental management, as well as to encourage employees to develop their skills and knowledge in occupational health and safety from PDI-organized training classes.

## Accidents and Safety

One lost-time accident (LTA) during 2015 was caused by an unsafe act of one individual employee, which resulted in a personal injury but did not interfere with operations. PDI takes this accident serious and emphasizes its commitment to occupational health and safety by sharing the concluded preventive actions in the entire organization. No occupational health incidents have been reported in 2015.

PDI also persists in deploying its anti-drug and alcohol policies across the organization.

## Programs and Training on Occupational Health and Safety in 2015

- “Basic Fire Safety and Fire Fighting” training
- “Maintenance of Forklifts and Safe, Proper Ways to Drive a Forklift” training
- “Resuscitation and First Aid” training
- “Safety, Occupational Health and the Environment Training for Supervisors” training
- “Safety Officer Training for Supervisors” training
- “Safety Officer Training for Executives” training
- “Confined Space Work Safety” training
- “Health Risk Behavioral Modification for Employees and Service Contractors Prone to Chronic Diseases” program and training
- “Fire Evacuation from High Rises” training
- “Work Safety, Occupational Health and Environment Committee” training
- “Industrial Gas Controller Training”
- “Liquefied Petroleum Gas Controller Training”
- “Process Safety Management Internal Audit” training
- “Work Safety with Chemicals” training
- “Outstanding Safety and Occupational Health Management at Operating Site” program
- “Promotion of Safety at Workplace” program
- “Bringing Safety to Schools” program
- “Prevention of Road Accidents” program

## Awards on Occupational Health and Safety in 2015

- Provincial-level Award on Outstanding Disease-Free, Safety, Happy Body and Mind Award from the Office of Disease Prevention and Control, 9-Phitsanulok, Ministry of Public Health
- Outstanding Operator for Safety, Occupational Health and Work Environment Award from the Ministry of Labor for the 8<sup>th</sup> consecutive year
- Safe Work Place Award under the “Workplace Safety Project in Honor of HRH Princess Sirindhorn’s 60<sup>th</sup> Birthday” from the Ministry of Labor



## The Number of Employees on the EHS Committees

Level of Employee	PDI-Bangkok	PDI-Tak	PDI-Rayong	PDI-Mae Sod
Management	1	2	0	1
Administration	1	3	3	4
Supervisor	3	6	2	2
Operation	0	0	4	6
Total	5	11	9	13
Total employees	74	516	87	196
% of Total employees	6.76	2.12	10.34	6.60

## Safety Indicators

Safety Indicator	Unit of Measurement	PDI-Bangkok			PDI-Tak*			PDI-Rayong			PDI-Mae Sod		
		2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
Frequency rate of injuries	Number of leaves of absence per million man-hours	0.00	0.00	0.00	0.00	0.89	0.90	0.00	3.52	0.00	0.00	0.00	0.00
Severity rate of injuries	Days of absence per million man-hours	0.00	0.00	0.00	0.00	16.04	36.9	0.00	10.57	0.00	0.00	0.00	0.00
Number of employees	Persons	79	76	74	584	532	516	105	94	87	206	200	196

Remark: \*Number of employees means PDI's employees and sub-contractor labor

## Community Engagement

PDI continues its mission to support the development of society, communities, and the environment and deems it the Company's responsibility, as stated by this commitment to being a responsible business operator at the locations where we operate. Believing that our plants and the communities should coexist in harmony, PDI has taken part in the development of communities in Tak and Rayong for the past 34 years. Since then, over 200 million baht have been spent to realize the Company's mission through community enhancing projects and activities. As for new investments, PDI is determined to apply the same policy. Its community relations team plays a predominant role in new projects by supporting and participating in community activities, while creating proper understanding of these projects.

PDI's community engagement projects and activities, whether involving education, public health, religion and culture, public interest, or career development, are initiated to not only satisfy community needs but also stress public participation, enhance community strength and encourage community self-reliance. The effort leads toward sustainable development in line with PDI's social responsibility policy:

### Educational Support

In 2015, PDI allocated 395 scholarships totaling almost Baht 1,000,000 to needy students with good school records at primary, secondary, and university levels. In addition to these scholarships, school equipment was provided to some institutes. PDI extended its support for a lunch project and other various activities that enhance students' learning, such as study trips, youth camps and academic competitions.



### Promotion of Community Health and Welfare Through “60<sup>th</sup> Coronation Anniversary Fund for Health and Welfare”

PDI runs a project to promote community health and welfare through the “60<sup>th</sup> Coronation Anniversary Fund for Health and Welfare” in three sub-districts around the mining area in Mae Sod district, Tak. The project was initiated in partnership with the community in 2006. The four funds will clock their 10th anniversary in 2016, with systematic progress recorded. Each fund was administered by locals and has ultimately drawn support from all sectors. Because the funds have been under government sponsorship since 2013, each site has had its own approach to fund administration.



As an example at Mae Tao sub-district, the fund was used as loans for other funds, such as the government's village fund. Another example is Phra That Pa Daeng sub-district's fund, where the government contribution was used as a revolving fund for various career groups. Some 3,000 members of the funds continue to receive welfare benefits from cradle to grave. Some sites may eventually give even more benefits to members, such as increasing the 100-Baht-per-night compensation for hospital stays from three to five nights, and increasing the scholarship value for members' children.



## Support the Karen People's Hand-Weaving Project

Support for the Karen people's hand-weaving careers is yet another PDI social contribution project and source of pride for the Company. This PDI initiative encourages local women in Pa Dae and Tam Sua villages to set up hand-weaving career groups to improve villagers' income after each harvesting season. Under the project, hand-woven cloth is used as a primary material for making various finished products such as notebooks, purses, and ladies' bags. The women's group now receives further support from the Tambon Administration Organization of Phra That Pa Daeng and the Mae Sod Community Development Office in collecting woven cloth directly from each woman skilled in hand-weaving. The Mae Sod Community Development Office and the Industrial Promotion Office also provided training in goods production and marketing to ensure that community products are duly recognized as Phra That Pa Daeng-native products.

## Promote Staff's Volunteer Spirit

PDI encourages staff to apply their knowledge and skills to assist community development through activities that contribute to society, such as arranging basic fire extinguishing drills for grade 3 students at schools surrounding the factory, namely Baan Klong Huay Sai School, Baan Nong Bua Tai School, and Bang Ta Le School. Such assistance also includes hosting lunch for schoolchildren, repairing and repainting school furniture, and beneficially modifying the landscape of Baan Klong Huay Sai School in Tak. Furthermore, PDI's volunteer staff, with the support of heavy equipment supplied by the Company, pruned and cut branches of area trees to prevent them from falling and causing damage to local homes. The assistance was extended to improving the community's common market area, dredging public waterways, upgrading the water pumping systems of temples and local hospitals, and arranging backup water supply trucks as a drought relief measure.



## Assimilate Community Perspectives

This year, PDI's community relations team carried on its duty to pay visits to community leaders and members in areas surrounding its sites and new investment sites. This is considered an important part of obtaining the "license to operate" from locals in new investment areas. Based on the understanding that the business and communities can coexist in harmony, PDI's community relations team runs projects in collaboration with local people, such as joint monthly village meetings and other community activities. These activities not only benefit relations, but are genuine opportunities for the community to share concerns, giving the Company insight into community issues. Designed to be friendly to the environment and communities, these activities also demonstrate the Company's sincerity and determination, two core PDI values.

PDI welcomes the community and various agencies to its sites to observe business operations. The community was informed at an open-house session about the planned mine decommissioning in 2016, the Company's environmental rehabilitation plan and proposals to make the best use of the area after the closing of the mine to the benefit of the community. A party to officially bid farewell to the mine was organized and held in collaboration with government agencies and community members early December 2015.



## Product Responsibility

PDI has total confidence in the quality and safety of its metal products, having passed production process assessments with meticulous adherence to international standards - including EN (European Standard), ASTM (American Society for Testing and Materials), RoHS (Restriction of Hazardous Substances), European Union standard governing hazardous substances in electrical and electronic appliances and BS EN71 part 3 governing the testing of chemicals in toys and toy parts with reference to the EU Directive on Toy Safety. Our users can rest assured that our products are safe for use by humans and as raw materials for various applications such as the galvanizing and zinc die-casting industries.

## Value for Customers

Regular visits to customers' plants by our technical service teams have vastly contributed to clients' knowledge of PDI's products and services. On a typical visit, we provide advice on quality improvement and solutions to customers' processing problems, while returning with valuable data and feedback for our own product analysis and development. In addition, we have organized several seminars with customers, featuring guest speakers from Thailand and abroad to support knowledge and know-how improvement of our customers. We have further developed communication with customers by introducing more channels, including the publication of a monthly online journal called "PDI Newsletter" as well as the improvement of the [www.coezinc.com](http://www.coezinc.com) website and COE Zinc on Facebook. These serve as data and academic knowledge resources for the zinc industry, supporting Thai operators as well as interested members of the public. PDI also facilitates activities held by the Thai Galvanizing Association and various networks to promote the capability and competitiveness of Thai operators. For 2016, plans are in effect to organize a Customer Day to formally establish a dialogue with customers and address their queries to further enhance their confidence and trust in our business.

## Customer Survey

To obtain helpful data for the improvement of our products and services, this year PDI conducted a comprehensive customer survey via questionnaire on products and services, and through customer focus visits by the marketing and sales teams as well as occasional visits by our technical service teams. We found customer satisfaction to be at "very good" to "outstanding" levels for PDI products, services and technical problem-solving.

## Customer Complaint-Handling Process and the Complaint Resolution Tracking System

Through various channels, PDI streamlined its complaint filing processes for products and services. Direct complaints can be made to Marketing and Sales by means of phone, email or on the PDI website. Once complaints are received, PDI records and forwards them to the responsible units to address questions or complaints within the shortest possible timeframe, supported by a complaint response tracking system to ensure all complaints are addressed within reasonable delays. In 2015 we received only 2 complaints, all of which were properly addressed through corrective and preventive actions.

## Customers' Private Information

PDI values and respects customers' private information. Preserving customer confidentiality and the ethical use of clients' privileged information represent key components of PDI's business code of conduct. Marketing data, purchase orders and any details of services provided to customers are treated as strictly confidential. Access to these data is strictly limited to authorized key personnel to prevent loss, robbery, or the abuse of customers' data.





## Supply Chain Management

PDI is committed to efficient supply chain management in line with its sustainable operations approach. To this end, it analyzes and develops assorted activities within the supply chain to prevent and minimize environmental, social, and economic risk to its businesses and its stakeholders. Therefore, PDI has put in place a transparent process for the fair selection, assessment, and inspection of suppliers.

### Implement PDI's Sustainable Guidelines for Suppliers

PDI began applying its sustainable guidelines for suppliers in 2015 by incorporating four key necessities to the purchasing process: business ethics, human rights, occupational health and safety and environmental management. PDI amended its PQ (pre-qualification questionnaire) for assessing suppliers' capability to align with the revised version of its business code of conduct and developed the "PDI Supplier Code of Conduct", which was unveiled this year, starting with the most critical group of suppliers. Deployment to all suppliers is planned in 2016.

### Procurement Risk Management

PDI manages the risks in its procurement processes, from the selection of suppliers – in which initial qualifications screening applies to potential vendors – to the development of the "PDI Approved Vendor List", which contains the top 30 critical vendors, 70% or Baht 527 million of the total procurement value. This group's risks have been reviewed under strict inspection and assessment procedures. In 2015, PDI inspected 103 of them under the annual supplier assessment plan. This year, 3 suppliers failed the assessment and have been requested to develop correction plans to modify their operations in line with PDI's code. In 2015 0.5% of procurement items did not meet PDI's rules and requirements.

To enhance cooperation under PDI's supply chain management, this year PDI made it possible for suppliers to take part in customer seminar staged by PDI's marketing units, featuring exhibitions and education in products and applications that benefit customers as well as expand new business opportunities for suppliers.

PDI continues to support the supply of local goods and services wherever it operates so as to support local economies, create jobs and generate income. This demonstrates PDI's three decades – long efforts to develop communities. In 2015 about 23% of PDI's total procurement came from sourcing local products and services.





## Anti-Corruption

PDI remains committed to its anti-corruption policy statement announced early 2015: “PDI is committed to conducting all of its business in an honest and ethical way. The Company has adopted a zero-tolerance approach to bribery and corruption, and pledges to act professionally, fairly, and with the utmost integrity.”



### Training on Counter-Corruption Measures

PDI conducted training on counter-corruption measures for the Board of Directors, management, and staff, along with adding anti-corruption orientation to the intake process for new employees, parallel with on-going communication to employees about the revised code of business ethics. It also communicates this policy to the public and communities where it operates, as well as business partners, agents, contractors, and the mass media so that they properly understand PDI's vision to fully support it.

### Complaint Channels

PDI has put in place complaint channels together with a response process in the hopes that all employees will work together to ensure compliance with these new standards in corporate governance and business ethics. To ask questions regarding business ethics or to file a complaint against alleged violations of PDI business ethics standards, individuals can contact Internal Auditing, Human Resources, direct superiors, or communicate issues through suggestion boxes. All complaint submissions are treated equally, transparently, attentively, fairly, and are dealt with within reasonable time frames. Confidentiality is maintained, and those who file complaints are duly protected against persecution before and after the investigation. In 2015, no complaints have been collected about corporate governance practices.

### Risk Assessments and Anti-Corruption Measures

In addition, PDI staged risk assessments for internal corrupt practices and developed anti-corruption measures in line with the assessed risks. It also prepared a manual/set of guidelines for the management and employees for due conformance.

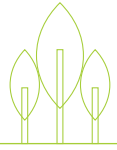
### Ally of CAC

PDI recognizes the value of a joint solution to domestic corruption, which affects the entire population and the economic sector directly. Thus, on October 9, 2015, to reiterate its firm intentions as a private company whose business ideals consist of integrity and righteousness, PDI announced its desire to become an ally of CAC (Private Sector Collective Action Coalition against Corruption). PDI adheres to CAC's anti-corruption guidelines, while preparing to undergo the certification process under the committee on joint operations against Thai private sector corruption to be completed by December 2016.





# Environment



## Environmental Management

With PDI's strong dedication to environmental management the company aims to enhance sustainability with respect to the local communities and the society at large. PDI conducts its businesses by continuously improving the efficiency of its environmental impact to air, water and soil. This also includes consciousness of valuable scarce resources, efficient use of energy, reuse and recycling, reduce waste, as well as the protection and management of the environment and communities around PDI's operating sites. The ISO 14001 standard has been adopted as a guiding principle for consistent development and control of the environmental management system and integrated with the Eco Factory framework and standards on social responsibility under the Ministry of Industry's CSR-DIW program.



## Sustainable Utilization of Resources

PDI is committed to manage natural resources at the highest efficiency. As a result, it has:

- Upgraded the quality of zinc silicate ores with 8% zinc content to a significantly higher 27% through a continuously improved flotation process.
- Used more alternative materials like zinc oxide, a recycled material, to replace the use of natural zinc ores.
- Improved the leaching process for maximum recovery.
- Generated by-products from the leaching process in order to increase overall revenues.

Raw Materials Feed Utilized	Unit	2013	2014	2015
Natural ore	tons	220,626	217,732	220,203
Recyclable crude zinc oxide (from steel plants)	tons	5,328	6,074	7,210
Proportion of recyclable feed used	percentage	2.36	2.71	3.17





## Energy

### Energy Management and Conservation

PDI places strong emphasis on the efficient use of energy for both production cost reduction and environmental conservation purposes. Energy used in PDI's production process comprises: 1) Direct Energy such as diesel, fuel oil, liquefied petroleum gas (LPG) and bituminous coal, and 2) Indirect Energy, which is electricity from the Electricity Generating Authority of Thailand (EGAT), the Provincial Electricity Authority of Thailand (PEA), and self-generated electricity by the recovery of steam from the ore roasting process.

In 2015, PDI consumed a total of 1,541,430 gigajoules divided into 1,144,251 gigajoules of electricity and 397,179 gigajoules of thermal energy from fuel, an increase with 37,826 gigajoules from 2014. This was because of the extended plant maintenance periods in Rayong leading to the higher use of energy for start-up. On the other hand, the Tak plant consumed less energy as a result of continuous electricity consumption management, reducing electricity usage during on-peak rate hours without any impact on the plant's production efficiency.

The implementation of the energy conservation projects in 2015 led to the reduction of 9,823 gigajoules in energy consumption compared to 2014. Energy consumption in various projects was reduced by 5,631 gigajoules as shown in the table below:

Reduction of  
**9,823**  
gigajoules  
from energy  
conservation  
projects

#### Energy Conservation Projects in 2015

Project	Energy Saved (gigajoules)	Greenhouse Gas Reduction (tons of carbon dioxide equivalent)
1. Project to recycle cooling water from the zinc production process into industrial water at the Tak plant	211	36
2. Control Project to reduce electricity consumption by 2% during the ore dressing process at CH1 of the Tak plant	8,725	1,477
3. Project to discontinue use of one 200-kW furnace at the Tak plant	39	7
4. Cooling Tower Fan Weight Improvement Project to reduce energy consumption at the Rayong plant	135	23
5. Project to increase Steam Coil in the Waste Heat Boiler System to increase steam for electricity generation at the Rayong plant	213	36
6. Project to increase Steam Coil in the Waste Heat Boiler System to increase steam for electricity generation at the Rayong plant	388	3
7. The Ministry of Energy's Consumption Reduction Campaign Project and other production-supporting activities at the Mae Sod mine	112	19
<b>Total</b>	<b>9,823</b>	<b>1,601</b>



## Air

PDI's management principle is very clear on its objectives and production control mechanisms, with the intention of having a "zero effect" on air quality. All measures are to be implemented with proven technologies, according to standards controlled by technologies and audit processes which surpass what is stipulated in the EIA. Operational control efficiency improvement is also emphasized to ensure the highest possible air quality control at all times without any direct or indirect impact on communities.

### Air Quality Measured at Stacks

Stack	Site	Parameters	Unit	Standard	Monitoring Results 2015
Sulfuric Acid Production Process	PDI-Tak	Sulfur dioxide (SO <sub>2</sub> )	ppm	<500	206
Calcine Production Process	PDI-Rayong	Sulfur dioxide (SO <sub>2</sub> )	ppm	<500	113
Coal-Fired Boiler	PDI-Tak	Sulfur dioxide (SO <sub>2</sub> )	ppm	<700	61
	PDI-Tak	Total suspended particulate (TSP)	mg/cu.m.	<320	245
Zinc Casting Furnace	PDI-Tak	Total suspended particulate (TSP)	mg/cu.m.	<400	11.57

Remarks: 1) Monitored by SPS Consulting Services Co., Ltd.  
2) Monitored by Eastern Thai Consulting 1992 Co., Ltd.

### Ambient Air Quality

Parameter	Site	Unit	Standard	Monitoring Results 2015
SO <sub>2</sub>	PDI-Tak	mg/cu.m.	<0.30	<0.01 <sup>1)</sup>
SO <sub>2</sub>	PDI-Rayong	ppm	<0.30	0.02 <sup>2)</sup>
TSP	PDI-Tak	mg/cu.m.	<0.33	0.042
TSP	PDI-Rayong	mg/cu.m.	<0.33	0.142
TSP	PDI-Mae Sod	mg/cu.m.	<0.33	0.060-0.188
TSP < PM-10 (TSP smaller than 10 microns)	PDI-Mae Sod	mg/cu.m.	<0.12	0.028-0.088

Remarks: 1) 24-hour average atmospheric SO<sub>2</sub> standard  
2) 1-hour average atmospheric SO<sub>2</sub> standard



## Climate Change

PDI recognizes the impact of climate change and has therefore focused on efficient energy consumption and reduction of greenhouse gases (GHG) released through the use of environmentally friendly innovative technologies.

The major source of GHG generation at PDI is from the use of electricity and thermal energy from various fuel types in ore treatment processes. In 2015, the total release of GHGs from PDI was reduced to 221,595 tons of carbon dioxide equivalent. This is a drop of 19,382 tons of carbon dioxide equivalent, or an 8% decrease from 2014.

The additional 9,823 gigajoules of energy savings from the efficient production management and energy conservation programs reduced GHG release by an additional 1,601 tons of carbon dioxide equivalent.



## Water

According to PDI's natural resources policy, water used in office buildings and production processes at the Tak and Rayong plants must be consumed for maximum benefit and whenever possible recycled. The plant water management at these two plants is different from that of the Mae Sod Mine which mainly manages rainfall flowing through the mining area.

### Plant Water Quality

In 2015, PDI's plants consumed a total of 1.67 cubic meters of water while 46% was recycled in the production and non-production processes. Treated waste water quality was monitored to ensure compliance with the standards as shown in the table.

#### Waste Water Quality

Parameters	Unit	Standard	Tak Plant	Rayong Plant
pH	-	5.5 - 9.0	7.76	7.76
Zinc	mg/l	<5	0.15	0.41
Cadmium	mg/l	<0.03	0.005	0.003
Manganese	mg/l	<5	0.24	NA
Lead	mg/l	<0.2	0.0006	0.047
Arsenic	mg/l	<0.25	0.001	0.095
Mercury	mg/l	<0.005	0.0005	0.0034





## Water Quality at PDI-Mae Sod

No water was consumed in the mining processes. Natural rainfall flowing through the mining area was managed to ensure that its quality complied with imposed standards before being returned to nature. This was done through the mining-standard sedimentation process stipulated in the mining project plan and its environmental management program. In the mining area, a total of 11 open pits have been excavated for sedimentation, and have adequate year-round natural rainfall. Several systems have been put in place to treat the water and to meet the mining wastewater quality standards defined by the National Environmental Board and referenced in the Department of Industrial Works (DIW) waste water quality standards. The storage rainfall is used in the closed ore flotation dressing system and recycled all year round.

Mae Sod mine's waste water quality in 2015 again remained within the standards as shown in the table.

Parameters	Unit	Standard <sup>1</sup>	Disposal Point			
			Zone A	Zone B	Zone C <sup>2</sup>	Zone D
pH	-	5.5 - 9	7.7-8.1	8.0-8.3	-	7.5-8.6
Suspended Solids	mg/l	<50	<1-3	2-11	-	2-14
Total Dissolved Solids	mg/l	<3000	100-186	593-990	-	118-208
Zinc	mg/l	<5	0.04-0.20	<0.01-0.25	-	<0.01-0.37
Cadmium	mg/l	<0.03	<0.01	<0.01	-	<0.01
Lead	mg/l	<0.2	<0.01	<0.01	-	<0.01-0.01

Remarks: 1) References the DIW waste water quality standards

2) No discharge to the surroundings

## Industrial Waste Management

PDI manages waste efficiently and correctly in line with good corporate principles and practices. Under the 3 R's Principle, all industrial waste is screened for safe and effective treatment, and where possible, recycled and reused to minimize the total produced and reduce the exploitation of resources in the future.

In 2015, a total of 573,816 tons of waste was generated. 99.7% of this or the equivalent of 572,093 tons were ore residues which are treated under authorized standards to become stable and suitable for the landfill in the Tak plant's ponds. These ponds were designed and constructed according to the procedures defined by DIW and the Office of Natural Resources and Environmental Policy and Planning.

The other portions of waste, totaling 1,405 tons or 0.3%, were classified as hazardous and were disposed of by DIW-authorized external entities for landfill. Another 88 tons of waste were sold to DIW-authorized waste traders for recycling. The remaining 136 tons were categorized as general non-hazardous waste and buried as landfill according to public sanitation procedures.



PDI is very proud of the decade-long commitment to its Padaeng Mine environmental rehabilitation. The result is that Yard Mound No. 3 has now been transformed into a lush green forest with large, dense trees, certainly amongst the most beautiful green mines globally.



## Land Use and Biological Diversity

Under PDI's land use and biological diversity management policies in all areas where it operates, land is fully used with minimum impact on our ecological systems. In addition, PDI maintains the areas not involved in its activities in their original condition as much as possible, and rehabilitates the environment of the areas where the operation is completed before returning them to nature.

### Biological Diversity of Forests and Wildlife

In 2015, PDI still continued to gather information for the study of the environment and ecological systems in mining areas. Initial information on both physiological and biological diversity was collected to complement the mining plans and the rehabilitation plans of the depleted areas after operations have ceased. The aim is for the resulting biological diversity to reflect the original conditions as much as possible. The result of the biological diversity survey of the forests and wildlife in the area of Yard Mound No. 3 rehabilitated between 2004 and 2012 mirrors the forest ecology generally found in mixed forests and has the same wildlife variety as those areas found outside the mining project areas.

### Aquatic Ecosystem

Furthermore, the ecological condition of the Mae Tao Stream flowing through the zinc mining area is surveyed annually. Water samples at the various stations along the stream are collected for analyzing and study. Phytoplankton and Zooplankton are also surveyed each year.

### Green Areas

PDI surveyed 497 rai of land not involved in mining activities but in the permitted area. The water found in this area has been kept to its natural flow consistent with accepted preventive and corrective measures to reduce the environmental impact on surface water and water quality. In the areas where there were few trees, PDI planted new ones resulting in a significant improvement in the forest condition.

## Mae Sod Mine Rehabilitation

In 2015, PDI continued to produce zinc and at the same time rehabilitated the environment of the area where operations were completed. It planted 15,000 indigenous standing timbers, mainly Lamphu Forest, Teak and Bamboo varieties, and then 10,000 shrubby perennial plants on another 92 rai of land to nurture soil quality according to the annual plan. As a result 733 rai, or 70% of the total 1,040 rai of depleted mining areas, were rehabilitated. The expenses incurred from this environmental rehabilitation work totaled Baht 84 million provided by Padaeng Mine's 114-million-Baht rehabilitation development fund. The remaining area will be rehabilitated once zinc production is completed in the middle of 2017, with the rehabilitation work completed by the end of the same year.

As of 2015

More than **100,000** standing timbers and indigenous trees were planted

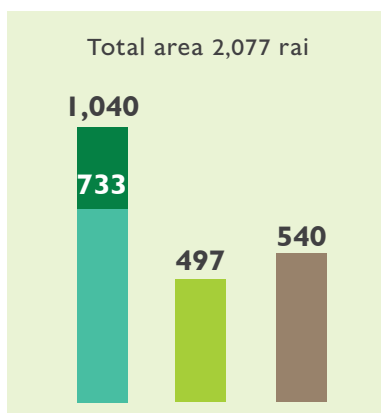


A total of **23 million** vetivers were planted



This brings the total rehabilitated area up to **733 rai** (capable of absorbing 1,077 tons of carbon dioxide)

### PDI-Mae Sod Mining Project



- A total of 1,040 rai in the mining project area need rehabilitation
- 733 rai have already been rehabilitated
- 497 rai have been maintained in their original green condition
- 540 rai are construction and facilities



## Implementation of His Majesty the King's Initiative on Vetiver Planting for Soil and Water Conservation



The mining area rehabilitation should be considered to bring the fertile forests back to nature and to turn it into tourism spots that will help create work and jobs for the people in the community. In addition, it will be the source for nature studies in the future.



*His Majesty the King's  
speech in 2003*



PDI-Mae Sod has undiminished implemented the wishes in His Majesty the King's speech to Mr. Arsa Sarasin, Chairman of the Board, in 2003 saying that **"the mining area rehabilitation should be considered to bring the fertile forests back to nature and to turn it into tourism spots that will help create work and jobs for the people in the community. In addition, it will be the source for nature studies in the future."** PDI-Mae Sod has, therefore, planted vetiver grass in the Padaeng mining area since 2003 in order to conserve soil and water according to His Majesty's initiative. Vetivers were first planted on August 15, 2003 and since then they have been planted annually. PDI attempted planting 39 various types of vetivers, and finally concluded that the Kampaengpetch 2 vetiver is the most suitable type for Padaeng Mine's climate and soil conditions. In 2015 alone, PDI-Mae Sod planted an additional 2.3 million vetivers in the rehabilitation area. In total, since the start of the project in 2003 through the end of 2015 PDI planted a total of 23 million vetivers.

About 1-2 million vetivers and other standing timbers have been planted by PDI each year to return the mining area to fertile forest by the end of the mining project. Vetiver planting activities for soil and water conservation according to His Majesty's initiative continue yearly and involve participants from all sectors, including government, surrounding communities, and particularly teachers and students from various schools. The objectives of these activities are to disseminate information on vetivers, create awareness of soil and water conservation, and enhance community involvement. More than 1,000 people join this unique activity yearly. 2015 was the 13<sup>th</sup> year that PDI has planted vetivers for soil and water conservation. The Padaeng mining area is considered to be one of the largest vetiver planting sites in Thailand. In addition, the Padaeng Mine is the first mine to intensively utilize vetivers in its environmental rehabilitation program and turn the area into a large fertile vetiver mountain and achieves the King of Thailand's Certificate of Excellence for outstanding vetiver promotion from the Chaipattana Foundation.

## The Environment Rehabilitation Plan after the End of Mine Operation in 2016-2017

2016 will be the last year of zinc mining after PDI first started operations in 1984. Approximately 300 rai covering the mining area will be rehabilitated through the planting of about 2.5 million vetivers and 42,000 standing timbers.

In 2017, PDI will rehabilitate 230 rai of the tailing retention and recycling ponds by planting about 1 million vetivers and about 30,000 cassia trees. Besides this rehabilitation work, PDI will continue to maintain the previously rehabilitated areas. PDI's mine will be the model for land rehabilitation in having returned fertility to nature and the community, ready to handover to the Department of Forestry.

## Managing for Sustainability

PDI consulted various sectors including the Office of the Special Coordinator for the project of Royal Initiatives, the Chai-pattana Foundation and the Royal Forestry Department of managing the area for sustainability. All parties jointly agreed to maintain the rehabilitated zinc mining area in its fertile condition. The Office of His Majesty's Principal Private Secretary reported this intention to His Majesty and requested his royal support. His Majesty accepted this project under his royal patronage and named it "The Environment Conservation and Rehabilitation Promotion Project". The Office informed PDI of this great news on March 24, 2015. After that, the Royal Forestry Department and other project organizations jointly created a master plan for sustainable area management and expect to have executed its goals within the fiscal year 2016. The various projects included in this plan include:

1. The Learning Center for Natural Resources Conservation according to His Majesty's Initiative
2. The Center for wild orchid and indigenous plant conservation
3. Maintenance of the royal lodging
4. Doi Padaeng Zinc Mine Museum
5. The Rehabilitation Center for the Elderly and the Community's Quality of Life
6. The Vetiver Development and Promotion Center for Soil and Water Conservation
7. Ecological tourism sights and entertainment sources
8. Pollution Audit and Control

## Community Involvement in PDI's Environmental Conservation Measures

PDI has involved the community in environmental conservation. This has been done through the community's visits to learn about PDI's operations and exchange ideas on preventive and corrective measures to reduce the impact on the environment. Various work groups have been installed and numerous activities have been organized to disseminate information on environmental conservation. These include:

- **Environment Network:** This network consists of representatives from the communities surrounding the Padaeng Mine and PDI's environmental officers. The purposes are to monitor, audit and acknowledge third-party environmental survey results.
- **Community Relations Committee:** The 3 stakeholders to form this committee are: 1) one government representative, 2) one community representative, and 3) one PDI representative. These representatives meet twice a year to disseminate information about the mining project and build good community relations. In addition, they jointly investigate complaints.





## Our Environment Awards



The King of Thailand's Certificate of Excellence for outstanding vetiver promotion from the Chaipattana Foundation. HRH Princess Maha Chakri Sirindhorn presided over the 6<sup>th</sup> International Conference on Vetiver in May 2015 and awarded this certificate to PDI.



The Green Mining Continuous Award for 2015 from the Department of Primary Industries and Mines (DPIM), the Ministry of Industry



The Eco Factory Award from The Industrial Environment Institute, the Federation of Thai Industries (FTI)



The CSR-DIW Continuous Award 2015 from the Department of Industrial Works (DIW), the Ministry of Industry



The CSR-DPIM Continuous Award for 2015 from DPIM

## Community Involvement in PDI's Environmental Conservation Measures (Cont'd)

- **Health Monitoring Fund:** Each year, PDI provides 100,000 baht to support the community health monitoring activities of the health units near the Padaeng Mine.
- **Vetiver Planting Project for Soil and Water Conservation**
- **EIA Monitoring Meeting:** The meeting is held once a year to report both the results of preventive and corrective measures taken to reduce the impact on the environment and the EIA monitoring measures to another committee consisting of representatives from all sectors - government, the press and the communities in the Map Ta Phut and Ban Chang municipality areas, Rayong Province.
- **Rayong Plant's Environment Governance Project (White Flag, Green Star):** This project is the standard for the environmental and safety management of industrial plants in industrial estates. The plant audit is held twice a year by the committee consisting of all sectors, particularly representatives from various communities.



