

YOUR ULTIMATE SOLUTION PARTNER

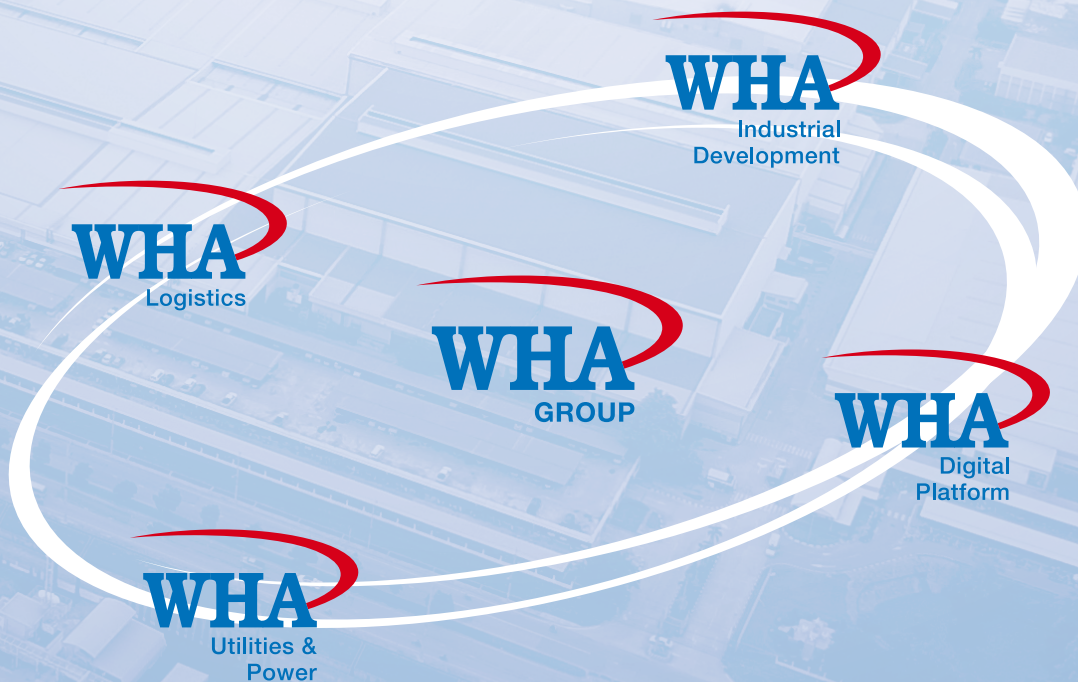


ANNUAL REPORT 2017  
WHA Corporation Public Company Limited



# Your Ultimate Solution Partner

A leader in providing a fullyintegrated services, capturing  
a wide range of complementary businesses i.e. Industrial Estate,  
Logistic, Utilities, Power and Digital Platform



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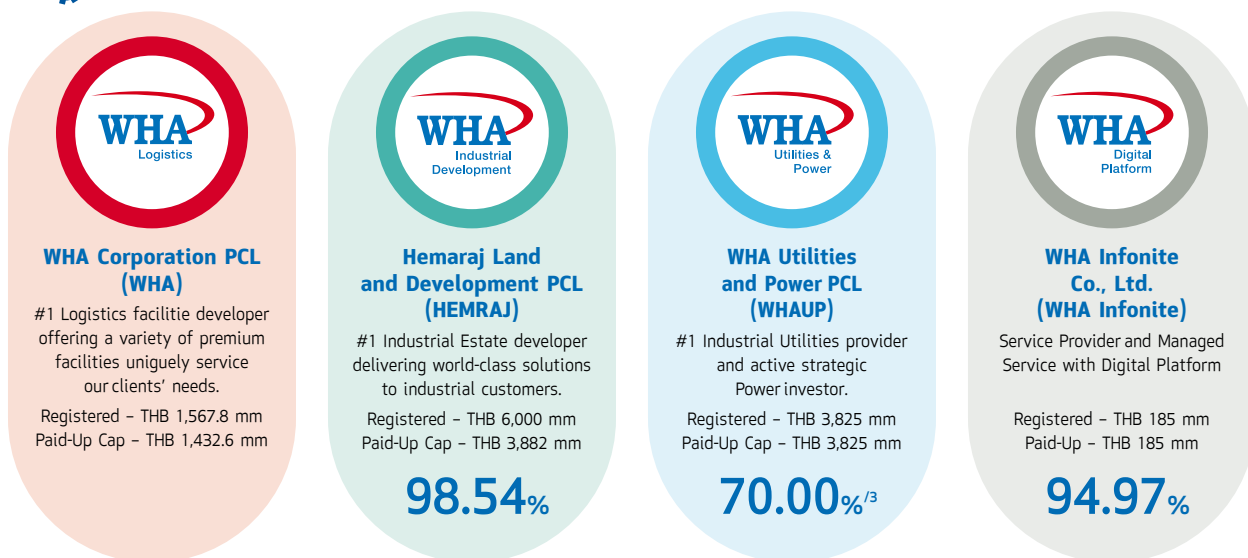
## [ Strategic Performance Overview ]

## PERFORMANCE OVERVIEW

## BUSINESS STRUCTURE



## CORE BUSINESS



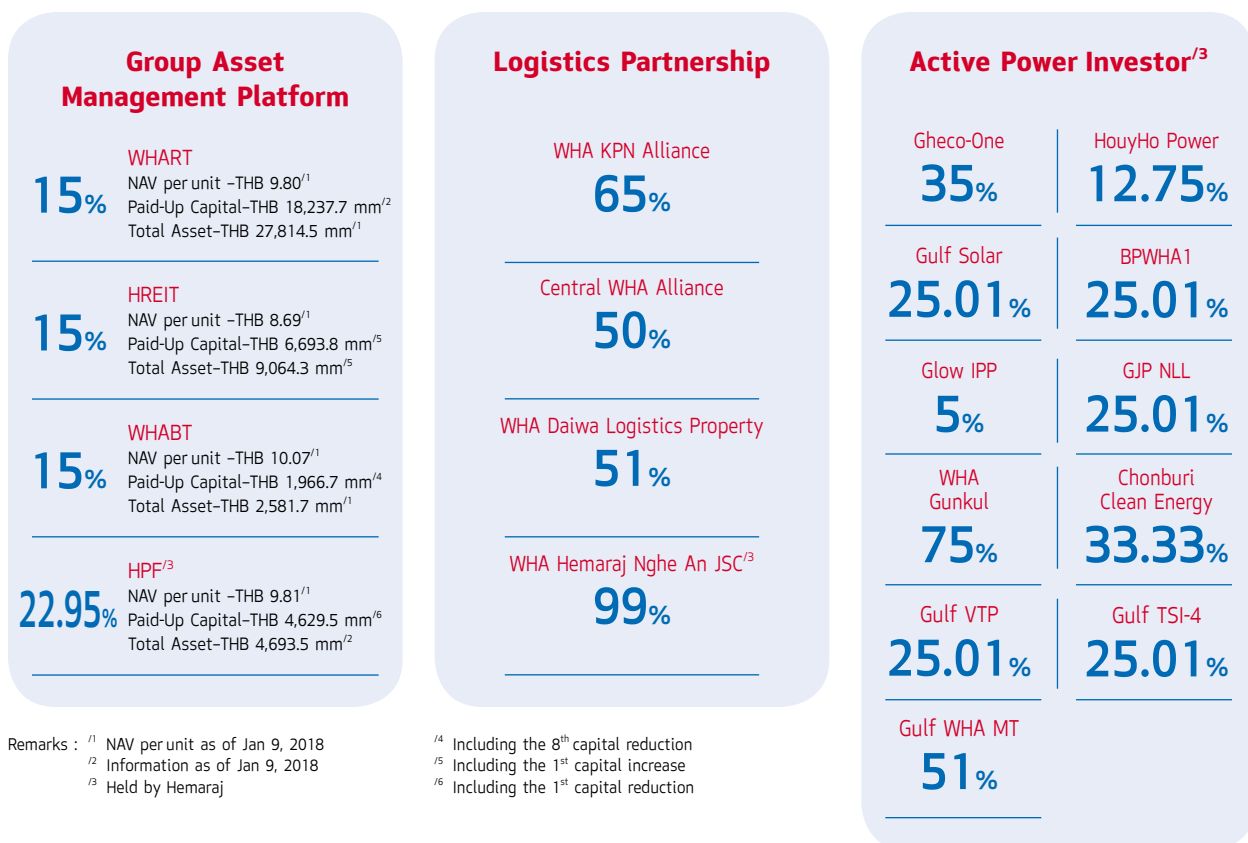
## PROPERTY FUNDS AND REITS



## JV COLLABORATIONS

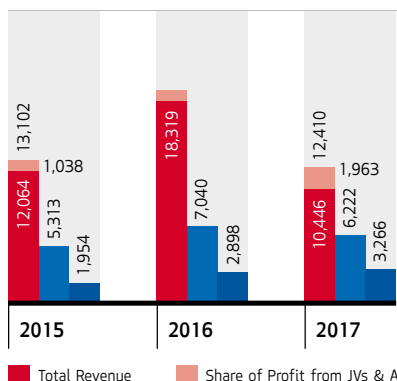


## BUSINESS COLLABORATIONS - POWER

Remarks : <sup>/1</sup> NAV per unit as of Jan 9, 2018<sup>/2</sup> Information as of Jan 9, 2018<sup>/3</sup> Held by Hemaraj<sup>/4</sup> Including the 8<sup>th</sup> capital reduction<sup>/5</sup> Including the 1<sup>st</sup> capital increase<sup>/6</sup> Including the 1<sup>st</sup> capital reduction



## OPERATING PERFORMANCE



### 2017 PERFORMANCE (Unit : THB mm)

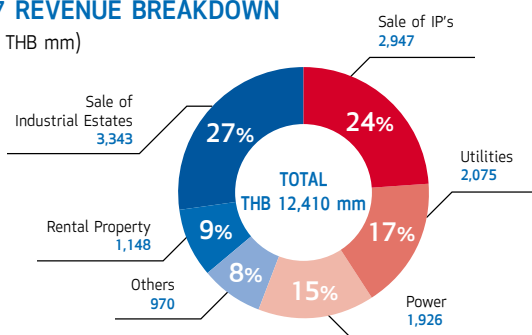
#### OVERALL HIGHLIGHT

- Total revenue decreased 36% from 2016 to THB 12,410 mm in 2017, mainly from the asset monetization to only WHART, compared to 2016, which the company monetized assets to both WHART and HREIT which compensate by higher number of land transfer from Hemaraj IE in 2017 compared with 2016, increase in share of profit from JVs and right of way charged in Hemaraj IE.
- Share of profit from JVs 2017 increased by 95%, compared with 2016 as B.Grimm Power, Gulf VTP, Gulf TS1, Gulf TS2 and Gulf TS3 have commenced its COD in Nov 2016, May 2017, July 2017, Sep 2017 and Nov 2017, respectively adding our portfolio up to 478 Equity MW. Moreover, there was unrealized FX gain amount of THB 574 mm during this year.
- EBITDA decreased by 12% YoY to THB 6,222 mm in 2017, resulting from the asset monetization to only WHART, compared to 2016, which the company monetized assets to both WHART and HREIT which compensate by an increase of share of profit of power business in 2017 and achieved B.Grimm Power, Gulf VTP, Gulf TS1 Gulf TS2 and Gulf TS3 COD on planned schedule of 159 equity MW.
- Net profit attribute to owners of the parent increased to THB 3,266 mm in 2017 or increase at the rate of 13% YoY mainly from an increase of sale of Hemaraj IE, profitability from asset monetization to WHART, share of profit and decrease of financial cost after acquisition loan repayment, WHAUP's loan refinancing, Hemaraj's bond repayment and loan repayment in 2Q'17 from WHAUP's IPO proceed.

## REVENUE & GROSS PROFIT BREAKDOWN

### 2017 REVENUE BREAKDOWN

(Unit : THB mm)

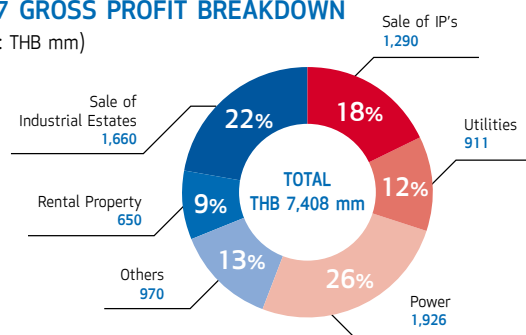


Recurring vs non-Recurring = 49:51

Remark : Share of profit from JV's and Associates included

### 2017 GROSS PROFIT BREAKDOWN

(Unit : THB mm)



Recurring vs non-Recurring = 60:40

Remark : Share of profit from JV's and Associates included  
Gross profits are based on consolidated financial statements and thus affected by PPA adjustment

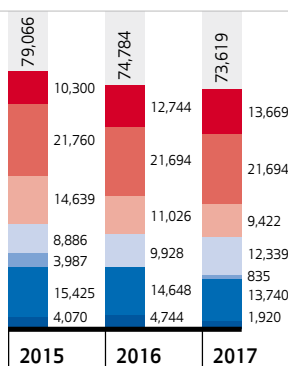
## FINANCIAL POSITION

### ASSETS

(Unit : THB mm)

- IP's stood at THB 9,422 mm in 2017 due to reclassification to non-current assets held for sale and sold to REIT.
- Intangible assets & goodwill of THB 21,694 mm resulted from the PPA after the acquisition.
- Hemaraj contributed Cost of Real Estate Developments after PPA of THB 13,740 mm and Investment in Associates after PPA of THB 12,339 mm to the consolidated balance sheet in 2017.

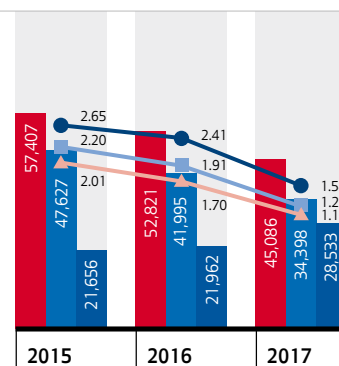
- Others
- Intangible Assets & Goodwill
- Investment Properties
- Investment in Associates
- Non-Current Assets Held for Sale
- Cost of Real Estate Development
- Cash & ST Investments



### CAPITAL STRUCTURE

(Unit : THB mm)

- Liabilities
- IBD
- Equity
- D/E
- IBD/E
- Net IBD/E

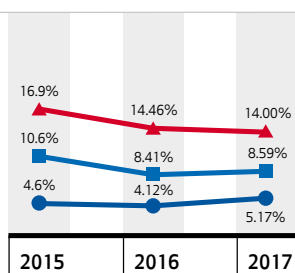


## FINANCIAL RATIO

### RETURN ON INVESTMENT

(Unit : %)

- ROE
- ROA
- ROIC

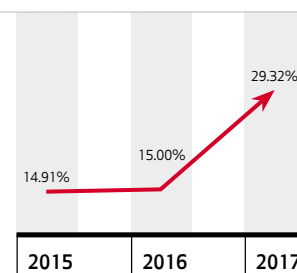


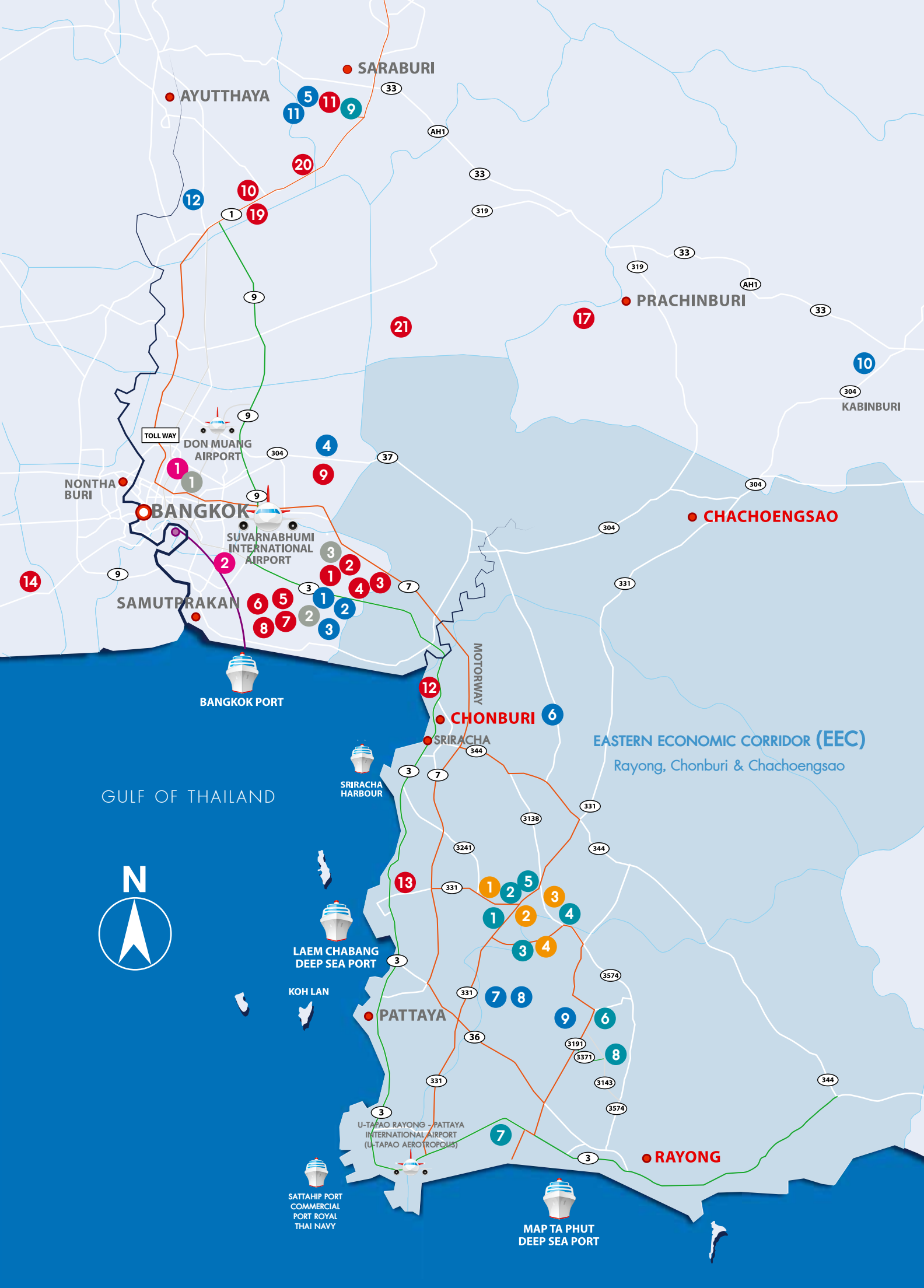
### NET PROFIT MARGIN

(Unit : %)

#### NET PROFIT MARGIN IMPROVEMENT

- Albeit the drop in total revenue in 2017, the net profit was higher thanks to the higher profitability in both industrial land sale and REIT monetization as well as significantly lower interest expenses.
- As a result, the net profit margin improved significantly from 15.00% in 2016 to 29.32% in 2017. This is also supported from more balanced revenue profile between the recurring and non recurring income in 2017.







# WHA 40+

## STRATEGIC LOCATIONS IN THAILAND

WHA is a key player in the development of the Eastern Economic Corridor (EEC).

### WAREHOUSE FARM

---

1. WHA Mega Logistics Center  
Bangna-Trad km.18
2. WHA Mega Logistics Center  
Bangna-Trad km.19
3. WHA Mega Logistics Center  
Bangna-Trad km.23
4. WHA KPN Mega Logistics Center  
Bangna-Trad km.23
5. WHA Mega Logistics Center  
Chonlaharnpichit km.3
6. WHA Mega Logistics Center  
Chonlaharnpichit km.3 Phase 2
7. WHA Mega Logistics Center  
Chonlaharnpichit km.4
8. WHA Mega Logistics Center  
Chonlaharnpichit km.5
9. WHA Mega Logistics Center  
Ladkrabang
10. WHA Mega Logistics Center  
Wangnoi 61
11. WHA Mega Logistics Center  
Saraburi
12. WHA Mega Logistics Center  
Panthong, Chonburi
13. WHA Mega Logistics Center  
Laemchabang
14. WHA Mega Logistics Center  
Rama II, km.35
15. WHA Mega Logistics Center  
Lampoon
16. WHA Mega Logistics Center  
Khon Kaen
17. WHA Mega Logistics Center  
Kabinburi
18. WHA Mega Logistics Center  
Suratthani
19. WHA Mega Logistics Centers  
Wangnoi 62
20. WHA CENTRAL Mega Logistics Center  
Wangnoi 63
21. WHA Mega Logistics Center  
Lum Luk Ka

### BUILT-TO-SUIT FACTORIES AND WAREHOUSES

---

1. Consumer Goods Distribution Center
2. Healthcare Air-Con Distribution Center
3. Hazardous Goods Distribution Center
4. Ladkrabang Logistics Center (2 Phases)
5. Diaper Warehouse
6. Consumer Goods Distribution Center
7. Aerospace Manufacturing
8. Motorbike Manufacturing
9. Aerospace Factory
10. Hemaraj Ready Built Factory Park 1 @Hi-tech Kabin
11. Diaper Factory
12. Consumer Goods Distribution Center

### INDUSTRIAL ESTATES/LANDS

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1. Hemaraj Chonburi Industrial Estate (HCIE)
2. Hemaraj Chonburi Industrial Estate 2 (HCIE2)
3. Eastern Seaboard Industrial Estate (Rayong) (ESIE)
4. Hemaraj Eastern Seaboard Industrial Estate (HESIE)
5. Hemaraj Eastern Seaboard Industrial Estate 2 (HESIE 2)
6. Hemaraj Eastern Seaboard Industrial Estate 4 (HESIE 4)
7. Hemaraj Eastern Industrial Estate (Map Ta Phut) (HEIE)
8. Hemaraj Rayong Industrial Land (HRIL)
9. Hemaraj Saraburi Industrial Land (HSIL)

### HEMARAJ LOGISTICS PARKS

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1. Hemaraj Logistics Park 1 (HLP 1)
2. Hemaraj Logistics Park 2 (HLP 2)
3. Hemaraj Logistics Park 3 (HLP 3)
4. Hemaraj Logistics Park 4 (HLP 4)

### DIGITAL PLATFORM

---

1. WHA Data Center Vibhavadi-Rangsit
2. WHA Data Center Bangna-Trad
3. JV Data Centre Bangna-Trad

### BUSINESS COMPLEX

---

1. SJ Infonite / Business Complex
2. Bangna-Trad Business Complex

[ Strategic Performance Overview ]

## MESSAGE FROM CHAIRMAN & GROUP CEO



"I believe that technological advancements have come to the point where the people have to be well prepared for potential impacts, either in their personal lives or business operations. I am confident that the successful businesses in the future will combine the original business platforms, which is infrastructure base, with new technology to maximize business operations"

**Miss Jareeporn Jarukornsakul**  
Chairman and Group Chief Executive Officer



The year 2017 is considered to be a successful year for the Company in terms of operating results with our net profit reaching record high since its establishment. The Company records 3,266 million Baht net profit, an increase of 13% compared to the previous year. Our record high net profit is mainly attributable to a successful collaboration between our four business hubs: Logistics Hub, Industrial Development Hub, Utilities & Power Hub and Digital Platform Hub. We have also gradually expanded our operations to cover new businesses related to our core ones, enabling us to achieve sustainable growth and provide comprehensive services to our customers in accordance with our business slogan, “Your Ultimate Solution Partner.”

Our core businesses are essential drivers of the national economic growth, as well as the manufacturing industry, Foreign Direct Investment, and the reduction of logistics cost from manufacturers to consumers. Thus, the Company is ready to respond to and support the Thai Government’s Eastern Economic Corridor (EEC) policy as well as infrastructure development of the country since the policy will contribute greatly to the growth of the Company. In addition, all of the Company’s four business hubs are commensurate with the goals and development of EEC policy, which begin with encouraging foreign investors to use Thailand as a manufacturing base, production center, and transportation hub to move goods from Southeast Asia to other regions of the world, especially for borderless connectivity between four countries in Mekong Sub-region, namely, Cambodia, Laos PDR, Myanmar, and Vietnam. The Company is ready to upgrade its industrial estate into the Smart IE. We place a high priority on technological development because we believe that technology will contribute to ultimate performance, such as applying Internet of Thing (IoT) to the provision of basic services to an industrial estate. With regard to our warehouses, factories, and distribution centers for rent, we have carefully studied the implementation of the automation systems to maximize our customers’ operational effectiveness. Furthermore, the platforms that the Company provides services to our customers in Thailand can be used to expand businesses overseas as per requirements of customers in each country. For example, in Vietnam where importance is placed on manufacturing, the Company has invested in industrial estates and provided utilities and power services. As for Indonesia, which puts importance on logistics cost reduction, the Company has invested in distribution center for rent.

Additionally, the Company has received approval of the Eastern Economic Corridor Policy Committee, enabling all of the eight industrial estates already in operation in EEC area to receive better tax privileges than those provided by BOI. Such privileges also cover companies investing in the industrial estates and foreign specialists and personnel working in Thailand in 10 targeted industries, such as aviation and logistics, industrial robotics, and future automotive industry.

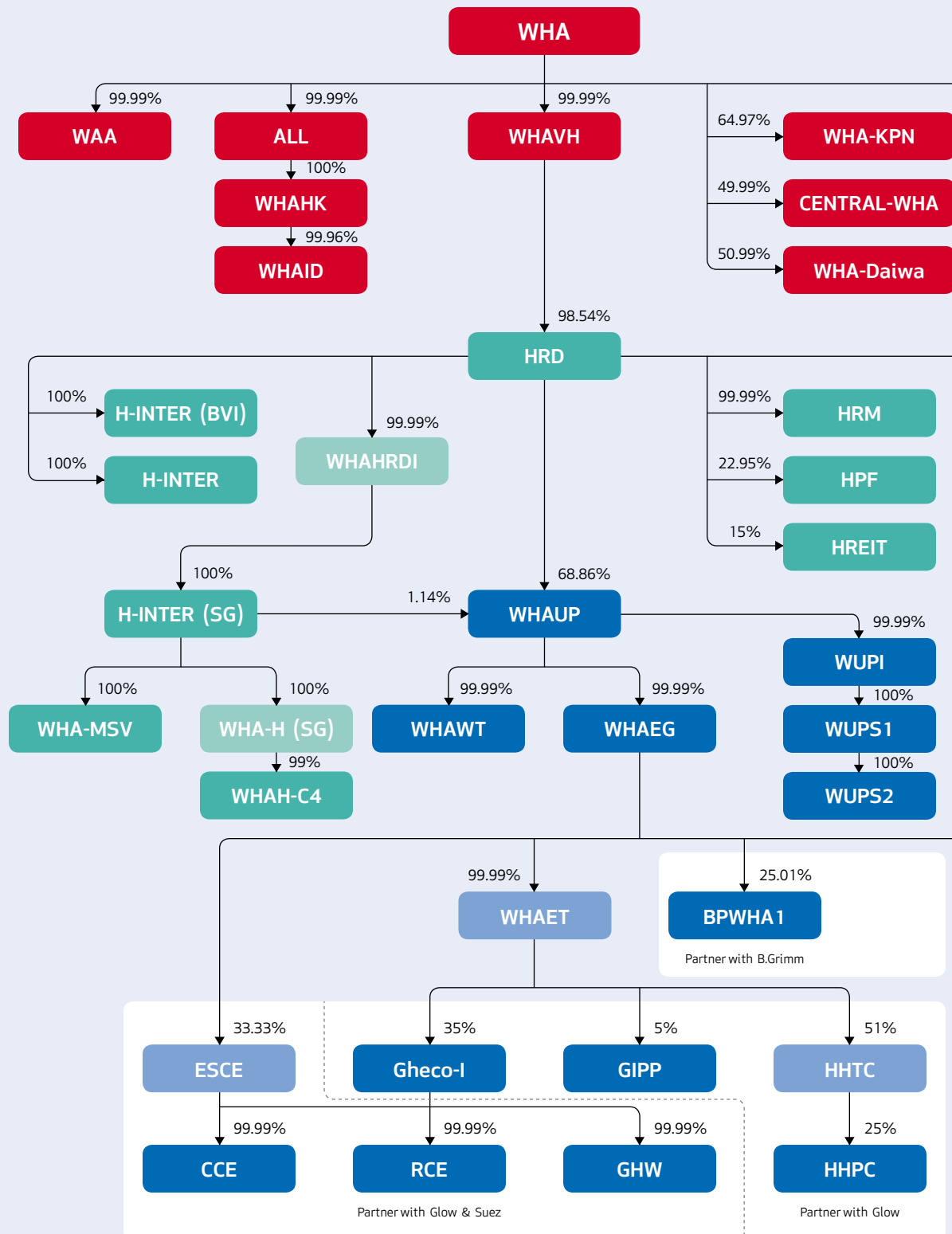
Moreover, I believe that technological advancements have come to the point where the people have to be well prepared for potential impacts, either in their personal lives or business operations. I am confident that the successful businesses in the future will combine the original business platforms, which is infrastructure base, with new technology to maximize business operations; for example, the use of energy storage system to store solar energy from rooftop PV systems for customers to reduce the cost of solar rooftop, or utilization of blockchain technology to create an ecosystem for customers. In this regards, the Company’s business hubs, namely, industrial development, logistics, utilities & power, which tend to becoming more decentralized, will serve as intermediaries, and the digital platforms developed by the Company will be used to support such technology. Furthermore, the Company is ready to modify and improve its major infrastructures to meet such change and contribute to a sustainable growth.

Finally, on behalf of the Chairman, the Group CEO, and the Board of Directors, I would like to thank you all for your continued support and contribution to our success. I would like to express my gratitude to all shareholders for your trust, all customers for allowing us to serve you, financial institutions for supporting our growth, our business partners, Board of Directors, management team and all employees for your continued trust, support, and involvement in the Company’s growth and success for the past 15 years since its establishment. For the year 2018, we are confident that the Company will seek to move forward and grow sustainably, dedicate and work to create the best value for the society, our shareholders, our customers, and our stakeholders.