## Overview of the Environmental Performance Indicators (EPI)

Indicator	Measurement Unit	Tak Plant			Rayong Plant		
		2013	2014	2015	2013	2014	2015
Input Indicators							
Total Materials Used	ton	225,954	223,805	227,414	106,488	66,045	74,769
Total Energy Consumption							
- Electricity	gigajoule	1,238,198	1,074,469	1,107,787	70,303	53,212	56,288
- Electricity/ ton production	gigajoule/tonne production <sup>1</sup>	14.94	15.32	14.94	0.77	0.90	0.84
- Fuel	gigajoule	202,955	260,681	308,279	17,151	16,901	18,124
- Fuel/ton production	gigajoule/ton production <sup>1</sup>	2.45	3.72	4.16	0.19	0.29	0.27
Total Water Consumption							
- Total water consumption	1,000 m <sup>3</sup>	1,868	1,471	1,403	341	251	263
- Water consumption/ ton production	m <sup>3</sup> /ton production <sup>1</sup>	22.54	20.97	18.93	3.72	4.26	3.93
Output Indicators							
Produced Waste							
- Total waste produced	ton (wet weight)	575,599	562,448	572,315	2,413	1,952	1,369
- Disposal <sup>2</sup>	%	99.97	99.97	99.97	98.37	99.25	98.04
Effluent							
- Total emitted process water	1,000 m <sup>3</sup>	1,176	411	1,136	113.527	120	114
Total emitted metals	kg	363	94	295	73.23	115	73
Effluent Quality							
- Zinc (<5 mg/l)	mg/l	0.58	0.25	0.15	0.44	0.79	0.41
- Cadmium (<0.03 mg/l)	mg/l	0.012	0.008	0.005	0.01	0.00	0.00
- Manganese (<5 mg/l)	mg/l	0.29	0.19	0.24	-	-	-
- Lead (<0.2 mg/l)	mg/l	0.003	0.002	0.001	0.023	0.079	0.047
Emission							
Total emitted metals	kg	450	574	806	616	331	53
Total emitted SOx	ton	214	110	194	44	36	40
Air Quality							
1. Air emission							
- SO <sub>2</sub> at Acid Plant (< 500 ppm)	ppm	57	58	206	63	88	113
- SO <sub>2</sub> at Coal fired Boiler (< 700 ppm)	ppm	-	148	61	-	-	-
- Total suspended particulate at Coal fired Boiler (< 320 mg/m <sup>3</sup> )	mg/m <sup>3</sup>	-	205	245	-	-	-
- Total suspended particulate at Bag Filter (< 400 mg/m <sup>3</sup> )	mg/m <sup>3</sup>	9.86	11.86	11.57	-	-	-
2. Ambient air							-
Total suspended particulate (< 0.33 mg/m <sup>3</sup> )	mg/m <sup>3</sup>	0.053	0.052	0.042	0.207	0.105	0.142
- Sulfur dioxide (SO <sub>2</sub> ) (average 24 hr <0.30 mg/m <sup>3</sup> )	mg/m <sup>3</sup>	0.01	0.01	0.01	-	-	-
(average 1 hr <0.30 ppm)	ppm	-	-	-	0.06	0.03	0.02
Greenhouse Gas							
- Total greenhouse gas	ton	211,173	203,437	214,746	2,905	3,492	3,157
- Total greenhouse gas/ton production	kg/ton production <sup>1</sup>	2,547	2,901	2,897	31.65	59.21	47.19
Recycle							
- Reduce waste							
- Total recycled waste	ton	148	171	68	33	10	20
- Recycled waste	%	0.03	0.03	0.01	1.38	0.49	1.49
- Reduce water							
- Recycle and reuse water	%	44	63	46	13	9	8

Remark : 1. ton production means ton of is zinc cathode for Tak Plant , ton of calcine and washed oxide for Rayong plant

2. % disposal : % of total waste were treated by landfill (internal and external) and other % of waste were recycled and reused

Indicator	Measurement Unit	Tak Plant			Rayong Plant			Mae Sod Mine		
		2013	2014	2015	2013	2014	2015	2013	2014	2015
Financial Indicators										
Environmental Investment and Operating Costs										
Total environmental investment costs	million Baht	23	0.4	0	3	14	19	0	0	0
Total environmental operating costs	million Baht	134	96	82	44	35	16	7	2	2



# Economy



## Market Overview

The domestic zinc market tightened this year in line with China's economic contraction, the debt crisis in Greece, China's economic reform policy implementation, deflation in the Eurozone and Japan, and delay in the global economic recovery. Major zinc-based industries including zinc-galvanized steel pipes and steel plates fell in line with declining demand during the economic contraction and substitution of cheap products from China, leading some zinc-galvanized steel producers to cut their production capacities or close down their production facilities. For zinc die-casting alloys, the market weakened in line with falling automotive sales. Moreover, substitutes like aluminum and plastics dominated market shares, driving PDI's total sales volume of zinc metal dropped 14% this year. Without a clear signal of recovery, the 2016 sales target is set at par to the 2015 level.



The imported amount for zinc metal increased slightly from 2014 by 5%. This was because of no import duty since 2015; consequently, there had a large amount of imported zinc to keep as a stock.

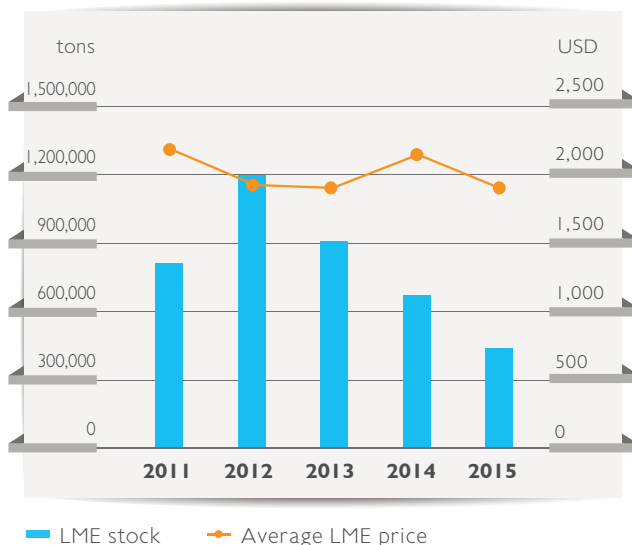
Zinc prices also plummeted this year, particularly in the latter half, to below USD 2,000 per ton, with the annual average value of USD 1,933 per ton, a drop of 11% from 2014. Again, the main factors driving the price down were the world's sluggish economy, economic contraction in China and market oversupply. The global demand was estimated at 13.8 million tons, while the overall supply stood at over 14 million tons.

## Strategic Plan

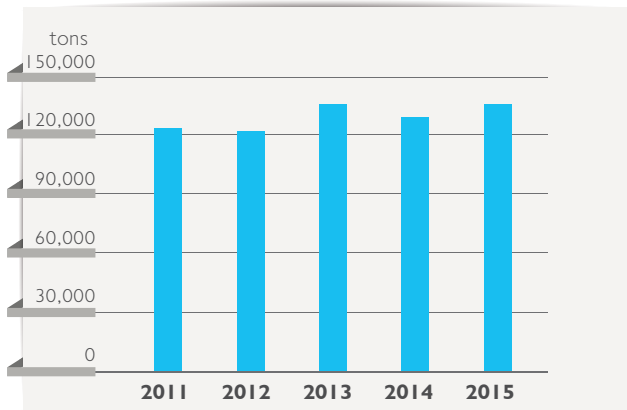
Despite the sluggish domestic zinc market and higher competition with other substitutes, PDI sustains its commitment to providing quality products and services, particularly aiming at robust technical solutions. A series of seminars were facilitated for various customer groups, including galvanizing and die-casting industries, especially focusing on knowledge transfer and technology updates. PDI supported cooperation with various institutions and organizations to promote knowledge exchange and dissemination of the uses for zinc metal among various public groups

This year, PDI jointly organized a “Hot Dip Galvanizing (HDG) for Architectural Design and Corrosion Protection” seminar with the Thai Galvanizing Association (TGA), International Zinc Association (IZA), Thai Corrosion of Metals and Materials Association (TCMA), National Metal and Materials Technology Center (MTEC), Association of Siamese Architects under Royal Patronage (ASA), and the National Science Technology and Innovation Policy Office (STI). The organizers also staged the first Thai Galvanizing Design Award 2015 competition among galvanizing designers to promote creative designs using zinc galvanized steel for architectural design. These designers (professionals and university students) competed in the use of hot dip zinc galvanized steel for the design of public roadside pavilions.

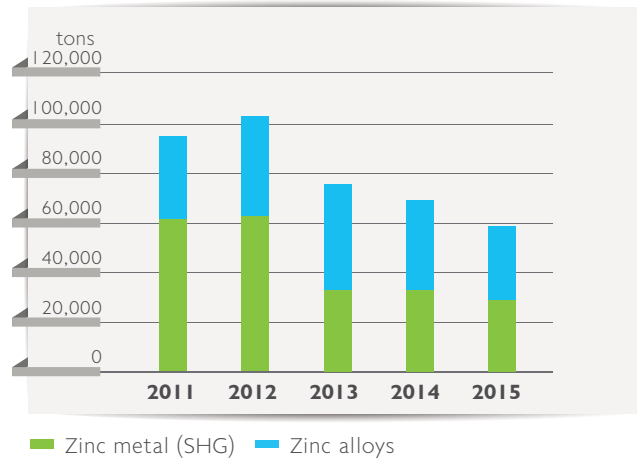
**Figure 1 : LME Zinc Prices and Stock Levels During the Past 5 Years**



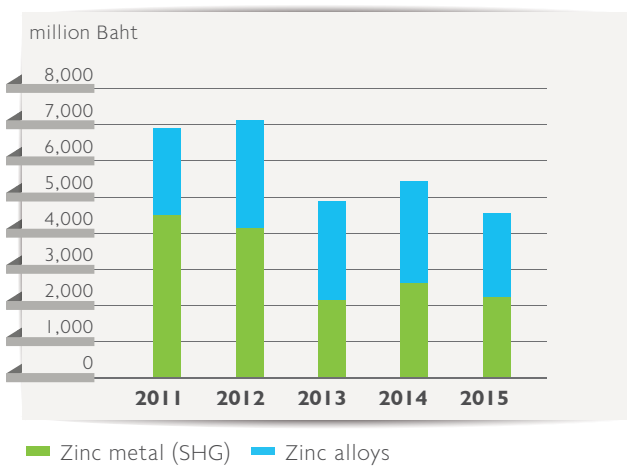
**Figure 2 : Zinc Consumption in Thailand from 2011-2015**



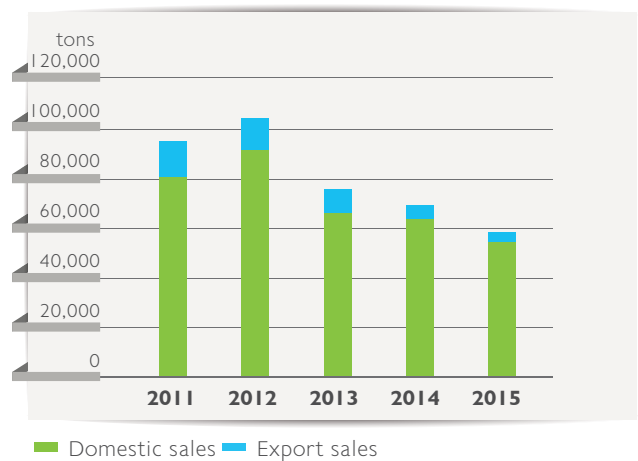
**Figure 3 : Sales Volume of Zinc Metal and Alloys from 2011-2015 (tons/year)**



**Figure 4 : Sales Value of Zinc Metal and Alloys from 2011-2015 (million Baht/year)**



**Figure 5 : Sales Volume of Zinc Metal from 2011-2015 (Domestic/Export)**





## Operations

### Raw Material Procurement

In 2015, PDI imported a total of 83,000 dry tons of zinc ores. Mostly they originated from Australian zinc sulfide mines. The Australian sulfide concentrate was first processed at the Rayong Roaster to be transformed into calcine. The calcine is processed in the Tak Refinery together with the zinc silicate from the Mae Sod mine to produce various zinc metal based products.

### Tak Operations

#### Production Target Achieved, Power Consumption Optimized

The Tak Refinery achieved its zinc production target of 74,121 tons in 2015, up about 5.7% from 2014. The refinery also achieved the highest efficiency in all production stages, leading to optimal power consumption efficiency of 56 electricity units per ton of zinc cathode, a drop of 1.4% from the previous year. With falling electricity charges in 2014, the total power expenses dropped by 6.7% from 2014, resulting in savings of Baht 67 million on total electricity expenditure.

In addition, the Tak Refinery participated in the 1/2558 DR (Demand Response) program launched by the Electricity Generating Authority of Thailand (EGAT), promoting power consumption reduction during a four-day period in April 2015. This saved the national power system from blackout caused by the temporary shutdown of the natural gas supply from Myanmar and the subsequent power generation reduction in the national grid. Under the program, the Tak Refinery achieved efficiency of uninterrupted production with a limited power supply of 337,950 kilowatt-hours (kWh), adding cost-savings of more than Baht 1 million.

#### Continuous Cost-Savings on Ore Feed

In 2015, the refinery continued its ore feed management optimization from 2014 to maximize value through cost-savings on ore feed. The operational feed plan succeeded to keep the feed in the process of Mae Sod zinc silicate at a high level of 48% against 52% imported zinc sulfides and silicates and zinc oxide from the steel-dust recycling process.

#### Value-Added from Recycled Byproducts

In line with its core value of making optimal use of natural resources, PDI continuously improves the entire production process including the extraction of associated minerals and impurities from imported zinc sulfide. These value-added commercial byproducts, containing lead and silver, referred to as Padaeng Leach Product (PLP) add to the revenues from PDI's normal zinc operations. The PLP quantity in 2015 rose to 9,800 tons. Other value-added byproducts are copper cathode sheets produced from the recycled materials of brass plants: including brass dust, brass powder trapped by dust filters, and brass sludge. The Tak Refinery produced close to 50 tons of copper cathode sheets in 2015.



## Mining Operations and Ore Reserves

### Mining Operations

This year PDI processed zinc ore to derive 34,738 tons of zinc metal, which exceeded the target by 11%, but still 8% lower than last year, in line with the mine production planning over the last two years (2015–2016).

The year 2016 will mark the final year of mining in the Padaeng Mine area, where the mining license began in 1982. Over the past 32 years, some 6.6 million tons of zinc ore have been extracted from this mine, equivalent to 1.45 million tons of metal delivered to various domestic industries for subsequent application, bringing progress and economic value to the country while substituting important ore imports worth some Baht 80 billion.

In 2015, PDI proceeded under its mine closure plan of 2015–2021 by completing the procurement of topsoil from outside for the environmental rehabilitation plan of 2016. In 2016 we will acquire more topsoil for the rehabilitation plans of 2017, the final year of the Mae Sod mine. Consequently the mine environmental rehabilitation will proceed under the mine closure plan. Finally, the rehabilitated mine area will be handed over as an abundant forest to the Royal Forestry Department for further project management under the Royal initiative.

### Ore Reserves

As of December 31, 2015, total mineral resources at 3%Zn cut-off grade of Mae Sod mine was estimated at 474,000 dry metric tons at 8.47% zinc, containing about 40,100 tons of zinc metal as shown in Table 1.

**Table 1: Mineral Resources at Mae Sod Mine, December 31, 2015**

Category	Tonnage (dmt)	Zinc Grade (%Zn)
Measured resource	31,000	16.90
Indicated resource	443,000	7.88
<b>Total</b>	<b>474,000</b>	<b>8.47</b>

*Remarks: The information in this Public Report that relates to Mineral Resources at the Mae Sod Mine is based on information compiled by Mr. Anupong Piragunta, Assistant Manager-Geotechnical Engineering, Padaeng Industry Public Company Limited. The Resource estimate was completed by Mr. Anupong Piragunta. Mr. Anupong Piragunta is a Member of the Australasian Institute of Mining and Metallurgy (#312663) and has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity that they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Anupong Piragunta consents to the inclusion in this Report of the matters based on their information in the form and context in which it appears.*

Ore reserves will be 202,000 dry metric tons at 14.95% Zinc, containing 30,200 tons of zinc metal as shown in Table 2.

**Table 2: Ore Reserves at Mae Sod Mine, December 31, 2015**

Category	Tonnage (dmt)	Zinc Grade (%Zn)
Stock	98,000	18.86
Proven reserve	52,000	11.84
Probable reserve	52,000	10.70
<b>Total</b>	<b>202,000</b>	<b>14.95</b>

*Remarks: The information in this Public Report that relates to Ore Reserves at the Mae Sod Mine is based on information compiled by Mr. Somchok Yu-iat Manager-Ore Production, Padaeng Industry Public Company Limited. The Reserve estimate was completed by Mr. Somchok Yu-iat. Mr. Somchok Yu-iat is a Member of the Australasian Institute of Mining and Metallurgy (#301367) and has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity that they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Somchok Yu-iat consents to the inclusion in this Report of the matters based on their information in the form and context in which it appears.*

## The Operations of Our Subsidiaries and Joint-Ventures

### Maesod Clean Energy Co., Ltd.

Maesod Clean Energy Co., Ltd., a 35% PDI-owned Company, produces ethanol from sugar cane in its 7<sup>th</sup> consecutive year at a daily capacity of 230,000 liters. 2015 output reached 72 million liters which is 10% higher than last year's 67 million liters. The volume of sugarcane processed by the plant this year reached 327,000 tons, 12% gain over the last year's production but still significantly lower than the target demand of 500,000 tons per year. The shortage of sugarcane forces the company to buy 140,000 tons of molasses on the market. Nevertheless, the plant's efficiency has been improved, as evidenced by the increased ethanol output and the achievement of the sales targets.

In 2015, Maesod Clean Energy's generated 71 million kilowatts of electricity which is 5% below last year. The company sold 35 million kilowatts of excess electricity (19% less than last year) to the Provincial Electricity Authority.

While Maesod Clean Energy's ethanol output increases, its sale of electricity declines due to shortage of power generating fuel. In addition, the recent falling ethanol prices entailed close to Baht 24 million losses to the company. Still, Maesod Clean Energy Co., Ltd. continues to improve its process efficiency (from direct processing of sugarcane and molasses) to keep unit costs minimal, and maximize its production of ethanol and electricity, whilst the search for increased supply of sugarcane remains a key target.



## Updates on New Green Business Projects

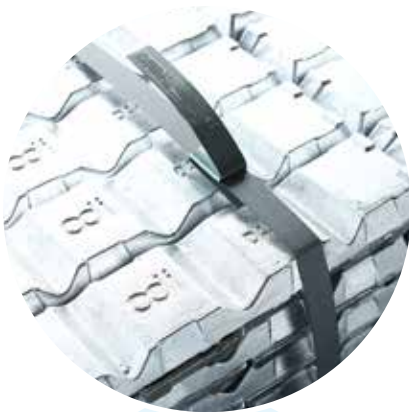
Thanks to its robust financial profile, generating cash flow from operating activities and an extreme low debt-to-equity ratio, our Company is in an excellent position for investment in new businesses. These investments will rely on both cash flow from its operating activities and financing from financial institutions. Investment projects include:

**1. PDI Materials** invested in PDI-CRT, a technology venture JV, with CRT, Carbon Reduction Technology AS, a leading Norwegian recycling company. PDI Materials holds 51% of shares and CRT 49%. PDI-CRT is a technology venture project that aims to create sustainable business from the recycling of complex metal containing industrial waste. PDI's JV partner, CRT brings into the partnership extensive expertise and experience in handling and recycling various metal containing industrial wastes. The JV partnership with CRT also brings exclusive rights to technologies, provided by ScanArc Plasma Technologies AB of Sweden, for the recovery of high value products from waste using ultra-high-temperature (UHT) processes. The unique technology is not yet available in Asia. It is used by leading metal recycling companies in Europe.

Examples of recyclable industrial waste to recover metals include red dust from steel mills, electronic waste, spent catalysts and batteries. In addition, the same technology can be used to dispose of hazardous wastes, such as plastics, liquid wastes and refrigerants with the least impact on the environment, compared to alternative waste disposal and recycling systems. The technology to be deployed has the highest environmental performance commercially available and as such contributes to the most efficient, environmentally friendly and effective, hazardous waste recycling.

The marketing, technical and financial feasibility study is ongoing and is expected to conclude mid-2016, with commercial operation date expected within 2018. The project will be located at our Rayong site.





**PDI Materials  
Co., Ltd.**

Providing high added value materials, mainly from recycling



**PDI Eco  
Co., Ltd.**

Providing raw materials from waste and eco management of waste



**PDI Energy  
Co., Ltd.**

Providing energy from renewable sources

**2. PDI Eco** elaborates on a partnership in an industrial waste management facility at Tak, utilizing the land at PDI's Tak refinery. PDI will have 51% ownership, in JV with a leading overseas waste management company to study and set up the facility.

The JV will target all complex industrial unhazardous and hazardous waste streams in the North and Center of Thailand, by handling, sorting, incinerating and as limited as possible landfilling.

The feasibility study shows positive returns. Together with our future partner the roadmap to success is being finalized, with as major hurdle to assure obtaining all necessary permits fast.

**3. PDI Energy** continues to explore several renewable energy projects, including biomass, wind and solar. Prioritization has been given to projects that generate revenues and profits within the very short term, to provide a bridge to developing longer term recycling based materials projects and waste management projects. For biomass issues such as feed stock availability and local community support need to be carefully studied, before committing to development investment. Due to this the Palm Oil Empty Fruit Bunch biomass project in Surat Thani has been slowed down, however new biomass opportunities to invest in operating power plants are assessed.

Both the solar farms at the Tak plant residue ponds and the wind-energy plant at Nakhon Ratchasima have undergone technical investigation and an investment feasibility study, and both are pending the upcoming public policy on new power purchase agreements (PPAs). Should PDI secure a PPA early 2016, it will be able to construct its power plants within the next 2 years.



# Financial Review

## Overview of Company Performance in 2015

Note: The following management review is based on a formation of accounts which may not have been audited. The purpose of presenting such a format is to disclose the results in a way more useful to the reader than that of the heavily regulated financial statements.

The Company, as a zinc smelter, generates earnings by converting raw materials such as imported concentrates, other feed stock, and ore from its own Mae Sod mine into marketable zinc metal. The revenues of the Company are mainly affected by the commodity zinc prices, exchange rate of the Thai Baht to the US Dollar, and the treatment charges (TC) received from the mines to process their zinc concentrates into zinc metal.

The London Metal Exchange (LME) average zinc cash settlement price in 2015 was USD 1,933 per ton, an 11% decrease compared to the price of USD 2,162 per ton in 2014. This mainly resulted from an continuing slowdown of the global economy since the second half of 2015.

The average exchange rate of Thai Baht against US Dollars in 2015 was Baht 34.40 to the dollar, which represents 5% depreciation from Baht 32.62 in 2014. The Thai Baht weakened against the US Dollar due to the impact of the financial policy management from the central banks of the major countries, as well as the impact from the Thai political situation.

In 2015, the Company generated net revenues from zinc sales of Baht 4,633 million, a 15% decrease compared to Baht 5,427 million in the previous year. The decrease in zinc sales resulted from the lower sales volume and the lower zinc prices, while the depreciated Thai Baht against the US Dollar weakened the negative impact. The 2015 average of sales premiums on zinc metal was in line with that of the previous year.

To cope with the unfavourable market conditions and to protect its cash flow from operations, PDI hedged 34% of 2015 zinc metal production from its Mae Sod mine at an average of 2,298 USD/ton. Consequently the Company realised a strategic hedging gain in 2015, as the hedged zinc metal price exceeded the actual average price.

Despite a drastic drop in the metal prices, the income from by-products slightly increased compared to the previous year. This was in line with the Company's plan to increase recovery of economic values in by-products including silver and lead concentrates (PLP) and sulphuric acid.

The raw material costs decreased with 10% from previous year, by optimizing the raw material feed mixing in line with the strategic decision of the Group to readjust production and focus more on its own resources.





In 2015, a decrease of 14% from the previous year was recognized in total operating expenses from a strict control process and from lower prices of electricity and chemicals used in the operations.

On February 18, 2016, the Company's Board of Directors decided to cease the Company's conventional zinc operations by the end of 2017 after the full depletion of Mae Sod mine in 2016. Consequently impairment provisions for labor and assets involving the zinc transition have been recognized in 2015. This explains the increase in depreciation, amortization and other provisions from the previous year in total of Baht 435 million.

During the 2<sup>nd</sup> quarter of 2015, Puthep Co., Ltd., a PDI subsidiary, has recognized the loan forgiven by Puthep's shareholders of Baht 585.02 million which resulted to a significantly increase in other incomes of the Group.

The Group announced a consolidated net profit of Baht 151 million, decreased from the net profit of Baht 461 million in 2014. The consolidated earnings per share in 2015 are Baht 0.67, compared with Baht 2.04 in 2014.

The Group's earnings before interest, taxes, depreciation and amortization (EBITDA) in 2015 reached Baht 816 million, fully in line with the EBITDA of Baht 836 million in 2014. This characterizes our continuous effort to maintain a positive performance during business transition period.

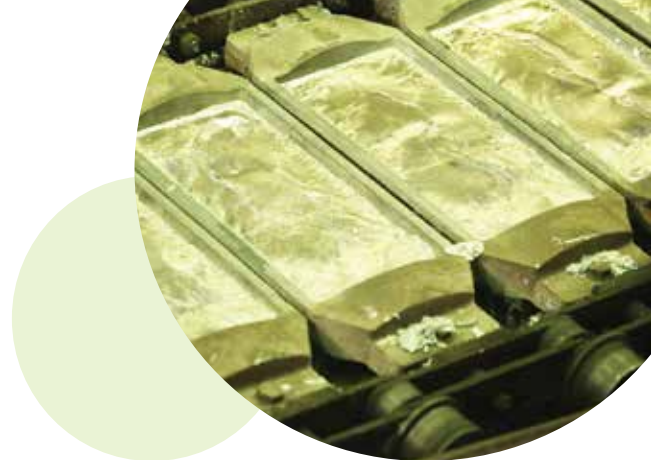
Nevertheless, the volatility of zinc price and the depletion of the Mae Sod mine will have a major impact on PDI's performance. Therefore, several business opportunities in materials, renewable energy, waste management and recycling materials are accelerated explored and assessed. However, in this unstable economic environment, the Group prefers to focus on robust performing, low risk involving targets with strong growth potential, rather than quick fits. A combination of green field projects and M&A of existing companies is under consideration.

## Statement of Financial Position

### Assets and Liabilities

At the end of 2015, total assets of the PDI Group were Baht 5,105 million, a decrease of Baht 445 million compared to previous year. The cash and cash equivalent, including short-term deposits, were decreased from Baht 1,715 million in 2014 to Baht 1,201 million in 2015 from a significant increase in inventories. The non-current assets related to zinc operations were decreased in total amount of Baht 406 million by accelerated depreciation and impairment provisions on the assets linked to the zinc operations in line with the business transition plan.

At the end of 2015, total liabilities decreased by Baht 701 million to Baht 1,524 million from Baht 2,225 million in 2014. The decrease resulted mainly from the loan forgiveness in Puthep Co., Ltd., a PDI subsidiary and also the short-term financing and trade payables repayments. The provisions of Baht 428 million are related to restoration, rehabilitation and closing zinc operation commitments. The personnel compensations linked to the zinc closing of Baht 197 million have been recognized as other non-current liabilities as of December 31, 2015.



## Shareholder's Equity

As of December 31, 2015, the total shareholder's equity of PDI amounted to Baht 3,581 million, a net increase of Baht 256 million compared to the previous year.

On February 18, 2016, the Board of Directors approved a dividend payment of Baht 0.20 per share, equivalent to 45.2 million from the retained earnings. The dividend payment is subject to approval at the annual shareholders meeting scheduled in April 2016.

## Cash Flow and Capital Expenditures

The net cash used in operating activities for 2015 of the Group was Baht 69 million, compared to the net cash generated of Baht 1,682 million in 2014. This resulted mostly from increases of working capitals especially the inventories due to a slowdown of global and domestic economy.

In 2015, the cash flow generated from investing activities in property, plant and equipment of the PDI Group was Baht 330 million. This included Baht 422 million received from arrangement of short-term investment in a private investment funds compared to the fixed deposits in previous year. There was Baht 18 million invested in PDI-CRT Co., Ltd., a new jointly controlled entity. The capital expenditure for the maintenance of machinery and equipment was Baht 89 million and investment for restoration assets were Baht 13 million in 2015.

The net cash flow of Baht 361 million was used in the financing activities of 2015, mainly for short-term loan repayments, amounting to Baht 272 million, and dividend payments for the previous year's operations, which amounted to Baht 90 million.

The PDI Group sustained a healthy financial position with consolidated net cash of Baht 816 million by the end of 2015, excluding short term deposits of 385 million.



## Financial Status

		2014		2015
Averages				
LME Zn (USD/ton)		2,162		1,933
LME Cu (USD/ton)		6,859		5,492
USD/Baht		32.62		34.40
Zn (Baht/ton)		70,526		66,495
Cu (Baht/ton)		223,761		188,915
	tons	2014 million Baht	tons	2015 million Baht
Net Zinc sales	69,283	5,427	59,504	4,633
Net Copper sales	17	4	-	-
Net Acid sales	46,376	96	45,532	90
Net PLP sales	1,135	14	4,580	50
<b>Company revenue</b>		<b>5,541</b>		<b>4,773</b>
<b>Other income</b>		6		8
<b>Expenses</b>				
Zinc purchased		1,798		1,566
PLP purchased		9		31
Alloying metals		90		65
Sulphur		255		266
Total raw materials		2,152		1,928
Personnel expenses		511		514
Energy expenses		1,033		820
Materials and supplies		50		37
Consumables		237		156
Services (freight, contracts)		419		323
Other expenses		284		156
Depreciation amortisation		363		487
<b>Subtotal</b>		<b>5,049</b>		<b>4,421</b>
Gain (loss) on foreign exchange		4		(13)
Financial income (expenses)-net		13		26
Gain from fixed asset sales		-		-
Loss from provision		-		(311)
Net consolidation effect- profit/(loss)		(4)		224
Share of loss from joint venture		1		(8)
<b>Operating result</b>		<b>513</b>		<b>278</b>
Corporate income tax		(52)		(127)
<b>Net operating result</b>		<b>461</b>		<b>151</b>



## Related Companies Highlights

### Puthep Co., Ltd.

Since August 21, 2000, a Participation Agreement was established between the Company and Pan Australian Resources Limited (PanAust) and PNA (Puthep) Pty Ltd., which is a wholly owned subsidiary of PanAust, in order to embark on the exploration and mining of the Puthep Copper Project in Loei Province, in the Northeastern region of Thailand.

The capitalized exploration and acquisition costs incurred by Puthep amounted to Baht 926 million, which was mainly financed in the form of equity and loans coming from PNA (Puthep). A long-term loan, including the accrued interest of Baht 576 million has been provided by PNA (Puthep) to finance the project. According to the loan agreement, the repayment of the loan will come as soon as Puthep generates sufficient profit.

Due to major difficulties in the acquisition of mining operation permits, the Puthep's Board of Directors unanimously approved a resolution on April 23, 2015 to relinquish the Mining Lease Application ("MLA") to the Department of Primary Industries and Mines ("DPIM"). The authorities have officially accepted and confirmed effectiveness of the MLA relinquishing on May 8, 2015, which resulted in accordance with Revenue Code write off of the capitalized exploration and acquisition costs of Baht 926 million. PNA (Puthep), the other shareholder, has issued the Loan forgiveness letter to Puthep covering its loan balance and interest payable. As at 31 December 2015, Puthep has been dissolved and is in the final process of liquidation.

### Padaeng Industry (Laos) Co., Ltd. (PDIL)

In 2012, the Company's management concluded that substantial expenditures and other alternative drilling methods would be required to continue with the zinc exploration Project of Padaeng Industry (Laos) Co., Ltd. (PDIL). Therefore, PDIL has ceased all its exploration activities and has recognized a provision of Baht 107 million for impairment with respect to the exploration costs capitalized since 2012.

In 2013, PDIL was approached by a potential investor with interest in further development and possibly taking over the project. This initiated a series of negotiations. As of December 31, 2015, the negotiations with the potential buyer have been concluded and sales process is expected to complete within 2016.

### PDI Materials Co., Ltd. (PDI Materials)

In line with the Company strategic plan, Southeast Asia Metal Co., Ltd., a wholly owned subsidiary of Padaeng Properties Co., Ltd., has been renamed to PDI Materials Co., Ltd., as of June 24, 2014, with the purpose of accommodating the PDI Group in its zinc and other metals related business in the near future. On August 26, 2015, PDI Materials has entered into a Shareholders Agreement to set up a joint venture with CRT Norway to explore business opportunities to engage in the recycling of metal containing wastes by using highly innovative technologies.

### PDI Energy Co., Ltd. (PDI Energy)

In line with the Company strategic plan, Padaeng International Mining Co., Ltd., a wholly owned subsidiary of PDI, has been renamed to PDI Energy, as of since May 12, 2014, with the purpose of being a vehicle for investment and operation in renewable energy.

On April 24, 2015, PDI Energy has entered into the Share Purchase Agreement and Shareholders Agreement to invest in PDI Surat Biomass Co., Ltd. ("PDI Surat Biomass") (formerly name is Smothong Biomass Co., Ltd.) to develop a 9.5 MW biomass power plant located in the South of Thailand. However, the investment in this project has been impaired after the scheduled commercial operation date (COD) as stated in the Power Purchase Agreement is uncertain to be extended by the authorities.

### PDI Eco Co., Ltd. (PDI Eco)

PDI Eco Co., Ltd., a wholly owned subsidiary of the Company, has been established since June 16, 2014, with the purpose to be a vehicle for investment and operation in waste treatment.

### Maesod Clean Energy Co., Ltd. (MCE)

Maesod Clean Energy Co., Ltd., (MCE), has been provided with a shareholder loan of Baht 105 million by the Company as of October 5, 2011. The purpose was to improve the liquidity of MCE. In 2015, MCE realized a net loss of Baht 24 million compared to a net profit of Baht 3 million in 2014. Strict cost control and liquidity improvement are in place to cope with the negative performance impact from the shortage of sugar cane supply in the area.

### PDI-CRT Co.,Ltd. (PDI-CRT)

On September 10, 2015, a joint venture between PDI Materials Co.,Ltd. and CRT Norway was established and registered. PDI Materials Co.,Ltd. holds 51% of its shares. PDI-CRT is finalizing the investment project - of metal containing waste recycling - commercial feasibility study.







## Business Risk Assessment

### Identifying and Mitigating the Inherent Risks of New Green Businesses

The company assessed how to assure the continuation of its conventional zinc business after the depletion of the Mae Sod zinc mine in the course of 2016. PDI's Zinc business would entirely depend on imported ores, mainly from South-America and Australia, which will invoke a sharp increase of logistic and production costs. Hence operational expenses would largely exceed revenues from the zinc business and PDI might generate continuous losses. Consequently the PDI Board of Directors adopted a resolution in February 2016 to cease its conventional zinc business operations by the end of 2017 and reinforce its business strategy to create sustainable revenues from green businesses being, PDI Materials, PDI Eco, and PDI Energy; with the intention of targeting added value materials, waste management and renewable energy projects.

As with all new projects, a level of uncertainty and risk is involved, and green business are no different. We at PDI have always deployed sound risk management as part of the strategy for achieving our corporate objectives and reaching our goals. This strategy has added value to the company by balancing costs with expected results. We aim to identify and mitigate the risks inherent to our ongoing activities as well as those that arise from venturing into new green business.

### Major Risks for the Company

#### Credit Risk

Our main credit risks at PDI occur in our accounts receivable. PDI actively monitors payment performance of all its customers and evaluates their solvency prior to granting any credit. In addition to this, we apply a credit insurance system for non-credit worthy customers in order to cover receivables that are not supported by cash advance, a bank guarantee, or a letter of credit. A yearly audit plan has been taken to ensure the proper treatment of all of our accounts receivable.



## Commodity Price Exposure

Through the nature of our business, PDI is exposed to fluctuations in the market price of commodities. For day-to-day operations, we engage in transactional hedging, meaning that we generally limit hedging transactions to cover the time risks between raw material purchases and the sale of metals, in order to cover any exposure on fixed-price forward sales of metals for our customers.

In 2015 PDI following its strategic hedging plan has sold forward a total of 10,900 tons of zinc covering 35% of PDI's Mae Sod mine production. This forward selling has protected our income against fluctuations in the LME zinc price and the US dollar to Thai Baht exchange rate. Although these strategic hedging transactions have at times prevented PDI from taking advantage of potential upsides on the zinc metal tonnage hedged, the Company was able to lock-in an acceptable return for its shareholders. The strategic hedging policy is still active and will be ongoing in 2016. Any decisions for strategic hedging are made at the Board level, following a detailed screening of proposals given by our management. For 2015 this strategy has indeed brought benefit to the Company since the actual average zinc price was much lower than the hedged price.

## Currency Exposure

PDI incurs foreign currency risk on sales, purchases, and borrowings that are made in currencies other than Thai Baht. The primary currency giving rise to this risk is the US dollar. We address this exposure by using foreign-exchange forward contracts and US dollar deposits.

## Raw Materials and Exploration

Since 2014, PDI and its subsidiaries ceased all of its mining exploration activities. Any expenses incurred by exploration activities have already been capitalized and if necessary impaired in previous years, according to the potential of the exploration projects.

## Social and Environmental Issues

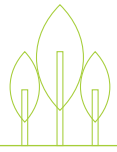
PDI operates its mine and refinery under licenses and permits issued by governmental authorities which require our emissions to meet regulatory standards. Occupational health and safety risks are also assessed and monitored in accordance with these standards.

In order to meet our current obligations at our mining operations, provisions are made for the present value of the rehabilitation and risk fund. These provisions have been continuously reviewed in anticipation of costs incurred by upcoming changes in social and environmental laws and regulations. This is to ensure sufficient provisions for environmentally-related expenditures that are to be expected.

## New Projects

As mentioned earlier, PDI has embarked upon green business ventures and projects. All new projects studied are supported by a strict risk assessment process, following our standard procedures, in order to identify and mitigate any risks that might occur. This covers all areas of the project, including technical, financial, environmental and business risks. These risks are presented to the Board of Directors before any final decisions are made.





# **2015 Board of Directors, Executive Committee, Strategic Committee, Audit Committee and Nomination and Remuneration Committee**





### 1. Arsa Sarasin

Chairman

### 2. Francis Vanbellen

Director

Managing Director

Executive Committee Member

### 3. Sadawut Taechaubol

Director

Executive Committee Chairman

### 4. Tommy Taechaubol

Director

Executive Committee Member

Nomination & Remuneration Committee Member

### 5. Prapa Puranachote

Director

Executive Committee Member

### 6. Karel Vinck

Independent Director

Audit Committee Member Strategic Committee Member

### 7. Vinai Vamvanij

Independent Director

Executive Committee Member

Audit Committee Chairman

### 8. Aswin Kongsiri

Independent Director

Executive Committee Member

Audit Committee Member

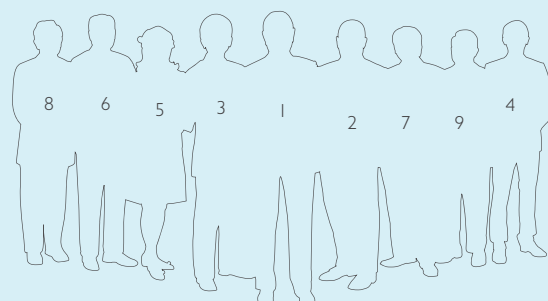
Nomination and Remuneration Committee Chairman

### 9. Pinit Vongmasa

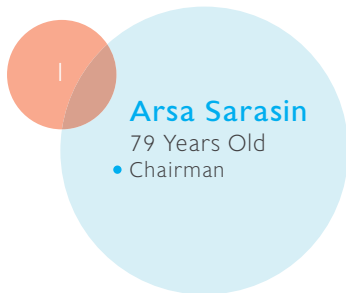
Independent Director

Strategic Committee Member

Nomination and Remuneration Committee Member



## 2015 Board of Directors, Executive Committee, Strategic Committee, Audit Committee and Nomination and Remuneration Committee



**Arsa Sarasin**

79 Years Old

- Chairman

**Education** • B.A. (Business Administration), Boston University, USA

**Training in IOD** • Thai Institute of Directors Association - Director Accreditation Program (DAP), 2003 - Audit Committee Program (ACP), 2007 - Finance for Non-Finance Directors (FND), 2008 - Role of Chairman Program (RCP), 2013

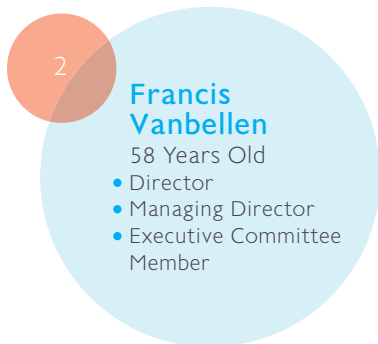
**Current Position in Listed Company** • Chairman, Padaeng Industry Public Company Limited • Chairman, Dusit Thani Public Company Limited • Chairman, Siam Makro Public Company Limited • Director, Chairman of Corporate Social Responsibility Committee for Sustainable Development and Member of the Governance and Nomination Committee, the Siam Cement Public Company Limited • Chairman of Audit Committee, Vice Chairman and Independent Director of Charoen Pokphand Foods Public Company Limited

**Other Current Position** • Chairman, Thai Asia Pacific Brewery Company Limited • Chairman, Amata City Company Limited • Chairman of the Board of Governors, Amata Spring Country Club • Chairman, Maesod Clean Energy Company Limited • Chairman of Advisor, Thai-Laos Association • Vice Chairman, Thai Tapioca Development Institute • Director, Thai Pure Drinks Company Limited • Chairman, Mitsubishi Elevator Asia Co., Ltd.

**Working Experience** • Chief Executive Officer, Padaeng Industry Public Company Limited • Director-General, Department of Economic Affairs, Ministry of Foreign Affairs • Thai Ambassador to Belgium & Chief of Mission to the European Community • Director-General, Department of Political Affairs, Ministry of Foreign Affairs • The Permanent Secretary of the Ministry of Foreign Affairs • Thai Ambassador to the USA • The Minister of Foreign Affairs • Chairman of the Asia-Europe Business Forum II • Vice Chairman of the Board of Directors and Advisor, Bangkok Bank Public Company Limited • Director, Vinythai Public Company Limited • Chairman of the Thai-Laos Association • His Majesty's Principal Private Secretary

**% Share Possession:** None

**Date of the First Appointment:** November 23, 1987



**Francis Vanbellen**

58 Years Old

- Director
- Managing Director
- Executive Committee Member

**Education** • Master's Degree in Chemical Engineering, Catholic University Leuven (KUL), Belgium • Master of Business Administration, Vlerick Management School, Gent, Belgium

**Training** • Process Management, Harvard, Cambridge, USA • Strategic Innovation Management, Insead, Fontainebleau, France • Business Excellence Assessment, EFQM, Brussels, Belgium • Multicultural Leadership, Ashridge, London, UK

**Training in IOD** • Director Certification Program (DCP), Thai Institute of Directors Association, Bangkok, Thailand

**Current Position in Listed Company** • Managing Director, Padaeng Industry Public Company Limited

**Other Current Position** • Chairman of the Board, PDI Energy Co. Ltd., Bangkok, Thailand • Chairman of the Board, PDI Materials Co. Ltd., Bangkok, Thailand • Chairman of the Board, PDI Eco Co. Ltd., Bangkok, Thailand • Chairman of the Board, PDI-CRT Co. Ltd., Bangkok, Thailand • Director, Maesod Clean Energy Co. Ltd., Bangkok, Thailand • Director, Belgian-Luxembourg/Thai Chamber of Commerce, Bangkok, Thailand • Director, GMM Quartz NV, Antwerp, Belgium

**Working Experience** • Chairman of the Supervisory Board, GMM Quartz, Berlin, Germany • Director, Puthep Co. Ltd., Bangkok, Thailand • Director, OMM, Aydin, Turkey • Manager special metals refinery Umicore, Hoboken, Belgium • Manager precious metals refinery Umicore, Hoboken, Belgium • Manager raw materials sampling department, Umicore, Hoboken, Belgium • Head of Department human resources & business excellence, Umicore, Brussels, Belgium • Head of Department knowledge & supply chain management, Umicore, Hoboken, Belgium • Head of Department Precious Metals Operations, Umicore, Hoboken, Belgium • Plant Manager, Umicore Precious Metals Refining Operations, Hoboken, Belgium • Managing Director, GMM Quartz, Antwerp, Belgium

**% Share Possession:** None

**Date of the First Appointment:** April 26, 2012



3

### Sadawut Taechaubol

63 Years Old

- Director
- Executive Committee Chairman

**Education** • Honorable Degree (Business Administration), Kensington University, California, USA • Commerce Diploma, Davis School, Brighton, UK • B.A. (Political Science), Ramkhamhaeng University

**Training** • Capital Market Academy Class 12, Year 2011, the Stock Exchange of Thailand • Energy Literacy for the World Program, Class 7 (TEA 7), Year 2016, Thailand Energy Academy

**Training in IOD** • Director Accreditation Program, Class 66/2007 Thai Institute of Directors Association

**Current Position in Listed Company** • Chairman of Country Group Holdings Public Company Limited • Chairman of the Executive Board of Directors, MFC Asset Management Public Company Limited • Chairman of the Executive Board of Directors, Country Group Securities Public Company Limited • Vice Chairman of Country Group Development Public Company Limited

**Other Current Position** • Executive Directors China Overseas Exchange Association • Chairman of Thai Chamber of Commerce & Industry • Chairman of Sing Sian Yit Pao Company Limited • Director of Profit Ventures Company Limited • Director of Baan Rai Taechaubol Company Limited • Director of Bangkok Development Company Limited • Chairman of Country Group Company Limited

**Working Experience** • Director of Landmark Development Group Company Limited • Director and Executive Director, MFC Asset Management Public Company Limited • Chief Executive Officer and President, Country Group Securities Public Company Limited

**% Share Possession:** None

**Date of the First Appointment:** November 10, 2015

4

### Tommy Taechaubol

32 Years Old

- Director
- Executive Committee Member
- Nomination and Remuneration Committee Member

**Education** • Master of Business Administration (MBA) (with distinction), Sasin Graduate Institute of Business Administration of Chulalongkorn University • Bachelor of Commerce, Finance Major (with distinction), the University of New South Wales, Australia • Bachelor of Laws, the University of New South Wales, Australia

**Training** • Real Estate Development RE-CU, Class 40, the Real Estate Executive Association of Chulalongkorn University

**Training in IOD** • Director Accreditation Program (DAP), Class 88/2011 Thai Institute of Directors Association

**Current Position in Listed Company** • Director and Chief Executive Officer, Country Group Holdings Public Company Limited • Advisor to the Executive Committee, MFC Asset Management Public Company Limited • Director, Country Group Securities Public Company Limited

**Other Current Position** • Chairman of Executive Committee, Sing Sian Yit Pao Company Limited

• Director, Baan Rai Taechaubol Company Limited • Director, Country Group Company Limited

**Working Experience** • First Executive Vice President (Business Development Division), MFC Asset Management Public Company Limited • Director, Country State Company Limited

**% Share Possession:** None

**Date of the First Appointment:** May 7, 2015

5

### Prapa Puranachote

61 Years Old

- Director
- Executive Committee Member

**Education** • Master of Business Administration (MBA), the National Institute of Development Administration (NIDA) • Bachelor of Arts, Journalism and Mass Communication Program, Thammasat University

**Training** • Advanced Certificate Course in Public Economics Management for Executives, Class 7, King Prajadhipok's Institute • Chief Executive Program, Class 14 (CMA 14), Capital Market Academy Thammasat Leadership Program (TLP 2), Thammasat University Alumni Relations Office • Energy Literacy for the World Program, Class 6 (TEA 6), Thailand Energy Academy

**Training in IOD** • Director Certification Program (DCP), Class 148/2011, Thai Institute of Directors Association

**Current Position in Listed Company** • Director, Executive Director, Member of the Risk Management Committee, Member of the Good Corporate Governance Committee and President, MFC Asset Management Public Company Limited • Independent Director and Audit Committee, Ratchaburi Electricity Generating Holding Public Company Limited

**Working Experience** • Senior Executive Vice President and Chief of Provident Fund Division, Krung Thai Asset Management Public Company Limited • Senior Executive Vice President and Chief of Business Development & Marketing Division, Krung Thai Asset Management Public Company Limited

**% Share Possession:** None

**Date of the First Appointment:** June 29, 2015

6

**Karel Vinck**

77 Years Old

- Independent Director
- Audit Committee Member
- Strategic Committee Member

**Education** • Master's Degree in Electrical and Mechanical Engineering, Katholieke Universiteit Leuven (KUL), Belgium • Master of Business Administration, Cornell University, USA

**Current Position** • Director, La Monnaie Opera House • Coordinator European Commission ERTMS, for Railway Transport • Director, Tessenderlo Chemicals, Belgium • Director, Nyrstar N.Y., Belgium • Senior Advisor, Roland Berger Consultants, Germany

**Working Experience** • Chairman of BAM (Antwerp Mobility Program), Belgium • CEO, Bekaert, Belgium • Chairman, Umicore, Belgium • Chief Executive Officer, NMBS/SNCB (Belgian Railways), Belgium • Chairman, Sibelco, Belgium • Chief Executive Officer, Umicore, Belgium

**% Share Possession:** None

**Date of the First Appointment:** July 13, 2000

7

**Vinai Vamvanij**

75 Years Old

- Independent Director
- Executive Committee Member
- Audit Committee Chairman

**Education** • Professional Accountancy, CPA, Australia

**Training in IOD** • Thai Institute of Directors Association - Advance Audit Committee Program 2013 - Chartered Director Class 2007 - Audit Committee Program 2007 - DCP Refresher Course - Director Certification Program 2001 - Chairman 2000 - Creating a Strategic Direction

**Current Position** • Director, Palang Sophon Company Limited • Director, Continental Petrochemical (Thailand) Company Limited • IOD Chartered Directors, Thai Institute of Directors Association

**Working Experience** • Independent Director and Audit Committee, Christiani & Nielsen (Thai) Public Company Limited • Executive Director, Thonburi Automotive Assembly Plant Company Limited • President, Eternal Petrochemical Company Limited • Chief Executive Officer, Aquastar Group

**% Share Possession:** 0.0035

**Date of the First Appointment:** November 6, 1998

8

**Aswin Kongsiri**

70 Years Old

- Independent Director
- Executive Committee Member
- Audit Committee Member
- Nomination and Remuneration Committee Chairman

**Education** • B.A. (Hons.) in Philosophy, Politics and Economics, Oxford University, England

**Training** • Banff School of Advanced Management, Alberta, Canada • The National Defence Course for the Joint State-Private Sectors, Class 6, National Defence College

**Training in IOD** • Thai Institute of Directors Association - Chairman 2000, Class 5/2001, - Director Certification Program (DCP), Class 11/2001

**Current Position in Listed Company** • Chairman, Ch. Karnchang Public Company Limited • Independent Director, Bangkok Aviation Fuel Services Public Company Limited • Independent Director, OHTL Public Company Limited (Mandarin Oriental Hotel) • Independent Director, Thai Reinsurance Public Company Limited

**Other Current Position** • Chairman, Thai Orix Leasing Company Limited • Chairman, Ton Poh Thailand Fund

**Working Experience** • Member, Monetary Policy Committee, Bank of Thailand • Governor, the Stock Exchange of Thailand • Chairman, Thoresen Thai Agencies Public Company Limited • Vice Chairman, Electricity Generating Public Company Limited • Chairman, Krungthai-AXA Life Insurance Company Limited Assembly Member, the National Legislative Assembly • Director and Executive Director, Krung Thai Bank Public Company Limited • Independent Director, Thai Rating and Information Service Company Limited • Director and Executive Director, Siam Commercial Bank Public Company Limited • President, the Industrial Finance Corporation of Thailand

**% Share Possession:** None

**Date of the First Appointment:** April 10, 1981

9

**Pinit Vongmasa**

71 Years Old

- Independent Director
- Strategic Committee Member
- Nomination and Remuneration Committee Member

**Education** • M.S. (Ind. Mgt.), Oklahoma State University, USA • B.Eng. (Electrical Engineering), Chulalongkorn University • Advanced Management Program, Harvard University, USA

**Training in IOD** • Thai Institute of Directors Association - Director Certification Program (DCP), 2001

**Current Position in Listed Company** • Independent Director, Strategic Committee Member and Nomination and Remuneration Committee Member, Padaeng Industry Public Company Limited

**Working Experience** • Chief Executive Officer, Padaeng Industry Public Company Limited • President and Chief Executive Officer, Padaeng Industry Public Company Limited • President, the Siam Kubota Industry Company Limited • Managing Director, the CPAC Concrete Products Company Limited

**% Share Possession:** None

**Date of the First Appointment:** June 1, 1999

## Board of Directors (Resigned during the year)

1

**Paron Israsena**  
88 Years Old

**Education** • Master of Engineering (M.E.), Massachusetts Institute of Technology (MIT), USA

**Training** • The Stock Exchange of Thailand - The Audit Committee...the Expectation Increase and the Responsibility Expansion

**Training in IOD** • Thai Institute of Directors Association - Role of the Compensation Committee - The Characteristics of Effective Directors - Improving the Quality of Financial Reporting - Directors Accreditation Program (DAP), Class 4/2003 - The Board's Role in Setting Effective Compensation Policy

**Current Position in Listed Company** • Director, Chairman of the Audit Committee and Risk Management Chairman, Summakorn Public Company Limited • Chairman of the Board of Directors, Thaicom Public Company Limited

**Other Current Position** • Member, National Reform Council • Chairman, Educational Reform and Personal Development Commission • Chairman, Mitr Technical Consultant Company Limited • President, Darunsikkhalai School for Innovative Learning of King Mongkut's University of Technology Thonburi • Vice President, Thaicom Foundation • Honorary President, Thonburi Phanich Group • Committee, Swissotel Park Nai Lert • Member and Chairman of Audit Committee, the Thai Red Cross Society • Board Member, National Competitiveness Development Committee • Director, Council of Chiang Mai Rajabhat University • Chairman, Shinawatra University Council • Chairman, the National Economic and Social Development Board • Director of the Selection Committee, the Board of Directors of a State Enterprise, Ministry of Finance

**Working Experience** • President, the Siam Cement Public Company Limited • Chairman, the Federation of Thai Industries • Senator and Member of National Legislative Assembly • Chairman, Committee on Economics & Industry of the Senate • Director, Thailand Productivity Institute • Director and Member of the Audit Committee, the Siam Cement Public Company Limited • Director, Office of the Education Council • Chairman, Office of the Basic Education Committee, Ministry of Education • Honorary Council member of Chulalongkorn University • Member of Chiang Mai University Council

**% Share Possession:** None

**Date of the First Appointment:** April 28, 1994

2

**Philaslak Yukkasemwong**  
58 Years Old

**Education** • Master of Business Administration, Tarleton State University (A part of Texas A&M System), Texas, USA • Bachelor of Communication Arts, Chulalongkorn University • Graduate Diploma in Applied Economics, University of Canberra, A.C.T., Australia

**Training** • Executive Development Program, Kellogg School of Management, Northwestern University, Evanston, Illinois, USA • Executive Program in Leadership, Graduate School of Business, Stanford University, Stanford, USA • Mini MBA, National Institute of Development Administration (NIDA) • Certificate of Senior Executive of Office of the Civil Service Committee (Class 75)

**Current Position** • Executive Director, Asian Development Bank • Director, International Institute for Trade and Development (Public Organization) • Director, Office of Economic Development Cooperation with neighboring countries (Public Organization)

**Working Experience** • Deputy Director-General, Fiscal Policy Office, Ministry of Finance • Director, Dawei SEZ Development Co., Ltd. (Representative of Ministry of Finance) • Director, MFC Asset Management Public Company Limited • Executive Director, International Economic Policy Bureau, Fiscal Policy Office • Minister (Economic and Financial), Office of Economic and Finance Affairs, Washington D.C. • Senior Expert, International Economic Policy Bureau, Fiscal Policy Office • Acting Director, International Economic Policy Bureau, Fiscal Policy Office • Director, Macroeconomic Analysis Group, International and Macroeconomic Policy Bureau, Fiscal Policy Office • Director, Specialized Financial Institutions Policy Group, Fiscal Policy Office • Economist 6-8, Monetary Policy and Financial Institutions Division, Fiscal Policy Office • Vice President, Investor Relations and Communication Department, The Stock Exchange of Thailand • Manager, Members Supervision, The Stock Exchange of Thailand • Economist 6, Savings and Investment Policy Division, Fiscal Policy Office • Chief, Securities Companies Supervision, Office of the Securities and Exchange Commission • Economist 3-5, Monetary Policy and Financial Institutions Division, Fiscal Policy Office

**% Share Possession:** None

**Date of the First Appointment:** March 26, 2015

3

**Somkad Sueptrakul**  
63 Years Old

**Education** • MPA, Public Administration (Public Policy and Strategic Management), NIDA • Bachelor of Laws, Ramkhamhaeng University

**Training** • Democratic Politics and Governance for High-Level Administration, King Prajadhipok's Institute, Class 10 • Management and Administration of Justice, Class 2, College of Administrative Justice, Office of Administrative Courts • Executive for Higher Politic Level, Politic Development Institute, Class 2, Bangkok

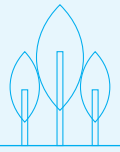
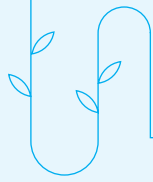
**Training in IOD** • Thai Institute of Directors Association - Director Accreditation Program (DAP), Class 77/2009 - Director Certification Program (DCP), Class 115/2009

**Current Position in Listed Company** • Director, Country Group Holdings Public Company Limited • Director, Thai Rubber Latex Corporation Public Company Limited • Director, Electronic Industry Public Company Limited • Director, Country Group Securities Public Company Limited • Legal Consultant, Areeya Properties Public Company Limited

**Working Experience** • Deputy Leader, Rum Jai Thai Chart Pattana Party • Consultant to President of Senate (General Manookrit Roopkachorn) • Member of Judicial Selection Commission of the Constitutional Court, the Parliament • Consultant to Committee on Following Up the Budget Administration, the Senate • Secretary to Bangkok Governor (Dr. Pichit Rattakun) • Technical expert and advisor to the Committee on Justice and Human Rights, House of Representatives

**% Share Possession:** None

**Date of the First Appointment:** May 7, 2015



## Company Executives





**1. Francis Vanbellen**

Managing Director

**2. Tianchai Singhakarn**

Executive Vice President - Mae Sod Mining

**3. Chitchai Thaveepanich**

Corporate Vice President - Human Resources

**4. Chaya Hasdisave**

Executive Vice President - Commercial

**5. Siam Dowmanee**

Corporate Vice President - Process & Technology Innovation

Executive Vice President - Rayong Operations

**6. Unnop Tungkananukulchai**

Corporate Vice President - Regulatory Affairs

**7. Manoch Jaroenvuthitham**

Executive Vice President - Tak Operations

**8. Woratip Rerkpiboon**

Corporate Vice President - Finance

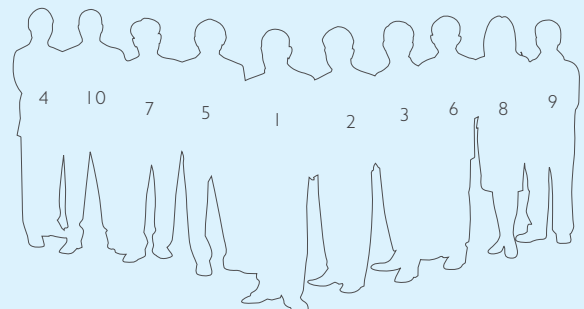
**9. Surin Tanticharoenkiat**

Corporate Vice President - Internal

Company Secretary

**10. Anthony Waring Chisnell**

Vice President - Business Development







# Audit Committee's Statement

## Dear Shareholders,

At present, the Audit Committee comprises three independent directors, Mr. Vinai Vamvanij as Chairman, Mr. Aswin Kongsiri, and Mr. Karel Vinck. The Audit Committee performed its duties as assigned by the Board of Directors in accordance with the Audit Committee Charter as well as proposing the appointment of external auditors for the year 2016.

In 2015, the Audit Committee has met 4 times with the external auditor, the internal auditor and the management to review the consolidated and company financial statements which were prepared in accordance with the Thai Financial Reporting Standards (TFRS) and in compliance with the International Financial Reporting Standards (IFRS) to ensure conformity with laws, the regulations of SEC, SET and with the generally accepted accounting principles of Thailand before submission to the Board. Additional meetings were held with the external auditor without management so as to independently discuss the information of financial statement and of any potential fraudulent action as needed.

The Audit Committee has discussed with the internal auditor and the management to assess the Company's internal control. Using the result from its internal audit department's recommendation, PDI continues to improve the efficiency and effectiveness of the control systems which the aim to lead to continuous improvement and sustainable development. For year 2015 the areas that benefit from the audit work and improve in internal control include sales & marketing, administrative work, general procurement, inventory management, payment process and EHS compliance.

In addition to internal audits and control, up till now the Audit Committee also oversees risk management. In this dynamic environment and in the upcoming year with PDI diverting into new businesses after ceasing its conventional zinc business by 2017, PDI has emphasized risk prevention measurements and risk management, with the anticipation of upcoming changes in internal factors, economic changes, and general external influences and especially the risks that arise from venturing into new green business. For 2015, PDI has also conducted its risk assessment to focus on fraud and anticorruption to be in line with its policy on anti-corruption program in additional to its normal operation risks.

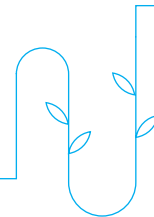
In all respects, the Audit Committee is of the opinion that the Company's operations have been appropriate and has found no significant weaknesses in its conduct of business. In addition the Audit Committee has also overseen the issue of connected party transaction to prevent any conflict of interest that might arise from such transaction.

The Audit Committee has recommended to the Board of Directors to propose to the shareholders to appoint Mrs. Nattaporn Phan-Udom Certified Public Accountant (Thailand) No. 3430 and/or Mr. Paiboon Tunkoon Certified Public Accountant (Thailand) No. 4298 and/or Mr. Pisit Thangtanagul Certified Public Accountant (Thailand) No. 4095 of PricewaterhouseCoopers ABAS Ltd. to conduct the audit of financial statements for the Company and its subsidiaries for the year 2016.

(Vinai Vamvanij)  
Chairman of the Audit Committee  
March 7, 2016



# AUDITOR'S REPORT



## To the Shareholders and the Board of Directors of Padaeng Industry Public Company Limited

I have audited the accompanying consolidated and company financial statements of Padaeng Industry Public Company Limited and its subsidiaries and of Padaeng Industry Public Company Limited, which comprise the consolidated and company statements of financial position as at December 31, 2015, and the related consolidated and company 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 Padaeng Industry Public Company Limited and its subsidiaries and of Padaeng Industry Public Company Limited as at December 31, 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.