## [ Strategic Performance Overview ]

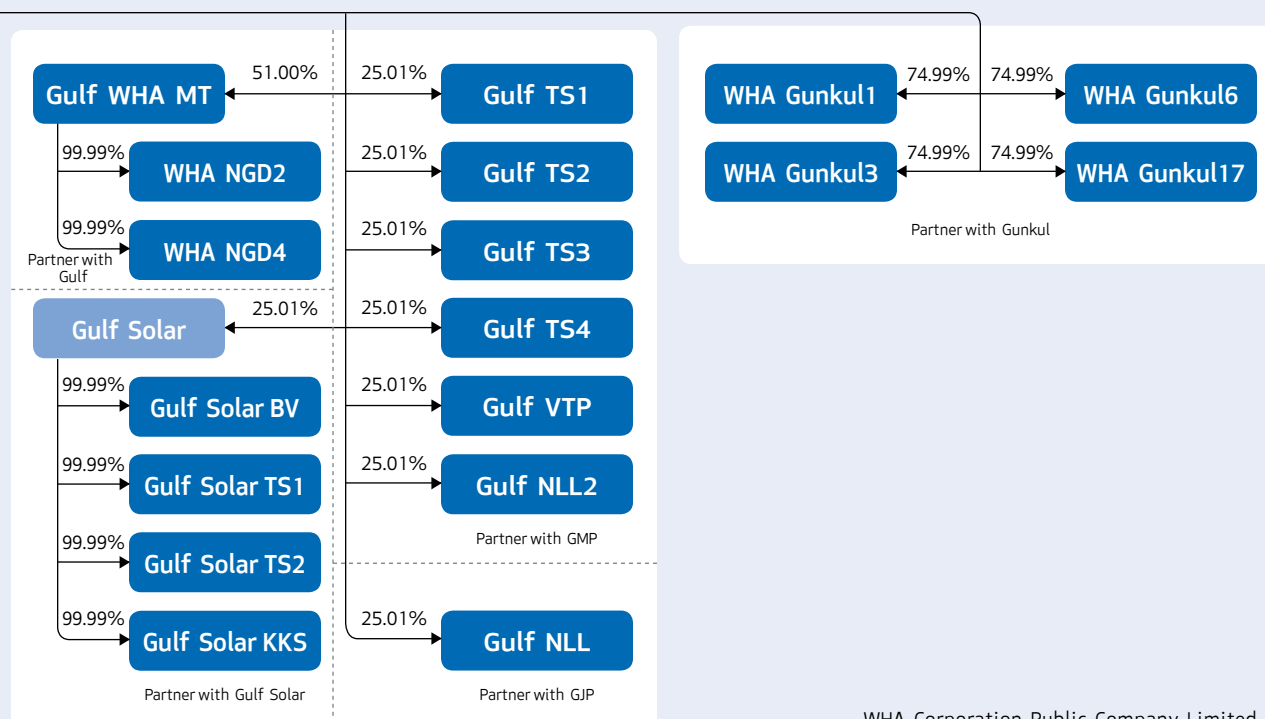
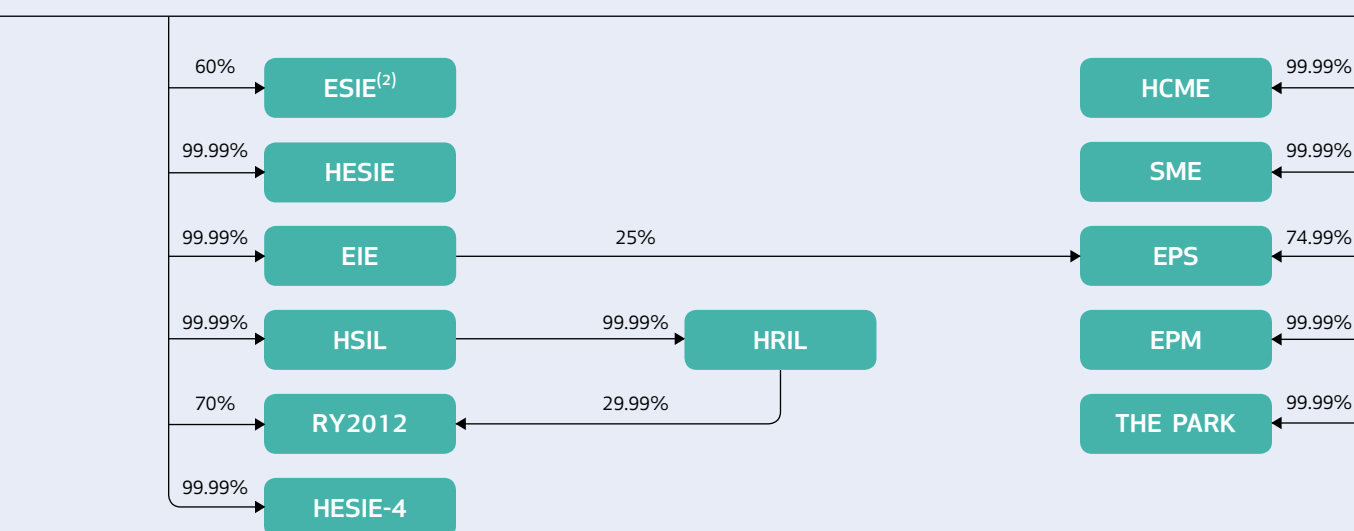
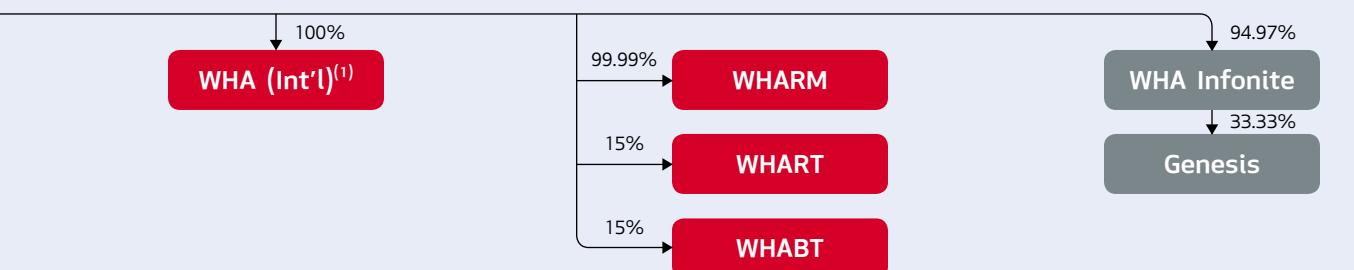
# GROUP SHAREHOLDING STRUCTURE

AS OF 31 DECEMBER 2017


REMARK : <sup>(1)</sup> In the process of liquidation.

<sup>(2)</sup> Another 40% shareholding stake of ESIE is held by Siam Food Products PCL.





## [ Strategic Performance Overview ]

**GROUP SHAREHOLDING STRUCTURE****AS OF 31 DECEMBER 2017**

<b>WHA</b>	<b>WHA Corporation Public Co., Ltd.</b>
WHA VH	WHA Venture Holding Co., Ltd.
WAA	Warehouse Asia Alliance Co., Ltd.
ALL	WHA Alliance Co., Ltd.
WHA HK	WHA Corporation (Hong Kong) Co., Ltd.
WHA ID	PT. WHA International Indonesia
WHA-KPN	WHA KPN ALLIANCE Co., Ltd.
CENTRAL-WHA	CENTRAL WHA ALLIANCE Co., Ltd.
WHA-Daiwa	WHA Daiwa Logistics Property Co., Ltd.
WHA (Int'l)	WHA Corporation (International) Co., Ltd. (Mauritius)
WHARM	WHA Real Estate Management Co., Ltd.
WHART	WHA Premium Growth Freehold and Leasehold REIT
WHABT	WHA Business Complex Freehold and Leasehold REIT
WHA Infonite	WHA Infonite Co., Ltd.
Genesis	Genesis Data Center Co., Ltd.

<b>HRD</b>	<b>Hemaraj Land and Development Public Co., Ltd.</b>
H-INTER (BVI)	H-International (BVI) Co., Ltd.
H-INTER	Hemaraj International Ltd.
WHA HRDI	WHA Hemaraj International Co., Ltd. (Holding Co.)
H-INTER (SG)	H-International (SG) Pte. Ltd.
WHA-H (SG)	WHA Hemaraj Land and Development (SG) Pte. Ltd. (Holding Co.)
WHA-MSV	WHA Hemaraj Management Services Vietnam Co., Ltd.
WHAH-C4 (Nghe An)	WHA Hemaraj Cienco 4 Nghe An Joint Stock Company
HRM	Hemaraj REIT Management Co., Ltd.
HPF	Hemaraj Industrial Property and Leasehold Fund
HREIT	Hemaraj Leasehold Real Estate Investment Trust
ESIE	Eastern Seaboard Industrial Estate (Rayong) Co., Ltd.
HESIE	Hemaraj Eastern Seaboard Industrial Estate Co., Ltd.
EIE	Eastern Industrial Estate Co., Ltd.
HSIL	Hemaraj Saraburi Industrial Land Co., Ltd.
HRIL	Hemaraj Rayong Industrial Land Co., Ltd.
RY2012	Rayong 2012 Co., Ltd.
HESIE-4	Hemaraj Eastern Seaboard Industrial Estate 4 Co., Ltd.
HCME	H-Construction Management and Engineering Co., Ltd.
SME	SME Factory Co., Ltd.
EPS	Eastern Pipeline Services Co., Ltd.
EPM	Eastern Seaboard Property and Marina Services Co., Ltd.
THE PARK	The Park Residence Co., Ltd.



WHAUP	WHA Utilities and Power Public Co., Ltd.
WHAWT	WHA Water Co., Ltd.
WHAEG	WHA Energy Co., Ltd.
WUPI	WHAUP International
WUPS1	WHAUP (SG) 1 Pte.
WUPS2	WHAUP (SG2) Pte.
WHAET	WHA Energy 2 Co., Ltd. (Holding Co.)
BPWHA1	B.Grimm Power (WHA) 1 Limited
ESCE	Eastern Seaboard Clean Energy Co., Ltd. (Holding Co.)
CCE	Chonburi Clean Energy Co., Ltd.
RCE	Rayong Clean Energy Co., Ltd.
GHW	Glow Hemaraj Wind Co., Ltd.
Gheco-I	Gheco-One Co., Ltd.
GIPP	Glow IPP Co., Ltd.
HHT	Houay Ho Thai Co., Ltd. (Holding Co.)
HHP	Houay Ho Power Co., Ltd. (Lao PDR)

Gulf WHA MT	Gulf WHA MT Natural Gas Distribution Co., Ltd.
WHA NGD2	WHA Eastern Seaboard NGD2 Co., Ltd.
WHA NGD4	WHA Eastern Seaboard NGD4 Co., Ltd.
Gulf Solar	Gulf Solar Co., Ltd.
Gulf Solar BV	Gulf Solar BV Co., Ltd.
Gulf Solar TS1	Gulf Solar TS1 Co., Ltd.
Gulf Solar TS2	Gulf Solar TS2 Co., Ltd.
Gulf Solar KKS	Gulf Solar KKS Co., Ltd.
Gulf TS1	Gulf TS1 Co., Ltd.
Gulf TS2	Gulf TS2 Co., Ltd.
Gulf TS3	Gulf TS3 Co., Ltd.
Gulf TS4	Gulf TS4 Co., Ltd.
Gulf VTP	Gulf VTP Co., Ltd.
GNLL2	Gulf NLL2 Co., Ltd.
GJP NLL	Gulf JP NLL Co., Ltd.

WHA Gunkul 1	WHA Gunkul Green Solar Roof 1 Co., Ltd.
WHA Gunkul 3	WHA Gunkul Green Solar Roof 3 Co., Ltd.
WHA Gunkul 6	WHA Gunkul Green Solar Roof 6 Co., Ltd.
WHA Gunkul 17	WHA Gunkul Green Solar Roof 17 Co., Ltd.



**#1** Logistics facilities developer offering  
a variety of premium facilities  
uniquely service our clients' needs

**2.1**

MILLION SQM  
UNDER OWNERSHIP  
& MANAGEMENT

SECURED  
PRE-LEASED AREAS

**161,588**  
SQM

SUCCESSFULLY  
CONVERTED WHARF  
INTO **WHART**



# LOGISTICS & INDUSTRIAL **PROPERTIES**

The Company is committed to be a leading company as a warehouse project developer, distribution center, and high quality factory located in a strategic location around Bangkok, Eastern Economic Corridor, and other provinces. The Company is able to fully meet the needs of its customers due to its project location, project design with international standards and quality of construction. This could reduce the cost of customer operations and increase long-term competitive advantages. Real estate business development and management could be described in accordance with the types of products and the services provided.





**#1** Industrial Estate developer delivering world-class solutions to industrial customers.

**75%**

MARKET SHARE  
1,000 RAI  
LAND SALES

**HESIE4  
EEC** SPECIAL  
PROMOTION ZONE

IRC APPROVED  
**3,100** RAI  
FOR NGHE AN  
PROJECT  
(VIETNAM)





# INDUSTRIAL DEVELOPMENT

Industrial Development Hub is operated through the Company's subsidiary, with Hemaraj Group responsible for developing Industrial estates and/or zones and selling of and to enterprises who demand to make their investment in Industrial estates/zones and Industrial Promotional zones. Enterprises can gain special privileges provided by Industrial Estate Authority of Thailand and/or Thailand Board of Investment. Another crucial role of Hemaraj Group is to act as a center for providing utilities and facilities for clients inside the Industrial Estate e.g. electricity, water supply, wastewater treatment, waste disposal, telephone, internet and coordinating with the authority on environmental control.



**#1** Industrial Utilities provider  
and active strategic Power investor.

SUCCESSFULLY  
LISTED  
THB **20** BILLIONS  
MARKET CAPITAL

**100**  
MILLION M<sup>3</sup>  
OF UTILITIES AND  
SALES MANAGEMENT  
VOLUME

POWER CAPACITY  
INCREASED TO  
**478**  
EQUITY MW



## UTILITIES & POWER

Utilities & Power Hub is operated through the Company's subsidiary, WHAUP Group, the provider of utilities in the Hemaraj Group's industrial estates/zones i.e. raw water, industrial water, and wastewater treatment. WHAUP Group is also into power business, through joint ventures with both domestic and foreign power plants, who have expertise in the power business field. Our power plants include both Conventional Fuel and Alternative Fuel power plants.



FTTx IN **5**  
INDUSTRIAL ESTATE  
COMMENCED  
OPERATION

**3**  
DATA CENTERS  
COMMENCED  
OPERATION  
(461 RACKS)

START PROVIDING  
**MANAGED  
SERVICES**

Service Provider and  
Managed Service with  
Digital Platform

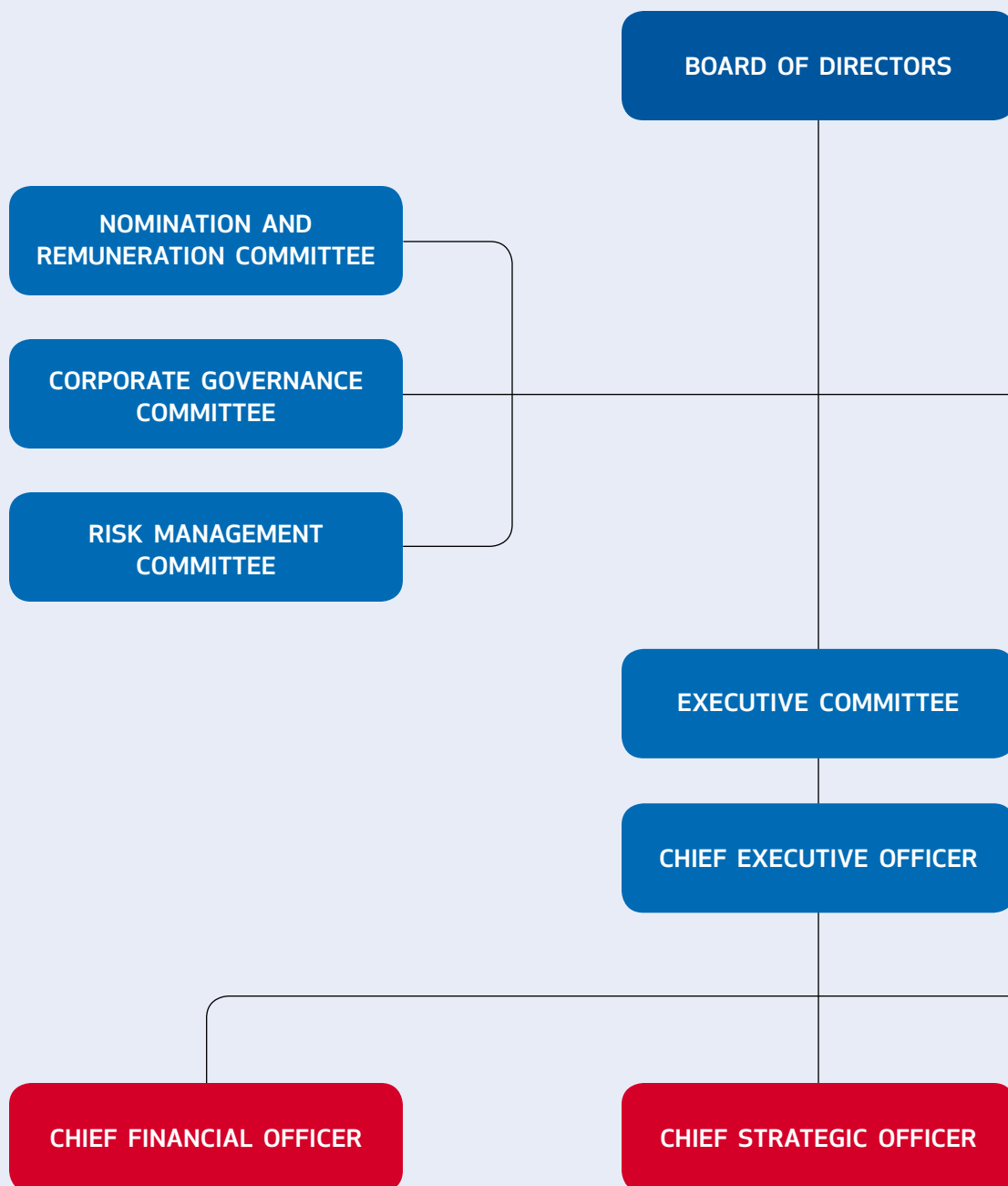
# DIGITAL PLATFORM

In 2017 WHA Group offered Digital Platform services through its subsidiary, WHA Infonite Company Limited. WHA Group offers the following Digital Services in order to provide our customers with a comprehensive IT solution: Data Center: Co-location, Fiber Optic Internet FTTx Service, Rental/Leasing Equipment & Software Service and System Integration Service.

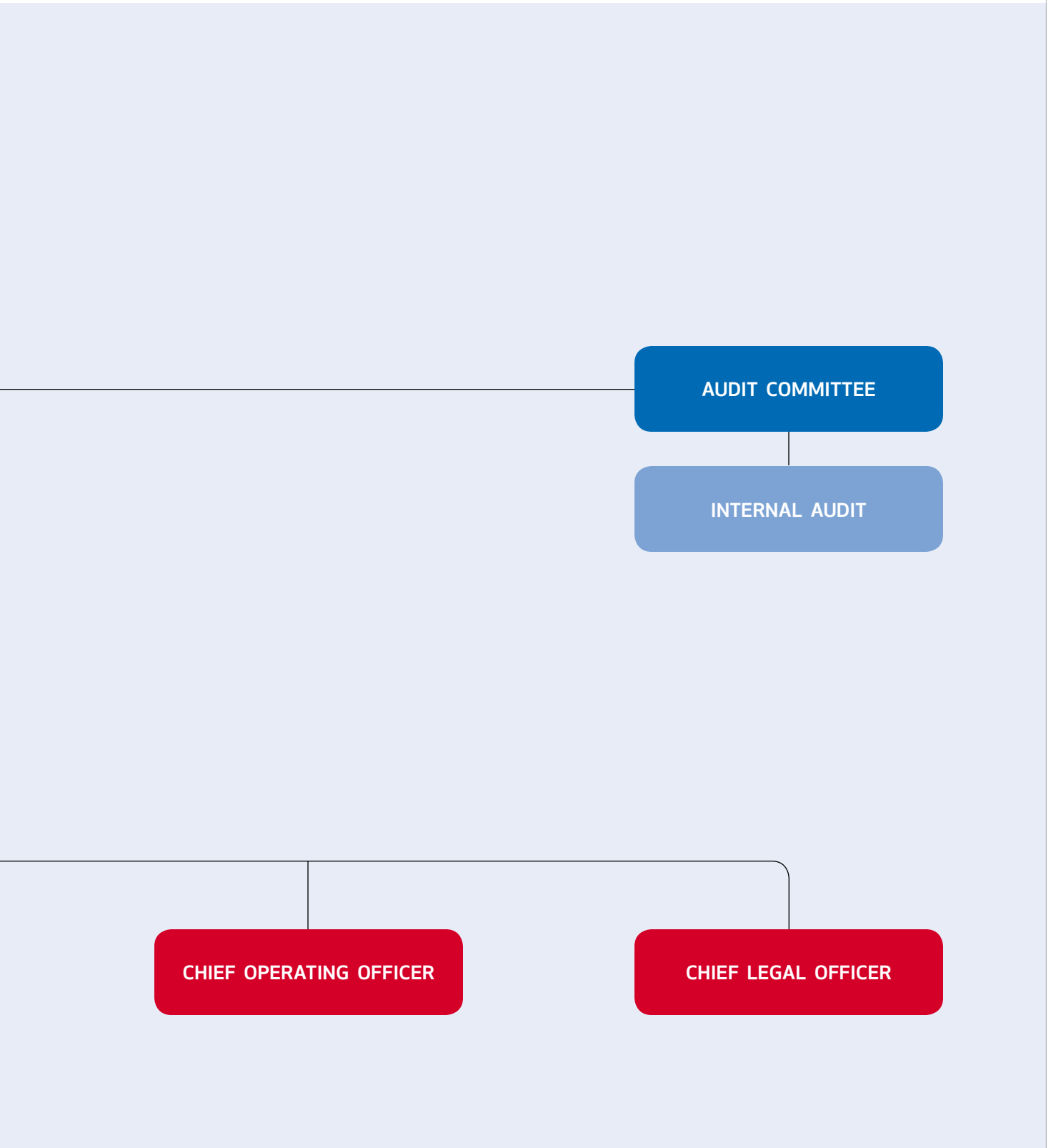
[ Corporate Information ]

# ORGANIZATION CHART

AS OF 31 DECEMBER 2017



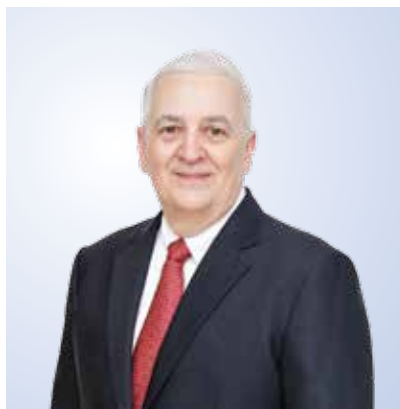




[ Corporate Information ]

## BOARD OF DIRECTORS

AS OF 31 DECEMBER 2017



1	2	3
4	5	6

1. **Mr. Somyos Anantaprayoon** <sup>/1</sup>  
Chairman of the Board of Directors
2. **Ms. Jareeporn Jarukornsakul** <sup>/2</sup>  
Vice Chairman of the Board of Directors
3. **Mr. David Richard Nardone**  
Vice Chairman of the Board of Directors
4. **Mr. Vivat Jiratikarnsakul**  
Director
5. **Mr. Jakrit Chaisanit**  
Director
6. **Mr. Krailuck Asawachatroj**  
Director



7	8	9
10	11	12
13		

**7. Mr. Arttavit Chalernsaphayakorn**  
Director

**8. Mr. Narong Kritchanchai**  
Director

**9. Mr. Somsak Boonchoyruengchai**  
Director

**10. Mr. Apichai Boontharawara**  
Independent Director

**11. Mr. Somsak Pratomsrimek**  
Independent Director

**12. Mrs. Kritsana Sukboonyasatit**  
Independent Director

**13. Mr. Chanvit Amatamatucharti**  
Independent Director

<sup>/1</sup> On 9 Feb 2018 vacate office upon death.

<sup>/2</sup> The appointment of the chairman of the Board of Director and the Chairman of the Executive Committee in place in accordance BOD's Resolution no.1/2018 on 9 Feb 2018.

[ Corporate Information ]

## AUDIT COMMITTEE AND EXECUTIVE COMMITTEE

### AUDIT COMMITTEE



**Mr. Apichai Boontharawara**  
Chairman of the Audit Committee



**Mr. Somsak Pratomsrimek**  
Audit Committee Member



**Mrs. Kritsana Sukboonyasatit**  
Audit Committee Member

### EXECUTIVE COMMITTEE



**Mr. Somyos Anantaprayoon** <sup>/1</sup>  
Chairman of Executive Committee



**Ms. Jareeporn Jarukornsakul** <sup>/2</sup>  
Vice Chairman of Executive Committee,  
Chief Executive Officer



**Mr. David Richard Nardone**  
Executive Committee Member



**Mr. Vivat Jiratikarnsakul**  
Executive Committee Member



**Mr. Jakrit Chaisanit**  
Executive Committee Member,  
Chief Operating Officer



**Mr. Arttavit Chalermphasayakorn**  
Executive Committee Member,  
Chief Financial Officer



**Mr. Krailuck Asawachatroj**  
Executive Committee Member,  
Chief Strategic Officer



**Mr. Narong Kritchanhai**  
Executive Committee Member,  
Chief Legal Officer



**Mr. Somsak Boonchoyruengchai**  
Executive Committee Member,  
Vice President

<sup>/1</sup> On 9 Feb 2018 vacate office upon death.

<sup>/2</sup> The appointment of the chairman of the Board of Director and the Chairman of the Executive Committee in place in accordance BOD's Resolution no.1/2018 on 9 Feb 2018.



# PROFILES OF DIRECTORS, EXECUTIVES AND COMPANY SECRETARY

AS OF 31 DECEMBER 2017

## 1. Dr. Somyos Anantaprayoon <sup>/1</sup>

- **Chairman of the Board of Directors** (The director having authority to sign for binding the company as set forth in the affiliates) Date of appointment: April 23, 2012
- **Chairman of Executive Committee** Date of appointment: May 25, 2012

Age (Year)	58		
Share holding's proportion(%)	22.12		
Family relationship between the director	None		
Education			
<ul style="list-style-type: none"><li>• Doctor of Medicine, Mahidol University</li><li>• Specialist doctor for Obstetrics and Gynecology, Rajavithi Hospital</li><li>• Master Degree of Business Administration for executives,Faculty of Commerce and Accountancy, Thammasat University</li></ul>			
Certifications			
<ul style="list-style-type: none"><li>• Director Certification Program, IOD, 210/2015</li><li>• Director Director Accreditation Program, 94/2012</li><li>• Diploma, National Defence College, The Joint State – Private Sector Course Class 58, National Defence college of Thailand, 2015-2016</li><li>• Top Executive Program for Industrial Development and Investment (IBID 1), Institute of Business and Industrial Development, 2014</li><li>• Executive Program Capital Market Academy (CMA#15), 2012</li></ul>			
Work experience in the past 5 years			
Period	Position	Company	Type of Business
2012 - Present	Chairman of the Board of Directors	WHA Corporation PCL.	Property developer on warehouses and factories
2012 - Present	Chairman of Executive Committee	WHA Corporation PCL.	Property developer on warehouses and factories
2012 - 2015	Chief Executive Officer	WHA Corporation PCL.	Property developer on warehouses and factories
Subsidiary Companies			
2016 - Present	Director	WHA Hemaraj Land and Development (SG) Pte. Ltd.	Investment in associate/subsidiaries
2016 - Present	Director	WHA Hemaraj International Co., Ltd	Investment in associate/subsidiaries
2015 - Present	Chairman of the Board of Directors	WHA Utilities & Power PCL	Utilities & Power
2015 - Present	Chairman of the Board of Directors	Hemaraj Land and Development PCL.	Property developer
2015 - Present	Chairman of the Board of Directors	Hemaraj REIT Management Co., Ltd	Trust Manager
2015 - Present	Director	WHA Infonite Co., Ltd	Digital services
2015 - Present	Director	WHA Ventures Holding Co., Ltd.	Holding company
2015 - Present	Director	Hemaraj Eastern Seaboard Industrial Estate 4 Co., Ltd	Property developer

Period	Position	Company	Type of Business
2015 - Present	Director	Eastern Seaboard Property and Marina Services Co., Ltd	Property for investment and marina services
2015 - Present	Director	Rayong 2012 Co., Ltd	Property developer
2015 - Present	Director	H-International (SG) Pte. Ltd.	Investment in associate/subsidiaries
2015 - Present	Director	The Park Residence Co., Ltd	Real Estate Development and Service Management
2015 - Present	Director	H-Construction Management and Engineering Co., Ltd	Design and Construction Supervision Service
2015 - Present	Director	Hemaraj International Ltd.	Holding company
2015 - Present	Director	H-International (BVI) Co., Ltd.	Holding company
2015 - Present	Director	Eastern Pipeline Services Co., Ltd	Pipe Pack Rental
2015 - Present	Director	Hemaraj Rayong Industrial Land Co., Ltd	Property developer
2015 - Present	Director	Hemaraj Saraburi Industrial Land Co., Ltd	Property developer
2015 - Present	Director	Hemaraj Eastern Seaboard Industrial Estate Co., Ltd	Property developer
2015 - Present	Director	Eastern Seaboard Industrial Estate (Rayong) Co., Ltd	Property developer
2015 - Present	Director	Eastern Industrial Estate Co., Ltd	Property developer
2014 - Present	Director	WHA Corporation (Hong Kong) Company Limited	Holding company
2014 - Present	Director	WHA Corporation (International) Company Limited	Holding company
2006 - Present	Director	Warehouse Asia Alliance Co., Ltd.	Property developer on warehouses and factories
2003 - Present	Director	WHA Alliance Co., Ltd.	Property developer on warehouses and factories
<b>Joint Venture Companies</b>			
2016 - Present	Director	WHA Daiwa Logistics Property Co., Ltd	Property developer on warehouses and factories
2016 - Present	Director	Central WHA Alliance Co., Ltd	Property developer on warehouses and factories
2013 - Present	Director	WHA KPN Alliance Co., Ltd.	Property developer on warehouses and factories
<b>WHAUP Affiliate Companies</b>			
2016 - Present	Director	WHA Eastern Seaboard NGD 2 Co., Ltd	Develops natural gas distribution pipeline and retail trade
2017 - Present	Director	WHA Eastern Seaboard NGD 4 Co., Ltd	Develops natural gas distribution pipeline and retail trade
2015 - Present	Director	Glow Hemaraj Wind Co., Ltd	Generator and distributor of electronic power
2015 - Present	Director	Houay Ho Thai Co., Ltd	Generator and distributor of electronic power
2015 - Present	Director	GHECO - One Co., Ltd	Generator and distributor of electronic power
2015 - Present	Director	Gulf JP NLL Co., Ltd	Generator and distributor of electronic power
2015 - Present	Director	Gulf Solar Co., Ltd	Generator and distributor of electronic power
2015 - Present	Director	B.GRIMM (WHA) Co., Ltd	Generator and distributor of electronic power

Period	Position	Company	Type of Business
2016 - Present	Director	Gulf VTP Co., Ltd	Generator and distributor of electronic power
2016 - Present	Director	Gulf TS 1 Co., Ltd	Generator and distributor of electronic power
2016 - Present	Director	Gulf TS 2 Co., Ltd	Generator and distributor of electronic power
2016 - Present	Director	Gulf TS 3 Co., Ltd	Generator and distributor of electronic power
2016 - Present	Director	Gulf Solar TS 1 Co., Ltd	Generator and distributor of electronic power
2016 - Present	Director	Gulf Solar TS 2 Co., Ltd	Generator and distributor of electronic power
2016 - Present	Director	Chonburi Clean Energy Co., Ltd	Investment in associate/subsidiaries
2016 - Present	Director	Rayong Clean Energy Co., Ltd	Investment in associate/subsidiaries
2016 - Present	Director	Eastern Seaboard Clean Energy Co., Ltd	Investment in associate/subsidiaries
2013 - Present	Director	WHA GUNKUL Green Solar Roof 1 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 3 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 6 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 17 Co., Ltd.	Generator and distributor of electronic power from solar energy
2015 - Present	Director	WHA Water Co., Ltd	Water Resources Development and Management
2015 - Present	Director	WHA Energy 2 Co., Ltd	Investment in associate/subsidiaries
2015 - Present	Director	WHA Energy Co., Ltd	Investment in associate/subsidiaries
2013 - Present	Director	WHA GUNKUL Green Solar Roof 2 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 4 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 5 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 8 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 9 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 10 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 16 Co., Ltd.	Generator and distributor of electronic power from solar energy
<b>Other Companies</b>			
2013 - Present	Director	Asia Wealth Securities Co., Ltd.	Securities company
2013 - Present	Director	Asia Wealth Holding Co., Ltd.	Securities trading
1993 - Present	Director	S & J Holding Co., Ltd.	Distribution of plastic products

<sup>1</sup> Vacate office upon death on 9 February 2018.

## 2. Ms. Jareeporn Jarukornsakul <sup>/2</sup>

- **Vice Chairman of the Board of Directors** (The director having authority to sign for binding the company as set forth in the affiliates) Date of appointment: April 23, 2012
- **Vice Chairman of Executive Committee** Date of appointment: May 25, 2012
- **Chairman of Risk Management Committee** Date of appointment: May 14, 2015
- **Chairman of the Nomination and Remuneration Committee** Date of appointment: October 29, 2015
- **Chief Executive Officer** Date of appointment: October 29, 2015

**Age (Year)** 51

**Share holding's proportion(%)** 22.94

**Family relationship between the director** None

### Education

- Bachelor Degree in Faculty of Public Health, Mahidol University
- Master of Business Administration, Bangkok University
- The Honorary PH.D.Degree, Logistics and Supply Chain Management, Christian University of Thailand

### Certifications

- Director Certification Program, IOD, 210/2015
- Director Director Accreditation Program, 94/2012
- Corporate Governance for Capital Market (CGI 17), IOD, 2016
- Senior Executives on Justice Administration Program National Justice Academy, Office of Judiciary (BYS 20), 2015
- Executive Program Capital Market Academy (CMA 18), 2014

### Work experience in the past 5 years

Period	Position	Company	Type of Business
2015 - Present	Chief Executive Officer	WHA Corporation PCL.	Property developer on warehouses and factories
2012 - Present	Vice Chairman of the Board of Directors	WHA Corporation PCL.	Property developer on warehouses and factories
2012 - 2015	Vice Chairman of Executive Committee	WHA Corporation PCL.	Property developer on warehouses and factories

### Subsidiary Companies

2016 - Present	Director	WHA Hemaraj Land and Development (SG) Pte. Ltd.	Investment in associate/subsidiaries
2016 - Present	Director	WHA Hemaraj International Co., Ltd	Investment in associate/subsidiaries
2015 - Present	Director	PT WHA International Indonesia	Property developer
2015 - Present	Vice Chairman of the Board of Directors	WHA Utilities & Power PCL	Utilities & Power
2015 - Present	Vice Chairman of the Board of Directors	Hemaraj Land and Development PCL.*	Property developer
2015 - Present	Director	WHA Infonite Holding Co., Ltd	Digital services
2015 - Present	Director	WHA Ventures Holding Co., Ltd.	Holding company
2015 - Present	Director	Hemaraj Rayong Industrial Land Co., Ltd	Property developer
2015 - Present	Director	Hemaraj Saraburi Industrial Land Co., Ltd	Property developer
2015 - Present	Director	Hemaraj Eastern Seaboard Industrial Estate Co., Ltd	Property developer
2015 - Present	Director	Eastern Seaboard Industrial Estate (Rayong) Co., Ltd	Property developer
2015 - Present	Director	Eastern Industrial Estate Co., Ltd	Property developer
2015 - Present	Director	Eastern Pipeline Services Co., Ltd	Pipe Pack Rental
2015 - Present	Director	H-International (BVI) Co., Ltd.	Investment in associate/subsidiaries



Period	Position	Company	Type of Business
2015 - Present	Director	Hemaraj International Ltd.	Investment in associate/subsidiaries
2015 - Present	Director	H-Construction Management and Engineering Co., Ltd	Design and Construction Supervision Service
2015 - Present	Director	The Park Residence Co., Ltd	Real Estate Development and Service Management
2015 - Present	Director	H-International (SG) Pte. Ltd.	Investment in associate/subsidiaries
2015 - Present	Director	Rayong 2012 Co., Ltd	Property developer
2015 - Present	Director	Hemaraj Eastern Seaboard Industrial Estate 4 Co., Ltd	Property developer
2015 - Present	Director	Eastern Seaboard Property and Marina Services Co., Ltd	Property for investment and marina services
2015 - Present	Director	Hemaraj REIT Management Co., Ltd	Trust Manager
2014 - Present	Director	WHA Corporation (Hong Kong) Company Limited	Holding company
2014 - Present	Director	WHA Corporation (International) Company Limited	Holding company
2006 - Present	Director	Warehouse Asia Alliance Co., Ltd.	Property developer on warehouses and factories
2003 - Present	Director	WHA Alliance Co., Ltd.	Property developer on warehouses and factories
<b>Joint Venture Companies</b>			
2016 - Present	Director	Genesis Data Co., Ltd	
2016 - Present	Director	WHA Daiwa Logistics Property Co., Ltd	Property developer on warehouses and factories
2016 - Present	Director	Central WHA Alliance Co., Ltd	Property developer on warehouses and factories
2013 - Present	Director	WHA KPN Alliance Co., Ltd.	Property developer on warehouses and factories
<b>WHAUP Affiliate Companies</b>			
2015 - Present	Director	Gulf VTP Co., Ltd	Generator and distributor of electronic power
2016 - Present	Director	Gulf Solar TS 2 Co., Ltd	Generator and distributor of electronic power
2016 - Present	Director	Gulf Solar TS 4 Co., Ltd	Generator and distributor of electronic power
2015 - Present	Director	Bowin Clean Energy Co., Ltd	Generator and distributor of electronic power
2015 - Present	Director	Gulf Solar BV Co., Ltd	Generator and distributor of electronic power
2015 - Present	Director	Gulf Solar KKS Co., Ltd	Generator and distributor of electronic power
2015 - Present	Director	Houay Ho Thai Co., Ltd	Generator and distributor of electronic power
2015 - Present	Director	WHA Water Co., Ltd	Water Resources Development and Management
2015 - Present	Director	WHA Energy 2 Co., Ltd	Investment in associate/subsidiaries
2015 - Present	Director	WHA Energy Co., Ltd	Investment in associate/subsidiaries
2015 - 2016	Director	Glow Hemaraj Wind Co., Ltd	Generator and distributor of electronic power

Period	Position	Company	Type of Business
2013 - Present	Director	WHA GUNKUL Green Solar Roof 1 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 2 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 3 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 4 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 5 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 6 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 8 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 9 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 10 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 16 Co., Ltd.	Generator and distributor of electronic power from solar energy
2013 - Present	Director	WHA GUNKUL Green Solar Roof 17 Co., Ltd.	Generator and distributor of electronic power from solar energy
<b>Other Companies</b>			
2013 - Present	Director	Asia Wealth Securities Co., Ltd.	Securities company
2013 - Present	Director	Asia Wealth Holding Co., Ltd.	Securities trading
1993 - Present	Director	S & J Holding Co., Ltd.	Distribution of plastic products

<sup>/2</sup> The appointment of the chairman of the Board of Director and the Chairman of the Executive Committee in place in accordance BOD's Resolution no.1/2018 on 9 Feb 2018

### 3. Mr. David Richard Nardone

- **Vice Chairman of the Board of Directors** Date of appointment: April 25, 2016
- **Executive Committee** Date of appointment: May 12, 2016

**Age (Year)** 62

**Share holding's proportion(%)** -

**Family relationship between the director** None

#### Education

- Master of Business Administration, Northeastern University, Boston, USA

#### Certifications

- Director Certification Program, IOD 57/2005

#### Work experience in the past 5 years

Period	Position	Company	Type of Business
2016 - Present	Vice Chairman of the Board of Directors	WHA Corporation PCL.	Property developer on warehouses and factories
2016 - Present	Executive Committee	WHA Corporation PCL.	Property developer on warehouses and factories

#### Subsidiary Companies

2016 - Present	Director	WHA Hemaraj Land and Development (SG) Pte. Ltd.	Investment in associate/subsidiaries
2016 - Present	Director	WHA Hemaraj International Co., Ltd	Investment in associate/subsidiaries
2015 - Present	Director	WHA Utilities & Power PCL.	Utilities & Power
2015 - Present	Director	H-International (SG) Pte. Ltd.	Investment in associate/subsidiaries
2015 - Present	Director	Hemaraj International Ltd.	Investment in associate/subsidiaries
2015 - Present	Director	H-International (BVI) Co., Ltd.	Investment in associate/subsidiaries
2014 - Present	Director	Hemaraj Rayong Industrial Land Co., Ltd.	Property developer
2011 - Present	Director	Hemaraj Eastern Seaboard Industrial Estate 4 Co., Ltd.	Property developer
2005 - Present	Director	Eastern Seaboard Property and Marina Services Co., Ltd .	Property for investment and marina services
2005 - Present	Director	Rayong 2012 Co., Ltd.	Property developer
2003 - Present	Director	The Park Residence Co., Ltd.	Real Estate Development and Service Management
2001 - Present	Director	H-Construction Management and Engineering Co., Ltd.	Design and Construction Supervision Service
1997 - Present	Director	Hemaraj Saraburi Industrial Land Co., Ltd.	Property developer
1996 - Present	Director	Hemaraj Eastern Seaboard Industrial Estate Co., Ltd.	Property developer
1995 - Present	Director	Eastern Pipeline Services Co., Ltd.	Pipe Pack Rental
1994 - Present	Director	Hemaraj Land and Development PCL.	Property developer
1994 - Present	Director	Eastern Seaboard Industrial Estate (Rayong) Co., Ltd.	Property developer
1994 - Present	Director	Eastern Industrial Estate (Rayong) Co., Ltd.	Property developer



**WHAUP Affiliate Companies**

<b>Period</b>	<b>Position</b>	<b>Company</b>	<b>Type of Business</b>
2013 - Present	Director	GHECO - One Co., Ltd	Generator and distributor of electronic power
2015 - Present	Director	WHA Energy 2 Co., Ltd	Utilities & Power
2011 - Present	Director	WHA Energy Co., Ltd	Utilities & Power
2005 - Present	Director	WHA Water Co., Ltd	Water Resources Development and Management
2009 - 2016	Director	Houay Ho Power Co., Ltd	Generator and distributor of electronic power

#### 4. Mr. Vivat Jiratikarnsakul

- **Director** Date of appointment: May 25, 2016
- **Executive Committee** Date of appointment: May 12, 2016

**Age (Year)** 62

**Share holding's proportion(%)** -

**Family relationship between the director** None

#### Education

- Bachelor Degree of Engineering Program in Sanitary Engineering, Chulalongkorn University

#### Certifications

- Director Accreditation Program, IOD, 2/2003
- Director Certification Program, IOD, 38/2003
- Anti-Corruption for Executive Program (ACEP 2/2014), IOD
- IOD Luncheon briefing 1/2013 : Thailand Economic Outlook 2013

#### Work experience in the past 5 years

Period	Position	Company	Type of Business
2016 - Present	Director	WHA Corporation PCL.	Property developer on warehouses and factories
2016 - Present	Executive Committee	WHA Corporation PCL.	Property developer on warehouses and factories

#### Subsidiary Companies

2016 - Present	Director	WHA Hemaraj Land and Development (SG) Pte. Ltd.	Investment in associate/subsidiaries
2016 - Present	Director	WHA Hemaraj International Co., Ltd	Investment in associate/subsidiaries
2015 - Present	Director	WHA Utilities & Power PCL	Utilities & Power
2014 - Present	Director	H-International (SG) Co., Ltd.	Investment in associate/subsidiaries
2014 - Present	Director	Hemaraj Eastern Seaboard Industrial Estate 4 Co., Ltd	Property developer
2013 - Present	Director	Eastern Seaboard Property and Marina Services Co., Ltd	Property for investment and marina services
2012 - Present	Director	Rayong 2012 Co., Ltd	Property developer
2005 - Present	Director	Hemaraj Saraburi Industrial Land Co., Ltd	Property developer
2005 - Present	Director	Hemaraj Rayong Industrial Land Co., Ltd	Property developer
2003 - Present	Director	The Park Residence Co., Ltd	Real Estate Development and Service Management
1997 - Present	Director	H-International (BVI) Co., Ltd.	Holding Company
1996 - Present	Director	Hemaraj Eastern Seaboard Industrial Estate Co., Ltd	Property developer
1995 - Present	Director	Eastern Pipeline Services Co., Ltd	Pipe Pack Rental
1994 - Present	Director	Hemaraj Land and Development PCL.	Property developer
1994 - Present	Director	Eastern Industrial Estate Co., Ltd	Property developer
1994 - Present	Director	Hemaraj International Ltd.	Holding Company

#### WHAUP Affiliate Companies

2015 - Present	Director	WHA Energy 2 Co., Ltd	Generator and distributor of electronic power
2013 - Present	Director	GHECO - One Co., Ltd	Generator and distributor of electronic power
2011 - Present	Director	WHA Energy Co., Ltd	Generator and distributor of electronic power
2008 - Present	Director	Houay Ho Power Co., Ltd	Generator and distributor of electronic power
2005 - Present	Director	WHA Water Co., Ltd	Generator and distributor of electronic power

## 5. Mr. Krailuck Asawachatroj

- **Director** Date of appointment: May 25, 2016
- **Executive Committee** Date of appointment: May 12, 2016
- **Chief Strategy Officer** Date of appointment: February 24, 2016

**Age (Year)** 46

**Share holding's proportion(%)** -

**Family relationship between the director** None

### Education

- Bachelor Degree of Industrial Engineering, Thammasat University
- Master Degree of Science, Majoring Financial Engineering, New York University, USA
- Master of Business Administration, Majoring Finance, Claremont Graduate University, USA

### Certification

- Director Certification Program, IOD, 2014

### Work experience in the past 5 years

Period	Position	Company	Type of Business
2016 - Present	Director	WHA Corporation PCL.	Property developer on warehouses and factories
2016 - Present	Executive Committee	WHA Corporation PCL.	Property developer on warehouses and factories
2016 - Present	Chief Strategy Officer	WHA Corporation PCL.	Property developer on warehouses and factories

### Subsidiary Companies

2015 - Present	Director	Hemaraj Land and Development PCL.	Property developer
2015 - Present	Director	Eastern Industrial Estate Co., Ltd	Property developer
2015 - Present	Director	Eastern Seaboard Industrial Estate (Rayong) Co., Ltd	Property developer
2015 - Present	Director	Hemaraj Eastern Seaboard Industrial Estate Co., Ltd	Property developer
2015 - Present	Director	Hemaraj Saraburi Industrial Land Co., Ltd	Property developer
2015 - Present	Director	Hemaraj Rayong Industrial Land Co., Ltd	Property developer
2015 - Present	Director	Eastern Pipeline Services Co., Ltd	Pipe Pack Rental
2015 - Present	Director	The Park Residence Co., Ltd	Real Estate Development and Service Management
2015 - Present	Director	H-Construction Management and Engineering Co., Ltd	Design and Construction Supervision Service
2015 - Present	Director	Rayong 2012 Co., Ltd	Property developer
2015 - Present	Director	Eastern Seaboard Property and Marina Services Co., Ltd	Property for investment and marina services
2015 - Present	Director	Hemaraj Eastern Seaboard Industrial Estate 4 Co., Ltd	Property developer
2015 - Present	Director	Hemaraj REIT Management Co., Ltd	Trust Manager

### WHAUP Affiliate Companies

2015 - Present	Director	WHA Water Co., Ltd	Water Resources Development and Management
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## 6. Mr. Jakrit Chaisanit

- **Director** (The director having authority to sign for binding the company as set forth in the affiliates)  
Date of appointment: April 23, 2012
- **Executive Committee** Date of appointment: May 25, 2012
- **Corporate Governance Committee** Date of appointment: February 18, 2014
- **Chief Operating Officer** Date of appointment: October 29, 2015

**Age (Year)** 45

**Share holding's proportion(%)** 0.55

**Family relationship between the director** None

### Education

- Bachelor Degree of Engineering Program in Environmental Engineering, Chulalongkorn University
- Master of Engineering in Project Management, Faculty of Engineering, University of Maryland

### Certification

- Director Accreditation Program, IOD, 2012

### Work experience in the past 5 years

Period	Position	Company	Type of Business
2015 - Present	Chief Operating Officer	WHA Corporation PCL.	Property developer on warehouses and factories
2013 - Present	Director	WHA Corporation PCL.	Property developer on warehouses and factories
2013 - Present	Executive Committee	WHA Corporation PCL.	Property developer on warehouses and factories
2012 - 2015	Director and Director of Construction Project Management Department	WHA Corporation PCL.	Property developer on warehouses and factories

### Subsidiary Companies

2016 - Present	Director	WHA Hemaraj Land and Development (SG) Pte. Ltd.	Investment in associate/subsidiaries
2016 - Present	Director	WHA Hemaraj International Co., Ltd	Investment in associate/subsidiaries
2015 - Present	Director	H-Construction Management and Engineering Co., Ltd	Design and Construction Supervision Service
2015 - Present	Director	SME Factory Co., Ltd	Sell and Lease of Factory
2014 - Present	Director	WHA Corporation (International) Company Limited	Holding Company

### Other Companies

2003 - Present	Managing Director	A&J Builder Co., Ltd.	Constructor Business
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## 7. Mr. Arttavit Chalermsoyayakorn

- **Director** (The director having authority to sign for binding the company as set forth in the affiliates)  
Date of appointment: April 28, 2014
- **Executive Committee** Date of appointment: July 17, 2013
- **Corporate Governance Committee** Date of appointment: February 18, 2014
- **Chief Financial Officer** Date of appointment: May 1, 2013

**Age (Year)** 42

**Share holding's proportion(%)** 0.04

**Family relationship between the director** None

### Education

- Bachelor Degree of Business Administrative, Faculty of Commerce and Accountancy, Thammasat University
- Master Degree of Science, Majoring in Finance, University of Illinois (Urbana-Champaign)

### Certification

- Director Accreditation Program, IOD, 2013
- Greater Mekong Subregion (GMS), CMA

### Work experience in the past 5 years

Period	Position	Company	Type of Business
2014 - Present	Director	WHA Corporation PCL.	Property developer on warehouses and factories
2013 - Present	Executive Committee	WHA Corporation PCL.	Property developer on warehouses and factories
2013 - Present	Chief Financial Officer	WHA Corporation PCL.	Property developer on warehouses and factories

### Joint Venture Companies

2013 - Present	Director	WHA KPN Alliance Co., Ltd.	Property developer on warehouses and factories
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### WHAUP Affiliate Companies

2013 - 2016	Director	WHA GUNKUL Green Solar Roof 1 Co., Ltd	Generator and distributor of electronic power from solar energy
2013 - 2016	Director	WHA GUNKUL Green Solar Roof 2 Co., Ltd	Generator and distributor of electronic power from solar energy
2013 - 2016	Director	WHA GUNKUL Green Solar Roof 3 Co., Ltd	Generator and distributor of electronic power from solar energy
2013 - 2016	Director	WHA GUNKUL Green Solar Roof 4 Co., Ltd	Generator and distributor of electronic power from solar energy
2013 - 2016	Director	WHA GUNKUL Green Solar Roof 5 Co., Ltd	Generator and distributor of electronic power from solar energy
2013 - 2016	Director	WHA GUNKUL Green Solar Roof 5 Co., Ltd	Generator and distributor of electronic power from solar energy

### Other Companies

2011 - 2013	Senior Vice President, IB	The Siam Commercial Bank PCL.	Bank and Financial Institution
2007 - 2011	Senior Vice President, IB	CIMB Thai Bank PCL.	Bank and Financial Institution

## 8. Mr. Somsak Boonchoyruengchai

- **Director** (The director having authority to sign for binding the company as set forth in the affiliates)  
Date of appointment: April 23, 2012
- **Executive Committee** Date of appointment: May 25, 2012
- **Chairman of the Corporate Governance Committee** Date of appointment: February 18, 2014
- **Vice President** Date of appointment: January 1, 2017

**Age (Year)** 47

**Share holding's proportion(%)** 0.01

**Family relationship between the director** None

### Education

- Bachelor Degree of Accounting, Faculty of Business Administration, Rajamangala University of Technology
- Master Degree of Accounting, Faculty of Commerce and Accounting

### Certification

- Director Accreditation Program, IOD, 2012

### Work experience in the past 5 years

Period	Position	Company	Type of Business
2017 - Present	Vice President	WHA Corporation PCL.	Property developer on warehouses and factories
2012 - Present	Director	WHA Corporation PCL.	Property developer on warehouses and factories
2012 - Present	Executive Committee	WHA Corporation PCL.	Property developer on warehouses and factories
2012 - 2016	Director of Accounting	WHA Corporation PCL.	Property developer on warehouses and factories

### Joint Venture Companies

2013 - Present	Director	WHA KPN Alliance Co., Ltd.	Property developer on warehouses and factories
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### WHAUP Affiliate Companies

2013 - 2016	Director	WHA GUNKUL Green Solar Roof 8 Co., Ltd	Generator and distributor of electronic power from solar energy
2013 - 2016	Director	WHA GUNKUL Green Solar Roof 9 Co., Ltd	Generator and distributor of electronic power from solar energy
2013 - 2016	Director	WHA GUNKUL Green Solar Roof 10 Co., Ltd	Generator and distributor of electronic power from solar energy
2013 - 2016	Director	WHA GUNKUL Green Solar Roof 16 Co., Ltd	Generator and distributor of electronic power from solar energy
2013 - 2016	Director	WHA GUNKUL Green Solar Roof 17 Co., Ltd	Generator and distributor of electronic power from solar energy

### Other Companies

2004 - Present	Director	Honesty Auditing Co., Ltd.	Accounting Audit Service
1995 - Present	Director and Managing Partner	A. Ruengroj Furniture Part., Ltd.	Furniture Producer and Interior Design

## 9. Mr. Narong Kritchanchai

- **Director** (The director having authority to sign for binding the company as set forth in the affiliates)  
Date of appointment: April 23, 2012
- **Executive Committee** Date of appointment: May 25, 2012
- **Corporate Governance Committee** Date of appointment: February 18, 2014
- **Chief Legal Officer** Date of appointment: February 24, 2016

**Age (Year)** 42

**Share holding's proportion(%)** -

**Family relationship between the director** None

### Education

- Bachelor Degree of Law, Thammasat University
- Master Degree of Law, Cornell University

### Certification

- Director Director Accreditation Program, IOD, 2012

### Work experience in the past 5 years

Period	Position	Company	Type of Business
2016 - Present	Chief Legal Officer	WHA Corporation PCL.	Property developer on warehouses and factories
2012 - Present	Director	WHA Corporation PCL.	Property developer on warehouses and factories
2012 - Present	Executive Committee	WHA Corporation PCL.	Property developer on warehouses and factories

### Other Companies

2015 - Present	Director	SME Factory Co., Ltd	Sell and Lease of Factory
2006 - Present	Director	Nakit Property Co., Ltd.	Property Developer
2003 - Present	Director	RL Counsel Co., Ltd	Legal Counsel



## 10. Mr. Apichai Boontherawara, Ph.D.

- **Independent Director** Date of appointment: April 29, 2014
- **Audit Committee** Date of appointment: April 29, 2014 (Acting in the Chairman of The Audit Committee)

**Age (Year)** 62

**Share holding's proportion(%)** -

**Family relationship between the director** None

### Education

- Bachelor Degree of Economics, Thammasat University
- Master Degree of Business Administrative, Thammasat University
- Ph. D. of Economic, Washington University

### Certifications

- Director Accreditation Program, IOD, 2004
- Director Certification Program, IOD, 2005
- Audit Committee and Continuing Development Program, IOD, 2005

### Work experience in the past 5 years

Period	Position	Company	Type of Business
2017 - Present	Chairman of the Audit Committee	WHA Corporation PCL.	Property developer on warehouses and factories
2014 - Present	Independent Director	WHA Corporation PCL.	Property developer on warehouses and factories
2014 - Present	Audit Committee	WHA Corporation PCL.	Property developer on warehouses and factories

### Other Companies

2015 - Present	Monetary Policy Committee	Bank of Thailand	Bank of Thailand
2011 - Present	Vice Chairman of Executive Board	Southeast Insurance PLC., Southeast Life Southeast Capital Co., Ltd.	Finance and Insurance Finance and Insurance Finance and Insurance
2009 - Present	Honorary of KMIT Council Member	King Mongkut's Institute of Technology Ladkrabang	University
2009 - Present	Audit Committee	Chiangmai University	University

**11. Mr. Somsak Pratomsrimek, Ph.D.**

- **Independent Director** Date of appointment: April 23, 2012
- **Audit Committee** Date of appointment: April 23, 2012

**Age (Year)** 46

**Share holding's proportion(%)** -

**Family relationship between the director** None

**Education**

- Bachelor Degree of Accounting, Burapha University
- Master Degree of Accounting, Science, Thammasat University
- Ph.D. of Accounting, Chulalongkorn University

**Certifications**

- Director Accreditation Program, IOD, 2012
- Certificate of Thai Financial Reporting Standard, 2013

**Work experience in the past 5 years**

Period	Position	Company	Type of Business
2012 - Present	Independent Director	WHA Corporation PCL.	Property developer on warehouses and factories
2012 - Present	Audit Committee	WHA Corporation PCL.	Property developer on warehouses and factories

**Other Companies**

1999 - Present	Professor of Faculty of Management and Tourism, Department of Accounting and Business Administration	Burapha University, Bangsaen, Chonburi	University
2010 - 2013	Sub-committee on the Monitoring of the Development of IFRS	Federation of Accounting Professions Under The Royal Patronage of His Majesty The King	Regulatory Agency
2008 - 2011	Director of Academic Council of Rajmanagala University of Technology Suvarnabhumi	Rajamangala University of Technology Suvarnabhumi	University
2007 - Present	President of Master Accountancy	Burapha University, Bangsaen, Chonburi	University
2006 - 2010	President of Master Accountancy Program, Burapha University	Burapha University, Bangsaen, Chonburi	University

## 12. Mrs. Kritsana Sukboonyasatit, Ph.D.

- **Independent Director** Date of appointment: April 23, 2012
- **Audit Committee** Date of appointment: April 23, 2012

**Age (Year)** 47

**Share holding's proportion(%)** -

**Family relationship between the director** None

### Education

- Bachelor Degree of Business Administration
- Master Degree of Business Administration, Chulalongkorn University
- Ph.D. of Arts, Khon Kaen University

### Certifications

- Director Accreditation Program, IOD, 2012

### Work experience in the past 5 years

Period	Position	Company	Type of Business
2012 - Present	Independent Director and Audit Committee	WHA Corporation PCL.	Property developer on warehouses and factories
2012 - Present	Audit Committee	WHA Corporation PCL.	Property developer on warehouses and factories
<b>Other Companies</b>			
2003 - Present	Managing Director Co., Ltd.	Business Excellence Consulting	Consultant
2004 - 2007	Deputy Managing Director	Carpet Maker (Thailand) Co., Ltd.	Factory
2003 - Present	Auditor of the Award Thailand	Quality Award Thailand	Office of Thailand Quality Award

### 13. Mr. Chanvit Amatamatucharti

- **Independent Director** Date of appointment: November 10, 2016

**Age (Year)** 62

**Share holding's proportion(%)** -

**Family relationship between the director** None

#### Education

- Master of Arts (Economics), Chiang Mai University
- Master of Economics Program (Development Economics), National Institute of Development Administration

#### Certification

- Director Certification Program, IOD, 109/2008
- Diploma, National Defence College, The Joint State – Private Sector Course Class 50 , National Defence college of Thailand
- Executive Program Capital Market Academy (CMA#18), 2014
- Top Executive Program in Energy Literacy for the world – Class 3, Thailand Energy Academy
- Intermediate Certificate Course in Good Governance for Middle Level Executives (#12) Public Director Institute
- Top Executive Program in Commerce and Trade (TEPCOT#4), Commerce Academy
- Advanced Certificate Course in Public Economics Management for Executives (#5), The College of Politics and Governance
- Middle Management, Office of The Civil Service Commission (OCSC)

#### Work experience in the past 5 years

Period	Position	Company	Type of Business
2016 - Present	Independent Director	WHA Corporation PCL.	Property developer on warehouses and factories

#### Other Companies

2016 - Present	Director of the Energy for Environment Centre	The Sirindhorn International Enviroment	Foundation
2010 - 2016	Deputy Secretary	National Economic and Social Development Board (NESDB)	
2008 - 2009	Consultant Assistant	Prime Minister's Office	
2007 - 2010	Consultant	Office of the National Economic and Social Development Board	
1996 - 2008	Advisor	Ministry of Transport	
1995 - 2006	Infrastructure	Office of the National Economic and Social Development Board	



#### 14. Mr. Sirisak Kijruksa

- **Corporate Secretary** Date of appointment: May 12, 2016

**Age (Year)** 56

**Share holding's proportion(%)** -

**Family relationship between the director** None

#### Education

- Bachelor Degree of Accounting, Bangkok University

#### Work experience in the past 5 years

Period	Position	Company	Type of Business
2016 - Present	Corporate Secretary	WHA Corporation PCL.	Property developer on warehouses and factories

#### Subsidiary Companies

2016 - Present	Director of Legal	Hemaraj Land and Development PCL.	Property developer
2016 - Present	Director	H-Construction Management and Engineering Co., Ltd.	Design and Construction
2009 - 2016	Corporate Secretary Director of Accounting	Hemaraj Land and Development PCL.	Property developer

## VISION & MISSION

### VISION

To be recognized as a market leader in aligning vertical integrated logistics facilities provider, total solution for industrial estates, utilities & power and digital infrastructure platforms with high quality throughout value chain in Asia.



## MAJOR DEVELOPMENTS

The company had series of major developments summarized per below tables

### BUSINESS AND OPERATION

#### Year 2014

- In July, the company acquired Equinox The Office Place, an office building, from Major Development Group and changed the name to SJ Infinite I Business Complex. It is a new 30-floor office building on Paholyotin-Vibhavadee Road, consists of the office space and retail area for rent with total leasable area of approximately 21,673 square meters.
- In December, Premium Growth Freehold and Leasehold Real Estate Investment Trust ("The Trust" or "WHART") was set up. The Company sold 11 warehouse buildings covering a total area of 167,107.45 sq.m., valued at THB 4,337 mm, to WHART for which WHA Real Estate Management Co., Ltd. ("WHARM"), a subsidiary company, was appointed as a REIT manager.
- In December, the Company entered into a share sale and purchase agreement (the "Share Sale and Purchase Agreement") with Hemaraj's major shareholders to purchase shares in Hemaraj Land and Development Public Co., Ltd. ("Hemaraj").
- The Company declared its intention to voluntarily and conditionally take over Hemaraj's securities. It arranged a voluntary tender offer to acquire the securities at THB 4.50 (Four Baht and Fifty Satang) per share on the condition that it would cancel the tender offer if the number of the offered shares at the end of the offer period was less than 50 (fifty) percent of Hemaraj's issued shares. The voluntary tender offer would take effect only if the following conditions have been satisfied.
  - (1) The conditions precedent specified in the Share Sale and Purchase Agreement to offer the shares in Hemaraj for sale at THB 4.50 (Four Baht and Fifty Satang) per share by the major shareholders in the voluntary tender offer have been satisfied.
  - (2) The shareholders' meeting approved the Company and/or its subsidiaries to acquire Hemaraj's shares as specified in the Share Sale and Purchase Agreement and the Company to proceed with the voluntary tender offer.
  - (3) The Shareholders' meeting approved the Company to issue and make a right offering of its common share to existing shareholders (right offering), in which the Company has successfully issued and sold the shares and registered its capital increase with the additional paid-up capital of THB 8,937,905,473.50.
  - (4) The Company was approved with credit facilities by financial institutions of approx. THB 31,982 mm, combined with the proceeds from the right offering, the Company had sufficient funding for the acquisition of Hemaraj under the first voluntary tender offer.

#### Year 2015

- On 5 February, the Company established WHA Ventures Holding Co., Ltd., in which the Company holds 99.99% of the shares in order to perform a tender offer of all issued distributable shares in Hemaraj Company.

- In March, the Company submitted a voluntary tender offer of all shares in Hemaraj Company with price per share of THB 4.50. The duration for the voluntary tender offer was from 6 March 2015 to 10 April 2015.
- On 20 April, the Company acquired 92.88% of Hemaraj's total outstanding shares.
- On 28 April, the Company sold an asset, the expansion part of DSG project, to a Fund for a total value of THB 17 mm (excluding value added tax)
- On 13 October, the Company had a resolution to clarify its business policies regarding warehouses, distribution centers, and factories. The Company will be the developer of Built-to-Suit warehouses, distribution centers and factories; and Ready-Built warehouses and distribution center in any area, except for those in the industrial estates, industrial zones, or industrial parks, which will be developed by Hemaraj. Hemaraj will be the developer of Ready-Built warehouses and factories that locate in the industrial estates, industrial zones, or industrial parks.
- On 30 October, WHA Group had a resolution to adjust the organizational structure and promoted Ms. Jareeporn Jarukornsakul to be Chief Executive Officer of the Company while Mr. Somyos Anantaprayoon, the former Chief Executive Officer, to resumed the position as Chairman of the Board, Director, and executive director of the Company. In addition, Mr. Jakrit Chaisanit was promoted to be Chief Operating Officer of the Company.
- On 6 November, the Company sold 2 office buildings (SJ Infinite I Business Complex and Bangna Business Complex Project) to the WHA Business Complex Freehold and Leasehold Real Estate Investment Trust ("WHABT") at the total sale price of THB 2,388,800,000 (after deducting value added tax), in which WHA Real Estate Management Company Limited (WHARM), one of the subsidiaries of the Company, was established as a trust manager.
- On 2 December, the Company submitted a voluntary tender offer of Hemaraj's shares to delist Hemaraj from the Stock Exchange of Thailand, in which the Company has submitted a voluntary tender offer for all shares at a price per share of THB 4.40. The period of the voluntary tender offer was from 3 December 2015 to 9 February 2016.
- On 29 December, the Company sold 3 warehouses to WHART covering a total area of 174,914 sq.m. with a value of THB 4,486 mm.
- On 30 December, the Company established 3 subsidiary companies in foreign countries, including:
  - (1) WHA Corporation (Hong Kong) Company Limited to invest outside Thailand, acting as a Holding Company, holding stocks of the foreign companies.
  - (2) WHA Corporation (International) Company Limited to invest outside Thailand, acting as a Holding Company, holding stocks of the foreign companies.
  - (3) PT WHA International Indonesia to invest and to operate businesses in Indonesia.

Moreover, the company has established 1 subsidiary company in Thailand, WHA Infonite Holding Company Limited (on 6 February 2017, changed the name to WHA Infonite Company Limited) as to operate in digital platform business.

## Year 2016

- In January, the Company has joined with the Central Group to establish Central WHA Alliance Co., Ltd., with registered capital of THB 10 mm. and paid-up capital of THB 2.5 mm to develop warehouses, distribution centers and factory buildings. The first project was located in Wangnoi in Phra Nakhon Si Ayutthaya province. The Company holds 50% of the shares and CRC Power Retail Co., Ltd. holds 50%, respectively. By the end of 2016, Central WHA Alliance Co., Ltd., had paid-up capital of THB 642.50 mm.