**Nattaporn Phan-Udom**  
Certified Public Accountant  
(Thailand) No. 3430  
PricewaterhouseCoopers ABAS Ltd.

Bangkok  
February 18, 2016

# Statements of Financial Position

As at December 31, 2015

		Consolidated		Company	
		December 31, 2015 Baht	December 31, 2014 Baht	December 31, 2015 Baht	December 31, 2014 Baht
Notes					
Assets					
Current assets					
Cash and cash equivalents	6	815,944,768	914,927,885	605,188,825	741,125,578
Short-term investments	7	385,079,906	800,000,000	385,079,906	800,000,000
Trade accounts receivable - other parties	8	283,520,393	286,769,252	272,353,280	286,059,008
Trade accounts receivable - related party	26 (iv)	-	-	10,211,213	-
Inventories	9	2,399,991,357	1,734,189,154	2,399,991,357	1,734,189,154
Value added tax receivables		38,713,202	65,173,269	37,295,386	64,194,899
Other receivables - related party	26 (v)	-	-	-	66,444
Other current assets		11,169,124	11,591,998	7,251,906	8,474,718
Total current assets		3,934,418,750	3,812,651,558	3,717,371,873	3,634,109,801
Non-current assets					
Advances to related parties	26 (vi)	-	-	1,949,342	477,630
Advances to jointly controlled entity		252,520	-	-	-
Investments in subsidiaries	26 (i)	-	-	192,549,925	117,549,925
Investments in jointly controlled entities	26 (i)	66,660,312	56,887,175	236,249,800	236,249,800
Long-term loan to jointly controlled entity	26 (i)	105,000,000	105,000,000	105,000,000	105,000,000
Property, plant and equipment	10	951,760,428	1,358,486,212	954,891,216	1,361,316,034
Exploration and acquisition costs	11	7,954,833	19,529,937	7,954,833	19,529,937
Deferred tax assets	12	-	129,792,121	-	15,195,515
Other non- current assets					
- deferred environmental rehabilitation expenses	13 (i)	20,635,953	48,339,825	20,635,953	48,339,825
- deferred environmental risk assurance expenses	13 (ii)	4,186,444	8,622,852	4,186,444	8,622,852
- others	13 (iii)	13,872,438	10,769,862	5,227,437	2,062,860
Total non-current assets		1,170,322,928	1,737,427,984	1,528,644,950	1,914,344,378
Total assets		5,104,741,678	5,550,079,542	5,246,016,823	5,548,454,179

The accompanying notes are an integral part of these consolidated and company financial statements.

# Statements of Financial Position (Cont'd)

As at December 31, 2015

		Consolidated		Company	
		December 31, 2015 Baht	December 31, 2014 Baht	December 31, 2015 Baht	December 31, 2014 Baht
Notes					
Liabilities and shareholders' equity					
Current liabilities					
Short-term loans from financial institutions	14	233,194,978	503,481,882	233,194,978	503,481,882
Trade accounts payable		94,900,795	187,694,346	93,671,965	186,647,175
Accrued electricity expenses		87,359,508	194,047,406	87,359,508	194,047,406
Other payable-related party	26 (vii)	-	-	511,766	374,420
Income tax payable		68,596,690	63,909,799	68,176,594	63,667,146
Other current liabilities	18	166,759,542	154,580,954	162,592,368	150,242,634
Total current liabilities		650,811,513	1,103,714,387	645,507,179	1,098,460,663
Non-current liabilities					
Loan from other party	26 (ix)	-	514,770,588	-	-
Accrued interest expenses	26 (ix)	-	69,141,292	-	-
Provision for cadmium legal case	28	27,000,000	27,000,000	27,000,000	27,000,000
Provision for restoration and rehabilitation expenses	16	428,057,372	390,327,856	428,057,372	390,327,856
Employee benefit obligations	17	220,405,430	119,912,183	220,405,430	119,888,183
Deferred tax liabilities	12	218,234	-	218,234	-
Other non current liabilities		197,303,164	-	197,303,164	-
Total non-current liabilities		872,984,200	1,121,151,919	872,984,200	537,216,039
Total liabilities		1,523,795,713	2,224,866,306	1,518,491,379	1,635,676,702

The accompanying notes are an integral part of these consolidated and company financial statements.

# Statements of Financial Position (Cont'd)

As at December 31, 2015

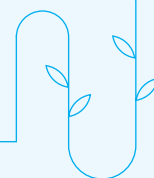
Notes

## Liabilities and shareholders' equity (Cont'd)

		Consolidated		Company	
		December 31, 2015 Baht	December 31, 2014 Baht	December 31, 2015 Baht	December 31, 2014 Baht
<b>Shareholders' equity</b>					
Share capital					
Authorized share capital					
226,000,000 ordinary shares of Baht 10 each		2,260,000,000	2,260,000,000	2,260,000,000	2,260,000,000
Issued and paid-up share capital					
226,000,000 ordinary shares of Baht 10 each, fully paid		2,260,000,000	2,260,000,000	2,260,000,000	2,260,000,000
Premium on share capital	20	602,413,600	602,413,600	602,413,600	602,413,600
Cumulative currency differences					
on translation		(5,174,722)	(7,133,551)	-	-
Retained earnings					
Appropriated legal reserve		226,000,000	226,000,000	226,000,000	226,000,000
Unappropriated		497,707,087	442,295,060	639,111,844	824,363,877
<b>Total equity attributable to owner of the parent company</b>		<b>3,580,945,965</b>	<b>3,523,575,109</b>	<b>3,727,525,444</b>	<b>3,912,777,477</b>
Non-controlling interests		-	(198,361,873)	-	-
<b>Total shareholders' equity</b>		<b>3,580,945,965</b>	<b>3,325,213,236</b>	<b>3,727,525,444</b>	<b>3,912,777,477</b>
<b>Total liabilities and shareholders' equity</b>		<b>5,104,741,678</b>	<b>5,550,079,542</b>	<b>5,246,016,823</b>	<b>5,548,454,179</b>

The accompanying notes are an integral part of these consolidated and company financial statements.





# Statements of Comprehensive Income

For the year ended December 31, 2015

	Notes	Consolidated		Company	
		2015 Baht	2014 Baht	2015 Baht	2014 Baht
Sales and services		4,868,143,705	5,593,073,716	4,824,198,046	5,581,749,637
Cost of sales and services		(4,083,111,256)	(4,741,452,867)	(4,045,195,823)	(4,735,369,037)
<b>Gross profit</b>		<b>785,032,449</b>	<b>851,620,849</b>	<b>779,002,223</b>	<b>846,380,600</b>
Other operating income	26 (ix)	620,350,990	25,880,764	41,823,999	23,941,372
(Loss) gain on exchange rate		(13,428,384)	3,958,151	(13,433,455)	6,200,198
Gain on sale of fixed assets		1,834,803	1,368,458	1,834,803	1,368,458
<b>Profit before expenses</b>		<b>1,393,789,858</b>	<b>882,828,222</b>	<b>809,227,570</b>	<b>877,890,628</b>
Selling expenses		(53,267,837)	(39,779,719)	(53,267,837)	(39,779,719)
Operating and administrative expenses		(706,796,616)	(329,173,493)	(685,850,433)	(316,206,282)
<b>Total expenses</b>		<b>(760,064,453)</b>	<b>(368,953,212)</b>	<b>(739,118,270)</b>	<b>(355,986,001)</b>
<b>Operating profit</b>		<b>633,725,405</b>	<b>513,875,010</b>	<b>70,109,300</b>	<b>521,904,627</b>
Share of (loss) gain of investment in jointly controlled entity on equity method	26 (i)	(8,226,863)	1,096,637	-	-
<b>Profit before finance costs and corporate income tax</b>		<b>625,498,542</b>	<b>514,971,647</b>	<b>70,109,300</b>	<b>521,904,627</b>
Finance costs		(7,686,632)	(6,630,983)	(7,694,590)	(6,630,983)
<b>Profit before corporate income tax</b>		<b>617,811,910</b>	<b>508,340,664</b>	<b>62,414,710</b>	<b>515,273,644</b>
Corporate income tax	23	(241,792,203)	(51,809,765)	(126,594,489)	(51,391,217)
<b>Net profit (loss) for the year</b>		<b>376,019,707</b>	<b>456,530,899</b>	<b>(64,179,779)</b>	<b>463,882,427</b>
<b>Other comprehensive income</b>					
Actuarial loss on defined benefit plan	17	(30,676,174)	(6,998,044)	(30,676,174)	(6,998,044)
Currency differences on translation		1,958,829	1,228,616	-	-
Change in value of investment in subsidiary		(1,173,553)	-	-	-
<b>Total comprehensive income (expenses) for the year</b>		<b>346,128,809</b>	<b>450,761,471</b>	<b>(94,855,953)</b>	<b>456,884,383</b>
<b>Net profit (loss) for the period attributable to:</b>					
Owners of the parent		150,760,535	461,127,054	(64,179,779)	463,882,427
Non-controlling interests		225,259,172	(4,596,155)	-	-
		<b>376,019,707</b>	<b>456,530,899</b>	<b>(64,179,779)</b>	<b>463,882,427</b>
<b>Total comprehensive income (loss) for the year attributable to:</b>					
Owners of the parent		120,869,637	455,357,626	(94,855,953)	456,884,383
Non-controlling interests		225,259,172	(4,596,155)	-	-
		<b>346,128,809</b>	<b>450,761,471</b>	<b>(94,855,953)</b>	<b>456,884,383</b>
Earnings (loss) per share					
Basic earnings (loss) per share	25	0.67	2.04	(0.28)	2.05

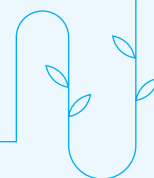
The accompanying notes are an integral part of these consolidated and company financial statements.

# Statements of Changes in Shareholders' Equity

For the year ended December 31, 2015

		Consolidated							
		Attributable to owners of the parent							
		Retained earnings					Total owners of the parent Baht	Non-controlling interests Baht	Total shareholders' equity Baht
		Issued and paid-up share capital Baht	Premium on share capital Baht	Cumulative currency differences on translation Baht	Appropriated legal reserve Baht	Unappropriated Baht			
Notes									
Opening balance as at January 1, 2015		2,260,000,000	602,413,600	(7,133,551)	226,000,000	442,295,060	3,523,575,109	(198,361,873)	3,325,213,236
Dissolution effect from subsidiary		-	-	-	-	26,897,299	26,897,299	(26,897,299)	-
Net profit for the year		-	-	-	-	150,760,535	150,760,535	225,259,172	376,019,707
Dividend paid		24	-	-	-	(90,396,080)	(90,396,080)	-	(90,396,080)
Other comprehensive income									
Actuarial loss on defined benefit plan		17	-	-	-	(30,676,174)	(30,676,174)	-	(30,676,174)
Currency differences on translation			-	-	1,958,829	-	1,958,829	-	1,958,829
Change in value of investment in subsidiary			-	-	-	(1,173,553)	(1,173,553)	-	(1,173,553)
Total comprehensive income for the year			-	-	1,958,829	-	55,412,027	198,361,873	255,732,729
Closing balance as at December 31, 2015		2,260,000,000	602,413,600	(5,174,722)	226,000,000	497,707,087	3,580,945,965	-	3,580,945,965
Opening balance as at January 1, 2014		2,260,000,000	602,413,600	(8,362,167)	226,000,000	55,964,001	3,136,015,434	(193,765,718)	2,942,249,716
Net profit for the year		-	-	-	-	461,127,054	461,127,054	(4,596,155)	456,530,899
Dividend paid		24	-	-	-	(67,797,951)	(67,797,951)	-	(67,797,951)
Other comprehensive income									
Actuarial loss on defined benefit plan		17	-	-	-	(6,998,044)	(6,998,044)	-	(6,998,044)
Currency differences on translation			-	-	1,228,616	-	1,228,616	-	1,228,616
Total comprehensive income for the year			-	-	1,228,616	-	386,331,059	(4,596,155)	382,963,520
Closing balance as at December 31, 2014		2,260,000,000	602,413,600	(7,133,551)	226,000,000	442,295,060	3,523,575,109	(198,361,873)	3,325,213,236

The accompanying notes are an integral part of these consolidated and company financial statements.



# Statements of Changes in Shareholders' Equity (Cont'd)

For the year ended December 31, 2015

		Company				
		Retained earnings				
		Issued and paid-up share capital Baht	Premium on share capital Baht	Appropriated legal reserve Baht	Unappropriated Baht	Total shareholders' equity Baht
Notes						
<b>Opening balance as</b>						
<b>at January 1, 2015</b>		2,260,000,000	602,413,600	226,000,000	824,363,877	3,912,777,477
Net loss for the year		-	-	-	(64,179,779)	(64,179,779)
Dividend paid		24	-	-	(90,396,080)	(90,396,080)
<b>Other comprehensive income</b>						
Actuarial loss on defined benefit plan		17	-	-	(30,676,174)	(30,676,174)
Total comprehensive income for the year			-	-	(185,252,033)	(185,252,033)
<b>Closing balance as</b>						
<b>at December 31, 2015</b>		2,260,000,000	602,413,600	226,000,000	639,111,844	3,727,525,444
<b>Opening balance as</b>						
<b>at January 1, 2014</b>		2,260,000,000	602,413,600	226,000,000	435,277,445	3,523,691,045
Net profit for the year			-	-	463,882,427	463,882,427
Dividend paid		24	-	-	(67,797,951)	(67,797,951)
<b>Other comprehensive income</b>						
Actuarial loss on defined benefit plan		17	-	-	(6,998,044)	(6,998,044)
Total comprehensive income for the year			-	-	389,086,432	389,086,432
<b>Closing balance as</b>						
<b>at December 31, 2014</b>		2,260,000,000	602,413,600	226,000,000	824,363,877	3,912,777,477

The accompanying notes are an integral part of these consolidated and company financial statements.

# Statements of Cash Flows

For the year ended December 31, 2015

		Consolidated		Company		
Notes		2015 Baht	2014 Baht	2015 Baht	2014 Baht	
<b>Cash flows from operating activities</b>						
Profit before corporate income tax		617,811,910	508,340,664	62,414,710	515,273,644	
<u>Adjustments for:</u>						
Unrealized loss on foreign currency		6,827,333	7,575,565	6,827,333	7,575,565	
Depreciation and amortization expenses	22	499,751,888	330,783,416	499,657,470	330,305,222	
Gain on loan forgiveness of subsidiary	26 (ix)	(585,021,374)	-	-	-	
Interest expenses		7,686,632	6,630,983	7,694,590	6,630,983	
Interest income		(32,822,023)	(18,180,201)	(29,574,509)	(15,234,946)	
Share of loss (gain) from jointly controlled entities		26 (i)	8,226,863	(1,096,637)	-	-
Allowance for doubtful debts			438,283	-	438,283	(123,262,778)
Allowance of slow-moving and obsolete stocks (reversal)			2,582,764	(3,337,090)	2,582,764	(3,337,090)
Allowance for diminution of inventories			36,316,394	-	36,316,394	-
Provisions for employee benefits	17	77,104,213	12,094,477	77,104,213	11,856,043	
Gain on disposal of property, plant and equipment			(415,509)	(1,368,460)	(415,509)	(1,368,460)
Provision for asset impairment	10	62,306,381	47,399,763	62,306,381	47,399,763	
Provisions for restoration expense	16	85,014,025	226,403,871	85,014,025	226,403,871	
Diminution (reversal) of investment	26 (i)	-	-	-	(100,000)	
Exploration costs written-down	11, 22	4,254,804	4,366,375	4,254,804	4,366,375	
Fixed assets and decommissioning costs written off	22	20,615,905	102,236,982	20,381,755	101,573,975	

The accompanying notes are an integral part of these consolidated and company financial statements.

# Statements of Cash Flows (Cont'd)

For the year ended December 31, 2015

	Notes	Consolidated		Company	
		2015 Baht	2014 Baht	2015 Baht	2014 Baht
<b>Changes in operating assets and liabilities</b>					
Trade accounts receivable - other parties		(2,405,154)	12,756,991	8,051,715	12,821,406
Trade accounts receivable - related party		-	-	(10,211,213)	14,926,497
Inventories		(704,701,361)	480,902,439	(704,701,361)	480,902,439
Value added tax receivables		26,460,067	99,144,487	26,899,513	99,188,600
Other receivable - related party		-	-	(371,839)	37,373,926
Prepayment to a related party		-	-	(1,471,712)	85,434,980
Prepayment to jointly controlled entity		(252,520)	-	-	-
Other current assets		177,048	(3,521,989)	1,138,193	(1,184,966)
Other non-current assets					
- deferred environmental expenses		(11,859,920)	(44,907,372)	(11,859,920)	(44,907,372)
- others		(8,447,995)	(8,740,919)	(8,509,995)	(154,918)
Trade accounts payable		(92,877,890)	(117,550,208)	(93,059,549)	(132,453,544)
Accrued electricity expenses		(106,687,898)	3,236,022	(106,687,898)	3,236,022
Royalty payable		3,630,000	(1,740,000)	3,630,000	(1,740,000)
Other payable - related party		-	-	137,346	(293,942)
Other current liabilities		7,791,609	72,854,357	8,147,843	72,018,246
Provisions for restoration expenses utilised	16	(47,284,509)	(17,287,206)	(47,284,509)	(17,287,206)
Provisions for employee benefits expenses utilised	17	(7,287,140)	(4,683,266)	(7,263,140)	(2,090,030)
Other non-current liabilities		178,378,349	-	178,378,349	-
Cash generated from operation		45,311,175	1,692,313,044	69,964,527	1,713,872,305
Interest paid		(7,185,454)	(6,892,430)	(7,185,454)	(6,892,430)
Income tax paid		(107,371,176)	(3,098,552)	(106,767,981)	(2,826,712)
<b>Net cash (used in) provided by operating activities</b>		(69,245,455)	1,682,322,062	43,988,908	1,704,153,163

The accompanying notes are an integral part of these consolidated and company financial statements.



# Statements of Cash Flows (Cont'd)

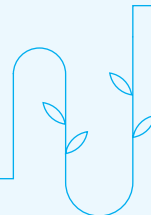
For the year ended December 31, 2015

		Consolidated		Company	
		2015 Baht	2014 Baht	2015 Baht	2014 Baht
Notes					
<b>Cash flows from investing activities</b>					
Cash received (paid) for short-term investments		421,540,956	(800,000,000)	421,540,956	(800,000,000)
Cash paid for investments in subsidiary	26 (i)	-	-	(75,000,000)	(37,449,925)
Cash paid for investments in jointly controlled entity	26 (i)	(18,000,000)	-	-	-
Interest received		26,631,449	17,716,263	23,043,199	15,111,743
Cash paid for purchase of property, plant and equipment	10	(102,167,334)	(280,317,632)	(102,139,733)	(280,307,697)
Cash received from sales of property, plant and equipment		2,225,184	1,776,589	2,225,184	1,776,589
<b>Net cash provided by (used in) investing activities</b>		330,230,255	(1,060,824,780)	269,669,606	(1,100,869,290)
<b>Cash flows from financing activities</b>					
Payments on short-term loans from financial institutions		(272,383,989)	(329,682,738)	(272,383,989)	(329,682,738)
Proceeds from long-term loan from other party	26 (ix)	1,649,534	10,928,848	-	-
Dividends payment		(90,333,323)	(67,764,440)	(90,333,323)	(67,764,440)
<b>Net cash used in financing activities</b>		(361,067,778)	(386,518,330)	(362,717,312)	(397,447,178)
Effects from changes in exchange rate for cash and cash equivalents					
		1,099,861	663,300	1,099,861	663,300
<b>Net (decrease) increase in cash and cash equivalents</b>		(98,983,117)	235,642,252	(135,936,753)	206,499,995
Cash and cash equivalents at beginning of the year		914,927,885	679,285,633	741,125,578	534,625,583
<b>Cash and cash equivalents at end of the year</b>		815,944,768	914,927,885	605,188,825	741,125,578

The accompanying notes are an integral part of these consolidated and company financial statements.



# Notes to the Consolidated and Company Financial Statements



For the year ended December 31, 2015

## I General Information

Padaeng Industry Public Company Limited (the “Company”) was established on April 10, 1981 and has been listed on the Stock Exchange of Thailand since July 21, 1987.

The Company’s registered office is at CTI Tower, 26<sup>th</sup>-27<sup>th</sup> floor, 191/18-25 Ratchadaphisek Road, Khlong Toei District, Bangkok. The Company operates a zinc mine and a zinc smelter located in the Tak Province and a roaster plant located in the Rayong Province.

The principal business operations of the Company, its subsidiaries and jointly controlled entities (the “Group”), are summarized as follows:

### Company

### Principal Activities

Padaeng Industry Public Co., Ltd.

Mining and smelting of zinc, the main products are zinc and zinc alloys

### Subsidiaries

### Principal Activities

Padaeng Properties Co., Ltd.

Providing property services

Padaeng Industry (Laos) Co., Ltd.

Dormant

PDI Energy Co., Ltd

Expand and diversify into renewable energy business

PDI Materials Co., Ltd.

Trading of various base metals and their by-products

Ton Sangkasi Pte. Ltd.

Dormant

PDI Eco Co., Ltd.

Waste management operation

PDI Tak Solar One Co., Ltd.

Solar energy business

PDI Tak Solar Two Co., Ltd.

Solar energy business

PDI Tak Eco Co., Ltd. (formerly name is “PDI Tak Solar Three Co., Ltd.”)

Industrial waste management

PDI Surat Biomass Co., Ltd.

Biomass energy business

(former name is “Smothong Biomass Co., Ltd.”)

### Jointly Controlled Entities

### Principal Activities

Maesod Clean Energy Co., Ltd.

Production and sales of ethanol and electricity

PDI-CRT Co., Ltd.

Industrial waste recycling

These consolidated and company financial statements have been authorized for issue by the Board of Directors at its meeting on February 18, 2016.

## 2 Significant 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 Financial Reporting 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 for the accounting of environmental restoration and rehabilitation expenses in Note 2.11, employee benefits as disclosed in Note 2.14 and financial instruments as disclosed in Note 2.18.

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 and company financial statements are disclosed in Note 3.

An English version of the consolidated and company statutory 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.

### 2.2 New Accounting Standards, New Financial Reporting Standards, New Interpretations and Amendments to Accounting Standards

2.2.1 New financial reporting standards and revised accounting standards, revised financial reporting standards are effective on January 1, 2015. These standards are relevant to the group.

a) Financial reporting standards, which have a significant impact to the group:

TAS 1 (revised 2014)	Presentation of financial statements
TAS 16 (revised 2014)	Property, plant and equipment
TAS 19 (revised 2014)	Employee benefits
TAS 27 (revised 2014)	Separate financial statements
TAS 28 (revised 2014)	Investments in associates and joint ventures
TAS 34 (revised 2014)	Interim financial reporting
TFRS 10	Consolidated financial statements
TFRS 11	Joint arrangements
TFRS 12	Disclosure of interests in other entities
TFRS 13	Fair value measurement

TFRIC 14 (revised 2014)	TAS 19 – The limit on a defined benefit asset, minimum funding requirements and their interaction
TFRIC 20 (revised 2014)	Stripping costs in the production phase of a surface mine

- b) Financial reporting standards with minor changes and do not have impact to the group are as follows:

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 12 (revised 2014)	Income taxes
TAS 17 (revised 2014)	Leases
TAS 18 (revised 2014)	Revenue
TAS 21 (revised 2014)	The effects of changes in foreign exchange rates
TAS 24 (revised 2014)	Related party disclosures
TAS 26 (revised 2014)	Accounting and reporting by retirement benefit plans
TAS 33 (revised 2014)	Earnings per share
TAS 36 (revised 2014)	Impairment of assets
TAS 37 (revised 2014)	Provisions, contingent liabilities and contingent assets
TAS 38 (revised 2014)	Intangible assets
TFRS 6 (revised 2014)	Exploration for and evaluation of mineral resources
TFRS 8 (revised 2014)	Operating segments
TSIC 15 (revised 2014)	Operating leases – Incentives
TSIC 25 (revised 2014)	Income taxes – changes in the tax status of an entity or its shareholders
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
TFRIC 10 (revised 2014)	Interim financial reporting and impairment

2.2.2 New financial reporting standards, revised accounting standards and revised financial reporting standards are effective on January 1, 2016. These standards are relevant to the group and are not early adopted:

- a) Financial reporting standards, which have a significant impact to the group:

TAS 16 (revised 2015)	Property, plant and equipment
TAS 19 (revised 2015)	Employee benefits
TAS 24 (revised 2015)	Related party disclosures
TAS 27 (revised 2015)	Separate financial statements
TAS 36 (revised 2015)	Impairment of assets
TAS 38 (revised 2015)	Intangible assets
TFRS 8 (revised 2015)	Operating segments



TFRS 10 (revised 2015)	Consolidated financial statements
TFRS 12 (revised 2015)	Disclosure of interests in other entities
TFRS 13 (revised 2015)	Fair value measurement

TAS 16 (revised 2015), 'Property, plant and equipment' clarifies how the gross carrying amount and the accumulated depreciation are treated where an entity uses the revaluation model.

TAS 19 (revised 2015), 'Employee benefits' is amended to apply to contributions from employees or third parties to defined benefit plans and to clarify the accounting treatment of such contributions. The amendment distinguishes between contributions that are linked to service only in the period in which they arise and those linked to service in more than one period.

TAS 24 (revised 2015), 'Related party disclosures' includes as a related party an entity that provides key management personnel services to the reporting entity or to the parent of the reporting entity (the 'management entity'). Disclosure of the amounts charged to the reporting entity is required.

TAS 27 (revised 2015) allows an investment entity that is exempted from consolidating its subsidiaries presenting separate financial statements as its only financial statements. It requires the investment entity to measure its investment in subsidiaries at fair value through profit or loss.

TAS 36 (revised 2015), 'Impairment of assets' is amended to provide additional disclosure requirement when the recoverable amount of the assets is measured at fair value less costs of disposal. The disclosures include 1) the level of fair value hierarchy, 2) when fair value measurement categorized within level 2 and level 3, disclosures is required for valuation technique and key assumption.

TAS 38 (revised 2015), 'Intangible assets' is amended to clarify how the gross carrying amount and the accumulated Amortization are treated where an entity uses the revaluation model.

TFRS 8 (revised 2015), 'Operating segments' requires disclosure of the judgements made by management in aggregating operating segments. It is also amended to require a reconciliation of segment assets to the entity's assets when segment assets are reported to chief operating decision maker.

TFRS 10 (revised 2015) 'Consolidated financial statements' is amended to define an investment entity and introduce an exception from consolidation. These amendments mean that many funds and similar entities will be exempt from consolidating most of their subsidiaries. Instead, they will measure them at fair value through profit or loss.

TFRS 12 (revised 2015) introduces disclosures that an investment entity needs to disclose.

TFRS 13 (revised 2015), 'Fair value measurement' is amended to clarify that the portfolio exception in TFRS 13 applies to all contracts (including non-financial contracts) within the scope of TAS 39 (when announced) or IFRS 9 (when announced).



- b) Financial reporting standards with minor changes and do not have impact to the group 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 12 (revised 2015)	Income taxes
TAS 17 (revised 2015)	Leases
TAS 18 (revised 2015)	Revenue
TAS 21 (revised 2015)	The effects of changes in foreign exchange rates
TAS 26 (revised 2015)	Accounting and reporting by retirement benefit plans
TAS 28 (revised 2015)	Investments in associates and joint ventures
TAS 33 (revised 2015)	Earnings per share
TAS 34 (revised 2015)	Interim financial reporting
TAS 37 (revised 2015)	Provisions, contingent liabilities and contingent assets
TFRS 6 (revised 2015)	Exploration for and evaluation of mineral resources
TFRS 11 (revised 2015)	Joint arrangements
TSIC 15 (revised 2015)	Operating leases – Incentives
TSIC 25 (revised 2015)	Income taxes – changes in the tax status of an entity or its Shareholders
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
TFRIC10 (revised 2015)	Interim financial reporting and impairment
TFRIC14 (revised 2015)	TAS 19 – The limit on a defined benefit asset, minimum funding requirements and their interaction

## 2.3 Group Accounting – Investments in Subsidiaries and Interests in Jointly Controlled Entities

### (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.

Intercompany transactions, balances and unrealized gains or loss on transactions between Group companies are eliminated. Unrealized 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 subsidiaries is given in Note 26 (i).

(2) Jointly controlled entities

The group has applied TFRS11 to all joint arrangements as of January 1, 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, interests in joint ventures are initially recognized at cost and adjusted thereafter to recognize 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 interests in the joint ventures (which includes any long-term interests 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.

Unrealized gains on transactions between the group and its joint ventures are eliminated to the extent of the group's interest in the joint ventures. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

A list of the Group's jointly controlled entities is given in Note 26 (i).

## 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 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 recognized in the profit or loss.

When a gain or loss on a non-monetary item is recognized in other comprehensive income, any exchange component of that gain or loss is recognized in other comprehensive income. Conversely, when a gain or loss on a non-monetary item is recognized in profit and loss, any exchange component of that gain or loss is recognized 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 in 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.

## 2.6 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 recognized in profit or loss within administrative expenses.

## 2.7 Inventories

Inventories are stated at the lower of cost or net realizable 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 (zinc sulphide, concentrates and zinc silicates), direct labor, other direct costs and related production overheads (based on normal operating capacity), but excludes borrowing costs. Net realizable value is the estimate of the selling price in the ordinary course of business, less the costs of completion and selling expenses. Where net realizable value is less than cost, an allowance for the diminution in value of inventories has been provided.

Spare parts and consumables are valued at the weighted average cost basis. Allowances are made, where necessary, for obsolete, slow moving and defective inventories and are based on a review of all outstanding amounts at the year-end.

## 2.8 General Investments

Investments other than investments in subsidiaries, associates and interests in joint ventures are classified into the following four categories: (1) trading investments; (2) held-to-maturity investments; (3) available-for-sale investments; and (4) 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 that are acquired principally for the purpose of generating a profit from short-term fluctuations in price are classified as trading investments and included in current assets.
2. Investments with fixed maturity that the management has the intent and ability to hold to maturity are classified as held-to-maturity and are included in non-current assets, except for maturities within 12 months from the statement of financial position date which are classified as current assets.
3. 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.
4. Investments in non-marketable equity securities are classified as general investments.

All categories of investment are initially recognized at cost, which is equal to the fair value of consideration paid plus transaction cost. General investments are non-marketable securities and are carried at cost less impairment.

Purchases and sales of investments are recognized on the trade date, which is the date that the Group commits to purchase or sell the investments. Cost of investment includes transaction costs.

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 profit or loss.

On disposal of an investment, the difference between the net disposal proceeds and the carrying amount is charged or credited to the profit or loss.

## 2.9 Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Cost is measured by the cash or cash equivalent price of obtaining the asset and bringing it to the location and condition necessary for its intended use. In the case of self-constructed assets, the cost of construction consists of materials, direct labor and other expenses attributable to the construction which are allocated to the assets on a systematic basis. Property, plant and equipment, except land, are presented in statement of financial position at cost less accumulated depreciation.

Depreciation is calculated on the straight line basis to write off the cost or the revalued amount of each asset, except for land which is considered to have an indefinite life, to its residual value over the estimated useful life as follows:

	Years
Land improvements	5 - 20
Buildings	20 - 25
Machinery and heavy equipment	8 - 20
Equipment, furniture and fixtures	3 - 5
Vehicles	5

Mine restoration assets/residual ponds are amortized on units of production basis using the capacity volume of the residue ponds. Residual value and the estimated useful life of the assets are reviewed, and adjusted if appropriate, at the end of each reporting period.

Where the carrying amount of an asset is greater than its estimated recoverable amount, it is written down immediately to a recoverable amount.

Repairs and maintenance are charged to the profit or loss during the financial period in which they are incurred. The cost of major renovations is included in the carrying amount of the asset when it is probable that future economic benefits in excess of the originally assessed standard of performance of the existing asset will flow to the Group. Major renovations are depreciated over the remaining useful life of the related asset. Gains and losses on disposals are determined by comparing proceeds with the carrying amount of the asset and are recognized in the profit or loss.

## 2.10 Exploration and Acquisition Costs

Exploration costs are accumulated separately for each area of interest and accounted using the successful efforts basis of accounting for such costs.

Under this basis, accumulated costs of exploration are capitalized and carried forward on statement of financial position where one or both of the following conditions are met:

- costs are expected to be recouped through successful development and exploitation of each area of interest or by sale of the area of interest; and/or
- exploration activities in the area of interest have not yet reached a stage that permits a reasonable assessment of the existence of economically recoverable reserves and exploration activities are continuing in the area of interest.