- On 9 February, the Company has committed to make a tender offer of Hemaraj to delist Hemaraj's securities from the Stock Exchange of Thailand. As a result, the Company's holder in Hemaraj increased to 98.54%.
- On 2 March, Hemaraj was delisted from the Stock Exchange of Thailand.
- After the acquisition of Hemaraj's group, the Company restructured the business within the Group by transferring utilities and power business to be under Hemaraj Clean Water Co., Ltd. (subsequently transformed into public limited company and changed the name to WHA Utilities and Power Public Co., Ltd. ("WHAUP")), the Company's subsidiary indirectly held through Hemaraj (99.99%).
- In March, WHAUP entered into a business partner's contract and a lease contract with a authority to produce and distribute water for industrial purpose, and industrial waste water management in industrial estates zones, as well as Hemaraj's area. WHAUP received 50 years contract to operate in water business.
- In May, WHA Energy 2 Co., Ltd. ("WHAET") transferred all its shares in power plant companies i.e. Gheco-One Co., Ltd. and Houay Ho Co., Ltd. (Houay Ho Co., Ltd. holds 25% of Houay Ho Thai Electrical Co. Ltd.'s shares) and Glow IPP Co., Ltd. to WHA Energy Co., Ltd. (formerly named Hemaraj Energy Co., Ltd.) from Hemaraj's Group. (WHAEG and WHAET were Company's subsidiaries indirectly held 99.99% through Hemaraj)
- In June, the Company transferred its shares totaling to 74.99% in 11 joint ventures companies to WHAEG (another 25.01% of the shares held by Gunkul Engineering Plc.). The 11 joint venture companies invest in Solar PV Rooftop projects.
- In July, Chonburi Clean Energy Co., Ltd. was established with registered capital of THB 20 mm to submit PPA application for industrial waste project.
- In July, WHA Hemaraj International Co., Ltd. was established with registered capital of THB 240 mm as a holding company, to support the group in term of general management, setting up business strategy, implementing a business plan and internal communication for both its domestic and international companies. Hemaraj held 99.99% of the WHA Hemaraj International's shares
- In August, the Company's made a joint venture with the Suez Group and the Glow Group in order to establish Eastern Seaboard Clean Energy Co., Ltd., a joint venture company, with a registered capital of THB 40,000,020 to be a holding company. The joint venture company was held by WHAEG (33.33%), Glow IPP 3 Co., Ltd. (33.33%), and Suez (South East Asia) Co., Ltd. (33.33%), respectively.
- On 10 August, WHAUP was transformed into a public limited company with a registered capital of THB 3,825 mm and paid-up capital of THB 3,200 mm (par value of THB 5 per share). WHAUP's prospectus was submitted to SEC on 6 September 2016.
- In August, since the Company's business has greatly expanded covering various business industries, the Company changed its logo to be under one same branding in order to be widely well recognized under one group.



- In September, the Company and Daiwa House Group established WHA Daiwa Logistics Property Co., Ltd. With a registered capital of THB 10 mm and paid-up capital of THB 2.5 mm to develop warehouse, distribution center, and factory projects. The initial projects were on Chonharnpichit Km.3 Road and LaemChabang. This joint venture company was held by WHA Corporation Plc. (51.00%) and DHL Asia investment private Co. Ltd. (49.00%). In December 2016, WHA Daiwa Logistics Property Co., Ltd. increased its paid-up capital to THB 820 mm.
- In September, the Company and 2 partners established Genesis Data Center Co., Ltd. with a registered capital of THB 12 mm and paid-up capital of THB 3 mm (by the end of 2016, the registered capital and paid-up capital increased to THB 210 mm and THB 111 mm, respectively) to develop the data centers project. The joint venture company was held by WHA Infonite Co., Ltd. (33.33%), Advance Information Technology Plc. (33.33%), and Inter link Telecom Plc. (33.33%). At the end of 2016, Genesis Data Center Co., Ltd increased its registered capital to THB 210 mm and its paid-up capital to THB 111 mm.
- In September, Glow Hemraj Wind Co., Ltd., which is indirectly held through Hemaraj (51.00%) was restructured to be under Eastern Seaboard Clean Energy Co., Ltd., who would hold 100 percent of the share after the restructuring.
- On 23 November, Hemaraj Group sold leasehold right of 80 units of factory buildings, and 21 units of warehouses, located in the industrial estates of Hemaraj Group, with a total area of 261,314 sq.m. at the selling price of THB 6,279 mm, to Hemaraj Leasehold Real Estate Investment Trust ("HREIT"). Hemaraj REIT management Co., Ltd. ("HRM"), a subsidiary of Hemaraj, was appointed to be a REIT manager, and Hemaraj was appointed as a property manager.
- In November, the Company repaid the last loan installment amounting to THB 31,891 mm back to a financial institution, clearing out all the Hemaraj's acquisition loan. However, WHA Utilities and Power Group took up a loan of THB 12,999 mm during the restructuring to prepare for listing in the Stock Exchange of Thailand.
- On 7 December, the Company sold 2 warehouses (WHA Mega Logistics Center (Chonlaharnpichit Km.5) and WHA Mega Logistics Center (Ladkrabang) to the trust with a total area of 159,141 sq.m. at a selling price of THB 4,145 mm.
- In December, WHA Energy Co., Ltd., which is indirectly held by Hemaraj (99.99%), made a joint venture with Gulf MP Co., Ltd. to invest in a small power plant project (SPP). WHA Energy Co., Ltd. has a 25.01% stake in Gulf NLP 2 Co., Ltd., which has a total PPA of 120 MW.

## Year 2017

- On 9 February, the Company has been launched opening "Hemaraj Eastern Seaboard Industrial Estate 4 (HESIE4) which is the ninth Industrial Estate of Hemaraj Group located at Pluak Daeng, Rayong, totally area 1,900 rais.
- WHAUP was permitted from the Securities and Exchange Commission "SEC" by the issuance of filling effective date 20 March 2016 and proposed the Initial Public Offering ("IPO") between 22 March to 3 April 2016 by entering ordinary shares to register in the Stock Exchange of Thailand and started trading on April 10, 2016.
- The Company has been expanded Industrial Estate Development to Vietnam by issuance and permission of Investment Registration Certificate ("IRC") from Vietnam Governance in May for the approval of long term Project Development totally area 20,000 rais which prospected first phrase of Industrial Estate Developmental Project at the approximately area 3,100 rais under the Project's name "WHA Hemaraj Industrial Zone" in Nghe An Province, and had the Ceremony of Laying Foundation on 10 March 2017.

- There are five projects of Small Power Plant (“SPP”), Gulf, VTP, and Gluf TS 1-4 which are the Joint Venture Project between the Company thru WHAUP and Gluf MP Company ,started commercial operations in May 16, July 8, September 1, November 1, 2017 and January 1, 2018, respectively with electricity according to the contracts totally 160.1 megawatts in accordance with the proportion of shares held.
- On 18 August, the Company has been certified as the Member of Thailand’s Private Sector Collective Action Coalition Against Corruption: CAC.
- In the fourth quarter, the Company Group has been operated 3 Service Data Centers to support 461 Racks which are the additional services of Fiber Optic (“FTTx”) in Hemaraj Group of Industrial Estate.
- In November, the Company had the Credit Rating Level A- by TRIS Rating Company.
- On 29 November, the Company Group had been distributed and leased long term assets of warehouses in four projects ie. WHA Mega Center Logistic Center Project km. 19 Building C and M, WHA Mega Logistics Center Project in Lam Luk Ka and Omada Aerospace Factory Project in Rayong to WHA Premium Growth Real Estate Investment Trust “WHART” totally lease area 85,867 square meters equivalent to totally income Baht 3,079.3 million.
- In November, Hemaraj Eastern Seaboard Industrial Estate 4 (“HESIE4”) has been approved from the Eastern Economic Corridor Policy Committee (“EEC Committee”) to be the promotional zone supporting industry businesses, and to be the promotional zone : Hemaraj Eastern Seaboard Industrial Estate 4 supporting the future automotive industry, robot industry, as well as aerospace and logistics industry on January 23, 2018. Furthermore, there are eight industrial estates of the Company Group which were approved from EEC Committee to be the promotional zone supporting industry businesses in February 2018 and being process for the publication.

## COMPANY’S CAPITAL

### Year 2014

- In February, the Company issued THB 500 mm debentures No. 1/2557 to sell to institutional investors and high net worth investors, with a 3 years tenure, at a fixed rate of 4.01% per annum.
- In May, the Company issued THB 1,810 mm debentures No. 2/2557 for sale, targeting at institutional investors and high net worth investors. The debentures were split into 2 sets. First was THB 700 mm debentures having a tenure of 3 years, and the second was THB 1,110 mm debentures having a tenure of 5 years as outlined in the table below:

NO.	NO. OF UNITS	SIZE (THB MM)	FIXED INTEREST RATE (PER ANNUM)	TENTURE (YEARS)
1	700,000	700	3.75	3
2	1,110,000	1,110	4.42	5

- In July, the Company issued THB 1,700 mm debentures No. 3/2557 for sale, targeting at institutional investors and high net worth investors. The debentures were split into 4 sets comprising THB 435 mm, THB 385 mm, THB 600 mm, and THB 280 mm having a tenure of 3, 5, 7, and 10 years respectively as outlined in the table below:

NO.	NO. OF UNITS	SIZE (THB MM)	FIXED INTEREST RATE (PER ANNUM)	TENTURE (YEARS)
1	435,000	435	3.85	3
2	385,000	385	4.40	5
3	600,000	600	4.70	7
4	280,000	280	5.00	10

- In October, the Company issued THB 200 mm debentures No. 4/2557 for sale, targeting at institutional investors and high net worth investors, having a tenure of 2.9 years at a fixed rate of 3.85% per annum.
- In November, the Company issued THB 290 mm debentures No. 5/2557 for sale, targeting at institutional investors and high net worth investors, having a tenure of 4 years at a fixed rate of 4.00% per annum.

### Year 2015

- In February, the Company increased its registered capital from THB 963,891,769 to THB 1,314,397,866, in order to reserve for (1) a rights offering to existing shareholders amounting to 350,506,096 shares, whereby the ratio of 2.75 existing shares to 1 new share was given, and (2) the exercise of WHA-W1 totaling to 116,835,366 shares.
- On 27 April, the Company split the security par value from THB 1 per share to THB 0.10 per share. Therefore, the number of shares changed from 1,431,233,233 shares to 14,312,332,330 shares.
- In July, the Company offered THB 400 mm debentures No. 1/2558 for sale to institutional investors and high net worth investors, having a tenure of 2 years at a fixed rate of 3.95% per annum.
- On 8 September, the Company issued THB 2,000 mm debentures No. 2/2558 for sale to institutional investors and high net worth investors, having a tenure of 3 years at a fixed rate of 4.15% per annum.
- On 11 September, the Company issued THB 350 mm debentures No. 3/2558 for sale to institutional investors and high net worth investors, having a tenure of 2 years at a fixed rate of 3.70% per annum.
- On 18 September, the Company increased its registered capital to THB 1,567,773,018.60 in order to reserve for (1) a right adjustment for WHA-W1, and (2) an exercise of WHA-W2, which was newly issued.
- In October, the Company issued THB 250 mm debentures No. 4/2558 for sale to institutional investors and high net worth investors, having a tenure of 2 years, 3 days at a fixed rate of 3.70% per annum.
- On 12 November, the Company issued THB 200 mm debentures No. 5/2558 for sale to institutional investors and high net worth investors, having a tenure of 2 years, 3 days at a fixed rate of 3.70% per annum.
- On 14 December, the Company increased the capital from the exercise of 1,178,363,008 share of WHA-W2 totaling THB 3,181,580,121.60.
- On 25 December, the Company increased the capital from the exercise of 88,409 share of WHA-W1 totaling THB 303,340.12.



## Year 2016

- In March, the Company issued THB 200 mm debentures No. 1/2559 for sale to institutional investors and high net worth investors, having a tenure of 2 years, 2 days at a fixed rate of 3.70% per annum.
- In April, the Company issued THB 2,500 mm debentures No. 2/2559 for sale to public investors and THB 1,000 mm debentures No. 3/2559 for institutional investors and high net worth investors. The details are in the below table.

NO.	NO. OF UNITS	SIZE (THB MM)	FIXED INTEREST RATE (PER ANNUM)	TENTURE (YEARS)
<b>Public Investors</b>				
1	1,000,000	1,000	3.85	3
2	1,500,000	1,500	4.10	4
<b>Institutional Investors and High Net Worth Investors</b>				
1	1,000,000	1,000	4.10	4

- In May, the Company issued THB 150 mm debentures No. 4/2559 for sale to institutional investors and high net worth investors, having a tenure of 3 years, 1 day at a fixed rate of 3.75% per annum.
- On 9 June, the Company issued THB 230 mm debentures No. 5/2559 for sale to institutional investors and high net worth investors, having a tenure of 3 years, 2 days at a fixed rate of 3.85% per annum.
- On 16 June, the Company issued THB 100 mm debentures No. 6/2559 for sale to institutional investors and high net worth investors, having a tenure of 2 years, 11 months, 26 days at a fixed rate of 3.85% per annum.
- On 21 June, the Company issued THB 280 mm debentures No. 7/2559 for sale to institutional investors and high net worth investors, having a tenure of 3 years, 17 days at a fixed rate of 3.85% per annum.
- On 24 June, the Company increased the capital from the exercise of 244 share of WHA-W1 totaling THB 837.19.
- In July, the Company issued THB 300 mm debentures No. 8/2559 for sale to institutional investors and high net worth investors, having a tenure of 3 years, 2 days at a fixed rate of 3.75% per annum.
- In September, the Company issued THB 1,500 mm debentures No. 9/2559 for sale to institutional investors and high net worth investors, having a tenure of 5 years at a fixed rate of 4.00% per annum

## Year 2017

- On 28 April, the Company issued THB 2,600 mm debentures No. 1/2560 for sale to institutional investors and high net worth investors, having a tenure of 3 years at a fixed rate of 3.50% per annum
- On 25 August, the Company issued THB 100 mm debentures No. 2/2560 to Private Placement investors, having a tenure of 2 years, 11 Month, 24 days at a fixed rate of 3.15% per annum

## [ Corporate Information ]

## NATURE OF BUSINESS OPERATION

The Company is the leader of one-stop service which covers all of customer demands relating to logistics service of which classifies into 4 business hubs as follows;

1. Logistics Hub
2. Industrial Development Hub
3. Utilities & Power Hub
4. Digital Platform Hub



Revenue structure, as recorded in consolidated financial statement of the Company and its subsidiaries during 2015-2017, can be summarized as follows;

Unit: THB mm

	2015 (ADJUST)		2016 (AUDITED)		2017 (AUDITED)	
<b>Rental, service and utilities income</b>	<b>2,994.3</b>	<b>22.9%</b>	<b>3,692.8</b>	<b>19.1%</b>	<b>3,223.5</b>	<b>26.0%</b>
: Rental and service income from warehouses, distribution centers and factories <sup>/1</sup>	1,425.4	10.9%	1,688.7	8.7%	1,148.3	9.3%
: Utilities income	1,568.9	12.0%	2,004.0	10.4%	2,075.2	16.7%
<b>Income from sales of real estate</b>	<b>8,466.3</b>	<b>64.6%</b>	<b>14,162.6</b>	<b>73.3%</b>	<b>6,290.1</b>	<b>50.7%</b>
: Income from industrial land sale	3,963.8	30.3%	2,425.5	12.6%	3,210.8	25.9%
: Income from investment properties	4,502.4	34.4%	11,737.2	60.7%	3,079.3	24.8%
<b>Total income from sales and services</b>	<b>11,460.6</b>	<b>87.5%</b>	<b>17,855.4</b>	<b>92.4%</b>	<b>9,513.6</b>	<b>76.7%</b>
<b>Other income</b>	<b>603.6</b>	<b>4.6%</b>	<b>463.4</b>	<b>2.4%</b>	<b>932.9</b>	<b>7.5%</b>
: Dividend income from Property Fund and REIT	111.7	0.9%	183.2	0.9%	299.9	2.4%
: Trust management fee for REIT, and property management fee for Property Fund and REIT <sup>/1</sup>	66.4	0.5%	76.7	0.4%	171.7	1.4%
: Other income <sup>/2</sup>	425.5	3.2%	203.5	1.1%	461.3	3.7%
<b>Total Revenue</b>	<b>12,064.2</b>	<b>92.1%</b>	<b>18,318.8</b>	<b>94.8%</b>	<b>10,446.5</b>	<b>84.2%</b>
Share of profit (loss) of associates and joint ventures <sup>/3</sup>	1,038.0	7.9%	1,006.2	5.2%	1,963.5	15.8%
<b>Total income with share of profit (loss)</b>	<b>13,102.2</b>	<b>100.0%</b>	<b>19,325.0</b>	<b>100.0%</b>	<b>12,410.0</b>	<b>100.0%</b>

**Remark:** <sup>/1</sup> Adjust income for 2015 for benefit in comparison income for 2016 and 2017

<sup>/2</sup> Other income consisted of interest income, gain from sale of short-term investments and others.

<sup>/3</sup> Share of profit of associates and joint ventures mainly came from power business.

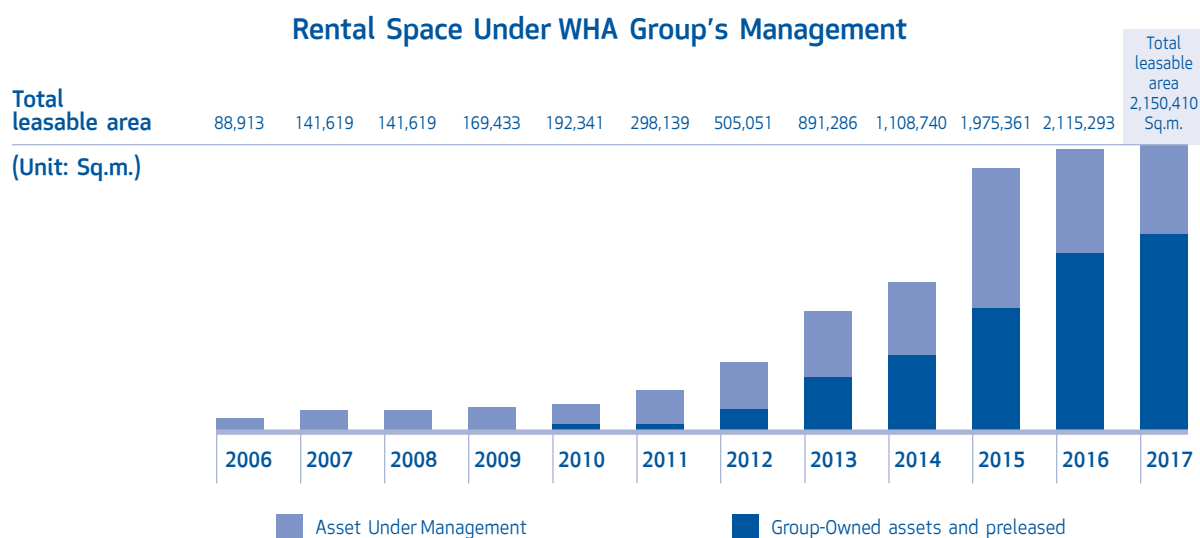
## PRODUCTS AND SERVICES

### 1. Logistics Hub

The Company is committed to be a leading company as a warehouse project developer, distribution center, and high quality factory located in a strategic location around Bangkok, Eastern Economic Corridor, and other provinces. The Company is able to fully meet the needs of its customers due to its project location, project design with international standards and quality of construction. This could reduce the cost of customer operations and increase long-term competitive advantages. Real estate business development and management could be described in accordance with the types of products and the services provided, details are as follows;

- A) Real estate development business for rental and service income
  - 1) Warehouse and distribution center
    - Built-to-suit project
    - Warehouse Farm project
    - Hemaraj Logistics Parks project (Ready-Built)
  - 2) Warehouse
    - Built-to-Suit Project
    - Ready-Built Project
  - 3) Other projects
- B) Real estate development business for sale
- C) Investment and real estate management business
- D) Trust management business

Real Estate development and management business is a major source of revenue for the Company. As of year-end 2017, the Company has expended its business in connection to its space rental business and space rental under the Company's management of more than 2,150,410 square meters, as the Company has offered a more variety of project types to its customers.



**REMARK :** total leasable area includes occupied space which generates revenue, pre-leased area and available area

## A) Real estate development business for rental and service income

Real estate development business for rental and service income is a real estate development project for the warehouse building, distribution centers, factories in order to rent and provide services to customers who emphasis on quality and high construction standards. They are located in strategic locations in the logistic areas, such as Bangna-Trad km 18-23 Ladkrabang Rama II and areas in the Eastern Economic Corridor project, including provincial cities such as Ayutthaya, Saraburi, Khon Kaen, Surat Thani and Lamphun etc. The Company's projects are located near to industrial estate, industrial area and/or Industrial zone, in providing our customers with competitive landscape. The projects are classified by product type and services offered, details are as follows:

### 1) Warehouse buildings and distribution centers

#### Built-to-Suit Project

Built-to-Suit Project is a project development according to the needs of customers. Most of the projects are large-scale building, ranging from 10,000 to 70,000 square meters which were designed and developed to meet complex, variety usage and best suit the need of each customer to give most benefit to their business nature and working procedure. Most of Built-to-Suit contracts are long-term lease with an average rental period between 10 and 15 years, and the tenant shall deposit for contract and service guarantee in cash and/or bank guarantees at the rate equivalent to approximately 3-12 months of rental fee, under the condition that If the tenant cancels the lease contract before the lease expiration specified in the lease agreement, the lessee shall compensate the rent for the remaining lease term to the Company.

#### Warehouse Farm Project

The Warehouse Farm project is a combination of Built-to-Suit and Ready-Built project with premium quality construction concept. It is a project developed to meet the increasing demand of both existing and new customers. Built-to-Suit buildings in Warehouse Farm are ranged from 10,000 to 16,000 square meters, while Ready-Built buildings in Warehouse Farm are approximately 3,000 to 5,000 square meters. The majorities of Built-to-Suit contract are long-term contracts for more than 5-10 years, while Ready-Built buildings in Warehouse Farm are short-term contract of approximately 3 years term. In addition, the Company provides options for renewal with the same condition as Built-to-Suit project.

Furthermore, the Company also looks after the common area of the projects such as central electricity services, security services, road repair services, public utilities and facilities, etc.

#### Hemaraj Logistics Park

The Hemaraj Logistics Park project is a high-quality Ready-Built project with the average area ranging from 2,400 to 25,000 square meters per site. The project is located in the logistics center and surrounded by industrial estates. The location is close to the deep sea port, and Eastern Economic Corridor zone which can meet the needs of the customers as well as third party logistics service providers. Hemaraj Logistics Park offers four projects as follows:

PROJECT	LOCATION	UNIT SIZE	OUTSTANDING
Hemaraj Logistics Park 1	Highway No. 331, Chonburi	195 Rai	Located between Laem Chabang Port and Hemaraj's Industrial Estate. It is only 20 kilometers from the port in Free Zone and the General Zone.

PROJECT	LOCATION	UNIT SIZE	OUTSTANDING
Hemaraj Logistics Park 2	Hemaraj Eastern Seaboard Industrial Estate (HESIE) on Highway No. 3574, Rayong	63 Rai	Located in the Free Zone with target customers in the automotive cluster and others.
Hemaraj Logistics Park 3	Hemaraj Eastern Seaboard Industrial Estate, on Highway No. 3574, Rayong	18 Rai	Located in General Zone
Hemaraj Logistics Park 4	Nearby Eastern Seaboard Industrial Estate (ESIE), Rayong	63 Rai	Located in General Zone which is the center of Eastern Industrial area

## 2) Warehouse and Factory Buildings

### Built-to-suit

The Company has a design and development team with extensive experience in design and construction of various projects. In order to meet the complex needs of our customers. In the design phase, the factory layout will be adjusted to suit with customer's production process, allowing for continuity of the production process and defects reduction. As a result, this project will best benefit our customers in terms of cost reduction and enhanced production efficiency.

### Ready-Built

Ready-Built project is developed to cater for small and medium-sized industry (SMEs), an average warehouse area ranging from 450 to 10,000 square meters. Most of the projects located in industrial zones and duty free zones in many industrial estates of Hemaraj Group. Therefore, the Ready-Built buildings will provide customers with greater flexibility, in terms of financial investments as well as business growth opportunities. Further, Hemaraj Ready-Built Factory Park 1 has an approximate area of 13 Rai, which located in Kabinburi Hi-Tech Industrial Estate, Prachin Buri. (The first factory project located outside Hemaraj Industrial Estate / Industrial Area). The project is located in the middle of Bangkok and the Northeast of Thailand. It is convenient to transport by land, water and air.

## 3) Other projects

### The projects in which the Group invests for development and lease

The Company plans to acquire the property which has been completely built and/or the property which have been partially built for development and lease. The target property should be in good condition and reasonably priced so that they can be further developed and leased to interested clients (including the existing tenants). This investment will enhance the Company's opportunity to increase the leased space while reducing the construction period. Also, the Company can implement its expertise in space design and improvement to meet the clients' requirements.

### Office buildings for rent

The Company has built and developed built-to-suit office buildings for rent for clients who want and/or purchase the fully completed office buildings for rent and/or partially completed property for development and lease. The Company will consider investing in the projects which are in good condition and reasonably priced. This will also help expand the Company's client base.



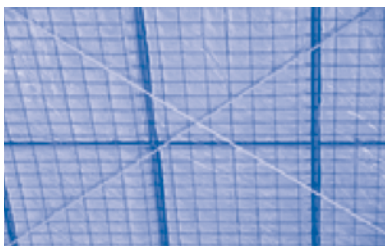
- **Examples of design which aims to meet different needs of tenants**

- Interior space design for the most effective inventory turnover
- Determination of the appropriate height of floor and access for large vehicles to facilitate goods delivery and transfer
- Shelf design for flexibility of adjustability of tenant operations to facilitate the product arrangement/ packaging and lessen the mistakes
- Temperature control of both Multi-Temperature and Cold Storage type which enables the control of the quality of the stored products

- **Examples of project specifications**


**Seamless metal sheet roof**

Seamless metal sheet roof helps reduce the problem of leaking through seams.


**Insulating roof**

Insulating materials are installed under the roof which consist of ventilation holes to help cooling down the heat within the project and maintain the quality of the stored products.


**Natural ventilation system**

Louvers and bird screens installed around the project and the higher position of the roof improve the air circulation within the project.

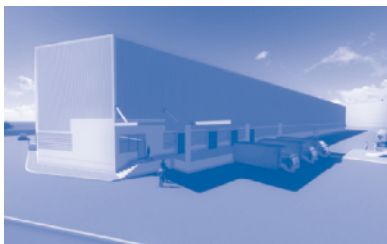

**Environmental management principles**

Infrastructure in the project such as product distribution system, warehouse and production plant have been developed in accordance with the international standards. These include the design of building structure to reduce dust and dirt accumulation and prevention of termites and insects.


**Strong Burnished Floor**

The floor structure is made of the specific concrete material which is much stronger than general concrete. Also, the Burnished Floor, which is an innovative technology of surface polishing, is used in the project to prevent scratches from heavy operations and reduce dust accumulation and floor cracks.

- Examples of Built-to-Suit Project



**Project location:** Bangna-Trad km. 5  
**Leased space:** 10,000 sq.m.  
**Project type:** Distribution center



**Project location:** Bangna-Trad km. 19  
**Leased space:** 10,000 sq.m.  
**Project type:** Distribution center



**Project location:** Saraburi Province  
**Leased space:** 55,000 sq.m.  
**Project type:** Plant and distribution center

- Examples of Warehouse Farm Project



**Project location:** Chonhan Pichit km. 5  
**Leased space:** 64,000 sq.m.  
**Project type:** Warehouse Farm



**Project location:** Hemaraj Industrial Estate,  
Saraburi Province  
**Leased space:** 96,000 sq.m.  
**Project type:** Warehouse Farm

- Examples of Ready-Built Project



**Project location:** Hemaraj Logistics Park 1



**Project location:** Hemaraj Logistics Park 2



**Project location:** Hemaraj Logistics Park 4



**Project location:** Hemaraj Ready-Built Factory Park 1

## B) Property development for sale

The Company has a clear policy to sell the property to Mutual Funds or Real Estate Investment Trusts to generate capital resources for development of the Company's future projects. However, the sale of property to Mutual Funds or Real Estate Investment Trusts requires an approval from investment unit holders, and the Company, as one of the investment unit holders of Mutual Funds or Real Estate Investment Trusts, is not eligible for casting votes. In addition, the sale the Company's property depends on other uncontrollable factors such as the market situations which affect the capital raising of Mutual Funds or Real Estate Investment Trusts. Nevertheless, the Company may consider selling the certain property to support the needs of capital use and the investment policy of the Company.

The Company will select the property to sell to Mutual Funds or Real Estate Investment Trusts on the basis that such property has to be completely developed and fully eligible for sale according to the investment policy of Mutual Funds or Real Estate Investment Trusts and the relevant laws and regulations. The quantity and the size of the projects to be sold to Mutual Funds or Real Estate Investment Trusts will be determined based on the amount of capital in need for the expansion of the new project or the profits expected to be received from the sale.

In 2017, WHA Premium Factory and Warehouse Fund (“WHAPF”) was converted by merging with WHA Premium Growth Real Estate Investment Trust (“WHART”) and WHART has additionally invested in 4 projects of the Group. This investment results in WHART having the total of 20 projects under its investment, amounting for 915,811 sq.m. of the leased space in buildings and 316,907 sq.m. of roofed leased space. The overall value of assets is 27,814 million Baht.

Furthermore, in 2017, Hemaraj Leasehold Real Estate Investment Trust (“HREIT”) raised capital by issuing and offering the investment units for sale for investing in the leasehold of another 55,131 sq.m. of the finished factory buildings and warehouses within Hemaraj industrial estates/industrial zones. HREIT finished its additional investment on 4 January 2018, resulting in HREIT having 316,445 sq.m. of the leased space and the total value of assets is increases 1,590 million Baht which increases from 8,434 million Baht at the end of 2017.

Also, the Company plans to sell the developed projects to the third parties, especially the current tenants of the projects, which will increase the Company’s income.

### C) Real estate investment and management

The Company plans to invest in the real estate business through Mutual Funds or Real Estate Investment Trusts in the proportion of not over 20 percent of all investment units for consistently gaining the dividends every year. However, the decision to invest in Mutual Funds or Real Estate Investment Trusts depends on the needs of capital and the amount of money raised by the sale of assets to Mutual Funds or Real Estate Investment Trusts at the time. Therefore, the investment in Mutual Funds or Real Estate Investment Trusts may be different from the indicated policy. In addition, the Company has been appointed as the manager of real estate for the assets of Mutual Funds or Real Estate Investment Trusts, from which the Company receives the income for management of the real estate of Mutual Funds or Real Estate Investment Trusts for investment in the real estate in the near future.

### D) Real Estate Investment Trusts Management

The Company has established WHA Real Estate Management Co., Ltd. as a subsidiary for conducting the business related to WHART management and established Hemaraj REIT Management Co., Ltd. to manage HREIT. The two companies receive the management fee on annual basis as well as the fee for acquisition and distribution of assets according to the asset value.

## Summary of the projects of the Group of Companies and the projects of the Mutual Funds or Real Estate Investment Trusts

(The area of the completed projects and the projects under construction as of 31 December 2017)

Unit: square meters

PROJECT STATUS	GROUP	WHART <sup>1</sup>	WHAPF <sup>1</sup>	HPF	HREIT <sup>2</sup>	WHABT
Completed projects	562,644	975,680	-	150,117	261,314	30,251
Projects under construction	20,791	-	-	-	-	-

#### Notes

<sup>1</sup> On 29 November 2017, WHART received the transfer of assets (the project area of 389,982 sq.m.) and obligations of WHAPF according to the plan to support WHAPF conversion to WHART.

<sup>2</sup> On 4 January 2018, HREIT invested in the leasehold of buildings and lands of the Group, amounting to 55,131 sq.m.

- **The Investment and Redevelopment / Renovation Projects for Rent**

The Group of Companies plans to purchase completed and/or partially constructed assets to develop for rent. In this regard, the Group of Companies will make an appropriate offer for projects that are in good condition to develop for lease to interested customers (who may be existing customers). This will enable the Group of Companies to have more leasable area at a faster pace, reduce construction period and utilize the Company's capabilities in design and renovation to respond to customers' needs.

- **Office Building for Rent**

To respond needs of the tenants who require office space and to diversify risks, in 2014, the Group of Companies developed a built-to-suit office building project on Bangna-Trad Road, namely Bangna Business Complex project with a leasable area of 8,578 square meters. In July 2014, the Group of Companies acquired Equinox The Office Place, an office building, from Major Development Group and changed the name to SJ Infinite I Business Complex. It is a new 30-floor office building on Paholyotin-Vibhavadee Road having a leasable area of approximately 21,673 square meters. It consists of the office space and retail area for rent. In November 2015, the Group of Companies sold both office building projects to WHA Business Complex Freehold and Leasehold Real Estate Investment Trust (WHABT), allowing the Group of Companies to receive cashflow proceeds from divestment and generate recurring income in the form of dividend as a trustholder and a REIT management fee through operation of WHA Real Estate Management Co., Ltd.

## 2. Industrial Development Hub

Industrial Development Hub is operated through the Company's subsidiary, with Hemaraj Group responsible for developing Industrial estates and/or zones and selling of land to enterprises who demand to make their investment in Industrial estates/zones and Industrial Promotional zones. Enterprises can gain special privileges provided by Industrial Estate Authority of Thailand and/or Thailand Board of Investment. Another crucial role of Hemaraj Group is to act as a center for providing utilities and facilities for clients inside the Industrial Estate e.g. electricity, water supply, wastewater treatment, waste disposal, telephone, internet and coordinating with the authority on environmental control.