Expenditures which no longer satisfy the above policy are written-off or a provision is recognized for such expenditure where management is of the opinion that the carried forward net cost may not be recoverable.

Upon commencement of development and production, these exploration costs are amortized by using the straight line basis over the period that they are expected to provide economic benefits. Mining concession fees and acquisition costs have an estimated useful life of 5 to 16 years and are amortized accordingly or over the life of the mine, whichever is shorter.



## 2.11 Environmental Rehabilitation, Environmental Risk Assurance and Restoration Expenses

Under the terms of the Group's mining and production licenses, it is required to restore mining and production areas to their original conditions. The Group has recognized environmental rehabilitation and risk assurance provisions in respect to these costs as follows:

The Group accounts for environmental restoration and rehabilitation costs by estimating the costs of decommissioning mine properties and mine restoration assets and removal of any related assets and site restoration as part of the cost of restoration assets as at the date the obligation first arises and to the extent that it is first recognized as a provision.

Deferred environmental rehabilitation expenses and environmental risk assurance costs are amortized by the straight-line method over the useful life of mining area. Mine restoration assets are subsequently amortized on a unit-of production basis. The provisions are reviewed regularly and any changes in provisions are recognized as administrative expenses.

The corresponding restoration and rehabilitation provision, of an amount equivalent to the restoration asset created, is reviewed at the end of each reporting period. The provision is measured at the best estimate of the present value amount required to settle the present obligation at the end of the reporting period based on current legal and other requirements and technology, discounted where material using the weighted average cost of capital at the statement of financial position date with terms to maturity that match, as closely as possible, the estimated future cash outflows.

Where there is a change in the expected restoration, rehabilitation or decommissioning costs, an adjustment is recorded against the carrying value of the provision and any related restoration asset, and the effects are recognized in the profit or loss on a prospective basis over the remaining life of the operation. Accretion expenses recognized due to unwinding of the effect of discounting of the restoration provision is included within administrative expenses in the statement of comprehensive income.

## 2.12 Impairment of Assets

Assets that have an infinite useful life, for example goodwill, are not subject to Amortization and are tested annually for impairment. Assets and intangible assets that have definite useful life are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the carrying amount of the assets exceeds its recoverable amount which 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 levels for which there are separately identifiable cash flows. Assets other than goodwill that suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

## 2.13 Current and Deferred Income Taxes

The tax expense for the year comprises current and deferred tax. Tax is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case the tax is also recognized 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 its 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 recognized, using the liability method, on temporary differences arising from differences between the tax base of assets and liabilities and their carrying amounts in the financial statements.

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 nor loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realized or the deferred income tax liability is settled.

Deferred income tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilized. Deferred income tax is provided on temporary differences arising from investments in subsidiaries and associates, 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.

## 2.14 Employee Benefits

### Retirement benefits

Group companies operate various retirement benefits schemes. The Group has both defined benefit and defined contribution plans.

A defined contribution plan is a retirement 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. 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 recognized as employee benefit expense when they are due. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available.

A defined benefit plan is a retirement plan that is not a defined contribution plan. Typically defined benefit plans define an amount of retirement benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation.

The liability recognized in the statement of financial position in respect of defined benefit retirement plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually 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 high-quality corporate bonds/market yield of government bonds] that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related retirement liability.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise.

Past-service costs are recognized immediately in profit or loss.

#### Termination benefits

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group recognizes termination benefits when it is demonstrably committed to either: terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal; or providing termination benefits as a result of an offer made to encourage voluntary redundancy. Benefits falling due more than 12 months after the end of the reporting period are discounted to their present value.

## 2.15 Provisions

Provisions, excluding the provisions for employee benefits, are recognized 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, for example under an insurance contract, the reimbursement is recognized as a separate asset but only when the reimbursement is virtually certain.

## 2.16 Revenue Recognition

Revenue comprises the fair value of the consideration received or receivable for the sale of goods net of output tax, rebates and discounts, and after eliminating sales within the Group for the consolidated financial statements. Revenue from sales of goods is recognized when significant risks and rewards of ownership of

the goods are transferred to the buyer which is at the time when the goods are delivered to the customer or as contractually agreed.

Interest income is recognized on a time proportion basis, taking into account the outstanding principal and the effective rate over the period to maturity, when it is determined that such income will accrue to the Group.

Dividends are recognized when the right to receive payment is established.

## 2.17 Dividend Distribution

Dividends are recorded in the consolidated and company's financial statements in the period in which they are approved by the shareholders.

## 2.18 Financial Instruments

Financial assets and liabilities carried on the statement of financial position include cash and cash equivalents, trade accounts receivable, related parties receivables and payables, bank overdraft, trade accounts payable, accrued expenses and loans.

The Group enters into derivative financial instruments that reduce its exposure to fluctuations in foreign currency exchange rates. The derivative instruments comprise forward foreign exchange contracts, protecting the Group from movements of foreign currency exchange rates.

Financial instrument contracts relating to foreign currency transactions are not recognized on the statement of financial position at inception. Gains and losses occurring on these contracts are only recognized upon settlement of the contracts.

The Group also enters into forward derivative contracts to protect itself from movements in the zinc metal price changes related to production, and contracted purchases of concentrate and metal and sales of finished products. Those instruments comprise forward contracts for the sale and purchase of zinc metal. Such derivatives are not recognized on statement of financial position at inception, since they relate to future transactions (or underlying) which are not yet reflected in the financial statements. Gains and losses on those derivative contracts are recognized in the financial statements upon settlement of the transactions; their valuation at period end is nevertheless mentioned in Note 19.

## 2.19 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 Management Committee that makes strategic decisions. The Group has only one operating segment, being zinc metal, sold as ingots and alloys.



Segment information is presented in respect of the Group's business segments which are based on the Group's management and internal reporting structure (See more information in Note 5).

### 3 Critical Accounting Estimates, Assumptions and Judgements

Accounting estimates, assumptions, and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

#### 3.1 Environmental Restoration and Rehabilitation Costs and Environmental Risk Assurance Costs

Deferred environmental restoration and rehabilitation expenses and provision for environmental restoration and rehabilitation expenses are recognized in the statement of financial position using the present value of the management's best estimation of future cash flows to be required to settle the expenditures for rehabilitation activities.

Deferred environmental risk assurance expenses and provision for environmental risk assurance expenses are recognized in the statement of financial position using the present value of the installments plan.

Significant judgment is required in determining the environmental restoration and rehabilitation expenses as there are many transactions and factors that will affect the ultimate liability payable to rehabilitate the mine site. Factors that will affect this liability includes future development, changes in technology, commodity price changes and changes in interest rates.

#### 3.2 Property, Plant and Equipment

Management determines the carrying value of property, plant, and equipment and intangible assets based on estimates, assumptions, and judgments in respect of remaining useful lives and residual values of these assets. These estimates, assumptions, and judgments reflect both historical experience and expectations regarding future operations, utilization and performance.

#### 3.3 Impairment

Assets with a definite useful life are reviewed for impairment losses whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Factors taken into consideration in reaching such a decision include the economic viability of the asset itself and, where it is a component of a larger economic unit, the viability of that unit itself. Future cash flows expected to be generated by the assets are projected, taking into account market conditions and the expected useful lives of the assets and using an appropriate discount rate.



#### Impairment of exploration and acquisition cost

The recoverability of exploration and acquisition expenditure is assessed at the end of each reporting period. Significant judgment is required as to whether an area of activity is to be carried forward on the statement of financial position, or written off through the identification of area of activity which are not yet reached a stage the permits a reasonable assessment of the existence of economically recoverable reserve, where there is no continuing significant activity plan in the relation to the area.

### **3.4 Income Tax**

The Group is subject to income taxes in Thailand and the jurisdictions where it has foreign operations. Significant judgment is requirement in determining the provision for income taxes. There are certain transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business. Where the final tax outcome is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the year in which such determination is made.

Management has to exercise judgement with regards to deferred tax assets. Where the possibility exists that no future taxable income may flow against which these assets can be offset, the deferred tax assets are not recognized.

Deferred tax assets and liabilities are measures at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled. When the different tax rates apply, deferred tax assets and liabilities are measured using the tax rates that are expected to apply to the taxable profit or loss if the periods in which the temporary differences are expected to reserve.

## **4 Capital Risk Management**

The Group's objectives when managing capital 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.



## 5 Segment Information

The Group produces a single product in Thailand for both domestic and export markets, using the same assets. The Group's operations relate primarily to the production and sale of one principle product, zinc products. The following is information relating to this operating segment:

For the years ended December 31

	2015 in million Baht	2014 in million Baht
Revenue domestic		
- zinc ingot	2,214	2,532
- zinc alloy	2,161	2,284
- others	139	144
Revenue export		
- zinc ingot	7	12
- zinc alloy	292	605
- others	55	16
Total sales and services	4,868	5,593
Operating profit	634	514
Net profit for the year	376	457

All assets relating to the production of zinc products are at the Company's facilities in Tak Province and Rayong Province. Total assets are as disclosed in Note 10.

## 6 Cash and Cash Equivalents

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
Cash on hand	402,132	481,749	350,000	350,000
Deposits held at call with banks	815,542,636	472,822,410	604,838,825	299,151,852
Bill of exchange	-	441,623,726	-	441,623,726
Cash and cash equivalents	815,944,768	914,927,885	605,188,825	741,125,578

Average interest rates on deposits and bill of exchange are in the range of 0.45% - 1.00% per annum (2014: 0.10% - 3.10% per annum).

## 7 Investments

### Short-term investments

Short-term investments represented the deposit in a private fund which invest in trading of debt and equity securities. In 2014, the Company invested in fixed deposits at banks that have maturity date ranging from 4-7 months.

### General investments

The Company also has general investments which are invested in third parties in the amount of Baht 14.40 million that have been fully written down in value.

## 8 Trade Accounts Receivable - Other Parties

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
Trade accounts receivable	283,520,393	286,769,252	272,353,280	286,059,008
<u>Less</u> +Allowance for doubtful accounts	-	-	-	-
Trade accounts receivable, net	283,520,393	286,769,252	272,353,280	286,059,008

Outstanding trade accounts receivable as at December 31, 2015 and 2014 can be analyzed as follows:

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
Up to 3 months	283,520,393	286,769,252	272,353,280	286,059,008
<u>Less</u> Allowance for doubtful accounts	-	-	-	-
Trade accounts receivable, net	283,520,393	286,769,252	272,353,280	286,059,008

## 9 Inventories

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
Raw materials	561,000,189	448,226,396	561,000,189	448,226,396
Spare parts and consumables	112,026,313	116,548,665	112,026,313	116,548,665
Goods in transit	77,630	8,689,196	77,630	8,689,196
Work in process	998,927,622	760,400,404	998,927,622	760,400,404
Finished goods	739,989,148	409,771,274	739,989,148	409,771,274
	2,412,020,902	1,743,635,935	2,412,020,902	1,743,635,935
<u>Less</u> Allowance for slow moving and obsolete inventories	(12,029,545)	(9,446,781)	(12,029,545)	(9,446,781)
Inventories, net	2,399,991,357	1,734,189,154	2,399,991,357	1,734,189,154

The cost of inventories recognized as expense and included in 'cost of sales' amounted to Baht 4,045 million (2014: Baht 4,735 million) in the consolidated and company financial statement. Inventories are presented net of allowance for net realizable value.

## 10 Property, Plant and Equipment

Consolidated									
	Land and land improvements	Buildings	Machinery and heavy equipment	Equipment, furniture and fixtures	Vehicles	Building and machinery under constructions	Mine restoration assets	Total	
	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	
<b>At January 1, 2014</b>									
Cost	835,423,740	1,662,568,134	5,561,217,320	487,646,691	230,253,002	95,282,256	93,199,807	8,965,590,950	
Less Accumulated depreciation	(382,236,714)	(1,454,747,314)	(4,757,195,857)	(445,526,179)	(195,388,830)	-	(9,416,108)	(7,244,511,002)	
Accumulated provision for impairment	(3,308,745)	(6,306,792)	(165,076,213)	(7,701,737)	(5,594,168)	-	-	(187,987,665)	
Net book value	449,878,281	201,514,028	638,945,250	34,418,775	29,270,004	95,282,256	83,783,699	1,533,092,293	
<b>Year ended December 31, 2014</b>									
Opening balance	449,878,281	201,514,028	638,945,250	34,418,775	29,270,004	95,282,256	83,783,699	1,533,092,293	
Additions	-	-	-	2,414,381	-	113,805,553	164,097,698	280,317,632	
Transfers	17,783,150	14,296,586	150,134,447	6,399,914	1,619,907	(190,234,004)	-	-	
Disposals	-	-	(992,442)	(78,673)	-	-	(101,573,975)	(102,645,090)	
Reversal/(Provision) for impairment	-	-	401,775	1,666,629	-	-	(49,468,167)	(47,399,763)	
Depreciation expense	(35,032,694)	(63,647,548)	(173,512,573)	(8,145,074)	(11,304,408)	-	(13,236,563)	(304,878,860)	
Closing net book value	432,628,737	152,163,066	614,976,457	36,675,952	19,585,503	18,853,805	83,602,692	1,358,486,212	
<b>At December 31, 2014</b>									
Cost	853,206,891	1,676,864,720	5,710,359,324	496,382,313	231,372,909	18,853,805	155,723,530	9,143,263,492	
Less Accumulated depreciation	(417,269,409)	(1,518,394,862)	(4,930,708,430)	(453,671,252)	(206,693,238)	-	(22,662,671)	(7,549,389,862)	
Accumulated provision for impairment	(3,308,745)	(6,306,792)	(164,674,437)	(6,035,109)	(5,594,168)	-	(49,468,167)	(235,387,418)	
Net book value	432,628,737	152,163,066	614,976,457	36,675,952	19,585,503	18,853,805	83,602,692	1,358,486,212	

### Year ended December 31, 2015

Opening balance  
 Additions  
 Transfers  
 Disposals  
 Reversal/(Provision) for impairment  
 Depreciation expense

Closing net book value

### At December 31, 2015

Cost  
 Less Accumulated depreciation  
 Accumulated provision for impairment

Net book value

	Consolidated						
	Land and land improvements	Buildings	Machinery and heavy equipment	Equipment, furniture and fixtures	Vehicles	Building and machinery under constructions	Mine restoration assets
	Baht	Baht	Baht	Baht	Baht	Baht	Total Baht
Opening balance	432,628,737	152,163,066	614,976,457	36,675,952	19,585,503	18,853,805	1,358,486,212
Additions	-	-	-	578,256	-	88,405,147	102,167,334
Transfers	226,251	89,350	83,247,799	12,137,888	3,548,706	(99,249,994)	-
Disposals	(1,456,939)	(1,250,420)	(6,410)	(234,152)	(552,844)	-	(3,500,765)
Reversal/(Provision) for impairment	(1,078,942)	(26,780,001)	(35,330,257)	(42,601)	840,218	-	(62,306,381)
Depreciation expense	(73,438,498)	(44,536,990)	(237,015,402)	(8,692,314)	(10,209,458)	-	(443,085,972)
Closing net book value	356,880,609	79,685,005	425,872,187	40,508,231	13,212,125	8,008,958	951,760,428
Cost	851,976,203	1,675,703,650	5,793,600,713	508,864,305	234,868,771	8,008,958	9,241,930,061
Less Accumulated depreciation	(490,707,907)	(1,562,931,852)	(5,167,723,832)	(462,363,566)	(216,902,696)	-	(7,992,475,834)
Accumulated provision for impairment	(4,387,687)	(33,086,793)	(200,004,694)	(5,992,508)	(4,753,950)	-	(297,693,799)
Net book value	356,880,609	79,685,005	425,872,187	40,508,231	13,212,125	8,008,958	951,760,428



Company														
Land and land improvements	Buildings			Machinery and heavy equipment		Equipment, furniture and fixtures		Vehicles		Building and machinery under constructions		Mine restoration assets		Total Baht
	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	
838,933,680 (382,236,714) (3,308,745)	1,662,568,134 (1,454,747,314) (6,306,792)	5,560,907,614 (4,757,080,204) (165,076,213)	481,880,986 (441,352,127) (7,701,737)	230,233,002 (195,369,325) (5,594,168)	95,282,257 - -	93,199,807 (9,416,108) -								8,963,005,480 (7,240,201,792) (187,987,655)
453,388,221	201,514,028	638,751,197	32,827,122	29,269,509	95,282,257	83,783,699								1,534,816,033
453,388,221	201,514,028	638,751,197	32,827,122	29,269,509	95,282,257	83,783,699								1,534,816,033
-	-	-	2,404,446	-	113,805,553	164,097,698								280,307,697
17,783,150	14,296,586	150,134,447 (401,784)	6,399,914 (6,324)	1,619,907	(190,234,004)	-								-
-	-	401,775	1,666,629	-	-	(101,573,975)								(101,982,083)
-	-	401,775	1,666,629	-	-	(49,468,167)								(47,399,763)
(35,032,694)	(63,647,548)	(173,450,632)	(7,754,005)	(11,304,408)	-	(13,236,563)								(304,425,850)
436,138,677	152,163,066	615,435,003	35,537,782	19,585,008	18,853,806	83,602,692								1,361,316,034
851,627,285 (412,179,863) (3,308,745)	1,676,864,720 (1,518,394,862) (6,306,792)	5,700,822,082 (4,920,712,641) (164,674,438)	489,525,632 (447,952,742) (6,035,108)	231,852,909 (206,673,733) (5,594,168)	18,853,806 - -	155,723,530 (22,652,671) (49,468,167)								9,125,269,964 (7,528,566,512) (235,387,418)
436,138,677	152,163,066	615,435,003	35,537,782	19,585,008	18,853,806	83,602,692								1,361,316,034

**At January 1, 2014**

Cost  
Less Accumulated depreciation  
Accumulated provision for impairment

Net book value

**Year ended December 31, 2014**

Opening balance  
Additions  
Transfers  
Disposals  
Reversal/(Provision) for impairment  
Depreciation expense

Closing net book value

**At December 31, 2014**

Cost  
Less Accumulated depreciation  
Accumulated provision for impairment

Net book value

	Company							
	Land and land improvements	Buildings	Machinery and heavy equipment	Equipment, furniture and fixtures	Vehicles	Building and machinery under constructions	Mine restoration assets	Total
	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht
Year ended December 31, 2015								
Opening balance	436,138,677	152,163,066	615,435,003	35,537,782	19,585,008	18,853,806	83,602,692	1,361,316,034
Additions	-	-	-	550,656	-	88,405,146	13,183,931	102,139,733
Transfers	226,251	89,350	83,247,799	12,137,888	3,548,706	(99,249,994)	-	-
Disposals	(1,456,939)	(1,250,420)	(6,410)	(4)	(552,844)	-	-	(3,266,617)
Reversal/(Provision) for impairment	(1,078,942)	(26,780,001)	(35,330,257)	42,602	840,217	-	-	(62,306,381)
Depreciation expense	(73,438,498)	(44,536,990)	(236,953,461)	(8,659,836)	(10,209,458)	-	(69,193,310)	(442,991,553)
Closing net book amount	360,390,549	79,685,005	426,392,674	39,609,088	13,211,629	8,008,958	27,593,313	954,891,216
At December 31, 2015								
Cost	824,102,658	1,674,929,070	5,783,467,218	499,194,923	227,361,415	8,008,958	168,907,461	9,185,971,703
Less Accumulated depreciation	(459,324,422)	(1,562,157,272)	(5,157,069,849)	(453,593,329)	(209,395,835)	-	(91,845,981)	(7,933,386,688)
Accumulated provision for impairment	(4,387,687)	(33,086,793)	(200,004,695)	(5,992,506)	(4,753,951)	-	(49,468,167)	(297,693,799)
Net book value	360,390,549	79,685,005	426,392,674	39,609,088	13,211,629	8,008,958	27,593,313	954,891,216

## Provision for asset impairment

Asset impairment charges represent a write-down in the book value of assets which exceed their estimated recoverable amount based on a review of each asset's fair value less costs to sell and value in use.

Changes in impairment provision movement are shown as follows:

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
At January 1	235,387,418	187,987,655	235,387,418	187,987,655
Addition	62,306,381	47,399,763	62,306,381	47,399,763
At December 31	297,693,799	235,387,418	297,693,799	235,387,418

## II Exploration and Acquisition Costs

Exploration and acquisition costs as at December 31 comprise:

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
<u>Exploration costs</u>				
Exploration costs	1,106,221,441	1,110,587,816	80,294,112	84,660,487
Written-off exploration costs	(4,254,804)	(4,366,375)	(4,254,804)	(4,366,375)
Transfer out provision for impairment of exploration costs	(926,283,470)	-	-	-
<u>Less Provisions for impairment of exploration costs</u>	(175,683,167)	(1,101,966,637)	(76,039,308)	(76,039,308)
At December 31	-	4,254,804	-	4,254,804
<u>Acquisition costs</u>				
Land use compensation-net	4,022,177	8,044,397	4,022,177	8,044,397
Other capitalized expenditure-net	3,932,656	7,230,736	3,932,656	7,230,736
At December 31	7,954,833	15,275,133	7,954,833	15,275,133
Total	7,954,833	19,529,937	7,954,833	19,529,937

### Exploration Costs

Exploration costs consist previously those incurred by the Company and its subsidiaries, Puthep Co., Ltd. ("Puthep") and Padaeng Industry (Laos) Co., Ltd. ("Padaeng Industry (Laos)"). In accordance with the Group's accounting policy for exploration, these costs will remain capitalized until final determination of whether economically recoverable resource exists. The remaining balance of exploration cost are related to mining license no.5 which will be expired within 2016.

#### Puthep Co., Ltd.

The capitalized exploration and acquisition costs of the Copper Project incurred by Puthep amount to Baht 926.3 million. The Project is located in the Loei province, in North Eastern Thailand. Although the Project viability is confirmed, the obtaining mining operation permits remains a major hurdle and there is no interest in the project shown from the selling process. Consequently, Puthep has decided to cease any further activities and has requested to relinquish the Mining Lease Application ("MLA") to the Department of Primary Industries and Mines ("DPIM") according to the resolution of Puthep Board of Directors meeting on April 23, 2015. The authorities have officially accepted and confirmed effectiveness of the MLA relinquishing on May 8, 2015, which resulted in accordance with Revenue Code write off of the capitalized exploration and acquisition costs of Baht 926.3 million. As at December 31, 2015, Puthep is in the process of liquidation as disclosed in Note 26 (i).

#### Padaeng Industry (Laos) Co., Ltd.

In October 2006, the Company through its subsidiary Padaeng Industry (Laos) signed a 5-year exploration agreement with the Department of Mines and Geology of Lao PDR which expired on October 27, 2011 and has been extended to January 4, 2015, for the purposes of exploring and producing resources containing Zinc. As at December 31, 2015, the total amount of exploration costs capitalized amounted to Baht 106.8 million. The Company's management concluded that significant expenditures and alternative expensive drilling methods currently not used by the company would be required to strengthen the assessment of the project's commercial viability. Consequently, the company has ceased all exploration activities and has recognized a provision for impairment with respect to the exploration costs capitalized. The Company have concluded its negotiation with potential buyers and sales process expects to be completed within 2016.

## 12 Deferred Income Taxes

The analysis of deferred tax assets and deferred tax liabilities is as follows:

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
<b>Deferred Tax Assets:</b>				
Deferred tax assets to be recovered within 12 months	-	130,010,355	-	15,413,749
	-	130,010,355	-	15,413,749
<b>Deferred Tax Liabilities:</b>				
Deferred tax liabilities to be recovered after 12 months	(218,234)	(218,234)	(218,234)	(218,234)
	(218,234)	(218,234)	(218,234)	(218,234)

The gross movement and the deferred income tax account are as follows:

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
At January 1	(129,792,121)	(114,596,606)	(15,195,515)	-
Charged/(credited) to profit or loss	129,792,121	(15,195,515)	15,195,515	(15,195,515)
At December 31	-	(129,792,121)	-	(15,195,515)

	Consolidation				Company		
	Deferred tax assets		Deferred tax liabilities	Total	Deferred tax assets	Deferred tax liabilities	Total
	Exploration cost Baht	Other Baht	Other Baht	Baht	Other Baht	Other Baht	Baht
At January 1, 2015	(114,596,606)	(15,413,749)	218,234	(129,792,121)	(15,413,749)	218,234	(15,195,515)
Charged to profit or loss	114,596,606	15,413,749	-	130,010,355	15,413,749	-	15,413,749
At December 31, 2015	-	-	218,234	218,234	-	218,234	218,234
At January 1, 2014	(114,596,606)	-	-	(114,596,606)	-	-	-
(Credited)/charged to profit or loss	-	(15,413,749)	218,234	(15,195,515)	(15,413,749)	218,234	(15,195,515)
At December 31, 2014	(114,596,606)	(15,413,749)	218,234	(129,792,121)	(15,413,749)	218,234	(15,195,515)

Deferred income tax assets are recognized for tax loss and carry forwards only to the extent that realisation of the related tax benefit through the future taxable profits is probable. The Company has no any unrecognized tax losses to carry forward against future taxable income.

### 13 Other Non-Current Assets

Other non-current assets as at December 31, 2015 and 2014 comprise:

#### i) Deferred Environmental Rehabilitation Expenses - Net

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
At 1 January	48,339,825	21,189,606	48,339,825	21,189,606
Additions	24,729,318	45,010,647	24,729,318	45,010,647
Closing book amount	73,069,143	66,200,253	73,069,143	66,200,253
<u>Less Amortization expense</u>	(52,433,190)	(17,860,428)	(52,433,190)	(17,860,428)
At 31 December	20,635,953	48,339,825	20,635,953	48,339,825

Deferred environmental rehabilitation expense represents the estimated costs incurred to restore mine sites to their original condition.

#### ii) Deferred Environmental Risk Assurance Expenses - Net

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
At 1 January	8,622,852	13,045,286	8,622,852	13,045,286
<u>Less Amortization expense</u>	(4,436,408)	(4,422,434)	(4,436,408)	(4,422,434)
At 31 December	4,186,444	8,622,852	4,186,444	8,622,852

Deferred risk assurance costs related to payments to be made to the local communities in which the Group operates for future environmental rehabilitation activities and are amortized over the life of the related mining licenses which will be expired in the first half of 2017.

#### iii) Others

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
Deposits and installment payments for condominium units	74,932,723	74,932,723	-	-
<u>Less Allowance for doubtful accounts</u>	(74,932,723)	(74,932,723)	-	-
	-	-	-	-



Capitalized software				
At January 1	280,318	772,029	280,316	746,842
Additions	56,300	167,000	56,300	167,000
<u>Less</u> Amortization expense	(236,220)	(658,711)	(236,218)	(633,526)
	100,398	280,318	100,398	280,316
Others	13,772,040	10,489,544	5,127,039	1,782,544
At December 31	13,872,438	10,769,862	5,227,437	2,062,860

A subsidiary has provided an allowance of Baht 74.9 million against deposits and installment payments for certain condominium units whose construction was suspended due to unfavorable economic conditions.

## 14 Short-Term Loans from Financial Institutions

Short-term loans from financial institutions as at 31 December 2015 and 2014 comprise:

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
Trust Receipts	233,194,978	503,481,882	233,194,978	503,481,882

The Company has entered into short-term financing arrangements to fund its operations with various financial institutions. The interest rates, the Company is paying on the trust receipts is 1.10% per annum.

### Financing Arrangements Available

	Consolidated		Company	
	2015 in million Baht	2014 in million Baht	2015 in million Baht	2014 in million Baht
Bank Overdraft	60	60	60	60
Short-term Loans	1,725	2,112	1,725	2,112
Bank Guarantee	1,079	1,277	1,076	1,274
Total	2,864	3,449	2,861	3,446

## 15 Bank Guarantees

As at December 31, 2015, the Company and subsidiaries have given letters of guarantee in the ordinary course of business issued by banks of approximately Baht 398.43 million (2014: Baht 425.59 million).

## 16 Provisions for Restoration and Rehabilitation Expenses

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
At January 1	390,327,856	181,211,191	390,327,856	181,211,191
Accretion expense	85,014,025	226,403,871	85,014,025	226,403,871
Amounts utilized	(47,284,509)	(17,287,206)	(47,284,509)	(17,287,206)
At December 31	428,057,372	390,327,856	428,057,372	390,327,856

The provision for restoration and rehabilitation costs represents amounts provided for 1) the estimated costs of restoration of cadmium and residue ponds at Tak and 2) rehabilitation and environmental risk assurance of the mined area in the Mae Sod in accordance with the government regulations and the Company's commitments. The estimated costs of decommissioning mine properties and residual ponds including removing any related assets and site restoration are included in the cost of restoration and rehabilitation assets as at the date the obligation first arises in conjunction with a related liability recognized in the same amount. This restoration asset is subsequently amortized on a unit-of-production basis. For environmental rehabilitation and environmental risk assurance assets, they are subsequently amortized on a straight-line basis. Accretion expense is recognized to reflect the change in present value of the liability initially recognized using the Company's end of period Weighted Average Cost of Capital ("WACC").

## 17 Employee Benefit Obligations

The amounts recognized in the statements of financial position are determined as follows:

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
At January 1	119,912,183	105,502,928	119,888,183	103,124,126
Current service cost	42,875,296	6,940,914	42,875,296	6,702,480
Interest cost	34,228,917	5,153,563	34,228,917	5,153,563
Benefits paid	(7,287,140)	(4,683,266)	(7,263,140)	(2,090,030)
Actuarial loss	30,676,174	6,998,044	30,676,174	6,998,044
At December 31	220,405,430	119,912,183	220,405,430	119,888,183

The amounts recognized in the statements of comprehensive income are as follows:

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
Current service cost	42,875,296	6,940,914	42,875,296	6,702,480
Interest cost	34,228,917	5,153,563	34,228,917	5,153,563
Actuarial loss	30,676,174	6,998,044	30,676,174	6,998,044
Total	107,780,387	19,092,521	107,780,387	18,854,087

The principal actuarial assumptions used were as follows:

	Consolidated		Company	
	2015 Percent	2014 Percent	2015 Percent	2014 Percent
Discount rate	2.59	4.01	2.59	4.01
Salary increase rate	5.00	5.40	5.00	5.40
Turnover rate	0 - 15	0 - 15	0 - 15	0 - 15

The Company recognizes the costs of employee retirement benefits payable in accordance with Thai Labor Law. The amount of retirement benefits are recorded based on the projected unit credit method by an actuarial valuation completed using end of period employee wages, turnover rates, retirement ages, mortality, length of service and other factors. All actuarial gains and losses following changes in actuarial assumptions of post employment defined benefit plans are recognized through equity in the year of occurrence.

	Impact on defined benefit obligation		
	Change in assumption	Increase in assumption	Decrease in assumption
Discount rate	0.5%	Decrease by 3%	Increase by 3%
Salary growth rate	0.5%	Increase by 3%	Decrease by 3%

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 recognized within the statement of financial position.

## 18 Other Current Liabilities

Other current liabilities as of December 31 comprise:

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
Accrued expenses	71,856,347	67,693,759	71,674,042	66,017,818
Social security and other taxes	7,942,837	7,171,842	7,851,950	7,118,340
Others	86,960,358	79,715,353	83,066,376	77,106,476
Total	166,759,542	154,580,954	162,592,368	150,242,634

## 19 Commitments

19.1) As at December 31, 2015 and 2014, the Company has the following commitments for the acquisition of plant and equipment that have been contracted but not recorded as liabilities:

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
Not later than 1 year	14,792,238	17,152,982	14,792,238	17,152,982

As at December 31, 2015 and 2014, the Company has the following commitments for the purchase of raw materials that have been contracted but not recorded as liabilities:

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
Not later than 1 year	218,679,434	369,245,263	218,679,434	369,245,263

In addition, as at December 31, 2015, the Company has contracted for the purchase of raw materials that contained zinc units of approximately 532 tons (December 31, 2014: 152 tons).

19.2) As at December 31, 2015, the balance of forward foreign exchange contracts outstanding were total sales contracts of USD 7,406,321 and total purchase contracts of USD 11,200,870. The changes in fair value of outstanding are Baht 14,890,669 unfavorable and unrealized.