By the end of 2016, there are eight industrial estates and industrial zones summarized in the following table:

INDUSTRIAL ESTATE/ ZONE			LOCATION	PROJECT SIZE (RAI)	PROMINENT FEATURES
1)	Hemaraj Chonburi Industrial Estate	HCIE	Sriracha, Chonburi	3,909 (1,564 Acre)	This industrial estate is situated at general industrial zone and industrial zone particularly for export. Major customers are comprised of heavy steel, energy, automotive parts, electrical parts, and building materials.
2)	Hemaraj Chonburi Industrial Estate 2	HCIE 2	Sriracha, Chonburi	632 (253 Acre)	This industrial estate is located near to an accessible highway i.e. a new highway no. 331 and highway 3241, linked to Laemchabang Port which is good for transportation and shortly connected to Sriracha district which is roughly 25 km away.



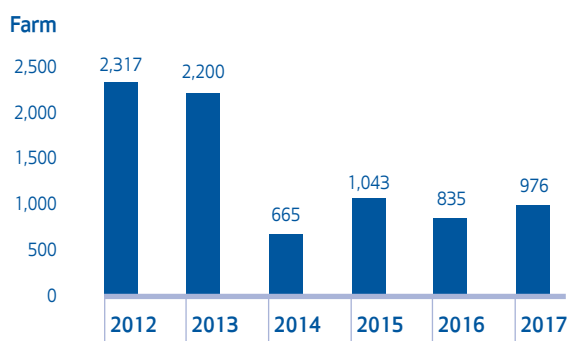
INDUSTRIAL ESTATE/ ZONE			LOCATION	PROJECT SIZE (RAI)	PROMINENT FEATURES
3)	Hemaraj Eastern Industrial Estate (Map Ta Phut)	HEIE	Map Ta Phut, Rayong (connect with National Petrochemical Complex)	3,760 (1,504 Acre)	This industrial estate is catered for some heavy industries including steel, petrochemical and chemical. This industrial estate is equipped with large-scale utilities with a capability to distribute untreated water, clarified water, tap water, high voltage electricity and wastewater treatment system. Apart from large-scale utilities, this industrial estate has additional services provided such as Electricity procurement, water steam, demineralized water for industries and pipe installation system for liquid and gas transportation.
4)	Eastern Seaboard Industrial Estate (Rayong)	ESIE	Pluakdaeng, Rayong	9,726 (3,890 Acre)	This industrial estate is a joint venture between Hemaraj Group and Siam Food Products PCL, with a proportional of 60:40 respectively. It was established in 1995. This industrial estate is proclaimed to be a fully-integrated industrial hub and one of the world's largest automotive cluster, occupied with major automobile manufacturers together with more than 100 downstream automotive manufacturers, most of which are the world's most renowned automobile brands. This industrial estate has become the central hub of automotive production with a combined capacity contributing to one-third of Thailand's total automotive production.
5)	Hemaraj Eastern Seaboard Industrial Estate	HESIE	Pluakdaeng, Rayong	8,112 (3,254Acre)	The industrial estate is connected to Eastern Seaboard (Rayong) Industrial Estate (ESIE), easily commutable by car. Additionally, ESIE is only 12 km from Hemaraj Chonburi Industrial Estate (HCIE). This industrial estate is a cluster for automobile manufacturers and automobile downstream industries.
6)	Hemaraj Saraburi Industrial Land	HSIL	Nong Kae, Saraburi	3,619 (1,448 Acre)	This industrial zone is catered for building materials, ceramics, paper, packaging, metal, and electricity industries.
7)	Hemaraj Rayong Industrial Land	HRIL	Bankai, Rayong	3,438 (1,375 Acre)	This industrial zone is for machinery, automotive equipment, electrical metals and other downstream industries. At the present, this industrial zone has a strategic location in the eyes of domestic and foreign industrial enterprises. It is considered to be the production base for industrial machinery, mining, and construction materials, exported worldwide.

INDUSTRIAL ESTATE/ ZONE			LOCATION	PROJECT SIZE (RAI)	PROMINENT FEATURES
8)	Hemaraj Eastern Seaboard Industrial Estate 2	HESIE 2	Sriracha and Banbueng, Chonburi	3,650 (1,460 Acre)	This industrial estate is located approximately 25 km from Laemchabang port and close to automotive cluster which is in Hemaraj Industrial Estate. Customer groups include automobile manufacturers and downstream manufacturers.
	Hemaraj Eastern Seaboard Industrial Estate 4	HESIE 4	Pluakdaeng, Rayong	1,870 (748 Acres)	The EEC Policy Committee approved and announced the 4th Hemaraj Eastern Seaboard Industrial Estate as Industrial Promotion Zones to support Next-generation Automotive, Aviation and Logistics, Robotics and Automation industry

At the end of 2017, Hemaraj Group is managing 6 Industrial Estates, 2 Industrial Lands and 1 Industrial Promotion Zones, together with an undeveloped land bank, totaling to 46,434 Rai, with a total 719 customers, and over USD 30,500 mm has been invested by our clients in the industrial estates/ zones. Hemaraj Group is targeting at customers who require a full service solution i.e. Industrial Estate fully equipped with utilities, power, capable to heavy production manufacturer, with good supporting infrastructure e.g. automobile industries, petrochemical industries, steel industries, energy industries etc.

Complimenting to Hemaraj Group's full services solution, the figures of land sale have been increasing steadily. In 2017, land presale in industrial estates/ zones added up to 976 Rai, contributing to a land sale revenue of approximately THB 3,210.8 million. Hemaraj Group is still having a land bank for future development of approximately 10,000 Rai. Hemaraj Group is now considered to be the largest industrial estate developer in Thailand, with accumulated land presale from 2013 to 2017 of 5,715 Rai, constituting to 50% of a total average market share. (Survey's results report from CBRE Bangkok Property).

#### Land presale in industrial estates/ zones of Hemaraj Group



Source: the Company

## Details of Industrial Estate Zoning

Hemaraj Group categories its industrial estates and industrial zoning into 6 different zones, in according with its use of land, details are as follows:

ZONING BY USAGE	DEFINITION OF EACH ZONING
General Industrial Zone	- The zone is designated for industrial and industrial-related activities.
Free Zone / Export Processing Zone-EPZ	- The zone is designated for industrial, commercial operations and other related-activities, which are beneficial to the nation as a whole. Import duties on machinery under the Free Zone Economic are tax exempted.
Commercial Zone	- The zone is designated for commercial operations including banks, post office, hospital, gas station and educational institution etc.
Residential Zone	- The zone is designated for residential area such as apartments, condominiums and houses etc.
Logistics Zone	- The Zone is designated for construction of warehouses or factories for rent in relation to logistic business.
Common Area and Public Utility System	- The area is designated for construction of public utility and public infrastructure such as road, water supply system, waste water treatment system, reservoir, public parks etc.

### 3. Utilities & Power Hub

Utilities & Power Hub is operated through the Company's subsidiary, WHAUP Group, the provider of utilities in the Hemaraj Group's industrial estates/zones i.e. raw water, industrial water, and wastewater treatment. WHAUP Group is also into power business, through joint ventures with both domestic and foreign power plants, who have expertise in the power business field. Our power plants include both Conventional Fuel and Alternative Fuel power plants.

A) **Utilities** can be categorized as follows:

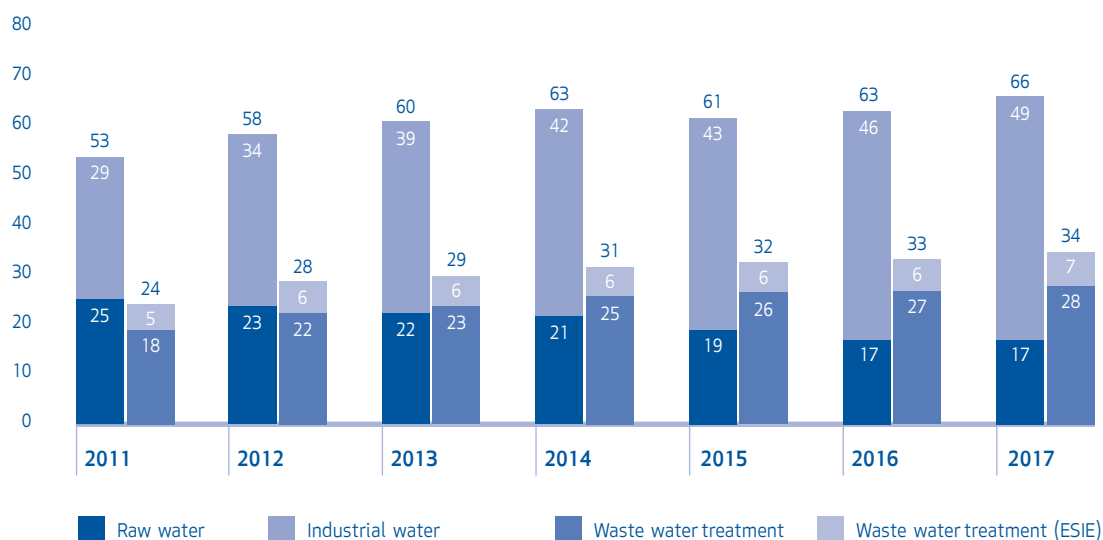
PRODUCTS AND SERVICES	PROMINENT FEATURES
Raw Water Procurement and Allocation	Procuring and distributing raw, untreated water to enterprises in Hemaraj Group's Industrial Estate with focusing mainly on heavy steel manufacturers, Independent Power Plant Producers (IPP), and Small Power Plant Producers (SPP).

PRODUCTS AND SERVICES	PROMINENT FEATURES
Industrial Water Production and Distribution	Producing and distributing industrial water to enterprises in industrial estate which can be divided into two main categories as followings: (1) Processed Water – Purified water through precipitation, filtration, and sterilization with Chlorine. Target customers include automobile manufacturers, automobile part manufacturers, food processing manufacturers, electronic manufacturers etc. (2) Clarified Water – Purified water through precipitation, filtration, and sterilization with Chlorine (adding higher Chlorine concentration compared to the processed water). The Concentrated Chlorine Solution added to the clarified water will evaporate prior to distributing to the customers, as it can be ensured that the Chlorine will not be eroding customers' machinery. The target customers include heavy metal industries, petrochemicals and power plants.
Wastewater Treatment	Providing wastewater treatment for customers inside the industrial estates in compliance with the Ministry of Industry, prior to draining into the natural water resource or recycling to be reuse in the production process.

Currently, WHAUP Group is one of the largest utilities providers in Thailand's industrial estates, with water production capacity of 281,376 m<sup>3</sup>/Day and waste water treatment capability of up to 149,456 m<sup>3</sup>/Day. In 2017, WHAUP Group has sold raw water and industrial water on an average of 182,415 m<sup>3</sup>/Day. Moreover, WHAUP Group has been treating wastewater on an average of 94,830 m<sup>3</sup>/Day.

### Utilities Production by WHAUP Group

(Unit : million m<sup>3</sup> per year)



Furthermore, WHAUP Group is on plan to offer enterprises with other utilities such as gas pipeline and waste disposal. Moreover, WHAUP Group also plans to expand its business outside the industrial estates, providing utilities to clients outside the industrial estates. WHAUP Group is certified by International Organization for ISO 9001:2008 and ISO 14001:2004 (environmental standards).

**B) Power** a joint venture power plant projects with highly-skilled enterprises who currently are in the power business, generating electricity via conventional fuel and alternative fuel. As of 31 December 2017, WHAUP Group has a combined electrical generating capacity of 478.36 Shareholder Equity Megawatts and another 64.47 Shareholder Equity Megawatts are still under-construction. Details are as follows:

1) Operated Power Plant Projects (Already-COD)

POWER PLANT PROJECT	LOCATION	FUEL TYPE	POWER PRODUCE TYPE	INVESTMENT PROPORTION	TOTAL CONTRACT CAPACITY	CAPACITY BY SHAREHOLDING PROPORTION	COD
<b>Joint Venture Projects with Glow's Group</b>							
Gheco-One	Industrial Estate Map Ta Phut	Coal	IPP	35.00%	Electricity 660.00 MW	231.00 MW	Aug 2012
Glow IPP	HCIE	Combined-Cycle Power Plant with Natural Gas	IPP	5.00%	Electricity 713.00 MW	35.65 MW	Jan 2003
Houay Power	Lao PDR	Hydro Power	IPP	12.75%	Electricity 152.00 MW	19.38 MW	Sep 1999
<b>Joint Venture Projects with Gulf's Group</b>							
Gulf JP NLL	HRIL	Cogeneration System with Natural Gas	SPP	25.01%	Electricity 122.50 MW Stream 3.00 TPH Cold water 3,200.00 RT	30.64 MW 0.75 TPH 800.32 RT	May 2013
Gulf Solar KKS	HPL1	Solar Power	VSPP	25.01%	Electricity 0.25 MW	0.06 MW	Dec 2014
Gulf Solar BV	HCIE	Solar Power	VSPP	25.01%	Electricity 0.13 MW	0.03 MW	Jun 2014
Gulf Solar TS1	HESIE	Solar Power	VSPP	25.01%	Electricity 0.13 MW	0.03 MW	Aug 2014
Gulf Solar TS2	ESIE	Solar Power	VSPP	25.01%	Electricity 0.09 MW	0.02 MW	Jan 2015



POWER PLANT PROJECT	LOCATION	FUEL TYPE	POWER PRODUCE TYPE	INVESTMENT PROPORTION	TOTAL CONTRACT CAPACITY	CAPACITY BY SHAREHOLDING PROPORTION	COD
<b>Joint Venture Projects with Gunkul Engineering's Group</b>							
WHA Gunkul Green Solar Roof 17	WHA Mega Logistic Center Wangnoi 61 Ayuthaya	Solar Power	VSPP	74.99%	Electricity 1.00	MW 0.73	MW Jul 2014
WHA Gunkul Green Solar Roof 3	WHA Mega Logistic Center Bangna-Trad Km.18	Solar Power	VSPP	74.99%	Electricity 0.83	MW 0.62	MW Apr 2014
WHA Gunkul Green Solar Roof 6	WHA Mega Logistic Center Bangna-Trad Km.18	Solar Power	VSPP	74.99%	Electricity 0.83	MW 0.62	MW Apr 2014
WHA Gunkul Green Solar Roof 1	WHA Mega Logistic Center Bangna-Trad Km.18	Solar Power	VSPP	74.99%	Electricity 0.64	MW 0.48	MW Apr 2014
<b>Joint Venture Projects with B Grim Power's Group</b>							
B.GRIMM Power (WHA) 1	HCIE	Cogeneration System with Natural Gas	SPP	25.01%	Electricity 121.00	MW 30.26	MW Nov 2016
<b>Joint Venture Projects with Gulf MP's Group</b>							
Gulf VTP	ESIE	Cogeneration System with Natural Gas	SPP	25.01%	Electricity 130.00 Stream 20.00	MW 32.51 TPH 5.00	MW May 2017
Gulf TS1	ESIE	Cogeneration System with Natural Gas	SPP	25.01%	Electricity 130.00 Stream 42.00	MW 32.51 TPH 10.50	MW Jul 2017
Gulf TS2	ESIE	Cogeneration System with Natural Gas	SPP	25.01%	Electricity 130.00 Stream 36.00	MW 32.51 TPH 9.00	MW Sep 2017
Gulf TS3	HESIE	Cogeneration System with Natural Gas	SPP	25.01%	Electricity 125.00 Stream 25.00	MW 31.26 TPH 6.25	MW Nov 2017
<b>Total</b>					Electricity 2,287.40	MW 478.34	MW
					Stream 126.00	TPH 31.50	TPH
					Cold water 3,200.00	RT 800.32	RT

## 2) Power Plant Projects (Under Construction)

POWER PLANT PROJECT	LOCATION	FUEL TYPE	POWER PRODUCE TYPE	INVESTMENT PROPORTION	TOTAL CONTRACT CAPACITY			CAPACITY BY SHAREHOLDING PROPORTION		SCOD
Gulf TS4	HESIE	Cogeneration System with Natural Gas	SPP	25.01%	Electricity	125.00	MW	31.26	MW	Jan 2018
					Stream	25.00	TPH	6.25	TPH	
WHA km. 3 Solar	WHA Mega Logistics Center (Chonhanpijit km. 3)	Solar Power	VSPP	100%	Electricity	0.90	MW	0.90	MW	Feb 2018
Gulf NLL2	HRIL	Cogeneration System with Natural Gas	SPP	25.01%	Electricity	120.00	MW	30.01	MW	Jan 2019
					Stream	10.00	TPH	2.50	TPH	
CCE	HCIE	Waste Energy	VSPP	33.33%	Electricity	6.90	MW	2.90	MW	2019
Total					Electricity	252.80	MW	64.47	MW	
					Stream	35.00	TPH	8.75	TPH	

POWER PLANT PROJECT	LOCATION	FUEL TYPE	POWER PRODUCE TYPE	INVESTMENT PORTION	CONTRACT CAPACITY			CAPACITY BY INVESTMENT PORTION		SCOD
Joint Venture Projects with Gulf MP Co. Ltd.										
Gulf VTP	ESIE	Cogeneration System with Natural Gas	SPP	25.01%	Electricity	130.00	MW	32.51	MW	May-2017
					Steam	20.00	TPH	5.00	TPH	
Gulf TS 1	ESIE	Cogeneration System with Natural Gas	SPP	25.01%	Electricity	130.00	MW	32.51	MW	Jul-2017
					Steam	42.00	TPH	10.50	TPH	
Gulf TS 2	ESIE	Cogeneration System with Natural Gas	SPP	25.01%	Electricity	130.00	MW	32.51	MW	Sep-2017
					Steam	36.00	TPH	9.00	TPH	
Gulf TS 3	HESIE	Cogeneration System with Natural Gas	SPP	25.01%	Electricity	125.00	MW	31.26	MW	Nov-2017
					Steam	25.00	TPH	6.25	TPH	
Gulf TS 4	HESIE	Cogeneration System with Natural Gas	SPP	25.01%	Electricity	125.00	MW	31.26	MW	Jan-2018
					Steam	25.00	TPH	6.25	TPH	

POWER PLANT PROJECT	LOCATION	FUEL TYPE	POWER PRODUCE TYPE	INVESTMENT PORTION	CONTRACT CAPACITY			CAPACITY BY INVESTMENT PORTION		SCOD				
Gulf NLL 2	HRIL	Cogeneration System with Natural Gas	SPP	25.01%	Electricity	120.00	MW	30.01	MW	Jan-2019				
					Steam	10.00	TPH	2.50	TPH					
Total					Electricity	760.00	MW	190.07	MW					
					Steam	158.00	TPH	39.57	TPH					

#### 4. Digital Platform Hub

In 2017 WHA Group offered Digital Platform services through its subsidiary, WHA Infonite Company Limited. WHA Group offers the following Digital Services in order to provide our customers with a comprehensive IT solution: Data Center: Co-location, Fiber Optic Internet FTTx Service, Rental/Leasing Equipment & Software Service and System Integration Service.

The offered services are described as follows:

##### A) Data Center : Co-location

Rental Server Hosting service incorporated with a world-class standard and a high-security operating system with an experienced consultant service. A customer is to prepare a server and to lease out a storage space in our data center. Currently, the WHA Group is operating 3 Data Centers located in Vibhavadi and Bangna-Trad area, moreover the WHA Group will develop another data center located in Eastern Seaboard Industrial Estate. All of the Data Centers are to be connected with high speed fiber optic, enabling the customers to conveniently make an access to the data center from their working stations and/or offices. The Data Centers is to obtain a world class standard, equivalent to Tier 3 data centers standard, in which electricity backup generators are installed in order to prevent from downtime, 24-hours ambience monitoring i.e. controlled temperature and humidity, allowing server to function efficiently together with longer machine life expectancy, 24-hours onsite staffs and security guards, installation of security cameras and fire alarm. Data centers are also designed to support as a Disaster Recovery site. Data centers are looked after by an expertise with more than 20 years of working experience in the field, who is certified with Certified Accredited Tier Design from Uptime institute. Last by not least, 24-hours Business Continuity Plan (BCP) are provided on site in order to assist our clients to manage their IT system contentedly. The WHA Group is currently providing Data Center service as an infrastructure service, known as Co-location, details are described as follows:

Co-Location Service is for corporations, government entities or state enterprises who are looking for Rental Server Hosting Services to be used as main site and back up (Disaster Recovery) site in order to prevent company's database from any unexpected situation or natural disaster that might cause damage to customer's main sites.

##### B) Fiber Optic FTTx Service

WHA Group has invested in laying of the fiber optic network (FTTx) in Hemaraj Group's industrial estates, providing infrastructure to support high-speed connection for our clients in industrial estates. Service operators have no longer need to invest in the FTTx infrastructure. Our clients in industrial estates can now enjoy a better high speed connection with their head quarter/office branches all over the world, through an enhanced network security system. FTTx network is a fundamental communication service, allowing for various communication types such as images, sounds and data.

### C) Rental/Leasing IT Equipment and Software

WHA Group will rent/lease IT equipment and software, together with looking after of its maintenance service as per clients' specifications and duration agreed upon i.e. 3-year or 5-year contract. Clients will benefit from having expert IT consultants setting IT facilities, which can best suit clients' requirements, at the most cost effective manner and an after-sale IT service, maintaining clients' IT facilities. Clients do not need to invest on the equipment, turning CAPEX into OPEX.

### D) System Integration Service

WHA group gives advice, designs, acquires, implements, maintains and brings together IT component subsystem in providing a comprehensive IT solution for our clients. As WHA Group is the specialize on IT digital platform, we are able to offer our clients with the best available technology on the market at the most competitive pricing.

The WHA Group understands the important of technology. Shifting from conventional economy to digital-oriented economy and to incorporate new technology in order to provide new innovation for our customers. Thus, the WHA Group is able to satisfy our customers' need and to provide our customers with a more efficient management system. In 2018 the WHA Group plans to expand our offered services, covering the following area:

- **Data Center : Cloud Services**

An innovative innovation on top of our Data Center Services, from an infrastructure service or Co-location, to an innovated service provider known as Cloud Services, details are described as follows:

**Cloud Solution Service** is for corporations, government entities or state enterprises who are looking to outsource/use IT facilities without the need to invest on IT infrastructure or IT resources. WHA Group has prepared a highly-experienced staff with certifications from international institutions such as Dell Certification, Hitachi Data System Certification, VM Ware Certification and OpenStack Certification to advise and to design the system to meet our clients' specifications in a cost-effective manner i.e. minimizing investment on hardware, software and maintenance while maximizing IT utilization. Cloud Solution Service is suitable for any corporations with no expertise on IT system so that the corporations can focus their expertise on their core business operation, leaving behind the IT system for WHA Group to look after. Cloud Solution Service can further be categorized into 3 services as follows:

- Infrastructure as a Service (IaaS) is the service that provides infrastructure such as virtualized server, storage, network and firewall. WHA Group helps customer to reduce number of physical servers, to monitor IT security system as well as to provide high-speed internet network. WHA Group will be responsible for an investment on IT infrastructure and the maintenance of the system, given the benefit to the clients in reducing their IT expenses, enabling for an efficient management of the IT resources in the most cost-effective manner.
- Platform as a Service (PaaS) is a service suitable for corporations with IT professionals, who are able to develop their own applications or those who need to develop complex applications. WHA Group will prepare IT infrastructure and application developing software e.g. hardware, operating system, middleware, database, software development tools and database. The service enables clients to effectively manage their IT resources, minimize the set-up time and having no need to invest on IT infrastructure.
- Software as a Service (SaaS) is a service of pay-per-use or renting of software/applications, via the utilization of WHA Group's data processing units. Clients do not need to invest on IT system, not to mention hardware nor software because the software/applications provided are on cloud which can be accessed from anywhere via web browser or internet connection.

All of the data processing is done through WHA Group's server. Examples of SaaS are Email on cloud, Anti-Virus, Firewall, Information back up system and Workflow cloud based ERP. SaaS facilitates smooth operations connectivity and enables a fully-automated workplace. Switching to SaaS can enhance operation efficiency, allowing for an in-depth data analysis. It is highly recommended for a corporation with high growth potential, as it enables a comprehensive business solution.

- **IT Outsourcing Service**

A service provider to deliver IT-enabled business process, IT human resources, applications and infrastructure solutions to enhance our clients' business outcomes. WHA Group can assist our clients outsourcing their IT facilities, enabling for an efficient IT resource management, thus reducing their overall IT expenses. The service is popular among clients in industrial estates, due to the fact that most of the clients are foreign manufacturing companies. These groups of clients have their expertise on the production facilities while IT department is considered as their supporting business unit. Thus, this group of clients would gain most benefits from our IT outsourcing service.

**Authorizations and benefits for the business**

WHA Group has obtained NBTC internet services (type 1) given by office of The National Broadcasting and Telecommunications Commission, document number NTC/MM/INT/ISP/1/078/2559 valid from 20 December 2016 to 19 December 2020. The course of permission can be renewed every 5 years. The company is in the process of submitting for NBTC (type 3), an operating license for a mass telecommunication service provider.

### **Benefits from the Board of Investment of Thailand (BOI)**

As at 31 December 2017, WHA Group has received the benefits from the Board of Investment of Thailand (BOI) for activities as follows:

- The Company has received the benefits from the Board of Investment of Thailand (BOI) totally 2 certificates for building factories and warehouses activities.
- The Company's subsidiaries have received the benefits from the Board of Investment of Thailand (BOI) totally 79 certificates for activities as follows;
  - Building factories and warehouses activities, 54 certificates.
  - Real estate development for industrial, 21 certificates.
  - Logistics parks, 1 certificate.
  - Public utilities and basis services Production of tap water or water supply for industry, 2 certificates.
  - Data Center activities, 1 certificate

**Significant privileges consist of:**

1) Tax exemption on the profit that the Company gains for 8 years since the first date of revenue generated. If the Company has loss from the operation, BOI allows the Company to deduct the loss from the profit that might occur in another 5 years after BOI expiry date. In addition, the Company can also choose to deduct the loss in one year or multiple years combine.

2) Tax exemption on the profit that the Company gains (no more than 100% of the finance cost that is not included in land cost and working capital that have 7 years of useful life). If the Company has loss from the operation, BOI allows the Company to deduct the loss from the profit that might occur in another 5 years after BOI expiry date. In addition, the Company can also choose to deduct the loss in one year or multiple years combine.



3) Tax exemption on the profit that the Company gains (no more than 100% of the finance cost that is not included in land cost and working capital that have 8 years of useful life). If the Company has loss from the operation, BOI allows the Company to deduct the loss from the profit that might occur in another 5 years after BOI expiry date. In addition, the Company can also choose to deduct the loss in one year or multiple years combine.

4) The Group does not need to include dividend received from a BOI-promoted entity to calculate the income tax expense during the exemption period.

5) Tax deduction (50% of normal rate) on net profit within 5 years after the end of the right period as mentioned in 1 above.

6) Two times deduction on travel, electricity, and water supply cost within 10 years starting from the date that the Group receives its first profit from the operation.

7) Deduction on investment cost (25% of investment cost that is not included in the normal depreciation rate).

8) Import duty tax exemption on machinery, as per Board of Investment of Thailand's (BOI) approval  
As a promoted company, the Company must comply with certain conditions and restrictions provided for in the promotional certificates.

## MARKETING AND COMPETITION

### 1. Real estate development and management business

The Company realizes the importance of creating value to tenants in terms of logistics cost management by understanding clients' specific needs and models of business to develop and design special projects. We select the location which address clients' needs and hand over the project in timely manner under reasonable rents so that tenants can rest assured that, by renting the projects, the logistics management will be more effective, which results in the Company being trusted and winning biddings for several projects.

To maintain its leadership in real estate development and management and sustainable growth, the Company has implemented the following business strategies:

- **Business strategies**

- 1) **Setting the goal to become the leader of Built-to-Suit project development**

The Company is striving for development of Built-to-Suit projects to meet the needs of domestic clients and tenants while emphasizing the quality, expertise, experience, and long-term reputation of the Company. The Built-to-Suit projects will be designed and developed based on the collaboration between the experienced structural engineering team of the projects and the tenants' team in order to create the project which can respond to the tenants' specific needs and enhance the effectiveness of logistics management for the tenants. The design will be made by taking account of functionality including the capacity of weight support of the building floor, appropriate clear height of the buildings as well as the temperature control system of the multi-temperature and the cold storage buildings.

- 2) **Expansion of the client base to ASEAN and CLMV countries**

The Company plans to expand the business to ASEAN and CLMV countries for increasing the business opportunities as those countries have a great number of population and labors while the labor cost is low and the economic growth rate is still high. For this reason, the Company, by having a wide range of products and services, will be able to provide a variety of services to clients.

### 3) Response to the government policies

The Company aims to respond to the government policies on upgrading Thailand's industries to industries of the future or high-value clusters by focusing on the business operators who demand the use of warehouses and plants in high-value clusters such as multi-temperature facilities, automation robotics and e-commerce.

### 4) Inorganic Growth

The Company is ready for inorganic growth by evaluating the feasibility of the projects for Sale-and-Lease-Back investment in order to increase the proportion of recurring income from the rent. This will enable the Company to recognize the income from the rent of the projects as there are continuous tenants, and the Company needs not waste the time to build new projects or find new tenants for newly developed projects.

#### • Prospective clients

##### 1) Domestic and international manufacturers and distributors of products, including

a) International manufacturers and retailers who need and realize the importance of complicated and high-quality of distribution center. Also, these multinational companies are in need of the business operators whom they can trust in terms of quality, cost, delivery time, and pre- and post-delivery service. Therefore, these companies express their interest in renting the projects from professional business operators more than other groups of tenants.

b) Domestic manufacturers and distributors are the tenants who see the importance and are in need of the logistics system development. In the past, these tenants built and managed the inventory, product distribution centers and plants by themselves, which require high costs but generate low efficiency. At present, these clients choose to use outsourcing service (this trend has occurred in Australia, USA and Japan) to increase competitiveness to an international level.

2) **Third Party Logistics providers (3PLs):** Most of this group of clients are leading international companies who have expertise in logistics management. They manage distribution and transportation of the goods which are not the main business or ability of the owners. These companies will invest in the creation of product distribution network from the provision of vehicles, warehouse, operators, equipment, and operation supporting system.

#### • Industry situation

Logistics business is very important for business operators as well as national development. Thailand also realizes the importance of logistics and is established as the logistics hub to support the ASEAN Economic Community (AEC). In addition, the Eastern Economic Corridor (EEC) Project encourages Thailand to develop the national logistics system at regional and international level to increase the competitiveness and to support the ASEAN Economic Community (AEC).

To increase the competitiveness of business operators and to support the ASEAN Economic Community (AEC), therefore, the government is trying to push forward the development of infrastructure which supports the multimodal transport focusing on the cost-effective transport, rail transport and regional and international link. Also, the efficiency of Supply Chain Optimization of the industrial sector is also emphasized.

## Factory space demand



ที่มา: CBRE Research Q3/2017

## Warehouse space demand



in 2017, industrial sector market has sharply grown by comparison with the previous year as a result of the EEC, in which the foreign companies are interested a lot. Moreover, the export and the domestic sale of automobiles in the third quarter increased by 2.5 percent and 12.2 percent, respectively, by comparison with the previous year while Foreign Direct Investment is expected to grow consistently.

In the third quarter of 2017, the supply and demand of the warehouse space have been consistently increasing. The number of overall space and leased space increased from 2016 and the vacancy rate also increased as the business operators have built new warehouses and plants to support the demand which was expected to be higher as a result of EEC. The Research Department of CBRE expects that the need of warehouse space for rent will be increasing continuously from the previous year when the growth rate was quite stable.

Although the demand of warehouses and plant increases, the supply of warehouses, distribution centers and plants for rent are still available partly because of the improvement of the national economy and by international business operators who wish to control the capital invested in the activities which are not the main business of the companies which do not have much expertise or high management cost as they do not benefit from the economies of scale. Most of the multinational companies do not want to hold ownership over the warehouses and plants, which limits the risks which may occur during the uncertainty of investment and demand of products and services of the Company. Furthermore, Thailand has advantage in terms of logistics because of high-quality utility system, location, labor skills, and banking and financial system, as well as the investment development and promotion plan of the government which will enable Thailand to continue being the logistics hub of the region.

In addition, business operators in Thailand are interested in receiving the service provided by logistics providers. However, most of the business operators still lack the policy on the investment in real estate which is not their main business. this is probably because real estate investment incurs a great amount of long-term fixed costs. The companies need to spend their money on development of IT system, vehicles and personnel, and they may also lack expertise in the investment in real estate development. For this reason, the companies in the industrial sector expect a company which has experience and expertise in real estate development, especially the project developer, to provide the service to them.

Although there is an increase in the supply of warehouses and factories available for rent, there is still a continuous demand in warehouses, distribution centers, and factories available for rent. This is partly due to the improved economic condition of the country and multinational companies (MNCs) who are looking to control their investments and cost not associated with their main activity. They might not have the expertise in this area or there is high cost management because they do not benefit from economies of scale. MNCs are not looking for ownership rights of the warehouse or factory building. This will reduce risk and other uncertainties which may occur, especially during unstable times to invest and needs of the goods and services of the company. Furthermore, Thailand has an advantage when it comes to logistics, such as good infrastructure, location, skilled labor, banking systems, and the government's development plan to promote their investment to support Thailand being the center of logistics.