As at December 31, 2015, total sales contracts of 5,800 metric tons of zinc and total purchase contracts of 8,000 metric tons of zinc on the London Metal Exchange are outstanding for both transactional hedges and strategic hedges. The change in fair value of these open positions amount to USD 1,994,154 or Baht 71,943,107 and favorable. These fair values reflect the mark to market values of the contracts at the prevailing period end rates for similar contracts. These positions will be offset by committed and priced physical purchases and sales contracts. The operations carried out on the future markets for hedging transactional risks as described are not of a speculative nature.

Fair values of financial derivative instruments as at the date of financial position are as follows:

	Consolidated and Company	
	2015 Baht	2014 Baht
<b>Financial instruments of foreign currency exchange rate</b>		
(Unfavorable) total sales contracts	(16,828,919)	(774,524)
Favorable total buy contracts	1,938,251	1,282,084
<b>Financial instruments of commodity products</b>		
Favorable total zinc contracts	71,943,107	2,102,114

## 20 Share Capital and Premium on Share Capital

	Number of shares	Ordinary shares Baht	Shares premium Baht	Total Baht
<b>For the year ended December 31, 2015</b>				
At January 1	226,000,000	2,260,000,000	602,413,600	2,862,413,600
Movement during the year	-	-	-	-
At December 31	226,000,000	2,260,000,000	602,413,600	2,862,413,600

As at December 31, 2015, the total authorized number of ordinary shares is 226,000,000 shares (2014: 226,000,000 shares) with a par value of Baht 10 per share (2014: Baht 10 per share). All issued shares are fully paid.

## 21 Legal Reserve

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
At January 1	226,000,000	226,000,000	226,000,000	226,000,000
Appropriation during the year	-	-	-	-
At December 31	226,000,000	226,000,000	226,000,000	226,000,000

Under the Public Companies Act, B.E. 2535, the company is required to set aside as a legal reserve at least 5% of its net profit after accumulated deficit brought forward (if any) until the reserve reaches 10% of the registered capital.

## 22 Expenses by Nature

The following expenditures items, classified by nature, have been charged in arriving at the operating profit:

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
Movement in inventories	(604,083,834)	(102,706,607)	(604,083,834)	(102,706,607)
Raw materials, spare parts and consumables used	2,460,013,671	2,489,822,458	2,460,013,671	2,489,822,458
Employee benefits expense	722,588,654	518,457,601	722,079,888	513,516,732
Utility expenses	1,043,920,885	1,069,817,939	1,037,626,771	1,069,404,725
Depreciation and Amortization expenses	499,751,888	330,783,416	499,657,470	330,305,222
Exploration costs written-down (Note 11)	4,254,804	4,366,375	4,254,804	4,366,375
Fixed assets and decommissioning costs written off	20,615,905	102,236,982	20,381,755	101,573,975



## 23 Income Tax Expense

	Consolidated		Company	
	2015	2014	2015	2014
	Baht	Baht	Baht	Baht
Current tax:				
Current tax on profits for the year	112,315,096	181,601,886	111,713,988	66,586,732
Adjustment in respect of prior years	(533,248)	-	(533,248)	-
<b>Total Current tax</b>	<b>111,781,848</b>	<b>181,601,886</b>	<b>111,180,740</b>	<b>66,586,732</b>
Deferred tax:				
Origination and reversal of temporary differences	130,010,355	(129,792,121)	15,413,749	(15,195,515)
<b>Total Deferred Tax</b>	<b>130,010,355</b>	<b>(129,792,121)</b>	<b>15,413,749</b>	<b>(15,195,515)</b>
<b>Total Tax Expense</b>	<b>241,792,203</b>	<b>51,809,765</b>	<b>126,594,489</b>	<b>51,391,217</b>

The tax on the Group's profit before tax differs from the theoretical amount that would arise using the basic tax rate of the country of the company as follows:

	Consolidated		Company	
	2015	2014	2015	2014
	Baht	Baht	Baht	Baht
Profit before corporate income tax	617,811,910	508,340,664	62,414,710	515,273,644
Tax calculated at a tax rate of 20% (2014: -20%)	123,562,382	101,668,133	12,482,942	103,054,729
Tax effect of:				
Income not subject to tax	(2,085,475)	-	-	-
Expenses not deductible for tax purpose	3,302,449	26,526,612	3,302,449	26,508,331
Deferred tax assets recognized	130,010,355	(15,195,515)	15,413,749	(15,195,515)
Deferred tax assets unrecognized	95,855,614	(8,053,916)	95,928,597	(8,053,916)
Utilization of previously unrecognized tax losses	-	(54,922,412)	-	(54,922,412)
Tax losses for which no deferred income tax asset was recognized	(108,319,873)	1,786,863	-	-
Adjustment in respect of prior years	(533,248)	-	(533,248)	-
<b>Total Tax Expense</b>	<b>241,792,203</b>	<b>51,809,765</b>	<b>126,594,489</b>	<b>51,391,217</b>

The weighted average applicable tax rate was 39.14% (2014: 10.19%).



## 24 Dividend

At the Ordinary Shareholders' Meeting held on April 27, 2015, shareholders approved the annual dividend payment from retained earnings of the Company of Baht 0.40 per share totaling Baht 90.40 million (2014: totaling Baht 67.80 million, 0.30 per share). The dividend was paid on May 22, 2015.

## 25 Basic Earnings (Loss) per Share

Basic earnings (loss) per share is calculated by dividing the net gain (loss) attributable to shareholders by the weighted average number of ordinary shares in issue during the year.

	Consolidated		Company	
	2015	2014	2015	2014
Net gain (loss) attributable to ordinary shareholders (Baht)	150,760,535	461,127,054	(64,179,779)	463,882,427
Weighted average number of ordinary shares outstanding (shares)	226,000,000	226,000,000	226,000,000	226,000,000
Basic earnings (loss) per share (Baht)	0.67	2.04	(0.28)	2.05

There are no potential dilutive ordinary shares in issue for the years ended December 31, 2015 and 2014.

## 26 Related Parties Transactions

### i) Investments in Related Parties

Details of investments in subsidiaries and jointly controlled entity are as follows:

	December 31, 2015					December 31, 2014				
	Consolidated		Company			Consolidated		Company		
	Equity		Paid-up capital	% ownership	Cost	Equity		Paid-up capital	% ownership	Cost
	Baht		Baht	Investment	Baht	Baht		Baht	Investment	Baht
<b>Subsidiaries</b>										
Padaeng Properties Co., Ltd.	-		80,000,000	100	80,000,000	-		80,000,000	100	80,000,000
Puthep Co., Ltd.	-		-	-	-	-		285,589,732	51	145,650,763
Padaeng Industry (Laos) Co., Ltd.	-		151,302,520	100	151,302,520	-		151,302,520	100	151,302,520
PDI Eco Co., Ltd.	-		12,499,925	100	12,499,925	-		12,499,925	100	12,499,925
PDI Energy Co., Ltd.	-		100,050,000	100	100,050,000	-		25,050,000	100	25,050,000
Ton Sangkasi Pte Ltd.	-		246,700	100	246,700	-		246,700	100	246,700
Total	-				344,099,145	-				414,749,908
Less: Diminution										
Puthep Co., Ltd.	-				-	-				(145,650,763)
Padaeng Industry (Laos) Co., Ltd.	-				(151,302,520)	-				(151,302,520)
Ton Sangkasi Pte Ltd.	-				(246,700)	-				(246,700)
Investments in subsidiaries-net	-				192,549,925	-				117,549,925
<b>Jointly controlled entities</b>										
Maesod Clean Energy Co., Ltd.	48,965,194		675,000,000	35	236,249,800	56,887,175		675,000,000	35	236,249,800
PDI-CRT Co., Ltd.	17,695,118		43,480,000	51	-	-		-	-	-
Investments in jointly controlled entities-net	66,660,312				236,249,800	56,887,175				236,249,800

Subsidiary Undertakings	% Ownership	Principal Activities	Country of Incorporation
PDI Properties Co., Ltd.	100	Providing property services	Thailand
Padaeng Industry (Laos) Co., Ltd.	100	Dormant	Laos
PDI Energy Co., Ltd.	100	Expand and diversify into renewable energy business	Thailand
PDI Material Co., Ltd.*	100	Trading of various base metals and their by-products	Thailand
Ton Sangkasi Pte Ltd.	100	Dormant	Singapore
PDI Eco Co., Ltd.	100	Renewable energy from waste	Thailand
PDI Tak Solar One Co., Ltd.*	100	Solar energy business	Thailand
PDI Tak Solar Two Co., Ltd.*	100	Solar energy business	Thailand
PDI Tak Eco Co., Ltd.*	100	Solar energy business	Thailand
PDI Surat Biomass Co., Ltd.*	100	Biomass energy business	Thailand

Jointly Controlled Undertakings	% Ownership	Principal Activities	Country of Incorporation
Maesod Clean Energy Co., Ltd.	35	Production and sales of ethanol and electricity	Thailand
PDI-CRT Co., Ltd.*	51	Explore opportunity in waste management	Thailand

\* Indirectly owned by the Company

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
At January 1	56,887,175	55,790,538	353,799,725	316,249,800
Investment in subsidiaries	-	-	75,000,000	161,289,332
Investment in jointly controlled entity	18,000,000	-	-	-
Share of (loss)/gain from jointly controlled entity	(8,226,863)	1,096,637	-	-
Diminution in value of investment	-	-	-	(123,739,407)
At December 31	66,660,312	56,887,175	428,799,725	353,799,725

#### Subsidiaries

PDI Eco Co., Ltd. ("PDI Eco"), registered on June 16, 2014, has a total authorized share capital of 500,000 shares, amount of Baht 50,000,000 of which Baht 12,499,925 has been issued and paid up. The company purpose is to expand and diversify into eco-management business.

PDI Energy Co., Ltd. ("PDI Energy"), a subsidiary of the company has increased its capital on April 23, 2015 from Baht 50 million to Baht 350 million of which Baht 75 million has been issued and paid up during the period. The company purpose is to expand and diversify into renewable energy business.

On April 24, 2015, PDI Energy has entered into the Share Purchase Agreement and Shareholders Agreement to invest in PDI Surat Biomass Co., Ltd. ("PDI Surat Biomass") (formerly name is Smothong Biomass Co., Ltd.) to develop a 9.5 MW biomass power plant located in the South of Thailand. The project investment cost is estimated at Baht 1,200 million.

As at December 31, 2015, the scheduled commercial operation date (COD) as stated in The Power Purchase Agreement ("PPA") was not extended by the authorities, which results in uncertainty to proceed with the project. Hence, all costs related to the project that have been made so far, have been impaired.

As at December 31, 2015, Padaeng Industry (Laos) has total authorized share capital of USD 4,673,000 which has been fully issued and paid up. Currently, the investment value of Padaeng Industry (Laos) in the Company's books, total amount of Baht 151 million, net of diminution in value of investment, is zero.

On July 13, 2015, the Puthep Board of Directors has approved to dissolve the company and start the process of liquidation. According to the Extraordinary General Meeting of Shareholders dated August 7, 2015, the meeting have unanimously resolved the Company's dissolution and liquidation after completion of the cancellation of Mining Lease Applications with the Department of Primary Industries and Mine, Loei Province. The dissolution application have been registered to the Department of Business Development on August 10, 2015 and the cancellation of Value Added Tax ("VAT") registration have been applied to the Revenue Department on August 13, 2015.

#### Jointly controlled entities

On October 9, 2006, Maesod Clean Energy Co., Ltd. ("MCE") was created together with MP Energy Co., Ltd. and Thai Oil Public Company Limited. The jointly controlled entity produces ethanol as an alternative energy source. As at December 31, 2015, Maesod Clean Energy has 67,500,000 shares issued and paid-up. The Company has subscribed to a total of 23,625,000 shares in Maesod Clean Energy.

Under the terms of a loan agreement dated September 9, 2011, signed by the Company and its partners with Maesod Clean Energy, the Company provided to Maesod Clean Energy a Baht 105 million loan on October 5, 2011. The Company is eligible to convert this loan into equity of MCE. The loan carries interest rate of 4.2% per annum.

On August 26, 2015, PDI Material, a subsidiary of Padaeng Properties Co., Ltd., has entered into the Shareholders Agreement to set up a joint venture with CRT Norway to explore business opportunity to engage in the operation for recycling of metal containing waste by using innovative technology.

On September 10, 2015, the joint venture was established and registered under the name PDI-CRT Co., Ltd. with a registered capital of Baht 100,000 consisting of 10,000 shares at par value of Baht 10 per share and fully paid.



On November 12, 2015, PDI-CRT Company Limited has increased its registered capital to Baht 52,000,000 with 5,200,000 shares which the 2,553,100 shares have been issued and fully paid. The rest of 2,646,900 shares have been issued and 67.8% paid.

The following amounts represent certain audited financial statements as at and for the years ended December 31 of jointly controlled entities:

	Maesod Clean Energy Co., Ltd.		PDI-CRT Co., Ltd.
	2015 in million Baht	2014 in million Baht	2015 in million Baht
Property, plant and equipment	1,180	1,366	-
Current assets	708	646	19
Non-current assets	15	13	38
<b>Total assets</b>	<b>1,903</b>	<b>2,025</b>	<b>57</b>
Long-term borrowing	280	565	-
Current liabilities	1,483	1,297	6
<b>Total liabilities</b>	<b>1,763</b>	<b>1,862</b>	<b>6</b>
<b>Net Assets</b>	<b>140</b>	<b>163</b>	<b>51</b>
Revenues	1,914	1,865	-
Expenses	(1,938)	(1,862)	(0.6)
<b>Net (Loss) Profit for the Year</b>	<b>(24)</b>	<b>3</b>	<b>(0.6)</b>

As at December 31, 2015, there are no contingent liabilities relating to the Company's interest in the jointly controlled entities.

## ii) Sales of Goods and Services

	Consolidated		Company	
For the years ended 31 December	2015 Baht	2014 Baht	2015 Baht	2014 Baht
Sales of goods and services:				
Padaeng Properties Co., Ltd.	-	-	1,037,520	1,037,520
PDI Materials Co., Ltd.	-	-	33,290,005	-

Sales to related parties are based on current industry market practices and prices.

## iii) Purchases of Goods and Services

	Consolidated		Company	
For the years ended December 31	2015 Baht	2014 Baht	2015 Baht	2014 Baht
Purchases of goods and services:				
Padaeng Properties Co., Ltd.	-	-	4,696,770	4,512,300

Purchases from related party are based on current industry market practices and prices.



iv) Trade Accounts Receivable – Related Party

For the years ended December 31	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
Sales of goods:				
PDI Materials Co., Ltd.	-	-	10,211,213	-
<u>Less</u> Allowance for doubtful account	-	-	-	-
	-	-	10,211,213	-

v) Other Receivables – Related Party

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
Puthep Co., Ltd.	-	-	438,283	66,444
<u>Less</u> Allowance for doubtful accounts	-	-	(438,283)	-
Other receivables-related party-net	-	-	-	66,444

vi) Advances to Related Parties

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
Ton Sangkasi Co., Ltd.	-	-	13,154,358	13,154,358
PDI Eco Co., Ltd.	-	-	307,795	307,795
PDI Tak Solar One Co., Ltd.	-	-	56,705	56,705
PDI Tak Solar Two Co., Ltd.	-	-	56,710	56,710
PDI Tak Eco Co., Ltd. (Formerly name “PDI Tak Solar Three Co., Ltd.”)	-	-	56,420	56,420
PDI Surat Biomass Co., Ltd. (Formerly name “Smothong Biomass Co., Ltd.”)	-	-	1,471,712	-
Total	-	-	15,103,700	13,631,988
<u>Less</u> Allowance for doubtful accounts	-	-	(13,154,358)	(13,154,358)
Advance to related parties – net	-	-	1,949,342	477,630

Advance from the Company in the amount of Baht 169,835 represents an advance for PDI Tak Solar One, PDI Tak Solar Two, and PDI Tak Eco’s registration fee. These companies purpose are to expand and diversify into solar energy business.

**vii) Other Payables – Related Party**

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
Padaeng Properties Co., Ltd.	-	-	511,766	374,420
Total	-	-	511,766	374,420

**viii) Key Management Compensation**

The compensation paid or payable to key management for employee services for the year ended December 31 is shown below:

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
Short-term employee benefits	43,808,600	36,991,120	43,808,600	36,991,120
Post-employee benefits and termination benefits	3,239,718	3,190,849	3,239,718	3,190,849
Total	47,048,318	40,181,969	47,048,318	40,181,969

**ix) Long-Term Loan from Other Party**

Under the terms of a Loan Agreement between Puthep and PNA (Puthep) dated August 15, 2008 and executed in March 2009, PNA (Puthep) agreed to advance funds necessary to complete a feasibility study for the Puthep copper project. The loan amount is in addition to equity funding of USD 6,000,000 or Baht 216,492,547 received from PNA (Puthep). Interest on principal amounts advanced under the Loan Agreement are calculated based on best commercial rates available for PNA (Puthep) and are to be capitalized. Under the terms of the loan, interest expense ceased since January 2012. Under the arrangements Puthep is not obliged to make loan repayments until such time as it has generated sufficient profits to commence making repayments at which time it will then commence to be equal to 35% of distributable net profits of the company.

During 2015, PNA (Puthep) Pty Ltd. has issued the Loan forgiveness letter to the Company covering part of the loan balance and interest as of March 31, 2015. Consequently, it was recognized as “Other operating income” in amounting to Baht 585 million in the Statements of Comprehensive Income. The remaining loan balance repayment was done according to the agreement dated June 26, 2015 regarding funds sharing between the shareholders.

Puthep's dissolution application have been registered to the Department of Business Development on August 10, 2015 and the cancellation of VAT registration have been applied to the Revenue Department on August 13, 2015.

	Consolidated		Company	
	2015 Baht	2014 Baht	2015 Baht	2014 Baht
PNA (Puthep) Pty Ltd.				
At January 1	514,770,588	503,841,740	-	-
Loan increase during the year	1,649,534	10,928,848	-	-
Loan decrease during the year	(516,420,122)	-	-	-
At December 31	-	514,770,588	-	-
Accrued interest expenses	-	69,141,292	-	-

## 27 Risk Management Policy for Assets and Liabilities

### 27.1 Risk Management and Hedging Instruments

#### Credit Risk

Credit risk refers to the risk that counterparties will default on their contractual obligations resulting in a financial loss to the Company. As a general rule, the Company has a credit risk management policy of obtaining credit insurance or collateral from the customers before commencing trade. The collateral may include bank guarantees or cash guarantees. The remaining Company's credit risk is spread amongst several customers. The maximum exposure to credit risk at the reporting date is the carrying amount of each receivable.

#### Interest Rate Risk

Interest rate risk in the statement of financial position from the potential for a change in interest rates to have an adverse effect on the net interest earnings of the Company in the current reporting period and in future years.



## 27.2 Fair Values

The carrying amounts at the financial statements date of cash and cash equivalents, trade accounts receivable, short-term loans to related parties, other current assets, certain other assets, loans from financial institutions, trade accounts payable, short-term loans and advances from other parties, accrued interest expenses, accrued electricity expenses, royalty payable and other current liabilities approximate their fair values.

## 27.3 Exploration Risk

In order to maintain a supply base for its smelter, the Company and some of its subsidiaries are performing exploration activities. These expenses are capitalized and eventually impaired as explained in Note 11 of these financial statements. The current increased level of activity is likely to generate higher level of exploration costs capitalized than in the previous year increasing the impact of the impairments. Regular assessments by the management, once sufficient reliable data have been collected and compiled, should lower both uncertainty and risk level related to the recoverability of these costs.

# 28 Litigation

As of December 31, 2015, the Company has been served notice of five complaints by 1,141 plaintiffs filed in the Bangkok Southern Civil Court. The plaintiffs are seeking compensation of Baht 3,969 million from the Company alleging that it caused cadmium contamination in the Mae Sod district of the Tak province. The Company has filed answers to all the claims as ordered by the Court.

On September 20, 2013, the Bangkok South Civil Court read a judgment on the first case against the Company and Tak Mining Company Limited of the Black Case No. 66/2552, filed by a group of villagers (a total of 207 villagers) in the Mae Tao basin, Mae Sot District, Tak Province. The accusation being that the mining operations of both companies caused cadmium contamination in the area. The villagers have claimed over Baht 726 million as damages to compensate 1) Plaintiffs who obtained a Cadmium patients' card from the Mae Sod Hospital, 2) Plaintiffs who claimed that they were unable to use the land for agriculture, 3) Plaintiffs who claimed of losing their jobs, and 4) Plaintiffs who were scared of cadmium contamination, 5) compensation for loss of culture and traditional living. The Company and Tak Mining have been also requested by the plaintiffs to pay Baht 50 million and 3 percent of the Company's profit to the Risk Insured Fund and to improve quality of lives and environment as well as restore the environment under at the cost of the Company and Tak Mining.

The court judgment on the above case ordered the Company and Tak Mining to pay a compensation of Baht 9.20 million only to villagers who hold the cadmium patient's card from the Mae Sod Hospital. The Company and Tak Mining are equally responsible for this compensation. For other Plaintiffs who claimed to have been damaged from the contamination, the Court gives a judgment to dismiss all claims because they were not able to prove that there were such damages claimed. The Company has studied the stated court judgment in detail and is in process to appeal the court order accordingly.

On February 28, 2014, the Bangkok South Civil Court ruled judgment in the Black Case No. 9/2553, in the same manner above, which claimed over 230 million Baht as damage compensation. The court judgment orders the Company and Tak Mining to pay a compensation to 20 plaintiffs (villagers) who hold the Cadmium patient's card issued by the Mae Sod Hospital, from the total 84 plaintiffs, at the total amount of Baht 2.48 million. The Company is considering the court resolution and in process to appeal to the court order.

On September 29, 2014, the Bangkok South Civil Court ruled judgment in the Black Case No. 64/2552, in the same manner above, which claimed over 836 million Baht as damage compensation. The court judgment orders the Company and Tak Mining to pay a compensation to 82 plaintiffs (villagers) who hold the Cadmium patient's card issued by the Mae Sod Hospital, from the total 218 plaintiffs, at the total amount of Baht 8.20 million. The Company is considering the court resolution and in process to appeal to the court order.

On May 27, 2015, the Bangkok South Civil Court ruled judgment in the Black Case No. 63/2552, in the same manner above, which claimed over Baht 1,095 million as damage compensation. The court judgment orders the Company and Tak Mining to pay a compensation to 40 plaintiffs (villagers) who hold the Cadmium patient's card issued by the Mae Sod Hospital, from the total 319 plaintiffs, at the total amount of Baht 4 million. The Company is considering the court resolution and in process to appeal to the court order.

The other 1 complaint is pending for the court proceedings.

The Company is confident that its strict environmental measures are in line with the regulations and requirements of the authorities. Management intends to defend the case vigorously. At that stage, the outcome of the proceedings is unknown. However, for prudence purpose, contingent liability amount of Baht 27 million has been recorded for these 5 complaints.



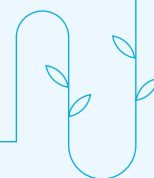
## 29 Subsequent Events

At the Board of Directors Meeting held on February 18, 2016, Board of Directors approved the dividend payment from retained earnings of the Company of Baht 0.20 per share totaling Baht 45.20 million. This will be submitted for final approval at the Annual General Shareholders meeting.





# Management and Corporate Governance



## Securities and Shareholders Information

### Number of Registered Capital and Paid-Up Capital

The Company's registered and paid-up capital amounts to Baht 2,260,000,000 issued as 226,000,000 ordinary shares at Baht 10 per share.

### Shareholders

- a) First 10 Major Shareholders of Padaeng Industry Public Company Limited as of February 10, 2016 which is the latest date of the close of the Shareholders' Register, are as follows:

No.	Name	No. of Shares	% of Total Shares
1.	Country Group Holding Public Company Limited	36,221,600	16.027
2.	Ministry of Finance	31,200,000	13.805
3.	Country Group Securities Public Company Limited	11,300,000	5.000
4.	Bangkok Bank Public Company Limited	7,301,070	3.231
5.	Mr. Anan Tanticharatcheep	6,473,800	2.865
6.	Thai NVDR Limited	5,326,160	2.357
7.	Mr. Supachai Veerabornvornpong	4,629,200	2.048
8.	Mr. Taveechat Jurangkul	3,000,000	1.327
9.	Mr. Kiat Srichomkwan	2,346,800	1.038
10.	Mr. Nurak Mahatana-arnont	2,133,400	0.944

- b) Major Shareholders

No.	Name	No. of Shares	% of Total Shares
1.	Country Group Holding Public Company Limited	36,221,600	16.027
2.	Ministry of Finance	31,200,000	13.805
3.	Country Group Securities Public Company Limited	11,300,000	5.000

## The Issuances of Other Securities - None

## Policy for Payment of Dividends

An amount of at least 5% of profits after corporate income taxes must be put in reserve, until the total amount in reserve equals 10% of the Company's authorized share capital. The Company will normally pay dividends up to 50% of profits after corporate income taxes, unless the Board determines that the near future cash needs of the Company justify reserving part of the profit to cover those needs.

At the meeting of April 27, 2015 and after reviewing the financial statements of December 31, 2014, the Company has a net profit for the year 2014 in the amount of Baht 463.88 million which has increased from the year 2013, the net loss of which was Baht 242.65 million. As such the Board of Directors is of the opinion that the dividend payment for 2014 at Baht 0.40 per share be paid from the net profit of the Company. The dividends declared to the Shareholders totaling 226 million shares amounting to Baht 90.4 million. The dividend increases from last year by 33% given the good results but less than the normal dividend policy. This is due to the fact that Company needs to keep a sufficient amount of cash to invest in its diversification projects.

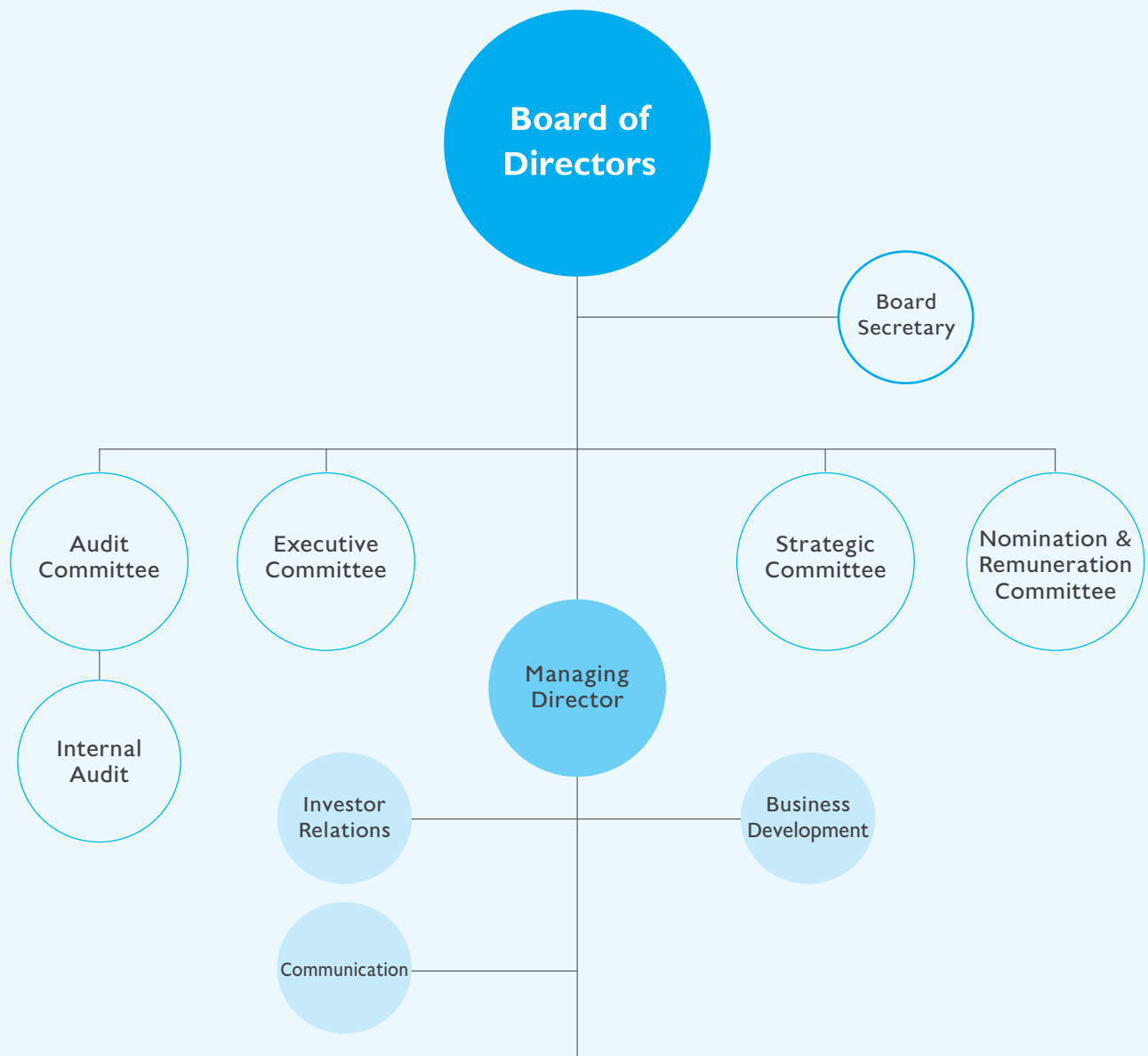
There is no fixed dividend payment policy for subsidiaries. However a subsidiary will generally follow the policy of the Company.

## Dividend Payment for the Year 2010-2014

Year	2010	2011	2012	2013	2014
Net (Loss) profit per share	1.83	0.02	(2.52)	(1.07)	2.05
Dividend payment per share	1.29	0.50	-	0.30	0.40
Proportion of dividend from net profit (%)	59.52	100.00 <sup>1)</sup>	-	N.A. <sup>2)</sup>	19.49

Remark: 1) The remaining dividends are paid from retained earnings.  
2) Not applicable.

## PDI Organization Chart



### Human Resources

- Human Resources
- Organizational Development

### Commercial

- Procurement
- Marketing & Sales
- Contract Administration
- Logistics

### Operations

- Mining
- Refining
- Roaster

### Finance

- Hedging
- Treasury
- Accounting & Cost Control
- Information Technology

### Regulatory Affairs

- Government Relations
- Legal
- General Services

### Process & Technology Innovation

- Laboratory, Research and Development
- Technical Services
- Knowledge Management

## Board of Directors

The duties and responsibilities of the Company's Board of Directors include:

1. Manage Company operations according to the law, rules and regulations, the mission and vision of the Company and the resolutions of the Company shareholders.
2. Propose the level of dividend to be paid to the shareholders.
3. Determine the level of compensation or bonus to be awarded to officers, employees or other staff working for the Company (permanent or temporary), not including pension benefits or other remuneration paid to directors.
4. Review the Company's strategic action plan and assess the operations as suggested by the Strategic Committee .

In carrying out its duties and responsibilities, the Board of Directors may assign the Managing Director, any or several directors or any other person(s), to take action on its behalf.

## Meeting of the Board of Directors

The Board of Directors meets every 3 months according to the meeting schedule and may call additional dedicated meetings. Clear agenda topics and agenda minutes of the meetings are prepared prior to each meeting and the Company Secretary sends out an invitation letter and relevant documents to Board members at least 5 working days prior to the meetings, enabling sufficient time for review.

The Company's Board of Directors is composed of 10 members. During 2015, the Board of Directors met 8 times with records of attendance as follows:

Directors	Position	Meeting	
		No. of Meeting	Attendance
1. Mr. Arsa Sarasin (Authorized director)	Chairman	8	8
2. Mr. Francis Vanbellen (Authorized director)	Director Managing Director Executive Director Strategic Committee Member	8	8
3. Mrs. Philaslak Yukkasemvong <sup>1)</sup>	Director	5	3
4. Mr. Sadawut Taechaubol <sup>2)</sup> (Authorized director)	Director Executive Director Chairman	1	1
5. Mr. Tommy Taechaubol <sup>3)</sup>	Director Executive Director Nomination & Remuneration Committee Member	6	6
6. Ms. Prapa Puranachote <sup>4)</sup>	Director Executive Director	5	3
7. Mr. Somkad Sueptrakul <sup>5)</sup>	Director	1	1

Directors	Position	Meeting	
		No. of Meeting	Attendance
8. Mr. Paron Israsena <sup>6)</sup>	Independent Director Audit Committee Member Nomination & Remuneration Committee Chairman	5	2
9. Mr. Karel Vinck <sup>7)</sup>	Independent Director Audit Committee Member Strategic Committee Member	8	7
10. Mr. Vinai Vamvanij (Authorized director)	Independent Director Executive Director Audit Committee Chairman	8	8
11. Mr. Aswin Kongsiri	Independent Director Executive Director Audit Committee Member Nomination & Remuneration Committee Chairman	8	5
12. Mr. Pinit Vongmasa	Independent Director Strategic Committee Member Nomination & Remuneration Committee Member	8	8

- Remark:
- 1) Mrs. Philaslak Yuktasemwong had been appointed as the director on March 26 and resigned from the director on October 31, 2015.
  - 2) Mr. Sadawut Taehaibol has been appointed as the director on November 10, 2015.
  - 3) Mr. Tommy Taehaibol has been appointed as the director on May 7, 2015.
  - 4) Ms. Prapa Puranachote has been appointed as the director on June 29, 2015.
  - 5) Mr. Somkad Sueptrakul had been appointed as the director on May 7 and resigned from the director on May 26, 2015.
  - 6) Mr. Paron Israsena had resigned from the director on September 6, 2015.
  - 7) Mr. Karel Vinck has been appointed as the Audit Committee member on September 15, 2015.

## Authorized Directors

The names and number of the directors who are authorized to sign on behalf of the Company are Mr. Arsa Sarasin, Mr. Vinai Vamvanij, Mr. Francis Vanbellen and Mr. Sadawut Taechaubol, where Mr. Arsa Sarasin or Mr. Francis Vanbellen jointly signed with one of the remaining three directors for the total of two directors with the Company's seal affixed.

## Executives

No.	Name	Position
1.	Mr. Arsa Sarasin	Chairman
2.	Mr. Francis Vanbellen	Managing Director
3.	Mr. Tianchai Singhakarn	Executive Vice President - Mae Sod Mining
4.	Mr. Chitchai Thaveepanich	Corporate Vice President - Human Resources
5.	Mr. Chaya Hasdisave	Executive Vice President - Commercial
6.	Mr. Siam Dowmanee	Corporate Vice President - Process & Technology Innovation Executive Vice President - Rayong Operations
7.	Mr. Unnop Tungkananukulchai	Corporate Vice President - Regulatory Affairs
8.	Mr. Manoch Jaroonvuthitham	Executive Vice President - Tak Operations
9.	Mrs. Woratip Rerkpiboon	Corporate Vice President - Finance
10.	Dr. Surin Tanticharoenkiat	Corporate Vice President - Internal Audit Company Secretary



**Education** • B.A. (Business Administration), Boston University, USA

**Training in IOD** Thai Institute of Directors Association - Director Accreditation Program (DAP), 2003 - Audit Committee Program (ACP), 2007 - Finance for Non-Finance Directors (FND), 2008 - Role of Chairman Program (RCP), 2013

**Current position in listed company** • Chairman, Padaeng Industry Public Company Limited

• Chairman, Dusit Thani Public Company Limited • Chairman, Siam Makro Public Company Limited • Director, Chairman of Corporate Social Responsibility Committee for Sustainable Development and Member of the Governance and Nomination Committee, the Siam Cement Public Company Limited • Chairman of Audit Committee, Vice Chairman and Independent Director of Charoen Pokphand Foods Public Company Limited

**Other current position** • Chairman, Thai Asia Pacific Brewery Company Limited • Chairman, Amata City Company Limited • Chairman of the Board of Governors, Amata Spring Country Club • Chairman, Maesod Clean Energy Company Limited • Chairman of Advisor, Thai-Laos Association • Vice Chairman, Thai Tapioca Development Institute • Director, Thai Pure Drinks Company Limited • Chairman, Mitsubishi Elevator Asia Co., Ltd.

**Working experience** • Chief Executive Officer, Padaeng Industry Public Company Limited • Director-General, Department of Economic Affairs, Ministry of Foreign Affairs • Thai Ambassador to Belgium & Chief of Mission to the European Community • Director-General, Department of Political Affairs, Ministry of Foreign Affairs • The Permanent Secretary of the Ministry of Foreign Affairs • Thai Ambassador to the USA • The Minister of Foreign Affairs • Chairman of the Asia-Europe Business Forum II • Vice Chairman of the Board of Directors and Advisor, Bangkok Bank Public Company Limited • Director, Vinythai Public Company Limited • Chairman of the Thai-Laos Association • His Majesty's Principal Private Secretary



2

**Francis Vanbellen**

58 Years Old

- Director
- Executive Committee Member
- Managing Director

**Education** • Master's Degree in Chemical Engineering, Catholic University Leuven (KUL), Belgium • Master of Business Administration, Vlerick Management School, Gent, Belgium

**Training** • Process Management, Harvard, Cambridge, USA • Strategic Innovation Management, Insead, Fontainebleau, France • Business Excellence Assessment, EFQM, Brussels, Belgium • Multicultural Leadership, Ashridge, London, UK

**Training in IOD** • Director Certification Program (DCP), Thai Institute of Directors Association, Bangkok, Thailand

**Current position in listed company** • Managing Director, Padaeng Industry Public Company Limited

**Other current position** • Chairman of the Board, PDI Energy Co. Ltd., Bangkok, Thailand • Chairman of the Board, PDI Materials Co., Ltd., Bangkok, Thailand • Chairman of the Board, PDI Eco Co. Ltd., Bangkok, Thailand • Chairman of the Board, PDI-CRT Co., Ltd., Bangkok, Thailand • Director, Maesod Clean Energy Co., Ltd., Bangkok, Thailand • Director, Belgian- Luxembourg/Thai Chamber of Commerce, Bangkok, Thailand • Director, GMM Quartz NV, Antwerp, Belgium

**Working experience** • Chairman of the Supervisory Board, GMM Quartz, Berlin, Germany • Director, Puthep Co., Ltd., Bangkok, Thailand • Director, OMM, Aydin, Turkey • Manager special metals refinery Umicore, Hoboken, Belgium • Manager precious metals refinery Umicore, Hoboken, Belgium • Manager raw materials sampling department, Umicore, Hoboken, Belgium • Head of Department human resources & business excellence, Umicore, Brussels, Belgium • Head of Department knowledge & supply chain management, Umicore, Hoboken, Belgium • Head of Department Precious Metals Operations, Umicore, Hoboken, Belgium • Plant Manager, Umicore Precious Metals Refining Operations, Hoboken, Belgium • Managing Director, GMM Quartz, Antwerp, Belgium

3

**Tianchai Singhakarn**

59 Years Old

- Executive Vice President - Mae Sod Mining

**Education** • Bachelor Degree in Mining Engineering, Prince of Songkla University

**Training** • Business Excellence Model, 2013 • CSR: Global Reporting Initiative (GRI: G4), 2014

**Current position** • Executive Vice President - Mae Sod Mining

**Working experience** • Vice President - Mining & Exploration, Padaeng Industry Public Company Limited • Managing Director, Sila Enterprise Company Limited

4

**Chitchai Thavepanich**

54 Years Old

- Corporate Vice President - Human Resources

**Education** • Master Degree in Business Administration, Western Michigan University, USA

**Training** • CSR for Corporate Sustainability, 2012 • Business Communication Skill, 2013 • Business Excellence Model, Belgium, 2013 • CSR: Global Reporting Initiative (GRI: G4), 2014 • Thai Institute of Directors Association - Director Certification Program (DCP), Class 204/2015 - Successful Formulation & Execution the Strategy (SFE), Class 25/2015

**Current position** • Corporate Vice President - Human Resources, Padaeng Industry Public Company Limited

**Working experience** • Vice President - Human Resources & Corporate Communication, Padaeng Industry Public Company Limited • Vice President - Human Resources & Corporate Administration, Padaeng Industry Public Company Limited • Assistant Vice President - Human Resources & Corporate, Administration, Padaeng Industry Public Company Limited

5

**Chaya Hasdiseve**

53 Years Old

- Executive Vice President - Commercial

**Education** • Master Degree of Management in Finance, Sasin Graduate Institute of Business Administration, Chulalongkorn University • Master Degree of Agricultural Economics Sciences, Kasetsart University

**Training** • London Metal Exchange, 2001 • Zinc College Peru, 2001 • Strategic Procurement Fraud, Singapore, 2012 • Business Communication Skill, 2013 • Business Excellence Model, 2013 • CSR: Global Reporting Initiative (GRI: G4), 2014 • Director Certification Program (DCP), Thai Institute of Directors Association, Bangkok, Thailand, 2014

**Current position** • Executive Vice President - Commercial, Padaeng Industry Public Company Limited

**Working experience** • Vice President - Commercial, Padaeng Industry Public Company Limited • Vice President - Procurement, Padaeng Industry Public Company Limited • Assistant Vice President - Procurement, Padaeng Industry Public Company Limited

6

**Siam Dowmanee**

59 Years Old

- Corporate Vice President - Process & Technology Innovation
- Executive Vice President - Rayong Operations

**Education** • Master Degree in Business Administration, Burapha University • Bachelor Degree of Engineering in Mechanics, Chulalongkorn University

**Training** • Zinc College 2001, Peru High Pressure Die Casting Process Technology, 2009 • Zinc and Zinc Alloy Coated Steel Sheet, Italy, 2011 • Business Excellence Model, 2013 • CSR: Global Reporting Initiative (GRI: G4), 2014

**Current position** • Corporate Vice President - Process & Technology Innovation, Padaeng Industry Public Company Limited • Executive Vice President - Rayong Operations Padaeng Industry Public Company Limited

**Working experience** • Vice President - Process & Technology Innovation, Padaeng Industry Public Company Limited • Vice President - Technical Service, Padaeng Industry Public Company Limited • Vice President - Operations, Calcine Plant, Padaeng Industry Public Company Limited

7

**Unnop Tungkananukulchai**

58 Years Old

- Corporate Vice President - Regulatory Affairs

**Education** • Master of Public and Private Management, National Institute of Development Administration (NIDA)

**Training** • International Conference on Cadmium in Food Human Health, 2010 • Business Excellence Model, 2013 • CSR: Global Reporting Initiative (GRI: G4), 2014

**Current position** • Corporate Vice President - Regulatory Affairs, Padaeng Industry Public Company Limited

**Working experience** • Vice President - Regulatory Affairs, Padaeng Industry Public Company Limited • Senior Manager - Central Personnel, Padaeng Industry Public Company Limited

8

**Manoch Jaroenvuthitham**

50 Years Old

- Executive Vice President - Tak Operations

**Education** • Bachelor Degree of Engineering in Metallurgy, Chulalongkorn University

**Training** • Training for Zinc Conversion Project, Germany, 1994 • International Symposium on Lead and Zinc Processing, South Africa, 2008 • Zinc College 2010, Canada • Senior Executive Program 2013, Sasin Graduate Institute of Business Administration, Chulalongkorn University • Business Excellence Model, 2013 • CSR: Global Reporting Initiative (GRI: G4), 2014

**Current position** • Executive Vice President - Tak Operations, Padaeng Industry Public Company Limited

**Working experience** • Vice President - Production, Padaeng Industry Public Company Limited • Senior Manager - Leaching & Purification, Padaeng Industry Public Company Limited

9

**Woratip Rerkpiboon**

50 Years Old

- Corporate Vice President - Finance

**Education** • Master Degree in Business Administration (Financial Management), National Institute of Development Administration (NIDA)

**Training** • Business Communication Skill, 2013 • Business Excellence Model, 2013 • CSR: Global Reporting Initiative (GRI: G4), 2004 • Director Certification Program (DCP), Thai Institute of Directors Association, Bangkok, Thailand, 2014 • Accounting & Tax, 2015 • Financial Reporting Update, 2015 • CFO Current Issues, 2015

**Current position** • Corporate Vice President - Finance, Padaeng Industry Public Company Limited

**Working experience** • Vice President - Finance, Accounting & IT, Padaeng Industry Public Company Limited • Vice President - Finance and Accounting, Padaeng Industry Public Company Limited • Senior Manager - Treasury, Padaeng Industry Public Company Limited

10

**Surin Tanticharoenkiat**

58 Years Old

- Corporate Vice President - Internal Audit
- Company Secretary

**Education** • Ph.D. in Materials Engineering, Auburn University, USA • Master Degree in Business Administration, Auburn University, USA • Master Degree in Metallurgical Engineering, Lehigh University, USA • Master Degree in Mechanical Engineering, Auburn University USA • Bachelor Degree in Metallurgical Engineering, Chulalongkorn University

**Training (Company Secretary)** • Thai Institute of Directors Association - Director Certification Program (DCP), Class 33/2003 - Registration system of listed companies, 2005 - The New SEC. Act, 2006 - Effective Minutes Taking, 2006 • Law and Development Research Center, Faculty of Law, Chulalongkorn University - Laws and Practices for Company Secretary, 2000

**Training (Internal Audit)** • Thai Institute of Directors Association - Internal Audit and Added for the Company, 2005 - D&O Insurance: Mitigating Directors Liabilities Risk, 2008 - Anti-Corruption Seminar, 1/2012 - Anti-Corruption: Practical Guide, 2013 • Thai Listed Company Association - Audit Committee Roles and Duty, 2000 - Organization Risk Management, 2005 - TLCA Annual Risk Management, 2012 • Thailand Environment Institute - Practical Course on Environmental Management System and Internal Audit, 1999

**Training (Other)** • CSR: Global Reporting Initiative (GRI: G4), 2014

**Current position** • Corporate Vice President - Internal Audit, Padaeng Industry Public Company Limited • Company Secretary, Padaeng Industry Public Company Limited

**Working experience** • Vice President - Internal Audit, Padaeng Industry Public Company Limited • Assistant Vice President - Internal Audit, Padaeng Industry Public Company Limited • Assistant Vice President - Technical Support, Padaeng Industry Public Company Limited

## Directors and Management in Subsidiary, Affiliated, Related and Other Companies

Executive's Name	Padaeng Industry PCL	Subsidiary Companies						Affiliated Company	Other Companies					
		1. Padaeng Properties Co., Ltd.	2. Putthep Co., Ltd.	3. Padaeng Industry (Laos) Co., Ltd.	4. PDI Energy Co., Ltd.	5. PDI Eco Co., Ltd.	6. PDI Tak Eco Co., Ltd.		7. Ton Sangkasi Pte. Ltd. (In-Corporated in the Republic of Singapore)	1. Maesod Clean Energy Co., Ltd.	1. PDI Materials Co., Ltd.	2. PDI Tak Solar One Co., Ltd.	3. PDI Tak Solar Two Co., Ltd.	4. PDI Surat Biomass Co., Ltd.
1 Mr. Arsa Sarasin	X		/	X	X	X		X	X					/
2 Mr. Francis Vanbellen	/-IV-VI								/					
3 Mr. Sadawut Taechaubol	/-VI													
4 Mr. Tommy Taechaubol	/-V-VI													
5 Ms. Phapa Puranachote	/-VI													
6 Mr. Karel Vinck	//-///-IV													
7 Mr. Vinai Varnvanij	//-///-VI													
8 Mr. Aswin Kongsiri	//-///-V-VI			/										
9 Mr. Pinit Vongmasa	//-IV-V													
10 Mr. Chitchai Thaveepanich		/			/		/						/	
11 Mr. Chaya Hasdiseve			/	/	/									
12 Mr. Unnop Tungkananukulchai		/	/	/	/	/	/	/	/	/	/	/		
13 Mr. Tianchai Singhakarn				/		/								
14 Mrs. Woratip Rerkpiboon		/		/	/	/	/	/	/	/	/	/		
15 Mr. Siam Downmanee		/								/				
16 Mr. Manoch Jaroenvuthitham								/	/	/	/	/		/
17 Mr. Anthony Waring Chisnall							/						/	/
18 Mr. Nattharit U-dee													/	/

Note : X = Chairman / = Director // = Independent Director /// = Audit Committee IV = Strategic Committee

V = Nomination and Remuneration Committee VI = Executive Committee

## Shareholdings of the Board of Directors and Executives as of December 31, 2015

No	Name	December 31, 2014		December 31, 2015		Change +(-)
		Own	Spouse/ Minor child	Own	Spouse/ Minor child	
1.	Mr. Arsa Sarasin	-	-	-	-	-
2.	Mr. Francis Vanbellen	-	-	-	-	-
3.	Mrs. Philaslak Yukkasemwong	-	-	-	-	-
4.	Mr. Sadawut Taechaubol	-	-	-	-	-
5.	Mr. Tommy Taechaubol	-	-	-	-	-
6.	Ms. Prapa Puranachote	-	-	-	-	-
7.	Mr. Karel Vinck	-	-	-	-	-
8.	Mr. Vinai Vamvanij	8,000	-	8,000	-	-
9.	Mr. Aswin Kongsiri	-	-	-	-	-
10.	Mr. Pinit Vongmasa	-	-	-	-	-
11.	Mr. Tianchai Singhakarn	-	-	-	-	-
12.	Mr. Chitchai Thaveepanich	-	-	-	-	-
13.	Mr. Chaya Hasdiseve	30,000	-	-	-	(30,000)
14.	Mr. Siam Dowmanee	-	-	-	-	-
15.	Mr. Unnop Tungkananukulchai	-	-	-	-	-
16.	Mr. Manoch Jaroenvuthitham	-	-	-	-	-
17.	Mrs. Woratip Rerkpiboon	-	-	-	-	-
18.	Dr. Surin Tanticharoenkiat	-	-	-	-	-

## The Company Secretary

In the Board meeting No. 04-2008 on May 13, 2008, the Board appointed Dr. Surin Tanticharoenkiat as the Company Secretary responsible for giving advice on regulatory issues for listed company to the Board. The Company Secretary is in charge of organizing board and shareholders' meeting as well as in preparing the minutes of the Board meetings and the minutes of shareholders' meetings, filing documents as stipulated by law. The Company Secretary is also coordinating with different department to ensure that the Board and shareholders' resolution are followed. Credential of the Company Secretary is listed in the executive section.

## Remunerations for Directors and Executives

Remuneration for Directors - Remuneration for Company directors has been determined in a clear manner and is comparable to that of similar companies in the industry. The level of remuneration has been approved by shareholders. Directors who have been selected to participate in the Audit Committee, the Strategic Committee and the Nomination and Remuneration Committee receive additional remuneration aligned with the additional responsibilities as stipulated in the Good Corporate Governance guideline for Listed Company 2012.

Remuneration of top executives is aligned with the principles and policies of the Board of Directors and corresponds with overall company and individual performance.

Remuneration of the Board, subcommittees and top executives is reviewed by the Nomination and Remuneration Committee prior submitting to the Board.

## 1. In the Form of Cash

- a) In the year 2015, the Company paid a total of Baht 2,864,438.84 to 10 Directors, 2 Strategic Committee Members, 3 Audit Committee Members and 4 Nomination and Remuneration Committee Members as director's fees and director's remuneration:

Name/Position	Meeting Allowance (Baht)				Director Bonus For 2015 <sup>1)</sup>	Total Remuneration (Baht) <sup>3)</sup>
	Director	Strategic Committee	Audit Committee	Nomination and Remuneration Committee		
1. Mr. Arsa Sarasin Chairman	-	-	-	-	- <sup>2)</sup>	-
2. Mr. Francis Vanbellen Director Managing Director Executive Committee Member Strategic Committee Member	-	-	-	-	- <sup>2)</sup>	-
3. Mrs. Philaslak Yukkasemwong Director (During March 26- October 31, 2015)	164,637.33	-	-	-	-	164,637.33
4. Mr. Sadawut Taechaubol Director Executive Committee Chairman (Since November 10, 2015)	43,260.00	-	-	-	-	43,260.00
5. Mr. Tommy Taechaubol Director Executive Committee Member Nomination and Remuneration Committee Member (Since May 7, 2015)	220,220.00	-	-	20,000.00	-	240,220.00
6. Ms. Prapa Puranachote Director Executive Committee Member (Since June 29, 2015)	146,098.90	-	-	-	-	146,098.90

Name/Position	Meeting Allowance (Baht)				Director Bonus For 2015 <sup>1)</sup>	Total Remuneration (Baht) <sup>3)</sup>
	Director	Strategic Committee	Audit Committee	Nomination and Remuneration Committee		
7. Mr. Somkad Sueptrakul Director (During May 7-26 2015)	25,440.00	-	-	-	-	25,440.00
8. Mr. Paron Israsena Independent Director Audit Committee Member Nomination and Remuneration Committee Chairman (Until February 9, 2015)	168,043.48	-	138,043.48	40,000.00	-	346,086.96
9. Mr. Karel Vinck Independent Director Audit Committee Member Strategic Committee Member	305,000.00	20,000.00	58,695.65	-	-	383,695.65
10. Mr. Vinai Vamvanij Independent Director Executive Committee Member Audit Committee Chairman	320,000.00	-	200,000.00	-	-	520,000.00
11. Mr. Aswin Kongsiri Independent Director Executive Committee Member Audit Committee Member Nomination and Remuneration Committee Chairman	275,000.00	-	200,000.00	80,000.00	-	555,000.00
12. Mr. Pinit Vongmasa Independent Director Strategic Committee Member Nomination and Remuneration Committee Member	320,000.00	20,000.00	-	100,000.00	-	440,000.00
Total					-	2,864,438.84

Remark:

- 1) No bonus payment for the Director.
- 2) Executive Director's bonus are included in b) the Company bonus paid to the executives.
- 3) No remuneration payment for the executive directors.

b) The Company paid a total of Baht 63,957,000 to the 10 executives in the year 2015, as salaries and bonuses.

## 2. In Other Forms

The Company contributed to employees' provident fund savings, as a percentage of salary and period of time enrolled in the fund, ranging from 5 to 10%.

# Corporate Governance

## Policy of Corporate Governance

PDI conducts its business in compliance with “The Principles of Good Corporate Governance”, published in 2012, and outlined by the Stock Exchange of Thailand. In doing so, we at PDI have demonstrated our commitment to these accepted standards and have fostered the confidence of our employees, our investors, and all stakeholders involved in our operations and business endeavors. Our Audit Committee, by means of the “Internal Audit Department”, supervises financial statements, internal control, and practices of good corporate governance to ensure compliance with our vision, values and policies. PDI has also endorsed a Code of Conduct including an Anticorruption Policy to which all executives and employees are assumed to comply with in conducting business and business related affairs. We have installed a Nomination and Remuneration Committee to supervise the process of director nominations and to recommend fair and reasonable annual remuneration for the Board of Directors, the subcommittees, and the top executives. To ensure efficient and productive business operations, a Strategic Committee has also been established to oversee our strategic plan, prior to giving recommendations to the Board of Directors.

The Company has proceeded in other areas as well, in an effort to be recognized by all our stakeholders as ensuring good corporate governance as enforced by the Stock Exchange of Thailand.

## Subcommittees

1) The structure of the Board of Directors consists of four Subcommittees as follows:

### 1. The Audit Committee

The Audit Committee was first established on December 22, 1998. At present it consists of three directors:

No.	Name	Title
1.	Mr. Vinai Vamvanij	Chairman
2.	Mr. Aswin Kongsiri	Member
3.	Mr. Karel Vinck	Member
	Dr. Surin Tanticharoenkiat	Secretary to the Audit Committee

In 2015, the committee held four meetings in order to perform its duties as stipulated in the Audit Committee Charter, and the proceedings from each meeting were reported to the Board of Directors. Additionally, there were also several additional meetings between the committee members and the external auditors.

### The Scope of Authority of the Audit Committee

1. To have the authority to request any information it considers relevant to its activities from the managing director and/or any managers of the Company.
2. To seek independent professional advice as it deems necessary.
3. To abstain from executive powers with regard to its findings and recommendations.





## Duties and Responsibilities of the Audit Committee

1. To review the Company's financial reporting process to ensure that it is accurate and adequate.
2. To review the Company's internal control system and internal audit system to ensure that they are suitable and efficient, and to determine an internal audit unit's independence, as well as to approve the appointment, transfer and dismissal of the chief of an internal audit unit or any other unit in charge of an internal audit.
3. To review the Company's compliance with the law on securities and exchange, the Exchange's regulations, and the laws relating to the Company's business.
4. To consider, select, nominate, and dismiss an independent person to be the Company's auditor, and to propose such person's remuneration, as well as to attend a non-managerial meetings with an external auditor at least once a year.
5. To review the Connected Transactions, or the transactions that may lead to conflicts of interests, to ensure that they are in compliance with the laws and the Stock Exchange of Thailand's regulations, and are reasonable and for the highest benefit of the Company.
6. To prepare, and to disclose in the Company's annual report, an audit committee's report, which must be signed by the audit committee's chairman and consist of at least the following information:
  - (a) Opinion on the accuracy, completeness, and Credibility of the Company's financial report.
  - (b) Opinion on the adequacy of the Company's internal control system.
  - (c) Opinion on the compliance with the law on securities and exchange, the Stock Exchange of Thailand's regulations, or the laws relating to the Company's business.
  - (d) Opinion on the suitability of an auditor.
  - (e) Opinion on the transactions that may lead to conflicts of interests.
  - (f) The number of the audit committee meetings, and the attendance of such meetings by each committee member.
  - (g) Opinion or overview comment received by the audit committee from its performance of duties in accordance with the charter.
  - (h) Other transactions which, according to the audit committee's opinion, should be known to the shareholders and general investors, subject to the scope of duties and responsibilities assigned by the Company's board of directors.
7. To monitor the risk management process.
8. To perform any other act as assigned by the Company's board of directors, with the approval of the audit committee.
9. Report any matter to the board that the audit committee considers appropriate.

## 2. The Strategic Committee

The Strategic Committee was established on July 13, 2000 and at present consists of three members:

No.	Name	Title
1.	Mr. Francis Vanbellen	Member
2.	Mr. Karel Vinck	Member
3.	Mr. Pinit Vongmasa	Member
	Dr. Surin Tanticharoenkiat	Secretary to the Strategic Committee

In 2015, the committee held one meeting and reported to the Board of Directors.

The Strategic Committee is responsible for preparing and providing the Company's strategic work plan and strategic assessment for consideration by the Board of Directors, as well as giving other recommendations to the Board of Directors. All matters regarding strategy and planning are channeled through the Strategic Committee for presentation and/or recommendation to the Board of Directors for consideration. Moreover, the Strategic Committee acts as an advisor to the Board of Directors, but does not have decision-making authority. This committee will be replaced by the setup of Executive Committee from year 2016 onwards.

### 3. The Nomination and Remuneration Committee

The Nomination and Remuneration Committee (NRC) was established on February 25, 2005 and at present consists of three members:

No.	Name	Title
1.	Mr. Aswin Kongsiri	Chairman, Independent Director
2.	Mr. Pinit Vongmasa	Member, Independent Director
3.	Mr. Tommy Taechaubol	Member, Director
	Dr. Surin Tanticharoenkiat	Secretary to the Nomination and Remuneration Committee

In 2015 the committee held five meetings and reported to the Board of Directors.

#### The Scope of Authority of the Nomination and Remuneration Committee

1. To set the criteria and process of nominating board members and top executives.
2. To set the process to review and assess the performance of the board and top executives.
3. To recommend new nominees to the Board to fill positions made vacant by directors who complete their terms or resign.
4. To review and recommend to the Board on the hiring of advisers to the Board as it deems necessary.
5. To review for the Board the succession plan of the Company's top executives.
6. To recommend fair and reasonable annual remuneration for the Board, the subcommittees, and the top executives.

### 4. The Executive Committee

The Executive Committee was established on November 10, 2015 and at present consists of six members:

No.	Name	Title
1.	Mr. Sadawut Tachaubol	Chairman of the Executive Committee
2.	Mr. Tommy Tachaubol	Member
3.	Ms. Prapa Puranachote	Member
4.	Mr. Aswin Kongsiri	Member
5.	Mr. Vinai Vamvanij	Member
6.	Mr. Francis Vanbellen	Member
	Dr. Surin Tanticharoenkiat	Secretary to the Executive Committee

### Authority and Responsibilities

The Committee shall have, and may exercise, the powers of the Board in the management and direction of the business and affairs of the Company in between full meetings of the Board, as determined by the Board, in line with the Company's certificate of incorporation or by-laws, each as amended and in line with applicable law or regulations.

The Committee shall maintain minutes of meetings and activities. It shall provide the Board a summary of the matters discussed and decisions taken at each meeting. The Committee minutes shall be presented to the Board at the next Board meeting for acknowledgement and approval.

The Committee shall have the authority to obtain advice and assistance from internal or external legal, accounting or any other advisors and to approve the fees and other retention terms related to any such external counsel, consultants or advisors.

The Committee may form and delegate authority to subcommittees when appropriate.

The Committee shall annually review its own performance.

The first meeting for executive committee will be in the year 2016.

### The Attendance of the Directors on the Subcommittees

Directors (Attendance/ No. of the meeting)	Audit Committee	Strategic Committee	Nomination and Remuneration Committee	AGM
1. Mr. Arsa Sarasin	-	-	-	1/1
2. Mr. Francis Vanbellen	-	1/1	-	1/1
3. Mrs. Philaslak Yukkasemwong <sup>1)</sup>	-	-	-	1/1
4. Mr. Sadawut Taechaubol <sup>2)</sup>	-	-	-	-
5. Mr. Tommy Taechaubol <sup>3)</sup>	-	-	1/1	-
6. Ms. Prapa Puranachote <sup>4)</sup>	-	-	-	-
7. Mr. Somkad Sueptrakul <sup>5)</sup>	-	-	-	-
8. Mr. Paron Israsena <sup>6)</sup>	1/3	-	2/4	1/1
9. Mr. Karel Vinck <sup>7)</sup>	1/1	1/1	-	0/1
10. Mr. Vinai Vamvanij	4/4	-	-	1/1
11. Mr. Aswin Kongsiri	3/4	-	4/5	1/1
12. Mr. Pinit Vongmasa	-	1/1	5/5	1/1

- Remark:
- 1) Mrs. Philaslak Yukkasemwong had resigned from the director on October 31, 2015.
  - 2) Mr. Sadawut Taechaubol has been appointed as the director on November 10, 2015.
  - 3) Mr. Tommy Taechaubol has been appointed as the director on May 7, 2015.
  - 4) Ms. Prapa Puranachote has been appointed as the director on June 29, 2015.
  - 5) Mr. Somkad Sueptrakul had been appointed as the director on May 7 and resigned from the director on May 26, 2015.
  - 6) Mr. Paron Israsena had resigned from the director on September 9, 2015.
  - 7) Mr. Karel Vinck has been appointed as the Audit Committee member on September 15, 2015.

2) Mr. Vinai Vamvanij is chairman of the Audit Committee. He has knowledge and experience reviewing financial statements of Companies. His background on financial statement reviews are as follows:

Year	Position	Company
1967-1968	Senior Auditor	Price Waterhouse & Co., Chartered Accountants
1963-1966	Audit & Accounting Clerk	R.J. Oehr & Church, Chartered Accountants, Melbourne, Australia

## The Selection and the Appointment of Company Directors and Executives

### 1. Independent Director

The Nomination and Remuneration Committee will consider from the list of candidates and nominate persons with proper qualification and experiences that can beneficial to the Company.

#### Qualification of Company Independent Directors

1. Holding shares not exceeding five percent of the paid-up capital of the Company, affiliated company, associated company or related company, inclusive of the shares held by any related persons.
2. Not taking part in the management of the Company, affiliated company, associated company, related company or majority shareholders of the Company. Not being an employee, staff member or advisor who receives a regular salary from the Company, affiliated company, associated company, related company or majority shareholders of the Company.
3. Having no direct or indirect benefit or interest in finance and management of the Company, affiliated company, associated company or majority shareholders of the Company. Having no benefit or interest of the said nature during the period of one year before his appointment as a director except where the Board of Directors has carefully considered that such previous benefit or interest does not affect the performance of duties and the giving of independent opinions.
4. Not being a related person or close relative of any management member or majority shareholder of the Company.
5. Not being appointed as a representative to safeguard the interests of the Company's directors, majority shareholders of the Company or those who are related to the Company's majority shareholders.
6. Being capable of performing duties, giving opinions, or reporting the results of performance of work according to the duties delegated by the Board of Directors free and clear of the management or the majority shareholders of the Company, including related persons or close relatives of the said persons.