Business owners in Thailand are also becoming increasingly interested in using various logistic services. These business owners usually do not want to invest in real estate that is not part of their main activity because it is costly and time consuming. They will also need to put their investments in developing information technology, transport vehicle, and personnel. Furthermore, they do not have the expertise to invest and develop real estate by themselves. Therefore, companies in the industry expects that someone with the expertise and experience in real estate to develop projects and provide them with the services they need.

- **Competition**

- **Direct competition from other developers**

There is currently a small number of warehouse, distribution centers, and high quality factory for rent developers which are located in the same strategic location as the Company. These other developers include TICON Industrial Connection Public Company Limited and its subsidiaries (TICON group), Pinthong Industrial Park Limited, and Thai Pattana Industrial Factory Public Company Limited. All three companies develop ready-built and built-to-suit warehouses and factories for rent. However, Pinthong Industrial Park and Thai Pattana Industrial Factory are not considered as our direct competition because they focus on building warehouses and factories for sale or rent to small or medium enterprises.

- **Competition from industrial estate developers**

The Company's competition also includes business owners that start from developing industrial estates and later on expands to develop their own warehouses and factories in their estate in order to add to the products and services they are able to provide. Competition includes Amata Summit Ready Built Company Limited who develops ready-built factory buildings for sale and rent to medium and small operators. These industrial estate developers' opportunity is limited to their own industrial estates or in the industrial estates for which they provide service. On the contrary, the Company can freely develop properties in any location seen that the Company and tenants want without limitation. Furthermore, because the Company bought common shares of Hemaraj Group, the Company has various locations to offer to the tenants which responds to their needs and the Company's flexibility puts us at the advantage when compared to other industrial estate developers.

- **Competition from other small-scale developers of warehouses for sale and rent**

At present, there are several small-scale developers of warehouses and factory buildings for sale and rent located in strategic areas for logistics business. This group of developers only target small to mid-sized businesses who are looking for low-cost warehouses for rent; therefore, these developers are not in direct competition with the Company.

## 2. Industrial Development Hub

- **Business Strategy**

- 1) **Extend our Leadership as Thailand's No 1 Industrial Estate**

The Company creates ultimate customer satisfaction by improvement of current products/services as well as introduction of new products/services. In additions, Hemaraj Group also develops industrial cluster in response with government policies targeting on high-value industries and customers from 10 Targeted Industries under Thailand 4.0 (First s-curve and New s-curve) by capitalizing on infrastructure investment particularly the transportation system in Eastern Economic Corridor such as high-speed train, U-Tapao airport etc.

The Company also studies and considers the opportunity for co-investment or land acquisition strategies and the continuing growth sustainability plan.

- 2) **Establish our premium brand in strategic countries with potential investment opportunities starting from Vietnam to other regional countries in order to diversify our portfolio**

The Company focuses on creating regional growth platform starting from ensuring the success of our first footstep in Vietnam, specifically Nghe An Projects in order to leverage on the experience in Vietnam and growing capability to expand into new locations.

In additions, Hemaraj Group explores and considers other international expansion opportunities in other regional countries meeting required investment criteria such as locations, financial returns, tax incentives.

- 3) **Move up to High-value add industries both domestic and CLMV countries**

Hemaraj Group searches for opportunities from government policies and international initiatives such as Eastern Economic Corridor Development Plan, Thailand 4.0 Strategic Plan, One Belt One Road Initiatives as well as explores potential partnerships or collaborations with EEC office, other related government authorities and educational institutions in response to market demand on leveraging from 10 targeted industries.

## 3. Utilities & Power Hub

- **Business Strategy**

### **Utilities Business Strategy**

- 1) **Strategy of continuously develop new utilities plant and system in tandem with the new expansion of Industrial Estate**

This aims for providing utilities to the business who are customers of the Hemaraj's Industrial Estate which will allows the Company to satisfy customer's needs in full service solution.

- 2) **Proactive Strategy in exploring into the utilities business outside the industrial estates**

WHAUP (Utilities & Power Hub) perceives the growing of needs in consumption of raw water, industrial used water and waste water management in other Industrial Estate other than Hemaraj's industrial estate. The Company then has a plan to be a business alliance with other industry by focusing on their expertise and high experience in utilities business, ability control cost and to understand the needs of each industry in order to expand the business

- 3) **Strategy to diversify products in order to satisfy the needs for existing customer and new customers**

The Group has planned to offer a more variety of product to the industrial water users to satisfy variety needs of the customers such as Recycled Water, Demineralized Water, Desalination System, etc.

#### 4) **Strategy of service expansion to regional countries**

The Group plans to expand its utilities business to regional countries, especially to the countries with high demand in utilities usage. This can be seen in the CLMV group, which is the high potential countries for water usage and investible.

#### **Power Business Strategy**

##### 1) **Strategy to joint venture with the leading power plant company**

The Group jointly invests with leading power plant in develop industrial power project to accommodate with power demand from industrial enterprises. Because of the pleasingly stable power supply is supply with the lower price comparing to power producers outside the industrial area. Moreover, the steam energy is also essential for production process for the industrial customer, therefore, there are lots of power plant projects emerges in the industrial area, particularly for the small power plant project or SPP

Power plants consume large amount of water in their power production line, thus supporting the utilities business of the group, in which WHAUP would benefit from cash flow generated from utilities hub together with a more stable business operation.

##### 2) **Strategy to be an operator of renewable energy project**

WHA Group has large warehouse rooftop and industrial building rooftop of over 2 million square meters, which can be applied to solar rooftop energy project. Comprising with the Government policy that support an investment in solar energy power plant, the Company sees a high growth opportunity in renewable energy in the future.

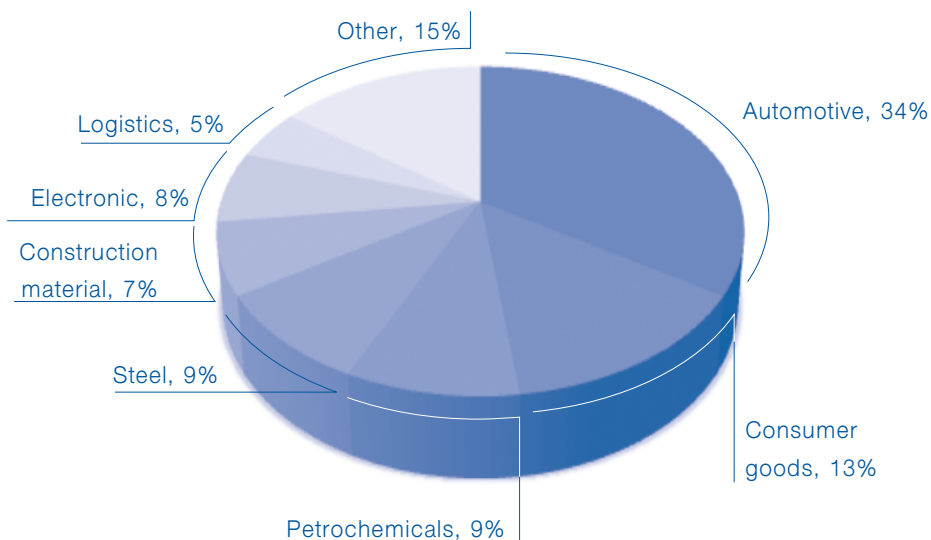
In additional to solar roof project, WHAUP also has a vision to expand its power plants into other sources of renewable energy, for example turning industrial waste into energy power plant.

#### • **Target Customers**

Industrial Development Hub and Utilities & Power Hub have similar customer base, mostly based in Industrial Estates. The two-business hubs are accommodating/complimenting one another in providing a full-service business model. The two hubs are focused on International Clients who are looking to expand their investment tapping into Thailand. The majority of the clients are the Japanese manufacturers which has contributed to half of clients' portfolio. Remaining clients consist of those from Europe, the USA and ASEAN (Singapore, Malaysia and Thai). Our clients come from various industrial clusters e.g. automotive, auto-parts, electronic, construction materials, metal casting, consumer products, logistic etc. As of year-end 2017, there were 719 clients with total of 1,088 contracts in the industrial estate with the following client proportion in each industry:



### Customer Profile by Industry



The amount of water usage (utilities) varies across industry in accordance with the production process and the product outcome. Energy Industry (electricity power producer) and Petrochemical Industry are the heaviest water consumption industries, as the fact can be seen in the table below:

TYPE OF INDUSTRY	AVERAGE WATER CONSUMPTION (CUBIC METER / RAI / DAY)
Electricity power producer	80-120
Petrochemical	40-60
Others/1	4-7

**Remark:** <sup>1/</sup> Others consist of Automotive industry, Consumer product industry, Electronic industry etc.  
**Source:** The Company

#### • Industry Trend

##### 1) Industrial Development Hub

The key success factors in operating a decent industrial estate business is to develop a large piece of land plot, allowing for factories/warehouses to be allocated into cluster, in a uniform orderly manner. Together with providing all necessary infrastructure in accordance with standards of Industrial Estate Authority of Thailand (IEAT). Industrial estate could be divided as 3 types as follows

1. Industrial estate owned and managed by IEAT
2. Industrial estate owned and managed by private sector with contract of co-operation with IEAT
3. Industrial estate operated by private sector, normally known as "Industrial park" or "Industrial land"

Currently, Industrial Estate Authority of Thailand had 56 operated industrial estates; 13 estates were operated independently and 43 estates were mutually operated with developers

(Source : <http://www.dpt.go.th>)

In order to deeply understand and able to analyze the industry trend of the industrial estates, it is important to take into consideration industrial trend of major industries which play a significant role in industrial estates i.e. automotive, plastic, petrochemicals and electronic parts, as well as, to consider on the foreign direct investment trend. Thailand was ranked 26th in the world and 3rd among Southeast Asia as the country with ease of doing business. Thailand is on a prime strategic location, together with many supporting factors promoting an investment in industrial estates, as a result, Thailand has continuously been bringing in foreign direct investment, which is a major business driver steering the growth of Thailand's industrial estate. The overview of investment promotion application in 2017 could be summarized as follows;

INVESTMENT PROMOTION APPLICATION IN 2017		
	NUMBER OF PROJECT	INVESTMENT (MILLION BAHT)
Promotion Application	1,456	641,980
Promotion Approval	1,677	625,080
Promotion Issuance	1,294	732,030

Source: <http://www.boi.go.th>

According to the figure of such investment promotion, the business obtaining investment promotion mostly was the business corresponds to the governmental supporting policy. BOI promotion is targeted at 10 new growth engine industries in accordance with the Eastern Economic Corridor (EEC), accounted for 61% of total approval projects (equivalent to 888 projects with investment fund of 391,608 million Baht) such as digital economy policy, international business collaboration policy and logistic system development policy.

In 2017, the combined area of industrial estates in Thailand was approximately 166,063 Rais, which can be classified into salable area of 87,279 Rais equivalent to investment fund of THB 3,142,812 mm, remaining 20,508 Rais are remained to be sold/rented. The top industries situated in the industrial estates are automotive, logistic/transportation and steel & metals, respectively. Industrial estate land price is depended on the location, road network connection, infrastructure and near material source. Industrial estate land price in Bangkok was the most expensive due to being the center of transportation and near the port and international airport. The second and third were Samutprakan and Prachinburi, respectively. The reasons behind Samutprakan having a land price higher than other part of Thailand are mainly due to Samutprakan's location, with its close proximity to Bangkok and it is readily equipped with good transportation infrastructure.

(Source: <http://www.ieat.go.th/investment/about-industrial-estates/investment-status-in-industrial-estate>)

The competition pressure of industrial estate industry is quite high from the growth of the new industrial estates and expansion of the existing industrial estates especially in the eastern side of Thailand. However, the aftermath of the great flood in 2011 caused for a continuous relocation of manufacturing base to the eastern seaboard area as it is close to Bangkok and Laemchabang Port and approx. 70-111 meter higher from sea level.

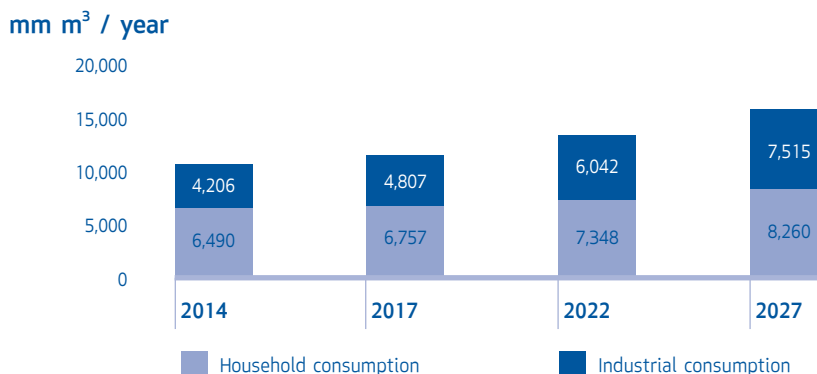
## 2) Utilities & Power Hub

### Utilities

Thailand is among the top-ranking nation in Southeast Asia that is known to have high water consumption rate. Water consumption can be divided into 2 categories, based on the consumption purposes, i.e. 1) household consumption such as household usage and tourism 2) Industrial consumption such as industrial production line. Referring to strategic planning for water resources management, constituted by Committee of Water Resources Policy and Management, the Department of Groundwater Resources, having a forecast of household water consumption rate increased from 2014 to 2027 at a rate of 1.9% per annum and industrial water

consumption rate increased from 2014 to 2027 at a rate of 4.6% per annum. The main area segment which greatly contribute to the highest water consumption growth rate is the industrial area situated in Bangkok and its vicinity, including eastern part of Thailand which is known for the nation's main industrial area. In other part of the country, industrial areas are scattered, mostly consist of agricultural products' downstream business and typically are for domestic use.

### Water consumption level in Thailand



**Source :** Strategic planning for water resource management 2015- 2026, Committee of Water Resources Policy and Management, Department of Groundwater Resource

### Power Hub

From the survey of Electricity Generating Authority of Thailand, it was found that the demand for electricity in Thailand has been increasing steadily. This is due to the nation's economic growth and the growth of Thailand's population. EGAT has consistently been providing a total electrical power production capacity higher than the peak demand for electricity. The peak demand for electricity is the highest amount of electricity consumed by consumers at any time of the day and at any day of the year. EGAT is maintaining the stability of the domestic electricity usage, while the peak demand for electricity is a major factor affecting the country's electricity production and purchasing policies. The peak demand for electrical power in the first six months of 2016, was on 11 May 2016 at 22.28 pm at 29,619 Megawatts, which increased 2,273 Megawatts compared to the year 2015 or 8.31% increase. From the past statistics, it was found that the peak demand for electricity increased from 16,681 Megawatts in 2002 to 29,619 Megawatts in 2016, or a CAGR of 4.19%, while the electrical power production capacity increased from 23,755 Megawatts in 2002 to 43,623 Megawatts in 2015, or a CAGR of 4.79%.

## 4. Digital Platform Hub

### • Business Strategy

#### 1. Strengthen market share in the domestic market of digital platform services

As the Company has commenced operations in all of the three main services: Data Centers, FTTx, and Managed services last year, the next step is to increase our presence of digital platform services in the domestic market. The Company plan to realize such goal by, besides providing a comprehensive IT solution services to customers, leveraging strong customer base of more than 1,000 customers that WHA Group has. In addition, the global trend of digital economy as well as the Thai government's new economic initiative, Thailand 4.0, with an aim to transform Thailand into value-based economy will translate into higher demands for IT related services, which the Company has various of services to accommodate future needs.

Another way that the Company aims to boost its market shares is to expand new product offerings. The existing platforms will allow the Company to create new products, reaching larger market demands and, hence, market shares. The new products that the Company studies and plans to launch in 2018 includes Cloud Solution services and IT Outsourcing services. With the completion of data center, the company can package product to better suit customer needs. For example, the Company can collaborate with existing System Integration (SI) companies to bring their IT infrastructure and Cloud services into the Company's data center facilities to deliver the best services to their customers.

The Company understands the dynamic nature of digital market and stays on guard for any changes in technologies (i.e. Modular Data Center, Big Data, and Internet of Things - IoT) in order to attract new market demand and supply.

## **2. Expand the digital infrastructure and solution along with the rapid movement of technology by offering to CLMV region**

In the meantime, the Company also plans to follow the footstep of other business hubs by expanding operations to international markets. The target locations under the Company's radar being Cambodia, Laos, Myanmar, and Vietnam (CLMV) markets as studies have shown that such market has a high growth potential in digital platform services because the demand for IT related services outpace the available digital infrastructures. The overseas experiences and facilities from other business hubs will allow the digital platform hub to reduce some risks associating with overseas investments.

## **3. Implement digital platforms within WHA group to upgrade facilities and enhance business values**

The Company plans to implement digital platforms across other business hubs in order for these hubs to install new technologies such as automations and Internet of Things (IoT) into their infrastructures and facilities. These technologies will not only enhance operation efficiency, but also increase value of the assets by attracting innovation-prone industries.

### **• Target Customer**

#### **1) Customers in WHA Group's Core Business**

More than 1,000 customers in all main business hub of WHA Group. The Company expands to serve in digital platform which the company would focus to customer in group of medium and large business size such as Automotive Industry, Logistics Industry, Electronics Industry etc. in order to meet the increasing demand for digital services. In addition, the trend of using the technology in the production process to enhance the customer's business operation which it is rapid growth and technological change in this time. However, the government has promoted investment in the country by focusing to develop the Eastern Economic Corridor (EEC) has been promoted. The EEC has supported the investment in 10 target industries which is a business innovation and IT services is the necessary key for running a business. Therefore, the Company have continually improved our digital services capabilities in order to serve our target customers in the future.

#### **2) Customers in WHA's collaborative System Integration**

The Company plans to grow with its partners by providing a full range of support services such as the provision of data center services to its integrated System Integrator (SI), Managed Service and Business Process Outsourcing (BPO) customers. To provide full service to customers. This enables customers to efficiently manage their resources.

#### **3) Customers in international country and CLMV market.**

The Company has realized to foresee the business opportunity growth in international country especially in Cambodia, Laos, Myanmar, Vietnam and Indonesia, which the company has started to invest building a warehouse and factory for rent in Indonesia. In addition, there are plans to further develop the industrial estates

in Vietnam, so the company foresees this opportunity to expand its digital services to cover the customer in these countries which they have high demand. Furthermore, the Company also provides networking as FTTx infrastructure for utilizing the existing customer to connect international linkage to international countries or CLMV countries.

## PRODUCT OR SERVICE PROCUREMENT

### 1. Logistics Hub

Land is the major cost of the Company's business. The Company has set out the following policy on land acquisition:

- **Land Procurement**

The Company's policy is to acquire land when needed rather than holding the land bank without development for long period of time. Land acquisition is made in accordance with the investment plan to match specific needs of customers (Built-to-Suit) and to reduce interest obligations incurred from acquisition and accumulation of a large number of lands with no potential projects. However, the Company may consider acquiring larger piece of land if the land is connected to the existing projects which can be developed for expansion for tenants who clearly express their interest in expansion of the leasable area in the future.

The Company acquires land from the owners directly or by leasing land from the Company's partners or by purchasing land through agents. In this respect, the Company usually selects land plots in at least two locations to allow the Company to have bargaining power and to acquire the land at the preferred location at a good price.

**The Company's criteria for land acquisition are as follows:**

- Location of the land must be connected to a road network according to the requirement and the need of tenants and it must be in a strategic location for logistics business near a port or in a zone entitled to privileges from the Board of Investment (BOI) which will also meet the need of other and new tenants once existing lease agreement expires.
- Land price must not be too high for both freehold and leasehold land. Land must generate a competitive monthly lease for the Company.
- Land must be of an appropriate size for first development as well as for expansion of future projects of tenants. It should also be flexible in terms of suitability for the need of new tenants.

The Company's land management team studies, analyzes, retains and updates land data so that the Company has data on location and land with potential for development of new projects and the Company can evaluate and set a strategy for acquisition and budget required accurately. Such data will be transferred to Finance Department for financial planning for the most appropriate and the most economical capital sourcing for land acquisition.

**Selection of Construction Contractor**

The Company divides selection of construction contractors into two categories based on type of projects as follows:

1. Contractor selection for Built-to-Suit project: The Group of the Companies sends an invitation to bid to construction companies and makes preliminary agreement on pricing before proposing the price to customers. However, not all decisions for selections are made by the Company. Tenants may want to select a construction company themselves or it has already been nominated.

2. Contractor selection for Ready-Built Warehouse Project: The Company invites all bids from construction companies, negotiate and select construction companies based on the procedure and the criteria set out by the Company.

Since the Company selects a contractor regularly, the process for contractor selection and the evaluation process has been established in the light of transparency, fairness and in accordance with a good corporate governance, details are as followed:

#### **Procedure for the selection of the construction company**

- Send out the requirement and the Terms of Reference (TOR) to construction companies listed in the pre-approved list. For new construction companies, their qualification and project history will be thoroughly verified.
- Consider bidders' proposal for both technical aspect and pricing aspect.
- Make selection by the selection committee.
- Enter into a contract with the selected construction company, most of which are turnkey contract, which includes project design, sourcing of construction materials and construction agreement. The construction agreement will clearly indicate labor cost and cost of raw materials.

#### **Criteria and policy for selecting construction company**

- The Company specifies and verifies construction companies in the pre-approved list while promoting fair, transparent and open competition by providing detailed requirements and scope of work in advance to at least two construction companies for bidding.
- Factors used for consideration and selection of construction companies are past projects, quality upon hand over, construction time, offered price and after-sale service.
- Selection of a construction company must be approved in accordance with the approval authority and the regulations of the Company.
- Contracts are reviewed by an expert legal advisor.
- There is a segregation of duties for contract execution, inspection for hand over and account recording.
  - Contracts will be executed by the authorized directors of the Company.
  - The Company' construction management team is responsible for inspection for hand over. They will inspect completed projects and provide a monthly progress report to the management. Inspection for hand over includes quality inspection and progress inspection against the terms and conditions in the contract.
  - Finance & Accounting Department verifies all documents and makes a record and payment upon due as specified in the contract after the project management team has inspected and received the project.
- The Company establishes guidelines for relevant units, for example, Guideline on Selection of Construction Companies, Operation Guideline for Project Management Team. All units must comply with the guidelines and the specified work process.
- **Environmental Impact**

The Company' policy on construction of warehouse, distribution center and factory buildings is based on good practice and strict control with a focus on construction process that minimizes impact on the environment. The Company also promotes and encourages preservation and energy saving. Before the tenants commence their operation, the Company will glance at their credibility, company profile, products and financial statements. The Company also specifies in the lease agreement entered between the Company and a tenant who



stores hazardous substances that the tenant must strictly comply with the regulations on environment preservation so that the Company's business does not have negative impact on the environment. Based on such practice, the Company has never breached any environmental law or had any environmental dispute.

## 2. Industrial Development Hub

Land is the major cost for the industrial estate development. The Company has set up land procurement policy, details are as followed:

- **Land Procurement**

Hemaraj Group purchase lands from local owners directly or from allies of by considering from the location of the project with connection to a road network, near a port or in a zone entitled to privileges from the Board of Investment (BOI) with affordable term condition. Land price must not be too high in order to develop in industrial estate and sell off the clients with sufficient profit margin and to be competitive in the market. Additionally, land must be accumulated into a large land plot in order to gain the benefit from economy of scale.

The project must be a nearby water source to drain wastewater and the land size shall be appropriate for development. Land soil is another crucial factor, it must have adequate strength to support the fundamental work of the structural buildings.

- **Environmental Impact**

Hemaraj industrial estate provides wastewater treatment system, waste disposal system and public utility system with standard in accordance with the specification defined by Industrial Estate Authority of Thailand and approved by Office of Natural Resources and Environmental Policy and Planning. Hemaraj industrial estates have been complied with all relevant laws and regulations.

## 3. Utilities & Power Hub

Raw water and fuel for electricity generation are vital raw materials for business of utility & power hub. WHAUP Group pays high attention to its procurement of the raw materials, in which the policy has been set up as follows:

- **Raw Water Procurement**

WHAUP is the exclusive operation on the utility business in Hemaraj's Industrial Estates. One of the key success factor in operating the utility business is to have access to sufficient raw water source to supply to all enterprises inside the industrial estates. As well as, to have adequate capability of supplying clarified water to cater for the water demand in the industrial estates. Three main raw water sources are described as follows:

(1) **Eastern Water Resources Development and Management Public Company Limited ("EASTW")** has been granted with concession to supply raw water in the Eastern part of Thailand, covering Chonburi, Rayong and Chachoengsao provinces.

(2) **Royal Irrigation Department** Hemaraj Saraburi Industrial Land Co., Ltd., a subsidiary of Hemaraj Group, has been purchasing raw water directly from the Royal Irrigation Department.

(3) **Hemaraj Group** such as water reservoir in Hemaraj's industrial estate, of which is built in prevention of water shortage event, to drain of water from the industrial estate, as well as to prevent the sites from flooding.

- **Fuel Procurement**

WHAUP is operating in the power business, thru joint venture with our business alliances, with an objective to operate Conventional Fuel Power Plant and Alternative Fuel Power Plant. The fuel use for electricity generation can be categorized into 2 categories, details as followed:

## (1) Commercial Fuel

- Coal

WHAUP has entered into a Coal Supply and Transport Agreements with Indonesia large conglomerate business partner to supply Bituminous coal to Gheco-I power plant as its raw material for electricity generation, in accordance with power purchase agreement.

- Natural Gas

WHAUP has entered into a 25-years purchasing agreements with PTT for the supply of natural gas to Glow IPP, GJP NLL and BCE power plants.

## (2) Non-commercial Fuel

- Water

Water is a raw material for hydro power plant. WHAUP obtains water from the natural source, a cost-free procurement process. Nevertheless, quantity of water acquired may throughout the year according to weather pattern and the change in seasons.

- Solar

Solar is another source of alternative or renewable energy. It is the main source of energy for solar farm power plant, with a main advantage that it is a free source of energy. Nevertheless, quantity of solar obtained may vary in accordance with seasons and weather pattern.

- **Environmental Impact**

WHAUP pays close attention to environmental impact from the process of clarified and waste water treatment. The by-products of such activities include precipitation and waste water disposal. WHAUP is strictly adhered to its code of conduct and to be compliance with all relevant laws and regulations, in order to control and to protect its by-products from causing a damage to the environment. The following describes the steps of control taken to protect our environment:

(1) Precipitation WHAUP hires a licensed waste disposal enterprise to dispose such waste by means of landfill.

(2) Waste water disposal waste water is thoroughly inspected for quality qualified for disposal in accordance with Office of Natural Resources and Environmental Policy and Planning. Moreover, Hemeraj Group has installed an innovated equipment for quantifying the quality of waste water i.e. Online Monitoring System (EMC2 system), in order for the staff to closely monitor the quality of water prior to its disposal.

WHAUP has been certified with ISO 14000:2004 on environmental preservation. WHAUP is strictly adhered to its code-of-conduct on the environmental preservation act. Thus, WHAUP has never once been filed a complaint nor having any litigation in relation to the environmental impact.

## BACKLOG PROJECTS

### 1. Logistics Hub

As of 31 December 2017, the Group of Companies has the following projects under construction

	LOCATION	COMPANY	LEASABLE AREA (SQ.M.)	PROJECT STATUS	PROJECT PROGRESS (% OF COMPLETION)	EXPECTED COMPLETION AND REVENUE RECOGNITION
1	Bangna Trad KM 23	Company	20,938	Under development	7%	Q2 2018

## 2. Industrial Development Hub

As of 31 December 2017, the Group of Companies has pending projects to deliver in industrial estates and logistic park in 11 location totaling 306 rais.

	LOCATION	COMPANY	AREA (RAI)	PROJECT STATUS	PROJECT PROGRESS (% OF COMPLETION)	EXPECTED COMPLETION AND REVENUE RECOGNITION
1	Hemaraj Eastern Industrial Estate (Map Ta Phut) / SUPER CHEMICAL SIAM CO.,LTD.	Industrial Estate Co., Ltd.	7.3	Complete	100%	2018
2	Hemaraj Eastern Seaboard Industrial Estate	Hemaraj Eastern Seaboard Industrial Estate Co., Ltd.	12.3	Complete	100%	2018
3	Industrial Promotional Zone: Hemaraj Eastern Seaboard Industrial Estate 4 / WHA EASTERN SEABOARD NGD 4 .	Hemaraj Land and Development Plc.	1.7	Complete	100%	2018
4	Hemaraj Eastern Seaboard Industrial Estate 2 / WANDA NEW MATERIAL CO.,LTD.	Hemaraj Land and Development Plc.	159.1	Complete	100%	2018
5	Eastern Seaboard Industrial Estate / LLIT (THAILAND) CO.,LTD.	Eastern Seaboard Industrial Estate Co., Ltd.	125.7	Complete	100%	2018

## 3. Utilities & Power Hub

-None-

## 4. Digital Platform Hub

-None-

[ Corporate Information ]

## RISK FACTORS

### 1. OVERALL RISKS FROM BUSINESS OPERATION

#### 1.1 Risks from Changes in Economy, Domestic Politics, and other Macro Environment Factors

As many of the Company's clients are transnational companies, the economic changes in both the national level and the global level have an effect on the Company's clients and revenue. For example, the global financial crisis or the global economic recession from 2010 to 2011 might cause the clients to lower the production rate or to delay the investment plan in foreign countries. The establishment of the ASEAN Economic Community (AEC) in 2015, which is intended to facilitate free movement of capital and labor, might encourage the current and target clients to relocate the production base and investment to another country where they can have better competitive advantages. The political uncertainties such as the political turmoil in 2010 and 2013 might have a negative impact on the image of the country and the interest and confidence of the clients to make investment. In addition, the frequent changes in the government or the working groups concerned, resulting in the discontinuity and uncertainty in terms of public policies, might have adverse effects on the Company, especially the policies relating to the investment promotion and the development of industrial areas.

Nevertheless, Thailand remains attractive to the foreign investors who want to invest in South East Asia due to the better labor quality and the acceptable wage rate in comparison to those in European countries, the United States, and other Asian countries. Moreover, the infrastructures particularly the public utilities in Thailand are better. In addition, Thai Government has supporting policies on Eastern Economic Corridor (EEC); thus, the overall investment in Thailand has been able to grow. Meanwhile, the economic uncertainties have had favorable effects on the Company because, in such circumstances, most companies decided to lease or outsource the businesses that are not the core activities of the companies in order to cut the operational costs. Even in the time of economic and political uncertainties, the Company has grown continuously as can be seen from the expansion of the revenue base whereby the Company does not have to rely on any business too much; the constant revenue from the rental service and the utility service, which helps balance the revenue structure; the significant increase in the number of clients in all 9 industrial estates and industrial zones; and the investment in industrial estate projects for niche markets, which helps reduce the risks.

#### 1.2 Risks from Interest Rate Fluctuations

The business operation of the Company requires high investment. The long-term loans from financial institutions at the end of 2015, 2016 and 2017 are approximately THB 9,227.9 mm, THB 7,929.9 mm and THB 3,936.9 mm, respectively. Some of the loans are subject to a floating interest rate. Therefore, if the interest rate in the market increases, the Company would have to pay higher amount of interests, resulting in a decrease in the Company's profit.

However, the interest rates of most of the loans from financial institutions are currently below the Minimum Lending Rate (MLR) determines by each institution. In addition, the financing plan for project development of the Company does not rely solely on the loans from financial institutions as the Company also has other financial sources, especially through the stock market and the sale of assets in mutual funds and trust funds, which would be the key financial sources for the future investments. The Company is listed on the Stock Exchange of Thailand so it is able to raise funds from the capital market. In 2015, 2016 and 2017, the Group of Companies issued debentures worth THB 3.20 billion, THB 6.26 billion and THB 6.70 billion, respectively, with fixed interest rates to lower the risk from the interest rate fluctuation. However, in order to lower the interest rate while maintaining the

risk at the acceptable level, the Company adopted the Interest Rate Swap measure to change the interest rate of some debentures worth THB 8.78 billion to a floating interest rate for certain periods of time while maintaining the fixed interest rates of the remaining debentures worth THB 19.55 billion. This is in order to reduce the risk from interest rate fluctuations and create a balance between the fixed interest rate and the floating interest rate.

### 1.3 Risk from Investment in Future Projects

The Company plans on investment expansion continuously inside and outside industrial estates, industrial land and both domestically and overseas. It is common that there are risks involved in any development and investment plan of new projects might turn out differently from initial estimation, objective plans or expected return (for examples, delays due to factory construction progress, resource allocation and risk from fluctuation in exchange rate and interest rate, etc.). These situations possibly cause notable consequences to business operation and financial circumstances for the Group of Companies.

To minimize the risks, the Company carefully considers investment projects that have potential in rewarding equity internal rate of return at appropriate levels and perform feasibility study to foresee possibilities of project as well as sensitivity analysis thoroughly and for joint venture cases, the Company's policy is to consider partnership very carefully by evaluating from potential partner's knowledge, ability, experiences, expertise, financial status and historical performance.

## 2. RISK FROM PROPERTY INVESTMENT, DEVELOPMENT, AND MANAGEMENT BUSINESS

### 2.1 Risk from Competition from Industrial Estate Developers and Other Developers

Currently, the industrial estate developers and other developers are constructing factories and warehouses for rent like the Company. However, most of them are selling and leasing ready-built factories and warehouses and providing service in their own industrial estates, whereas the Company is focusing on the built-to-suit scheme, which is the development of premium-quality projects that require sophisticated designs to respond the needs of each client. In addition, the Company is using its expertise in the built-to-suit design to develop a project under the concept of the Warehouse Farm. The Company is currently providing the built-to-suit design service and construction to serve the needs of certain clients such as those who want to preserve a part of the land for future expansion; and the ready-built warehouses for prompt response to new clients. The Company's main policy is to find the location that is favorable in terms of transportation and distribution in accordance with the client's need. As you can see, the Company is able to satisfy the clients differently from the competitors in the same market.

At present, there are few high-quality built-to-suit providers due to the high barrier of entry and difficulty to succeed. This service requires the expertise and detail orientation to understand the complicated requirements of each client, a lot of investment, and the knowledge and understanding about locations and in the procurement of and investment in land in accordance with the requirements of each client. The expertise and flexibility as well as the patience to conduct the product design to achieve the utmost benefit of the clients are also important. Also, the achievements in the past of the Company make the Company more credible to the lessees, who are mostly transnational companies with high standard of selection criteria. In addition, the Company has a policy to promote the continuous learning development and continuously improve the quality of the warehouses and services.

## 2.2 Risk of No Tenant in the Developing Projects and Risk of No Renewal in the Existing Projects

The Company's rental business includes the Built-to-Suit service, in which a contract is signed prior to the construction, and the Ready-Built service.

For the Built-to-Suit service, a lease agreement is signed prior to the construction. Therefore, the occupancy risk is low and most of the tenants are likely to renew the contract as the agreements between the Company and the tenants start with finding the locations and the Company focuses on the design, construction, and service to ensure the maximum benefits for the clients and the maximum satisfaction and confidence in the Company. Moreover, the cost of relocation is rather high, therefore, the risk that the main tenants would not renew the lease term is low. At the end of 2017, most of the tenants (such as Central Group, Thaibev Group, and Nissan Motor Group) not only renewed the contracts, but also agreed to lease additional areas with the Company. Most of them started doing business with the Company by leasing Ready-Built warehouses and subsequently leased Built-To-Suit warehouses.

Moreover, when a tenant decides not to renew the lease term, the Company is able to provide the Built-to-Suit factory or warehouse to a new tenant by modifying the property in accordance with the new tenant's need. With the advantages in terms of location, quality of construction and work system, and understanding and in-depth knowledge in the design and construction management, the Company is confident that it would be able to obtain a new tenant within the appropriate period of time. In addition, the Company would have sufficient time to seek new tenant as the lease agreement requires the existing tenant to notify its decision at least 3-12 months in advance.

For the Ready-Built Warehouses/Factories, there might be risk of unoccupancy because the projects are developed the lease agreement is signed. Nevertheless, the Company has developed such leasable area in order to serve the clients who want the properties immediately as well as to ensure the appropriate construction cost management and the utilization of land. Unless being severely affected by the external environment factors, the Ready-Built clients would renew the contracts because of the quality of the properties which are satisfying and acceptable to the clients. In case a tenant doesn't renew the contract, the Company is flexible to find a new tenant. The Company focuses on the location of the projects, which makes the Company confident in finding new tenants promptly. The Company also focuses on the design and quality of the structure of the projects and maintains the high standard, resulting in high interest from the prospective tenants.

## 2.3 Risks on Overdue Rental Payment under Lease Agreements

The risk arising from overdue rental payment under lease agreements may arise in case clients suffer from the economic and industry downturn or their business operation that affects their financial status and, thus, their ability to pay rent. The Company may be affected by a drop in rental revenue as it has an effect on the financial liquidity.

However, the Company foresees that the impact will be minimal because the key clients are leading and reliable companies with high financial stability. Moreover, the Company requires tenants to place cash deposit and/or a bank guarantee as security against payment of rental and service fee. It's stipulated in the lease agreements for Built-to-Suit projects that in the event of early termination by the tenants, the tenants must pay the compensation of the amount equal to the total rental charges for the remaining period.

## 2.4 Risk from the Reliance on Few Contractors

The core business of the Company includes developing projects for rent and sale, whereby the Company would hire contractors under turnkey contracts for the construction in accordance with the designs agreed by the clients. The Company has a process of selecting well-known contractors having the qualifications specified by the



Company and putting them in the short list. However, B.S.Y. Construction Co., Ltd. is the contractor that won the auctions for almost every project, especially the Ready-Built one. The contractor possesses the qualification according to the selection criteria in terms of the quality, construction cost, expertise, experience and capability to deliver the projects on time as well as after sale service. For the Built-to-Suit projects, the tenants are also involved in the contractor selection process. Therefore, the Company is having the risk of relying on B.S.Y. Construction Co., Ltd. for the development of the Company' projects.

However, the Company does not have a policy to hire only B.S.Y. Construction Co., Ltd. and always seek cooperation with other contractors of high standard. The process to select contractors is carried out in a systematic and transparent manner through the bidding process, except the Built-to-Suit projects, in which the clients or the existing clients would specify the contractor.

The Company's business is made up with different elements, for example, the source of funds, expertise in selecting locations, design and layout planning, and good relationship with clients. It's the capability of the Company to develop high quality projects without depending on a single contractor. The Company integrates the elements and builds a close cooperation with the clients, contractors and state agencies concerned. B.S.Y. Construction Co., Ltd. has engaged in the construction business and been widely recognized in the market for more than 20 years. It does not intend to engage in the same business as that of the Company. In addition, the executive members of B.S.Y. Construction Co., Ltd. are not related to those of the Company. The Company regards it as a good business partner.

In addition, the Company has signed a Memorandum of Understanding (MOU) with B.S.Y. Construction Co., Ltd. on 22 March 2012 to determine the collaboration between the two parties by specifying the framework of product development in terms of quality and price with the intention to allow the clients to efficiently compete with their competitors. Such agreement also entails the application of knowledge in the development of products, technical data and/or relevant know-how that are beneficial for the construction of warehouses, distribution centers, or factories, which have been registered to the joint ownership of the Company and B.S.Y. Construction Co., Ltd. Moreover, B.S.Y. Construction Co., Ltd. has agreed to bid in a Built-to-Suit project upon the request from the Company. B.S.Y. Construction Co., Ltd. has also agreed not to disclose the technical data and knowledge developed with the Company, or to use it in the projects of the Company's competitors, or to agree on a similar agreement with the Company competitors without consent from the Company. On the other hand, the Company does not have the obligation to hire a specific contractor. Therefore, the Company may hire any contractors apart from B.S.Y. Contractor Co., Ltd. The Company, thus, may work with other contractors by applying the jointly-developed knowledge in accordance with the standard determined by the Company to ensure the maximum benefits for the Company and the tenants without breaching any provisions in the MOU.

## 2.5 Risk from the Land Procurement Policy for the Development of Future Projects

The Company has a land procurement policy focusing on procuring the land that have potential and could be developed immediately or in the near future. Therefore, the Company does not have a policy to purchase land without development plans or if it's uncertain whether there would be tenants or not. However, due to the higher competition in the land acquisition in good locations, the Company has the risk of higher land price and, as a result, being unable to purchase the land in good locations at the desired prices. The Company may have to bear the higher cost of project development or may have to abandon the investment plan because the return on the investment may be in accordance with the criteria specified by the Company.

However, the Company has prepared a land survey and purchasing plan in accordance with the project development plan. The Company considers that purchasing many pieces of land without a development plan or pending tenant does not correspond to the business plan of the Company because it might affect the financial liquidity of the Company. Therefore, the Company ensures that the land acquisition is in accordance with its

business plan and that the land to be purchased must be able to be developed immediately or in the foreseeable future or have been selected by the clients for future expansion of clients' projects. The Company also has a policy to invest in leasehold land for some locations, taking into account of the possible return on investment. Such policies allow the Company to acquire the land with potentials with the agreement from the clients, which is better than the policy of other companies to collect land beforehand. They also allow the Company to efficiently respond to the clients' need to expand the projects and to control the land costs to be at the appropriate level.

## **2.6 Risk of revenue fluctuation from selling properties to property fund/ REIT for property investment purposes.**

The Company's main sources of income are property rental, services and sales of properties. Income from properties sales is mainly sales to REIT which required approval from REIT's unit holders. In addition, the Companies is a unit holder with no right to vote as the Company is considered a related party on this behalf. Therefore, any year that the Company does not have any property sales activity to a REIT or property sales plan is delayed, total income and profit can be fluctuated.

During 2015, 2016 and 2017, the Company recorded income from sales of properties to REITs and/ or property funds accounted for THB 4,502 mm, THB 10,425 mm and THB 2,875 mm, respectively. (During 2016, the Company has set up a new investment trust namely, Hemaraj Leasehold Real Estate Investment Trust "HRIET") There is indeed possibility of risks for the Company selling of properties to REIT. However, an advantage of REIT over property fund is that REIT allow a maximum loan at 35% of total asset value or 60% of total asset value, if a REIT is considered an Investment Grade from credit rating. Therefore, fund raising from unit holder can be reduced resulted in REIT having lower cost of fund than property fund. On the other hand, this makes the Company sell a property at higher price and gain higher gross profit margin compared to selling that property to a property fund and helps the Company to reduce the risk of fund raising from unit holders. As mentioned, a REIT consequently generates additional return of equity and be able to improve the REIT's size more than a property fund's which will resulted in REIT having more liquidity and has better price in secondary market. The Company expects continuation of selling more properties to REIT. Moreover, the Company will consider selling properties to other potential parties such as tenants of existing projects or other investors, etc.

## **2.7 Risk from the Competition with the Fund and REIT**

The main revenue of the Fund and REIT derives from the lease of properties in which the Fund and REIT invested, which are similar to those developed by the Company. The Company is responsible for the lease management of those properties. Therefore, there is a risk of the conflict of interest between the Company and the Fund or REIT. In the case that both the Company and the Fund or REIT have vacant areas that are located in nearby location and meet the tenants' requirements at the same time, the prospect clients regularly make decisions based on their own criteria, for example, the location, size, specifications, and timeframe.

Moreover, the possibility that the existing tenants for Built-to-Suit properties not renewing the lease term is rather low because those lease terms are long-term agreements, and the tenants have invested in the installation of equipment and local labor, resulting in high relocation cost.

The competition between the Company and the Fund or REIT, if any, will be transparent on the arm-length basis. The management team of the Company, in the capacity of both the property developers and the property manager of the Fund and REIT, has the intention to ensure that the Company, the Fund, and REIT would grow together sustainably.

## **2.8 Risk from the Expansion to the Office Building Leasing Business**

The Company has expanded its scope of businesses to the rental of office buildings. The first project is the construction of a building on Bang-Na Trad Road according to the client's requirement, and the second

one is the purchase of the SJ Infinite I office building (previously Equinox). The Company intends to increase the proportion of recurring income and alleviate the risk of relying on a single business. However, the purchase of the SJ Infinite I building has affected the Company's financial situation and created a short-term risk because it's a new building so the Company is receiving small amount of incomes from the tenants who have moved in while bearing the costs and expenses that have incurred since the date of the acquisition of the building, for example, the depreciation cost, which must be recognized in the accounting in full. In addition, there is a risk that the tenants would relocate to other places as there is huge supply of office buildings in Vibhavadi area.

However, the office building market in Vibhavadi area has improved continuously due to the substantial demand. Meanwhile, the supply of high quality office buildings is insufficient. Some of the prospect tenants are those looking for more spaces as there is not vacant unit in their existing buildings. The SJ Infinite I building has become an interesting option for the companies that are planning to relocate their offices to a place with similar rental rate because it's new and the rental rate is negotiable. This is resulting in an improvement of the occupancy rates of SJ Infinite I building, which were 70%, 87%<sup>1</sup> and 88% at the end of 2015, 2016 and 2017, respectively.

In addition, in November 2015, the Company sold the building to WHABT, which has recently been established to invest in commercial projects, whereby the Company is holding 15 percent of the WHABT's shares. Such transfer of business helps reduce the risks and increase the liquidity and the proportion of incurring income of the Company.

## 2.9 Risk from Natural Disasters and Accidents

Natural disasters and accidents may cause damage to the Company's properties and loss of life and properties of the staff working at the Company's projects. Most of the Company's projects are leased to the companies that have to store the goods that could be damaged by floods such as drug, medical equipment, and consumer goods. Therefore, the tenants or clients of the Company could be significantly affected by natural disasters, especially floods.

The Company is aware of the possibility of such risks, which is why it puts great attention on the selection of location and the proper security system. The road in every project is approximately 30-50 cm higher than the public road in front of the projects or the highest water level during the floods in the past 30 years in the locality (whichever is higher). Moreover, the building in every project is raised approximately 0.8-1.5 m higher than the road and a flood barrier with the height of 2 meters from the building floor can be built at every building. None of the Company's projects suffered severe damage from the flood disaster in October 2011 including the warehouses in the Bangpa-In Industrial Estate in Ayutthaya, which was severely damaged by the flood. The damage assessment report reflects that there was no substantial damage to the properties and no loss of rental revenue as the tenants continued to pay rents and didn't express an intention to relocate the warehouses or terminate the contracts.

The projects for rent of the Company are scattered in different locations so the risks from location are diversified. Nevertheless, the Company has applied for all-risk insurance covering all kinds of damage caused by natural disaster and accidents for every project. After the 2011 flood, the insurance company has determined the limit of the compensation for damage caused by flood for each project based on the project's location. As a result, the Company would be responsible for any repair costs of the damage caused by flood if the value of the damage exceeds the compensation limit determined by the insurance company. However, the Company is confident that it has proper plans and preventive measures to deal with floods. Therefore, there is little chance that the damage from floods in any projects would exceed the compensation limit.

<sup>1</sup> Including the rented and served units in the office area and the retail shop area

### 3. RISK FROM THE INDUSTRIAL ESTATE DEVELOPMENT BUSINESS

#### 3.1 Risk from the Reliance on the Clients in Automotive and Petrochemical Industries

The Company bears risk from relying on the clients in automotive and petrochemical industrial groups. Among 719 clients of the Company, there are 310 companies, or 43 percent, which operating in the industrial group of petrochemical (65) and automotive (245). If this group of clients decide to decrease or delay investment, the sale of land and other related revenue may be affected.

The Company is aware of the risks and effects resulting from such factor and has developed the marketing plan to penetrate diverse target groups apart from the automotive and petrochemical industries so that it doesn't have to rely on a single industry. Each of the nine industrial estates and industrial zones of the Company targets different groups of clients such as electronics, energy, steel, construction materials, logistics, and food. The Company has also regularly monitored and analyzed the proportion of the investment in different industries in the country before adjusting the strategies accordingly. In addition, the Eastern Economic Corridor (EEC), which plays an important role under Thailand 4.0 roadmap by upgrading the eastern corridor to become "World-Class Economic Zone", showed significant progress in 2017. EEC is anticipated to attract investments for super cluster and the 10 target industries that spread across different industries. As a result, the Company is expected to be a beneficiary of such development from having large availability of sellable lands in both developed and developing industrial estates, which are located in the EEC areas. Combining such benefit with the expansion to develop an industrial estate in Vietnam, the Company will be able to enhance business opportunities and also diversify customer concentration.

#### 3.2 Risk from Floods

The floods in many areas of the country, especially the one during the rainy season in 2011, have caused damage to many business sectors and undermined the confidence of the prospective investors and the existing investors planning to expand their businesses in the same areas. The investors have become more selective in choosing a project location to minimize the risks from flooding.

In selecting a new location, the Company takes into account various factors, namely the readiness of the infrastructure, size, and risks from flooding. Currently, the Company has eight projects in the industrial estates and industrial zones in the Eastern Region of the country of the Eastern Seaboard. They are located in high-ground areas and close to public water sources. Therefore, they are prevented from being flooded and there are retention ponds for the water discharged from the projects. The Hemaraj Saraburi Industrial Zone is located in central region's river basin and faced with the risk of flooding from the overflowing from the northern region and heavy rainfall. Aware of the risk, the Company assigned specialists to study the geological characteristics of the surrounding area and develop a simulation model based on the historical rainfall data to see whether the existing flood prevention system was efficient or not. Moreover, the Company improved the earth dykes to prevent flooding, expanded the drainage system in the bottleneck spots, improved the pumping system in the retention ponds to drain excess water from the industrial land, and regularly inspected and performed maintenance on all systems, tools, and machines to ensure that they can function properly at all times.

Due to the constant internal and external changes, the Company carried out inspection and assessment of the areas in the industrial estates and industrial zones before and after the rainy season to ensure the functionality of all systems. In addition, the Company developed measures to prevent unexpected incidents from rain storm with the 24-hour emergency response team.

### 3.3 Risk from Drought

In 2015, many provinces were faced with the risk from draught including Saraburi, in which an industrial zone of the Company is located. However, the public sector, the private sector, and the Company developed mitigating measures which have been continuously implemented to assure the investors that there would be sufficient water and preventive measures for the Company's projects, including those having been operating and those being expedited.

Moreover, the industrial estates and industrial zones located in the Eastern Seaboard are situated close to large reservoirs, namely Dokkrai Reservoir, Nong Pla Lai Reservoir, and Khlong Yai Reservoir with the maximum capacity of up to 275 million cubic meters in total. However, in order to ensure adequate water supply to support future demand, East Water Public Company Limited has already set up water plumbing network to draw water from Prasae Reservoir to Khlong Yai Reservoir and Nong Pla Lai Reservoir, resulting in the stability and security in terms of water supply in the Eastern Thailand.

### 3.4 Risk from Accident, Fire, and Chemical Spill

The Company also places importance on the risks from accidents such as fire, chemical spills, and road accident in the industrial estates and industrial zones. The Company has installed the fire extinguishing system in compliance with the National Fire Protection Agency (NFPA)'s standard to cover the entire area of the projects and provided fire trucks and necessary equipment as well as trained security staff to be stationed at every project 24 hours a day. Moreover, the Company has prepared the emergency response plan to ensure prompt response in emergency situation, whereby the project staff would receive regular trainings from local entrepreneurs and state agencies, ensuring the readiness and effectiveness in emergency situation in order to minimize the damage and loss.

## 4. RISK FROM POWER AND UTILITY BUSINESS

### 4.1 Risk relating to customer concentration

As the main group of the Company's core customers in the water business mainly consist of operators in petrochemical business, power generation business and automobile business in industrial estates and industrial lands, accounting for 42 percent., 20 percent. and 11 percent., respectively, of the Company's total revenue from the water business for 2017. In addition, the 10 largest customers of the Company mainly consist of operators in the petrochemical business and power generation business, accounting for 54.2 percent. and 54.4 percent. of the Company's total revenue for 2016 and 2017, respectively. A decline or slowdown in the business expansion or investment conditions of these industrial sectors and large customers may reduce their demand for water services and other public utilities which may materially affect the results of operations of the Company.

The Company realizes the risk and consequences from that Factor. In order to pull down the risk 1) the Company monitors customer's water usage closely 2) Queries and revise water usage plan for those customers consistently and 3) to sustainably reduce the possible consequences, the Company set policies and operating plans to offer more variety of products to better serve customer demand such as specific industrial water or reverse osmosis (RO) to focus on more groups of customers as well as plan for customers outside the industrial estates such as sub-district administrative organization, etc. in the important economic area.

### 4.2 Risk relating to reliance on the major suppliers for raw water procurement

The Group of Companies operates its utility service business by producing and distributing industrial water to operators in industrial estates and industrial lands in which the raw water is the key raw material for its operation. The cost of raw water represented approximately 65 percent. of the total cost. Currently, the Company mainly procures raw water from three (3) major suppliers, i.e. (1) Eastern Water Resources Development and Management

Public Company Limited (East Water) which is a large concessionaire granted by the Royal Irrigation Department (RID) having service area in Chonburi, Rayong and Chachoengsao provinces, (2) RID and (3) the Hemaraj Group (from Hemaraj Group's internal reservoir of natural water) and their supply volume accounts for 80 percent, 10 percent and 10 percent of the total sources of raw water for the year 2016, respectively. Further, the Hemaraj Group acted as an intermediary for East Water and RID in the Company's water procurement process. However, the Company is able to directly procure raw water from East Water and RID.

If East Water, RID or the Hemaraj Group is unable to supply raw water to the Company in the quantity required and at the agreed time, due to raw water supply shortage or significantly increases in the selling price of raw water, this may have a material adverse effect on the Company's financial condition, results of operations and prospects.

In the past decade, the Company has planned to reduce risks of having few major suppliers of raw water and/or distributors of raw water by 1) the Company keeps updates on natural raw water resources and plan to build water reservoirs in some industrial estates as appropriate 2) plans to explore natural raw water resources in addition to the resources currently use 3) plans for recycled water system 4) the Company also follows up and coordinates with customers constantly to promptly plan for sufficient water usage and distribution as well as coordinates with raw water distributors and find protection and modification solutions constantly. With those mention preventive measures that have been performed, the Company is confidence that there is sufficient and quality raw water resources for water supply business

#### **4.3 Risk relating to the deterioration and damage of the water production and distribution System**

The Group of Company's industrial water production and distribution system and wastewater treatment system may deteriorate in a usage life or be damaged during the course of operations, and if the repair is not completed in a timely manner, this may directly obstruct the production and distribution process of industrial water or interrupt the wastewater treatment system. In addition to impacting the Company's profitability and cash flow, this may cause the Company fails to fulfill its obligations under the Right Lease Agreement with the Hemaraj Group and agreements with Company's customers and may therefore also materially affect the Company's results of operations.

To reduce the mentioned risk, the Company keeps checking on all systems constantly and arranges maintenance plans of water providing and distribution system for industrial purposes appropriately. The purpose of maintenance plan is to focus on maintenance of dilapidated or damaged parts and increase performances for effective usage of water providing and distribution system for industrial purposes. In case when it is needed to temporary halt water providing and distribution system for repair and maintenance, the Company will inform customers in industrial estates beforehand and arrange spare water resources until the main water providing & distribution system will be completely fixed. Apart from this, the Company also prepares property insurance with insurance companies to responsible any damage of any circumstance.

#### **4.4 Risk from the Investment in the Independent Power Producer (IPP)**

The Company has invested in Independent Power Producers (IPP), namely Gheco-One Company Limited and the companies under Glow Energy Group, in accordance with the Company's strategy to expand the revenue base to other businesses with reasonable and consistent return. There are risks that could produce substantial adverse effects and damage on the projects and the Company, which are the risk from investment, the risk from changes of rules, regulations, and government policies, the risk from the delay in construction, the financing risk, the environmental risk, the risk from insufficient raw materials, the risk from consistent and continuous operation, the risk the complete reliance on the Electricity Generating Authority of Thailand, and the risk from exchange rates and interest rates.

The Company is aware of such risks and, therefore, conducts a study on the pros and cons and the feasibility of the project and the sensitivity analysis to consider all kinds of risks. The Company also evaluates the



return rate of the project and found that the Company would receive constant and continuous long-term return if the project is operated continuously. The project is developed and managed by Glow Energy Co., Ltd., of which the executive team is highly knowledgeable, experienced, and successful in the management of several power plants in Thailand. The project is supported by the major shareholder of Glow Energy, which is ENGIE company (former GDF Suez), one of the world's leading companies in the energy business. In addition, Gheco-One signed the contract to prevent the foreign exchange rate swap and the interest swap, the contract to purchase coal in advance, and other contracts in order to ensure the accordance between the revenue, expenditure, loans, and interest rates that come in different currencies.

#### **4.5 Risk from subsidiaries' and associates companies' power plants not be able to generate or distribute electricity, steam and cold water, might cause significant negative effect to business, financial status, income and cash flow.**

Income from electricity related business of company's subsidiaries and associates companies depends on the ability to generate or distribute electricity, steam and cold water of those companies to customers. Possible situations that may cause company's subsidiaries and associates companies be unable to distribute electricity to customers and other circumstances includes (a) delays and inability of expected power plant operations that are under construction or planned (b) damages or crashes of electricity generation devices (c) planned and unplanned halt of operation including normal maintenance and major maintenance performing by outsources or delays of those maintenances (d) defects of device and power plant construction and design which can cause the planned ability of electricity distribution of company's subsidiaries and associates companies (e) problem related to quality or lack in resource allocation including coal, , natural gas, water and sunlight and (f) human error including error of users of any device, etc. If the mentioned risks or similar risks occur, it can possibly affect negatively to the ability of generating and distributing electricity, steam and cold water of company's subsidiaries and associates companies and can significantly affect business, financial status, profit and cash flow of company negatively.

To reduce the mentioned risks, the Company policy is to prudently choose partners by considering possible partners' knowledge, ability, experience, expertise, financial status and historical performance. For example, Glow Energy Public Company Limited, Gulf Energy Development Company Limited, B.Grimm Power Public Company Limited and Gunkul Engineering Public Company Limited, which has management team with expertise and succeed from power plant operations in Thailand. The Companies also appoints management committee for associate companies to report performances of each power plant on quarterly basis. If there is any sign that the mentioned risks may happen, the Company can stay alert and solve the problem closely and immediately.

## **5. RISK FROM MANAGEMENT**

### **5.1 Risk from Dependence on Staff with High Expertise**

The business of the Company requires knowledge and competence of personnel. These personnel have significant roles and responsibilities in different sections of the Company such as the development of marketing strategies, the preparation of contracts and pricing, the procurement of land, and the project management. The loss of these personnel would affect the capability to find clients of and the performance of the Company. However, most of the key personnel are also shareholders of the Company so it's unlikely that they would resign or work for competitors. Also, in 2016, the Company had employed a significant number of skilled personnel. After being registered in the Stock Exchange of Thailand, the Company has become more well-known, and, as a result, the Company would be more attractive and interesting to the people with high capabilities. Moreover, the Company's human resource management policies are good. The Company is developing the knowledge base in the organization to reduce the dependence on individuals and also the competitive incentives.

[ Corporate Information ]

# GENERAL AND OTHER MATERIAL INFORMATION

## GENERAL INFORMATION

### 1.1 The Company

#### Company Name

WHA Corporation Public Company Limited

#### Nature of Business

1. Logistics Hub
  - 1.1 Properties development for rental and service income
  - 1.2 Properties for sale
  - 1.3 Investment and property management
  - 1.4 Real estate investment trust management
2. Industrial Development Hub
3. Utilities & Power Hub
  - 3.1 Utilities
  - 3.2 Power
4. Digital Platform Hub
  - 4.1 Data Center and Cloud Solution
  - 4.2 FTTx
  - 4.3 Rental/Leasing Equipment and Software
  - 4.4 System Integration
  - 4.5 IT Outsourcing

#### Head Office

1121 Moo. 3 Theparak Road, Theparak Subdistrict, Muang District, Samutprakarn Province 10270

Company Registered Number : 0107555000082

Telephone : 0-2753-3750

Facsimile : 0-2753-2750

Website : <http://www.wha-group.com>

#### Share Capital as at 5 January 2018

Authorised Share Capital : THB 1,567,773,018.60

Paid-up Capital : THB 1,432,63,019.10

Type of Shares : Ordinary Shares

Par Value : THB 0.10 per share

## 1.2 Subsidiaries (Information as at 31 December 2017)

COMPANY NAME	ABBREVIATION	NATURE OF BUSINESS	REGISTERED IN	SHAREHOLDER	REGISTERED CAPITAL (MM)	PAID-UP CAPITAL (MM)	PAR VALUE (PER SHARE)	PERCENTAGE OF SHARES HELD BY THE COMPANY
<b>Subsidiaries</b>								
WHA Alliance Company Limited	ALL	Providing rental factories, warehouses and other properties	Thailand	WHA	THB 260.00	THB 260.00	THB 10.00	99.99
Warehouse Asia Alliance Company Limited	WAA	Providing rental factories, warehouses and other properties	Thailand	WHA	THB 310.00	THB 310.00	THB 10.00	99.99
WHA Real Estate Management Company Limited	WHAREM	Trust manager for investment property	Thailand	WHA	THB 10.00	THB 10.00	THB 100.00	99.99
WHA Venture Holdings Company Limited	WHAHV	Investing in other companies and rental factories, warehouses and other properties	Thailand	WHA	THB 22,418.61	THB 22,418.61	THB 100.00	99.99
WHA Infonite Company Limited	WHA Infonite	Investing in data system	Thailand	WHA	THB 1.00	THB 1.00	THB 10.00	89.99
WHA Corporation (International) Limited	WHA (Int'l)	Holding Company	Republic of Mauritius	WHA	USD 0.01	USD 0.01	USD 1.00	100.00
<b>Subsidiaries under ALL</b>								
WHA Corporation (Hong Kong) Limited	WHAHK	Holding Company	Hong Kong	ALL	USD 2.00	USD 2.00	USD 1.00	100.00
<b>Subsidiaries under WHAHK</b>								
PT WHA (International) Indonesia	WHAID	Providing rental factories, warehouses and other properties	Indonesia	WHAHK	USD 2.00	USD 2.00	USD 1.00	99.96
<b>Subsidiaries under WHAVH</b>								
Hemaraj Land and Development Public Company Limited	HRD	Real estate development	Thailand	WHAHV	THB 6,000.00	THB 3,882.07	THB 0.40	98.54
<b>Subsidiaries under HRD</b>								
Eastern Industrial Estate Company Limited	EIE	Industrial estate development	Thailand	HRD	THB 400.00	THB 400.00	THB 40.00	99.99
Eastern Seaboard Industrial Estate (Rayong) Company Limited	ESIE	Industrial estate development	Thailand	HRD	THB 358.00	THB 358.00	THB 10.00	60.00

COMPANY NAME	ABBREVIATION	NATURE OF BUSINESS	REGISTERED IN	SHAREHOLDER	REGISTERED CAPITAL (MM)	PAID-UP CAPITAL (MM)	PAR VALUE (PER SHARE)	PERCENTAGE OF SHARES HELD BY THE COMPANY
Hemaraj Eastern Seaboard Industrial Estate Company Limited	HESIE	Industrial estate development	Thailand	HRD	THB 1,000.00	THB 1,000.00	THB 100.00	99.99
Hemaraj Saraburi Industrial Land Company Limited	HSIL	Industrial estate development	Thailand	HRD	THB 500.00	THB 500.00	THB 100.00	99.99
Hemaraj Rayong Industrial Land Company Limited	HRIL	Industrial estate development	Thailand	HSIL	THB 1,000.00	THB 1,000.00	THB 100.00	99.99
Eastern Pipeline Services Company Limited	EPS	Pipe Rack Rental	Thailand	HRD: 74.99% EIE: 25.01%	THB 100.00	THB 100.00	THB 100.00	99.99
H-International (BVI) Company Limited	H-INTER(BVI)	Holding Company	British Virgin Islands	HRD	USD 0.002	USD 0.002	USD 10.00	100.00
Hemaraj International Limited	H-INTER	Holding Company	Cayman Islands	HRD	USD 0.05	USD 0.001	USD 1.00	100.00
H-Construction Management and Engineering Company Limited	HCME	Design and construction supervision service	Thailand	HRD	THB 20.00	THB 17.15	THB 10.00	99.99
The Park Residence Company Limited	THE PARK	Real estate developer and service management	Thailand	HRD	THB 4.60	THB 4.60	THB 10.00	99.99
SME Factory Company Limited	SME	Sale and Lease Factory	Thailand	HRD	THB 294.00	THB 294.00	THB 10.00	99.99
WHA Utilities and Power Public Co., Ltd.	WHAUP	Utilities and Power	Thailand	HRD: 82.30% H-INTER(SG) : 17.69%	THB 3,825.00	THB 3,200.00	THB 5.00	99.99
H-International (SG) Pte. Ltd.	H-INTER(SG)	Holding Company	Singapore	HRD	USD 7.39	USD 7.39	USD 1.00	100.00
Rayong 2012 Company Limited	RY2012	Real estate development	Thailand	HRD: 70.00% HRIL: 29.99%	THB 1,165.00	THB 1,165.00	THB 10.00	99.99
Eastern Seaboard Property and Marina Services Company Limited	EPM	Real Estate Development for investment and marina services	Thailand	HRD	THB 1.00	THB 1.00	THB 10.00	99.99
Hemaraj Eastern Seaboard Industrial Estate 4 Company Limited	HESIE-4	Industrial Estate Development	Thailand	HRD	THB 792.80	THB 564.98	THB 10.00	99.99