### 2. The Selection of Company Directors and Executives

The NRC, consisting of two independent directors, is responsible for the selection of a qualified person, not subject to the prohibitive characteristics under the law for nomination, to the Board of Directors prior to submitting for final election in the "Annual General Shareholders' Meeting (AGM)".

The Company has also allowed the shareholders to submit names of qualified candidates to be nominated for selection as PDI Board of Directors in advance of the annual general shareholders' meeting through the Company's website. The Company also refers to the list of qualified candidates released by the Thai Institute of Directors (IOD).

## The Selection of Directors by the Annual General Shareholders' Meeting

The appointment of a director requires a majority vote from the eligible voting shareholders present at the annual general shareholders' meeting. Voting shall be casted according to the following guidelines:

1. Each shareholder shall have one vote for each share.
2. Each shareholder must exercise all the votes he has under item (1) to elect one or several persons to be directors, but cannot divide his votes to any person particularly.
3. The candidates shall be ranked in order descending from the highest number of votes received to the lowest, and shall be elected as directors equivalent to the number of directors who are to be elected.
4. If there is a tie in the last to be elected and this exceeds the said number of directors, the presiding Chairman shall have an additional casting vote.

In the case of a vacancy on the Board of Directors prior to the expiration of the term of office due to death, resignation, or for reasons other than by rotation, the Board of Directors shall elect any person who is qualified and not subject to the prohibitive characteristics under the law as the substitute director at the subsequent Board of Directors meeting, unless the remaining term of office of the said director is less than two (2) months. The aforesaid substitute director shall retain his office only for the remaining term of office of the director whom he replaces. The resolution of the Board on this matter must receive no less than three-fourths ( $\frac{3}{4}$ ) of the votes from the remaining directors.

At present, of all the Company's directors, four are independent directors and two are executive directors.

## Supervision the Operations of Subsidiary and Affiliated Companies

In the case of a subsidiary company, executives of the Company will be appointed as directors, in proportion of no less than half of the total number of directors, to supervise operations of the subsidiary company so that the subsidiary's activities are under Company policy.

In the case of an affiliated company, executives of the Company will be appointed as members to the Board of Directors, in proportion to the number of shares held by the Company. As a representative of the Company, the director(s) will receive policy mandates from the Company for the control or supervision of the operations of the affiliated company.

## Controlling the Use of Internal Information

The Company has established policies and guidelines to prevent executives and related persons from using internal company information for personal gains. Before the announcement of company results, internal data is restricted to related departments including Accounting and Finance, Investor Relations, Internal Audits, and the Company Secretary. Each quarter, a summary of changes of company holdings (if any) by directors and executives is submitted for review to monitor any use of inside information by executives.

Directors, executives, and employees at all levels are forbidden from using internal data containing crucial information that would have a significant impact on the stock price and has not yet been declared to the public or the Stock Exchange of Thailand for trading to the advantage of self or others. Furthermore, the Company plans to establish a policy such that aforementioned parties are to avoid or refrain from trading the Company's stock for one (1) month prior to the announcement date of the Company's results.

## Auditor's Fee

### 1. Audit Fee

The Company and its subsidiaries have paid audit fees to audit companies, individual auditors or other businesses relating to the auditors and auditing companies during the previous fiscal year totaling Baht 3,491,000.

### 2. Non-Audit Fee

The Company and its subsidiaries have a general policy not to hire individual auditors or other businesses relating to its auditor for non-audit services.

## Compliance with Good Corporate Governance Principles

### 1. Rights of Shareholders

The Company considers each shareholder equally and stipulates procedures for the shareholders meeting accordingly the law and in compliance with the guidelines of the Stock Exchange of Thailand.

In 2015, the Company organized an annual shareholders' meeting on April 27, 2015 at the Queen Sirikit National Convention Center, Bangkok. An invitation letter with agenda of the meeting and related documents were sent to the shareholders 7 days prior to the meeting. Topics included the views of the Board of Directors and the review of minutes of the previous meeting. As such allowing shareholders ample time and opportunity to review and consider the topics. The Company accommodated shareholders in a convenient location with appropriately sized meeting space. Shareholder proxies' were permitted in the event they were unable to attend the meeting. The Company also posted the information regarding shareholders meeting on the Company's website and shareholders were invited to submit questions related to the Company operations through the website, prior to the meeting.

During the 2015 annual shareholders' meeting, a total of seven directors attended, including the Chairman of the Audit Committee. The Chairman of the meeting allowed equal opportunity for all shareholders to question, comment, and submitted suggestions regarding Company operations. Prominent opinions were recorded in the minutes of the meeting.

In addition to the annual shareholders' meeting, the Company will call additional shareholders' meetings, if necessary, in the event of specific emerging topics, which are pertinent to the shareholders' interests or relate to laws or regulations that require the shareholders' approval.

### 2. Equitable Treatment of Shareholders

The Company treats all shareholders equally and stipulates procedures for the shareholders meeting in accordance to the law and in compliance with guidelines of the Stock Exchange of Thailand. Each shareholder has one vote for each share. Shareholders can send a proxy on their behalf in the event that they are unable to attend.

To prevent conflicts of interest and misuse of inside information for personal gain, the Board of Directors investigates any occasion which may lead to a dispute and has established a policy and guidelines to prevent executives and related persons from using internal company information for personal gains. Company holdings by directors and executives are assessed to screen any use of inside information for gains by executives.

In case of related parties' transactions, the Audit Committee is responsible for reviewing the related transactions to ensure that no conflict of interest will occur in order to maximize the overall company's benefits. The Company discloses all necessary information together with Directors' opinion to the public according to SET regulation.



The Company has established a channel, through the company's website, to allow shareholders to submit names of qualified candidates to be nominated as board members and to propose an agenda for, and in advance of, the annual general shareholders' meeting.

### 3. Role of Stakeholders

The Company maximizes added value for its clients, with respect to its people and the environment. PDI supports the communities in which it operates and gives the best possible return to its shareholders.

#### Commitment to Shareholders

The Company respects the rights of its major and minor shareholders equally. In alignment with PDI's vision, the Company commits to profitable and safe operations yielding the best possible return for the benefit of all its shareholders. More details can be found in "the Corporate Social Responsibility (CSR) report section".

The details of Commitment to Customers & Suppliers, commitment to Employees and commitment to the Community (Local and National) can also be found in the CSR report section.

The Company has dedicated an open channel for receiving complaints regarding corporate governance and the Code of Conduct. This can be done through the secretariat of the Audit Committee or the Chairman of the Audit Committee using the following email: [surint@padaeng.co.th](mailto:surint@padaeng.co.th). All information received will be treated as confidential and properly investigated in a timely manner.

### 4. Disclosure and Transparency

The Company manages its business with honesty, ethical conduct, and responsibility concerning all stakeholders: customers, employees, shareholders and the general public. The Company issued a Code of Conduct, which gives guidelines for work and employee behavior. All employees use this as a guide for their daily work, along with the influence and inspiration of the vision of the Company. The latest version of Code of Conduct has been revised in 2015.

The Company ensures that important information, both financial and non-financial, as specified in relevant regulations of the SET, is disclosed correctly, accurately, on a timely and transparent basis. In addition to this, the financial report, the annual statement (Form 56-1), and the annual report are available on the PDI website.

The Board of Directors has also called for the disclosure of company information in an accurate, complete, transparent, and widespread manner. As such, all financial information, as well as general information about the Company that might impact the value of company, is readily available. Shareholders and other interested parties can access any such information through the various Stock Exchange of Thailand media outlets or directly from the Company's website. A specific investor relations function has been established and existing and potential investors can obtain information by contacting the Company directly at Tel: 66(0)2695-9499 or at [www.padaeng.com](http://www.padaeng.com) or e-mail inquiries to the Investor Relation Manager at [woratipr@padaeng.co.th](mailto:woratipr@padaeng.co.th).

The Company recognizes the importance of internal control systems at managerial and operational levels, and has created an authority manual for reference. An independent internal audit department, reporting directly to the Audit Committee, organizes various internal checks and conducts audits as needed.

### 5. Responsibilities of the Board

The PDI Board of Directors is responsible for acting in compliance with the by-laws, objectives, and guidelines of the Company, as well as the resolutions of the shareholders' meeting, with honesty and prudence and in the best interest of



the Company. In addition to this, the Board of Directors also makes contributions towards establishing the vision, mission, strategy, objectives, business plans and the budget of the Company. The Board ensures that the management team conducts operations in accordance with the Company's business plan, in order to add value to its business and ensure sustainability for its shareholders.

The Board of Directors acknowledges that the Company maintains adequate internal controls and that its financial statements as of December 31, 2015 are reliable.

## Balance of Authority for Non-Executive Directors

The Company's Board of Directors consists of qualified directors with a broad realm of experience, totaling nine members at the end of 2015 as follows:

1. Executive Directors: Two directors.
2. Non-Executive Directors: Four independent directors; three of which are Audit Committee members.

## Aggregation or Segregation of Positions

The function of the Chairman of the Board of Directors and the Managing Director (MD) are separated to ensure a clear distinction between responsibilities in policy making and managing daily operations. The Company has clearly defined the authority and responsibilities of management at every level.

## Board Self-Assessment

The Board of Directors annually engages in self-assessment, which enables all board members to consider their overall performance and resolve any potential problems or issues. This serves as a tool for reviewing performance, as well as a way to identify issues and obstacles that each director faced over the past year. It also helps increase the operational effectiveness of the Board. At present, the performance assessment of the Board is conducted using an overall performance method. To facilitate this, the Company has developed an assessment form consistent with the Statement of Corporate Governance Principles and the duties and responsibilities stated in the Board of Directors Charter. In 2015, the results of the self-assessment will be distributed to all board members for acknowledgment and self-improvement in 2016.

## Orientation for New Directors and Director Participation in Seminars

The Board of Directors secretary division is responsible for preparing general information and briefing newly elected directors on the actions and procedures of the Company to ensure that they are updated on all Company operations, as well as the SEC and SET regulations and requirements. Site visits will also be available for new directors who would like to have a more in-depth knowledge of Company operations.

In order to keep the directors currently informed on new rules, regulations, and requirements, they are encouraged to attend refresher courses and seminars organized by the Thai Institute of Directors and other relevant organizations.

In 2015, directors and executives of the Company who participated in such courses are listed below:

Name	Position	Course
1. Mr. Chitchai Thaveepanich	Corporate Vice President- Human Resources	1. Director certification Program (DCP), Class 208/2015 2. Successful Formulation & Execution the Strategy (SFE), 25/2015



## Internal Control and Risk Management

At PDI internal control is a crucial process for achieving our goals and objectives. In this respect, the Audit Committee is mandated with supervising the Internal Audit Office and ensuring that it works independently, with the utmost integrity, and under proper ethics as defined in the Internal Audit charter. The latter clearly prescribes the mission, scope of work, authority, duty, and responsibility; as well as the operating and auditing guidelines. The Audit Committee is also responsible for ensuring a strict and appropriate assessment and review of the internal control systems, the internal audit activities, and risk management. This enables employees at all levels to perform their duties efficiently, effectively and under no other pressure aside from their roles and responsibility.

Based on recommendations gathered from the Internal Audit Department, PDI has streamlined our working procedures to ensure the efficiency and effectiveness of our control systems, with the aim of continuous improvement and sustainable development. In 2015, our auditing work has improved internal control and enhanced our internal control significantly in the areas of sales & marketing, administrative work, general procurement inventory management, payment process and EHS compliance.

At present the Audit Committee also oversees risk management. PDI intends to set up a separate Risk Management Committee to oversight the risk management process in 2016. In this dynamic environment, PDI has emphasized risk prevention measurements and risk management, with the anticipation of upcoming changes in internal factors, economic changes and general external influences. For 2016, PDI will continue to conduct its risk management to focus on fraud and anticorruption to be in line with its policy in addition to its normal operation risks.

In 2015 and especially in 2016, PDI will continue its strategy to move towards green business for sustainable growth. New projects have been studied, with emphasis on materials, renewable energy and industrial waste management, supporting the national agenda. Each feasibility study for all proposed projects included risk assessments that followed standard risk assessment procedures. All potential risks, including technical, financial, and managerial risks, for each project are identified and analyzed, and this information is presented to the Executive Committee and the Board of Directors before any final decisions on the projects are made.

At Board meeting no. 01-2016, with all three Audit Committee members present, the Board reviewed the system of internal control, the organization and external influencing factors, risk management, methods of dissemination, communications, and monitoring information. In conclusion, it was confirmed that PDI deploys an adequate system of internal controls regarding transactions with major shareholders, directors, management and related persons, as well as internal controls in other areas.

### Head of Internal Auditor:

In Board meeting no.08-1998, on December 22, 1998, the board appointed Dr. Surin Tanticharoenkiat as head of the Internal Audit Department and secretary to the Audit Committee. Dr. Surin had worked as the technical support manager, and possesses an extensive knowledge of the company's operations. In addition to this, he has also attended courses in both business management and internal audit fields. As such, the board of directors deems him qualified to lead the internal audit department of the Company. His credential is listed in Appendix No. 3.

The independence of the Internal Audit Department is ensured by the fact that the head of the department reports directly to the Audit Committee, and the Audit Committee is responsible for approving the appointment, as well as transferring and dismissing of the chief of the internal audit unit.

Below the judgment of the auditor, Mrs. Nattaporn Phan-Udom, Certified Public Accountant (Thailand) No. 3430, PricewaterhouseCoopers ABAS Ltd.:

*"In planning and performing our audit of the financial statements of Padaeng Industry Public Company Limited for the year ended December 31, 2015, we obtained an understanding of the internal control system in order to determine the nature, timing and extent of our audit procedures, for the purpose of expressing our opinion on the financial statements and not to provide an opinion on the internal control system.*

*The management of Padaeng Industry Public Company Limited are responsible for establishing and maintaining an internal control system to assist in achieving management's objective of ensuring, as far as practicable, the orderly and efficient conduct of its business, including adherence to management policies, the safeguarding of assets, the prevention and detection of fraud and error, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information.*

*Because of inherent limitations in any internal control system, errors or irregularities may nevertheless occur and not be detected. Also, projection of any evaluation of the internal control system to future periods is subject to the risk that procedures may become inadequate because of changes in conditions or that the effectiveness of the design and operation of policies and procedures may deteriorate.*

*However, after consideration of the internal control system, we noted no matters involving the internal control system and its operation that we consider to be material weaknesses under Thai Auditing Standard 315 (revised) 'Identifying and assessing the risks of material misstatement through understanding the entity and its environment'."*

## Legal Disputes

The Company has been served notice of five complaints by 1,141 plaintiffs filed in the Bangkok Southern Civil Court since 2009 and 2010. The plaintiffs are seeking compensation of Baht 3,969 million from the Company alleging that it caused cadmium contamination in the Mae Sod district of the Tak province. The Company has filed answers to all the claims as ordered by the Court.

On September 20, 2013, the Bangkok South Civil Court read a judgment on the first case against the Company and Tak Mining Company Limited of the Black Case No. 66/2552, filed by a group of villagers (a total of 207 villagers) in the Mae Tao basin, Mae Sot District, Tak Province. The accusation being that the mining operations of both companies caused cadmium contamination in the area. The villagers have claimed over Baht 726 million as damages to compensate 1) Plaintiffs who obtained a Cadmium patients' card from the Mae Sod Hospital, 2) Plaintiffs who claimed that they were unable to use the land for agriculture, 3) Plaintiffs who claimed of losing their jobs, and



4) Plaintiffs who were scared of cadmium contamination, 5) compensation for loss of culture and traditional living. The Company and Tak Mining have been also requested by the plaintiffs to pay Baht 50 million and 3 percent of the Company's profit to the Risk Insured Fund and to improve quality of lives and environment as well as restore the environment under at the cost of the Company and Tak Mining.

The court judgment on the above case ordered the Company and Tak Mining to pay a compensation of Baht 9.2 million only to villagers who hold the cadmium patient's card from the Mae Sod Hospital. The Company and Tak Mining are equally responsible for this compensation. For other Plaintiffs who claimed to have been damaged from the contamination, the Court gives a judgment to dismiss all claims because they were not able to prove that there were such damages claimed. The Company has studied the stated court judgment in detail and is in process to appeal the court order accordingly.

On February 28, 2014, the Bangkok South Civil Court ruled judgment in the Black Case No. 9/2553, in the same manner above, which claimed over Baht 230 million as damage compensation. The court judgment orders the Company and Tak Mining to pay a compensation to 20 plaintiffs (villagers) who hold the Cadmium patient's card issued by the Mae Sod Hospital, from the total 84 plaintiffs, at the total amount of Baht 2.48 million. The Company is considering the court resolution and in process to appeal to the court order.

On September 29, 2014, the Bangkok South Civil Court ruled judgment in the Black Case No. 64/2552, in the same manner above, which claimed over Baht 836 million as damage compensation. The court judgment orders the Company and Tak Mining to pay a compensation to 82 plaintiffs (villagers) who hold the Cadmium patient's card issued by the Mae Sod Hospital, from the total 218 plaintiffs, at the total amount of Baht 8.2 million. The Company is considering the court resolution and in process to appeal to the court order.

On May 27, 2015, the Bangkok South Civil Court ruled judgment in the Black Case No. 63/2552, in the same manner above, which claimed over Baht 1,095 million as damage compensation. The court judgment orders the Company and Tak Mining to pay a compensation to 40 plaintiffs (villagers) who hold the Cadmium patient's card issued by the Mae Sod Hospital, from the total 319 plaintiffs, at the total amount of Baht 4 million. The Company is considering the court resolution and in process to appeal to the court order.

The other 1 complaint is pending for the court proceedings.

The Company is confident that its strict environmental measures are in line with the regulations and requirements of the authorities. Management intends to defend the case vigorously. At that stage, the outcome of the proceedings is unknown. However, for prudence purpose, contingent liability amount of Baht 27 million has been recorded for these 5 complaints.

## Related Parties Transactions

The Company's policy on related parties' transactions is based on the principles of fair trade, using global pricing as a reference. It is conducted in the best interest of the Company. The internal audit department has from time to time carried out audits on related party transactions. Details can be found in note 26 of the 2015 financial statement.



# General data



<b>Company Name</b>	Padaeng Industry Public Company Limited
<b>Symbol</b>	PDI
<b>Registration Number</b>	0107537000467
<b>Business Type</b>	Producing and marketing of zinc metal and other by-products, providing added value materials from recycling and providing energy from renewable sources, providing raw materials from waste and eco management of waste
<b>Registered Capital</b>	Baht 2,260,000,000 with 226,000,000 Shares at Baht 10 per share
<b>Locations</b>	<p><b>PDI – Bangkok :</b> CTI Tower, 26<sup>th</sup>-27<sup>th</sup> Floor, 191/18-25 Ratchadaphisek road, Khlong Toei district, Bangkok 10110, Thailand Telephone : +66 (0) 2695-9499, Fax : +66 (0) 2695-9495 E-mail : info@padaeng.co.th Website: www.padaeng.com</p> <p><b>PDI – Tak :</b> 94 Moo 1, Ban Klonghuaysai Asian Highway, Nongbuatai subdistrict, Muang district, Tak 63000, Thailand Telephone : +66 (0) 5551-7444, (0) 5555-8500 Fax : +66 (0) 5551-7440, (0) 5555-8511</p> <p><b>PDI – Mae Sod :</b> 13 Moo 4 Phratad Padaeng subdistrict, Mae Sod district, Tak 63110, Thailand (P.O.Box 29 Amphoe Mae Sod, Tak 63110) Telephone : +66 (0) 5553-3015-9, Fax : +66 (0) 5553-3018</p> <p><b>PDI – Rayong :</b> Padaeng Industrial Estate, 15 Padaeng road, Maptaphut subdistrict, Muang district ,Rayong 21150, Thailand Telephone : +66 (0) 3868-3318-20, Fax : +66 (0) 3868-3321</p>

## Other References

### Registrar

Thailand Securities Depository Company Limited  
93 Ratchadaphisek Road, Dindaeng, Bangkok 10400, Thailand.  
Telephone : +66 (0) 2009-9000, Fax: +66 (0) 2009-9991  
SET Contact Center: +66 (0) 2009-9999  
Website: <http://www.set.or.th/tsd>, E-mail: SETContactCenter@set.or.th

### Auditor

Mrs. Nattaporn Phan-Udom,  
Certified Public Accountant Registration No. 3430, PricewaterhouseCoopers ABAS Ltd.  
Bangkok City Tower, 15th Floor, 179/74-80 South Sathorn Road, Bangkok 10120, Thailand.  
Telephone : +66 (0) 2344-1000, +66 (0) 2824-5000, Fax: +66 (0) 2824-5050,  
Website: <http://www.pwc.com/th>

### : Legal Advisor

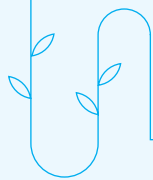
- None -

### : Advisor or Contractor under Management Agreement

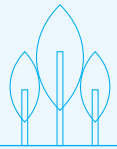
- None -

## Memberships

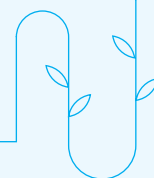
- International Zinc Association (IZA)
- Mining Industry Council
- The Thai Chamber of Commerce
- Thai Listed Companies Association
- Thai Institute of Directors Association
- Thailand Management Association (TMA)
- Thai Galvanizing Association (TGA)
- Community Partnership Association (CPA)



# 2015 Awards



- 
- The Thailand Sustainability Investment Awards 2015 from the Stock Exchange of Thailand (SET) for one of 51 listed companies that have passed the assessment process in sustainability on environmental, social and governance (ESG) aspects and recommended for investors who preferably aim at long-term returns.
- 
- The Certificate of Excellence of the King of Thailand Vetiver Awards 2015 for Outstanding Dissemination and Application of the Vetiver System from Chaipattana Foundation.
- 
- The Certificate of ESG 100 Recognition 2015 from the Thaipat Institute, for the top 100 most outstanding companies in Environmental, Social and Governance (ESG).
- 
- The CSR - DIW Continuous Award 2015 under the department's project promoting plants' moves toward environmental improvement for sustainable social responsibility from the Department of Industrial Works (DIW), Ministry of Industry.
- 
- The CSR-DPIM Continuous Award 2015 for accomplishment in social responsibility networking from the Department of Primary Industries and Mines (DPIM), Ministry of Industry.
- 
- The Green Mining Continuous Awards 2015 from DPIM.
- 
- The Certificate of Eco Factory from the Industrial Environment Institute, the Federation of Thai Industries (FTI).
- 
- The National Outstanding Operators Award for Safety, Occupational Health, and Work Environment 2015 for an eighth successive year from Ministry of Labor.
- 
- The National and Provincial Awards 2015 for Hygienic, Healthy, and Safe Operation Facilities from the Department of Disease Control, Ministry of Public Health.
-



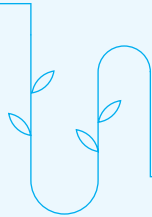
# SEC Contents in Accordance with Form 56-2

Accordance with the form of Annual Report for a security-issuing company (56-2) issued under notification of the Capital Market Supervisory Board No.Tor Chor.44/2556 regarding Rules, Condition and Procedures for Disclosure of Information Relating to Financial Status and Operating Result of Issuing Company. (Effective on January 1, 2014)

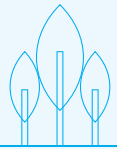
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For more information, the investor shall study the Company's information from the Annual Registration Statement (Form 56-1) at [www.sec.or.th](http://www.sec.or.th) and [www.padaeng.com](http://www.padaeng.com)





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G4-48	Highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material Aspects are covered	135-144	
G4-49	Process for communicating critical concerns to the highest governance body	135-144	
G4-50	Nature and total number of critical concerns that were communicated to the highest governance body	135-144	
G4-51	Remuneration policies for the highest governance body and senior executives	132	
G4-52	Process for determining remuneration	132	
G4-53	Stakeholders' views are sought and taken into account regarding remuneration	132	
<b>Ethics and Integrity</b>			
G4-56	Codes of conduct	21/31	
G4-57	Helplines or advice lines for employee	21	
G4-58	Mechanisms for reporting concerns about unethical or unlawful behavior	21	



## Specific Standard Disclosures

Indicator	Disclosures	Page	Note
G4-DMA	Generic Disclosures on Management Approach	4-7	
<b>Economic</b>			
<b>Economic Performance</b>			
G4-EC1	Direct economic value generated and distributed	8	
G4-EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	52-57/34	
G4-EC3	Coverage of the organization's defined benefit plan obligations		
<b>Procurement Practices</b>			
G4-EC9	Proportion of spending on local suppliers at significant locations of operation	30	
<b>Environmental</b>			
<b>Materials</b>			
G4-DMA	Generic Disclosures on Management Approach	4-7/32	
G4-EN1	Materials used by weight or volume	33/43	
G4-EN2	Percentage of materials used that are recycled input materials Includes both post-consumer recycled material and waste from industrial sources (e.g. new scrap from fabricators and old scrap from end-of-life equipment), but excludes internal recycling within the facility (home scrap)	33/43	
<b>Energy</b>			
G4-DMA	Generic Disclosures on Management Approach	4-7/32	
G4-EN3	Energy consumption within the organization	34/43	
G4-EN5	Energy intensity	34	
G4-EN6	Reduction of energy consumption	34	
G4-EN7	Reductions in energy requirements of products and services	47/43	
<b>Water</b>			
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G4-EN8	Total water withdrawal by source	36-37/43	
G4-EN9	Water sources significantly affected by withdrawal of water	36-37/43	
G4-EN10	Percentage and total volume of water recycled and reused	36-37/43	
<b>Biodiversity</b>			
G4-DMA	Generic Disclosures on Management Approach	38	
G4-EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	39-42	
G4-EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas Include impacts identified as a consequence of any resettlement and closure activities reported under Indicators MM9 and MM10 respectively	39-42	
MM1	Amount of land (owned or leased, and manage for production activities or extrative use) disturbed or rehabilitated	39-42	
G4-EN13	Habitats protected or restored	39-42	
MM2	The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place	39-42	

Indicator	Disclosures	Page	Note
<b>Emissions</b>			
G4-DMA	Generic Disclosures on Management Approach	35	
G4-EN15	Direct greenhouse gas (GHG) emissions (scope 1)	36/43	
G4-EN18	Greenhouse gas (GHG) emissions intensity	34/43	
G4-EN19	Reduction of greenhouse gas (GHG) emissions	34	
G4-EN21	NOX, SOX, and other significant air emissions Include emissions from both major mobile sources and on-site stationary sources	35	
<b>Effluents and Waste</b>			
G4-DMA	Generic Disclosures on Management Approach	37	
G4-EN22	Total water discharge by quality and destination	43	
G4-EN23	Total weight of waste by type and disposal method	43	
<b>Products and Services</b>			
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	29	
<b>Compliance</b>			
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	145-146	
<b>Overall</b>			
G4-EN31	Total environmental protection expenditures and investments by type	43	
<b>Supplier Environmental Assessment</b>			
G4-EN32	Percentage of new suppliers that were screened using environmental criteria	31	
<b>Environmental Grievance Mechanisms</b>			
G4-EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	39	
<b>Social: Labor Practices and Decent Work</b>			
<b>Employment</b>			
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	22-29	
G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	19	
G4-LA3	Return to work and retention rates after parental leave, by gender	22	
<b>Labor / Management Relations</b>			
G4-LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	21	
<b>Occupational Health and Safety</b>			
G4-LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	26	
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	26	
G4-LA7	Workers with high incidence or high risk of diseases related to their occupation	25-26	
G4-LA8	Health and safety topics covered in formal agreements with trade unions	-	No trade unions in PDI



Indicator	Disclosures	Page	Note
<b>Training and Education</b>			
G4-LA9	Average hours of training per year per employee by gender, and by employee category	23	
G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	20-21	
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	23	
<b>Diversity and Equal Opportunity</b>			
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	22-23	
<b>Equal Remuneration for Women and Men</b>			
G4-LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	22	
<b>Supplier Assessment for Labor Practices</b>			
G4-LA14	Percentage of new suppliers that were screened using labor practices criteria	30	
G4-LA15	Significant actual and potential negative impacts for labor practices in the supply chain and actions taken	30	
<b>Labor Practices Grievance Mechanisms</b>			
G4-LA16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms	18	
<b>Social: Human Rights</b>			
<b>Investment</b>			
G4-HR1	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	-	All agreements are in compliance with PDI Code of Conduct
G4-HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	23	
<b>Non-discrimination</b>			
G4-HR3	Total number of incidents of discrimination and corrective actions taken	-	There was no incidents of discrimination
<b>Freedom of Association and Collective Bargaining</b>			
G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	21/30	
<b>Child Labor</b>			
G4-HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	21/30	
<b>Forced or Compulsory Labor</b>			
G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	30	
<b>Security Practices</b>			
G4-HR7	human rights policies or procedures that are relevant to human rights policies or procedures that are relevant to operations	21	

Indicator	Disclosures	Page	Note
<b>Indigenous Rights</b>			
G4-HR8	Total number of incidents of violations involving rights of indigenous peoples and actions taken	-	None
MM5	Total number of operations taking place in or adjacent to Indigenous Peoples' territories, and number and percentage of operations or sites where there are formal agreements with Indigenous Peoples' communities	-	None
<b>Assessment</b>			
G4-HR9	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	-	None
<b>Supplier Human Rights Assessment</b>			
G4-HR10	Percentage of new suppliers that were screened using human rights criteria	30	
G4-HR11	Significant actual and potential negative human rights impacts in the supply chain and actions taken	30	
<b>Human Rights Grievance Mechanisms</b>			
G4-HR12	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanism	-	No grievances about human rights impacts filed
<b>Social: Society</b>			
<b>Local Communities</b>			
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs Report whether there are programs in place for assessing the impacts of operations on local communities	27-28	
G4-SO2	Operations with significant actual and potential negative impacts on local communities	27-28	
MM6	Number and description of significant disputes relating to land use, customary rights of local communities and Indigenous Peoples	-	None
MM7	The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and Indigenous Peoples, and the outcomes	-	None
<b>Artisanal and Small-Scale Mining</b>			
MM8	Number (and percentage) or company operating sites where artisanal and small-scale mining (ASM) takes place on, or adjacent to, the site; the associated risks and the actions taken to manage and mitigate these risks	-	None
<b>Resettlement</b>			
MM9	Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process	-	None
<b>Closure Planning</b>			
MM10	Number and percentage of operations with closure plans	19	
<b>Anti-Corruption</b>			
G4-SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	31	
G4-SO4	Communication and training on anti-corruption policies and procedures	31	
G4-SO5	Confirmed incidents of corruption and actions taken	31	
<b>Anti-Competitive Behavior</b>			
G4-SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	31	



Indicator	Disclosures	Page	Note
<b>Supplier Assessment for Impacts on Society</b>			
G4-SO9	Percentage of new suppliers that were screened using criteria for impacts on society	30	
G4-SO10	Significant actual and potential negative impacts on society in the supply chain and actions taken	-	No grievances about environmental impacts filed, and addressed
<b>Grievance Mechanisms for Impacts on Society</b>			
G4-SO11	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms	-	No grievances about environmental impacts filed, and addressed
<b>Social: Product Responsibility</b>			
<b>Customer Health and Safety</b>			
G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	-	100% of significant products
G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	-	None
<b>Materials Stewardship</b>			
MM11	Programs and progress relating to materials stewardship	45	
<b>Product and Service Labeling</b>			
G4-PR3	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements	-	All significant product and service categories are assessed regarding health and safety impact
G4-PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	-	There was no incidents of non-compliance
G4-PR5	Results of surveys measuring customer satisfaction	29	
<b>Marketing Communications</b>			
G4-PR6	Sale of banned or disputed products	None	There was no banned or disputed products
G4-PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	-	None
<b>Customer Privacy</b>			
G4-PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	29	
<b>Compliance</b>			
G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	-	There was no fines for non-compliance





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