COMPANY NAME	ABBREVIATION	NATURE OF BUSINESS	REGISTERED IN	SHAREHOLDER	REGISTERED CAPITAL (MM)	PAID-UP CAPITAL (MM)	PAR VALUE (PER SHARE)	PERCENTAGE OF SHARES HELD BY THE COMPANY
Hemaraj Reit Management Company Limited	HRM	Trust manager for investment property	Thailand	HRD	THB 25.00	THB 25.00	THB 10.00	99.99
WHA Hemaraj International Company Limited	WHAHRDI	Holding Company	Thailand	HRD	THB 240.00	THB 240.00	THB 10.00	99.99
<b>Subsidiaries under WHAUP</b>								
WHA Water Company Limited	WHAWT	Water resources development and management	Thailand	WHAUP	THB 100.00	THB 100.00	THB 10.00	99.99
WHA Energy Company Limited	WHAEG	Holding Company	Thailand	WHAUP	THB 9,178.00	THB 9,178.00	THB 10.00	99.99
<b>Subsidiaries under WHAEG</b>								
WHA Energy 2 Company Limited	WHAET	Holding Company	Thailand	WHAEG	THB 5,959.00	THB 5,959.00	THB 10.00	99.99
<b>Subsidiaries under H-INTER(SG)</b>								
WHA Hemaraj Land and Development (SG) Pte. Ltd.	WHA-H(SG)	Holding Company	Singapore	H-INTER(SG)	USD 0.001	USD 0.000001	USD 1.00	100.00

### 1.3 Joint Ventures (Information as at 31 December 2017)

COMPANY NAME	ABBREVIATION	NATURE OF BUSINESS	REGISTERED IN	SHAREHOLDER	REGISTERED CAPITAL (MM)	PAID-UP CAPITAL (MM)	PAR VALUE (PER SHARE)	PERCENTAGE OF SHARES HELD BY THE COMPANY
<b>Joint Ventures</b>								
WHA KPN Alliance Company Limited	WHA-KPN	Providing rental factories, warehouses and other properties	Thailand	WHA	THB 768.00	THB 768.00	THB100.00	64.97
Central WHA Alliance Company Limited	CENTRAL-WHA	Providing rental factories, warehouses and other properties	Thailand	WHA	THB 650.00	THB 642.50	THB100.00	49.99
WHA Daiwa Logistics Property Company Limited	WHA-Daiwa	Providing rental factories, warehouses and other properties	Thailand	WHA	THB 820.00	THB 820.00	THB100.00	50.99

COMPANY NAME	ABBREVIATION	NATURE OF BUSINESS	REGISTERED IN	SHAREHOLDER	REGISTERED CAPITAL (MM)	PAID-UP CAPITAL (MM)	PAR VALUE (PER SHARE)	PERCENTAGE OF SHARES HELD BY THE COMPANY
<b>Joint Ventures under WHA Infonite</b>								
Genesis Data Center Company Limited	Genesis	Providing data center	Thailand	WHA Infonite	THB 210.00	THB 111.00	THB100.00	33.33
<b>Joint Ventures under WHAUP</b>								
WHA Gunkul Green Solar Roof 1 Co., Ltd.	WHA Gunkul 1	Producing and distributing electricity by solar photovoltaic rooftop	Thailand	WHAEG	THB 11.50	THB 11.50	THB 10.00	74.99
WHA Gunkul Green Solar Roof 3 Co., Ltd.	WHA Gunkul 3	Producing and distributing electricity by solar photovoltaic rooftop	Thailand	WHAEG	THB 14.50	THB 14.50	THB 10.00	74.99
WHA Gunkul Green Solar Roof 6 Co., Ltd.	WHA Gunkul 6	Producing and distributing electricity by solar photovoltaic rooftop	Thailand	WHAEG	THB 14.50	THB 14.50	THB 10.00	74.99
WHA Gunkul Green Solar Roof 17 Co., Ltd.	WHA Gunkul 17	Producing and distributing electricity by solar photovoltaic rooftop	Thailand	WHAEG	THB 16.00	THB 16.00	THB 10.00	74.99
Gheco-One Company Limited	Gheco-I	Power plant operation and sale of electricity	Thailand	WHAET	THB 11,624.00	THB 11,624.00	THB 10.00	35.00
Houay Ho Thai Company Limited <sup>(1)</sup>	HHT	Holding Company	Thailand	WHAET	THB 422.15	THB 422.15	THB 10.00	51.00
Houay Ho Power Company Limited	HHP	Electricity and Power Generation	Lao People's Democratic Republic	HHT	USD 40.00	USD 40.00	USD 80.00	25.00
Glow Hemaraj Wind Company Limited	GHW	Electricity and Power Generation	Thailand	ESCE	THB 50.00	THB 2.50	THB 10.00	99.99
Gulf JP NLL Company Limited	GJP NLL	Electricity and Power Generation	Thailand	WHAEG	THB 1,384.00	THB 1,384.00	THB 10.00	25.01
Gulf Solar Company Limited	Gulf Solar	Producing and distributing electricity by solar photovoltaic rooftop	Thailand	WHAEG	THB 14.63	THB 14.63	THB 10.00	25.01
B.GRIMM Power (WHA) 1 <sup>(2)</sup> Company Limited	BGWHA-1	Electricity and Power Generation	Thailand	WHAEG	THB 1,533.56	THB 420.06	THB100.00	25.01
Gulf VTP Company Limited	GVTP	Producing and distributing electricity by solar photovoltaic rooftop	Thailand	WHAEG	THB 1,610.00	THB 1,610.00	THB 10.00	25.01
Gulf TS1 Company Limited	GTS1	Producing and distributing electricity by solar photovoltaic rooftop	Thailand	WHAEG	THB 1,685.00	THB 1,685.00	THB 10.00	25.01
Gulf TS2 Company Limited	GTS2	Producing and distributing electricity by solar photovoltaic rooftop	Thailand	WHAEG	THB 1,690.00	THB 1,690.00	THB 10.00	25.01



COMPANY NAME	ABBREVIATION	NATURE OF BUSINESS	REGISTERED IN	SHAREHOLDER	REGISTERED CAPITAL (MM)	PAID-UP CAPITAL (MM)	PAR VALUE (PER SHARE)	PERCENTAGE OF SHARES HELD BY THE COMPANY
Gulf TS3 Company Limited	GTS3	Producing and distributing electricity by solar photovoltaic rooftop	Thailand	WHAEG	THB 1,278.00	THB 1,278.00	THB 10.00	25.01
Gulf TS4 Company Limited	GTS4	Producing and distributing electricity by solar photovoltaic rooftop	Thailand	WHAEG	THB 1,010.00	THB 260.00	THB 10.00	25.01
Gulf NLL2 Company Limited	GULL 2	Electricity and Power Generation	Thailand	WHAEG	THB 610.00	THB 160.00	THB 10.00	25.01
Gulf Solar TS1 Company Limited	Gulf Solar TS 1	Producing and distributing electricity by solar photovoltaic rooftop	Thailand	Gulf Solar	THB 3.03	THB 3.03	THB 10.00	99.99
Gulf Solar TS2 Company Limited	Gulf Solar TS 2	Producing and distributing electricity by solar photovoltaic rooftop	Thailand	Gulf Solar	THB 2.29	THB 2.29	THB 10.00	99.99
Gulf Solar BV Company Limited	Gulf Solar BV	Producing and distributing electricity by solar photovoltaic rooftop	Thailand	Gulf Solar	THB 3.13	THB 3.13	THB 10.00	99.99
Gulf Solar KKS Company Limited	Gulf Solar KKS	Producing and distributing electricity by solar photovoltaic rooftop	Thailand	Gulf Solar	THB 6.00	THB 6.00	THB 10.00	99.99
Chonburi Clean Energy Company Limited	CCE	Electricity and Power Generation	Thailand	ESCE	THB 989.00	THB 989.00	THB 10.00	99.99
Rayong Clean Energy Company Limited	RCE	Electricity and Power Generation	Thailand	ESCE	THB 50.00	THB 12.50	THB 10.00	99.99
Eastern Seaboard Clean Energy Company Limited	ESCE	Electricity and Power Generation	Thailand	WHAEG	THB 40.00	THB 38.31	THB 10.00	33.33
Glow IPP Company Limited	GIPP	Electricity and Power Generation	Thailand	WHAET	THB 2,850.00	THB 2,850.00	THB 10.00	5.00
Gulf WHA MT Natural Gas Distribution Company Limited	Gulf WHA MT	Natural Gas Distribution	Thailand	WHAUP	THB 126.40	THB 71.22	THB 10.00	35.99
WHA Eastern Seaboard NGD 2 <sup>(3)</sup> Company Limited	WHA NGD2		Thailand	Gulf WHA NT	THB 50.00	THB 12.50	THB 10.00	99.99
WHA Eastern Seaboard NGD 4 <sup>(3)</sup> Company Limited	WHA NGD4	Electricity and Power Generation	Thailand	Gulf WHA NT	THB 50.00	THB 12.50	THB 10.00	99.99

**Remarks:** (1) Houay Ho Thai Company Limited held 25% in Houay Ho Power Company Limited which registered in Lao People's Democratic Republic. US Currency is the main currency used for business operation. Also, the Company did not include the financial information of Houay Ho Thai Company Limited in the consolidated financial statement because the Company is the strategic partner. Moreover, the other investors are proficient in the operation of all power plants.

(2) B.GRIMM Power (WHA) 1 Company Limited is Change name from Bowin Clean Energy Limited

(3) WHA Eastern Seaboard NGD 2 Company Limited and WHA Eastern Seaboard NGD 4 Company Limited are joint ventures with Gulf WHA MT Natural Gas Distribution Company Limited (Gulf Group)

#### 1.4 Other Juristic Persons in which the Company holds 10% or more of the shares (Information as at 31 December 2016)

COMPANY NAME	ABBREVIATION	NATURE OF BUSINESS	LOCATION / TEL. / FAX	SHARE-HOLDER	REGISTERED CAPITAL (MM)	PAID-UP CAPITAL (MM)	PAR VALUE (PER SHARE)	TYPE OF SHARES	PERCENTAGE OF SHARES HELD BY THE COMPANY
<b>Other Juristic Person in which the Company holds 10% or more of the shares</b>									
WHA Premium Growth Freehold and Leasehold Real Estate Investment Trust	WHART	Investment in real estate in the type of warehouses and distribution centers	Location: Kasikorn Bank Building, 6 <sup>th</sup> Floor, 400/22 Phaholyothin Road, Samsen-Nai Subdistrict, Phayathai District, Bangkok 10400 Telephone: 0-2673-3999 Facsimile: 0-2673-3900	WHA	THB 18,237.69	THB 18,237.69	THB 9.2861	Trust Units	15.00
WHA Business Complex Freehold and Leasehold Real Estate Investment Trust	WHABT	Investment in real estate in the type of office building	Location: 1 Empire Tower, 32 <sup>nd</sup> Floor, South Sathorn Rd., Yannawa Subdistrict, Sathorn District, Bangkok Telephone: 0-2686-6100 Facsimile: 0-2670-0430	WHA	THB 1,966.7	THB 1,966.7	THB 9.7362	Trust Units	15.00
Hemaraj Industrial Property and Leasehold Fund	HPF	Investment in real estate	Location: 199 Column Tower Ground floor & 21 <sup>st</sup> - 23 <sup>rd</sup> Floor, Ratchadapisek Road, Klongtoey Bangkok Telephone: 0-2649-2000 Facsimile: 0-2649-2233	HRD	THB 4,269.50	THB 4,629.50	THB 9.85	Ordinary Shares	22.95
Hemaraj Leasehold Real Estate Trust	HREIT	Investment in real estate	Location: 9 UM Tower 2 <sup>nd</sup> Floor Ranmkhamhaeng Road, Suan Luang Bangkok Telephone: 0-2717-3901 Facsimile: 0-2717-3902	HRD	THB 6,693.78	THB 6,693.78	THB 9.5267	Trust Units	15.00

## 1.5 References

### Share Registrar

#### Thailand Securities Depository Co., Ltd.

The Stock Exchange of Thailand Building,  
93 Ratchadaphisek Road, Dindaeng Subdistrict, Dindaeng District, Bangkok 10110  
Telephone: 0-2009-9999  
Facsimile: 0-2009-9991

### Debenture Registrar

#### The Siam Commercial Bank Public Company Limited

1060 New Petchaburi Road, Makkasan, Ratchathevee, Bangkok 10400  
Telephone: 0-2256-2323

### Auditor

#### PricewaterhouseCoopers ABAS Ltd.

Mr. Chanchai Chaiprasit	Authorized Auditor Registration No.3760 and/or
Mr. Pisit Thangtanagul	Authorized Auditor Registration No.4095 and/or
Ms. Nopanuch Apichatsatien	Authorized Auditor Registration No. 5266

15<sup>th</sup> Floor, Bangkok City Tower, 179/74-80 South Sathorn Road, Bangkok 10120  
Telephone: 0-2344-1000  
Facsimile: 0-2286-5050

### Legal Advisor

#### RL Counsel Co., Ltd.

62/15 Thaniya, Suriyawongse Sub District, Bangrak District, Bangkok 10500  
Telephone: 0-2235-3339  
Facsimile: 0-2235-3076

## 2. Other Material Information

There is no other information which may materially affect investors' decisions.

[ Management and Corporate Governance ]

## CAPITAL STRUCTURE

### 1. THE COMPANY'S SECURITIES

The Company's registered capital as of 5 January 2018 was THB 1,567,773,018.60 and the paid-up capital was also THB 1,432,630,019.10 , divided into registered ordinary shares of 15,677,730,186 shares with par value THB 0.10 and paid-up capital of 14,326,300,191 shares. Material change of paid-up capital during year 2017 is as follows.

(Unit:THB)

ITEM	REGISTERED CAPITAL (INCREASE/ DECREASE)	REGISTERED CAPITAL	PAID-UP CAPITAL (INCREASE/ DECREASE)	PAID-UP CAPITAL
31 Dec 2015	-	1,567,773,018.60	-	1,432,234,166.80
8 Jan 2016    Exercise of warrant WHA-W1	-	1,567,773,018.60	8,840.90	1,432,243,007.70
7 July 2016    Exercise of warrant WHA-W1	-	1,567,773,018.60	24.40	1,432,243,032.10
31 Dec 2016	-	1,567,773,018.60	-	1,432,243,032.10
31 Dec 2017	-	1,567,773,018.60	-	1,432,243,032.10
5 Jan 2018    Exercise of warrant WHA-W1	-	1,567,773,018.60	386,987.00	1,432,630,019.10

### 2 SHAREHOLDING STRUCTURE

The shareholders on the shareholders' register as of 7 February 2018 are as follows:

SHAREHOLDERS	SHARES	PERCENT
<b>Group of Mr. Somyos Anantaprayoon and Ms. Jareeporn Jarukornsakul</b>		
• WHA Holding Co., Ltd. <sup>(1)</sup>		
• Ms. Jareeporn Jarukornsakul	3,629,083,491	25.33
• Mr. Somyos Anantaprayoon	1,471,761,769	10.27
• Credit Suisse AG, Singapore Branch <sup>(2)</sup>	1,032,666,723	7.21
	321,473,360	2.24
<b>Sub-total</b>	<b>6,454,648,343</b>	<b>45.06</b>

SHAREHOLDERS	SHARES	PERCENT
State Street Bank Europe Limited	1,541,731,285	10.76
Thai NVDR Co., Ltd.	702,435,564	4.90
SCB Securities Co., Ltd.	316,455,600	2.21
N.C.B. Trust Limited-Norges Bank 11	186,861,000	1.30
<b>Group of Jarukornsakul</b>		
• Mr. Wutt Jarukornsakul	130,000,000	0.91
• Ms. Jaruwan Jarukornsakul	18,041,150	0.13
• Mr. Anuwat Jarukornsakul	9,700,000	0.07
• Ms. Patsanan Jarukornsakul	7,000,000	0.05
• Ms. Wannakan Jarukornsakul	6,000,000	0.04
• Ms. Malee Jarukornsakul	2,000,000	0.01
• Mr. Teera Jarukornsakul	1,022,000	0.01
<b>Sub-total</b>	<b>173,763,150</b>	<b>1.21</b>
<b>Group of Cholkadeedamrongkul</b>		
• Mr. Sompong Cholkadeedamrongkul held by Asset Plus Fund Management	58,756,700	0.41
• Mr. Sompong Cholkadeedamrongkul	46,334,800	0.32
• Mrs. Warunee Cholkadeedamrongkul	36,300,000	0.25
• Mr. Pongpat Cholkadeedamrongkul	1,000,000	0.01
<b>Sub-total</b>	<b>142,391,500</b>	<b>0.99</b>
Mr. Sanchai Suksomcheewin	155,000,000	1.08
Ms. Nalinrat Sae Ng	99,094,578	0.69
Ms. Chaleow Srichaiyawat	95,585,000	0.67
<b>Total Top Ten Shareholders</b>	<b>9,867,966,020</b>	<b>68.88</b>
<b>Other Minority Shareholders</b>	<b>4,457,997,171</b>	<b>31.12</b>
<b>Grand total</b>	<b>14,326,300,191</b>	<b>100.00</b>

**Remark** <sup>(1)</sup> WHA Holding Co., Ltd. is a holding company. As of 31 December 2017, it has a registered capital of THB 5,000,000 being 1,000,000 ordinary shares at a par value of THB 5 per share. The shareholders are listed as follows:

SHAREHOLDER	NO. OF SHARES	%
Mr. Somyos Anantaprayoon	500,000	50.0
Ms. Jareeporn Jarukornsakul	499,999	50.0
Ms. Jaruwan Jarukornsakul	1	0.0
<b>Total</b>	<b>1,000,000</b>	<b>100.0</b>

**Remark** <sup>(2)</sup> Part of the shares in Credit Suisse AG Singapore Branch, a securities company incorporated in Singapore, and the beneficiaries of the shares held by it are mostly Mr. Somyos Anantaprayoon and Ms. Jareeporn Jarukornsakul

### 3. OTHER SECURITIES

#### 3.1 Debentures – WHA Corporation PCL

As of 31 December 2017, WHA Corporation PCL has THB 14,195 mm of outstanding debentures. The details are as follows:

ISSUE	AMOUNT (THB MM)	INTEREST RATE (% P.A.)	TENURE (YEAR)	MATURITY DATE
WHA183A	200	3.70	2.00	19 March 2018
WHA189B	2,000	4.15	3.00	8 September 2018
WHA189A	570	4.84	5.00	20 September 2018
WHA18NA	290	4.00	4.00	25 November 2018
WHA194A	1,000	3.85	3.00	29 April 2019
WHA195B	150	3.75	3.00	20 May 2019
WHA196A	230	3.85	3.01	11 June 2019
WHA196B	100	3.85	2.99	11 June 2019
WHA197B	280	3.85	3.05	8 July 2019
WHA197C	300	3.75	3.01	30 July 2019
WHA197A	385	4.40	5.00	31 July 2019
WHA195A	1,110	4.42	5.00	31 July 2019
WHA204C	1,500	4.10	3.30	29 April 2020
WHA204A	1,500	4.10	3.30	29 April 2020
WHA204B	1,000	4.10	3.30	29 April 2020
WHA208A	100	3.15	2.98	18 August 2563
WHA217A	600	4.70	7.00	31 July 2021
WHA219A	1,500	4.00	5.00	16 September 2021
WHA247A	280	5.00	10.00	31 July 2024

#### 3.2 Debentures – Hemaraj Land and Development PCL

As of 31 December 2017, Hemaraj Land and Development PCL has THB 12,438 mm. The details are as follows:

ISSUE	AMOUNT (THB MM)	INTEREST RATE (% P.A.)	TENURE (YEAR)	MATURITY DATE
HEMRAJ190A	638	Year 1 - 3: 4.90 Year 4 - 6: 6.00 Year 7: 6.50 Year 8 - 9: 6.75	9	5 October 2019
HEMRAJ217A	2,000	5.65	9	23 July 2021
HEMRAJ222A	1,000	3.75	7	20 February 2022
HEMRAJ231A	2,500	5.50	10	25 January 2023



ISSUE	AMOUNT (THB MM)	INTEREST RATE (% P.A.)	TENURE (YEAR)	MATURITY DATE
HEMRAJ244A	2,500	5.75	10	30 April 2024
HEMRAJ252A	1,500	5.00	10	30 February 2025

### 3.3 Bill of Exchange – WHA Corporation PCL

As of 31 December 2017, the Company has outstanding Bill of Exchange of THB 990 mm. The details are as follows:

ITEM	AMOUNT (THB MM)	TENURE (DAYS)	MATURITY DATE
1	90	92	22 February 2017
2	450	182	19 March 2017
3	150	182	19 March 2017
4	35	161	16 May 2017
5	165	167	22 May 2017
6	100	194	4 June 2017

### 3.4 Bill of Exchange – Hemaraj Land and Development PCL

### 3.5 Warrants

The company issued warrants (WHA-W1) which its details (as of 31 December 2017) are summarized as follows:

WARRANTS	TOTAL UNITS ISSUED	EXERCISED UNITS	EXERCISE RATIO	EXERCISE PRICE (THB)	TENURE (YEAR)	LAST EXERCISE DATE
WHA-W1	116,447,570	386,623	1:10.2396	3.4181	5.0	4 March 2020

[ Management and Corporate Governance ]

## DIVIDEND POLICY

The Company has a policy to pay out dividends at not less than 40.0% of its net profits stated on the company financial statements after deduction of the corporate income tax and legal reserve each year. The Company considers dividend payment based on factors that deem to be the most beneficial to the shareholders such as the Company's performance and financial status, investment plans in each period as deemed reasonable or appropriate by the Board of Directors. The dividend payment shall not have significant impact on the Company's normal operation. The resolution of the Board of Directors on dividend payment has to be proposed to the shareholders for approval, except payment of the interim dividends where the Board of Directors has its authority to approve and then report the same to the next shareholders' meeting.

## MANAGEMENT STRUCTURE

The Company structure as of 31 December 2017 is as follows;

### BOARD AND COMMITTEES

The Company's management structure consists of six Board and committees namely:

1. Board of Directors
2. Executives Committee
3. Audit Committee
4. Risk Management Committee
5. Corporate Governance Committee
6. Nomination and Remuneration Committee

#### 1. Board of Directors

The Company's Board of Directors as of 31 December 2017 consisted of 13 directors as follows:

NAME	TITLE
1. Mr. Somyos Anantaprayoon <sup>/1</sup>	Chairman
2. Miss Jareeporn Jarukornsakul <sup>/2</sup>	Vice Chairman
3. Mr. David Richard Nardone	Vice Chairman
4. Mr. Vivat Jiratikarnsakul	Director
5. Mr. Krailuck Asawachatroj	Director
6. Mr. Jakrit Chaisanit	Director
7. Mr. Arttavit Chalermasaphayakorn	Director
8. Mr. Narong Kritchanchai	Director
9. Mr. Somsak Boonchoyruengchai	Director
10. Mr. Apichai Boontheerawara/3	Independent Director and Chairman of the Audit Committee
11. Mr. Somsak Pratomsrimek	Independent Director and Audit Committee
12. Mrs. Kritsana Sukboonyasatit	Independent Director and Audit Committee
13. Mr. Chanvit Amatamatucharti	Independent Director

#### Remark

<sup>/1</sup> Vacate office upon death on 9 February 2018.

<sup>/2</sup> The appointment of the chairman of the Board of Director and the Chairman of the Executive Committee in place in accordance BOD's Resolution no.1/2018 on 9 February 2018.

<sup>/3</sup> The Audit Committee's Meeting No.1/2017 held on 22 February 2017 approved the erection of Chairman of the Audit Committee.

The Company Secretary is Mr. Sirisak Kijraksa.

#### Authorized Directors

The Directors who have authority to sign for binding the Company are Mr. Somyos Anantaprayoon and Ms. Jareeporn Jarukornsakul jointly sign with any one of Mr. Jakrit Chaisanit, Mr. Arttavit Chalermasaphayakorn, Mr. Narong Kritchanchai or Mr. Somsak Boonchoyruengchai, altogether 3 persons, with the Company's seal affixed.

### Scope of Authorities and Responsibilities of the Board of Directors

1. To perform their duties in compliance with laws, rules, regulations or notification of the Securities and Exchange Commission of Thailand, the Capital Market Supervisory Board, and the Stock Exchange of Thailand that relate to the Company's objectives, the Articles of Association, the resolutions of the Board of Directors and the resolutions of the shareholders' meeting with their accountabilities, carefulness, and integrity;
2. To determine details and approve the Company's vision, business strategies, business direction, business policies, goal, guidelines, strategic plans, and budgets of the Company and its subsidiaries that prepared by the Executive Committee and the Executive;
3. To monitor the Executive and operation of the Executive Committee, Chief Executive Officer, the Executive, or any persons who take responsibilities and such duties in accordance with the Company's policies determined by the Board of Directors;
4. To constantly follow up the Company's performance to be in compliance with the operating plan and budget of the Company;
5. To procure the Company and its subsidiaries to apply appropriate and efficient accounting systems, and to provide internal control and internal audit systems;
6. To arrange the preparation of balance sheet and income statements at the end of the Company's fiscal year and certify such statements in order to propose to the shareholders at the annual general shareholders' meeting for their approval;
7. To consider and approve the selection and appointment of the Company's auditor, and the appropriate audit fee proposed by the Audit Committee prior to propose to the shareholders at the annual general shareholders' meeting for approval;
8. To prepare policy in relation to good corporate governance principle in writing and efficiently apply such policy to ensure that the Company be fairly responsible to all relevant group of persons;
9. To consider and approve the appointment of person who has qualification and is not prohibited under the Public Limited Company Act, B.E. 2535 (as amended), the Securities Exchange Act, B.E. 2535 (as amended), including other relevant notifications, regulations and/or rules to substitute a vacancy in the Board of Directors for reasons other than the termination of the term of office, and to consider and approve the appointment of the director to replace the one retiring by rotation, and determine the director's remunerations as proposed by the Remuneration and Nomination Committee in order to propose the shareholders in the annual general shareholders' meeting for approval;
10. To appoint sub-committee such as the Audit Committee, the Executive Committee, the Corporate Governance Committee, the Remuneration and Nomination Committee, the Risk Management Committee, or other committee, including determining their duties and authorities in order to support the Board of Directors' management;
11. To determine and change the director's name who has authority to sign for binding the Company;
12. To consider and appoint the Executive as defined by the Securities and Exchange Commission or the Capital Market Supervisory Board, and the Company Secretary, including determining their remuneration;
13. To seek profession opinions from external organizations if necessary for making appropriate decision;
14. To support the Company's Directors and Executive to attend any seminars held by Thai Institute of Directors on the program of Duties and Responsibilities of the Directors and the Executive;
15. To approve loan to such companies that have a business relationship with the Company as shareholders, or companies relating to commercial business or other companies in the amount that exceeds the Executive Committee's authority;

16. To approve investment and divestment of common shares and/or other securities in amount that exceeds the Executive Committee's authority;
17. To purpose to the Company's shareholders on the Company's capital increase or decrease, and the change in par value of shares, Memorandum of Associations, Article of Associations, and/or Objectives;
18. To approve the Company's establishment, merger or liquidation;
19. To delegate the management, executives, and employees of related companies to explain, give an opinion, attend a meeting or delivery documents as it deemed appropriate;
20. To consult experts, or Company's advisor, or hire external consultant or expert where it deemed appropriate by the Company's expenses.

The assignment of authorities and responsibilities of the Board of Directors shall not cause the Board of Directors or the sub-authorized person to be entitled to approve the transaction where itself or a person who has a conflict of interest (as defined in the Notification of the Securities and Exchange Commission or the Notification of the Capital Market Supervisory Board) may have interests or other types of benefit or conflict of interests with the Company or its subsidiaries, except the transaction was approved in compliance with the policy and principle approved by the shareholders meeting or the Board of Directors' meeting.

#### **Roles and Responsibilities of the Chairman of Board of Directors**

1. The Chairman is responsible as the Board's leader and as the Chairman of Board's meeting as well as in shareholders' meeting;
2. In case of equality of vote, the Chairman shall have a casting vote in the Board meeting.

The Company's Chairman of the Board is not an independent director, since the Company believes that the Chairman is qualified with knowledge, skill, and experiences in order to lead the Company to gain the most advantages and success.

## **2. Executive Committee**

The Executive Committee as of 31 December 2017 consisted of 9 members as follows:

NAME	TITLE
1. Mr. Somyos Anantaprayoon <sup>/1</sup>	Chairman of the Executive Committee
2. Miss Jareeporn Jarukornsakul <sup>/2</sup>	Vice Chairman of the Executive Committee
3. Mr. David Richard Nardone	Executive Committee Member
4. Mr. Vivat Jiratikarnsakul	Executive Committee Member
5. Mr. Krailuck Asawachatroj	Executive Committee Member
6. Mr. Jakrit Chaisanit	Executive Committee Member
7. Mr. Artavit Chalermasaphayakorn	Executive Committee Member
8. Mr. Narong Kritchanhai	Executive Committee Member
9. Mr. Somsak Boonchoyruengchai	Executive Committee Member

#### **Remark**

<sup>/1</sup> Vacate office upon death on 9 February 2018.

<sup>/2</sup> The appointment of the chairman of the Board of Director and the Chairman of the Executive Committee in place in accordance BOD's Resolution no.1/2018 on 9 February 2018.

### Scope of Authorities and Responsibilities of the Executive Committee

1. To screen the Company's business plan and budget prior to propose to the Board for approval;
2. To screen the Company's policies and operation measurement prior to propose to the Board for approval;
3. To give opinion, advice and consider to approve the matters relating to the Company's normal business operation under the amount or annual budget approved by the Board, and to approve the variance of not exceeding 5% of the amount or annual budget approved by the , or to perform any activities assigned by the Board;
4. To consider and approve specific matters or operations within the following amount:
  - (a) To approve the execution, investment, termination, or divestment of the Company's project for the value not exceeding THB 1,500 mm per project;
  - (b) To approve the determination of loans, B/E, P/N and their terms and conditions, with the value of note exceeding THB 1,000 mm per time;
  - (c) To approve the asset mortgage for being collateral of borrowing for the amount not exceeding to THB 1,000 mm per time;
  - (d) To approve the determination of Bank Guarantees and their terms and conditions, with the value of note exceeding THB 1,500 mm per time;
  - (e) To approve the payment to settle a legal dispute for the amount not exceeding THB 50 mm per time;
  - (f) To approve the hiring of a consultant, or third party expert in the amount of not exceeding THB 20 mm per time;
  - (g) To approve advertising expenses. Entertainment expenses, social, sports and scholarship donations, gift expense in the amount not exceeding THB 5 mm per time.
5. To approve investment or expenses, including advertising expenses. Entertainment expenses, social, sports and scholarship donations, gift expense in excess of the annual budget or limit as approved by the Board in the amount of not more than THB 10 mm per time.
6. To approve open and/or close of bank accounts, enter into other financial products; e.g. IRS, derivatives, Money Market, as well as to approve changes to the terms and conditions of the debentures, such as the borrowing period, interest rate.
7. To appoint or terminate the Company's Executive or employee at the level of department manager upward, including to determine their compensation.
8. To coordinate and follow up the Company's operation with the Executive in normal business operation to be in compliance with the Company's business plan and budget.
9. To implement and conduct the Company's business as assigned by the Board of Directors.

### 3. The Audit Committee

The Audit Committee as of 31 December 2017 consisted of 3 members as follows:

NAME	TITLE
1. Mr. Apichai Boontheerawara/1	Chairman of the Audit Committee
2. Mr. Somsak Pratomsrimek	Audit Committee Member
3. Mrs. Kritsana Sukboonytasatit	Audit Committee Member

#### Remark

<sup>/1</sup> The Audit Committee's Meeting No.1/2017 held on 22 February 2017 approved the erection of Chairman of the Audit Committee.



The secretary of the Audit Committee is Mr. Kasamsi Sakunchaisiriwit.

All 3 Audit Committee members have knowledge and experience in financial statement audit, and is a certified public accountant having accounting and finance expertise.

#### **Scope of Authorities and Responsibilities of the Audit Committee**

1. To review for the accuracy and sufficiency of the Company's financial reporting;
2. To review for appropriateness and efficiency of the Company's internal control system and internal audit system and to consider the independence of the internal control section, including to give opinion on appointment, relocation, termination of the head of the internal control section and/or engagement of the internal audit company or other sections responsible for the internal audit;
3. To review and ensure that the Company complies with the Securities and Exchange laws, the regulations of the Stock Exchange of Thailand, and other law relating to the Company's business;
4. To nominate a candidate who is independent to be the Company's auditor and propose its audit fee to the Board for consideration, and to propose the cancelation of auditor, if it is reasonable to do so, to the Board for consideration, as well as to attend the meeting at least once a year with the auditor without attending of the Executive;
5. To consider the connected transactions or any transactions having a conflict of interests to be in compliance with the laws and regulations of the Stock Exchange of Thailand in order to ensure that such transactions are reasonable and of ultimate benefit to the Company;
6. To provide the Audit Committee's report and disclose it in the Company's annual report. Such report must be signed by the Chairman of the Audit Committee and consist of the following information as a minimum:
  - (1) The opinion on the accuracy, completeness, and reliability of the Company's financial reports
  - (2) The opinion on the sufficiency of the internal control of the Company
  - (3) The opinion on compliance with the Securities and Exchange laws and regulations of the Stock Market of Thailand, or other law relating to the Company's business
  - (4) The opinion on appropriateness of the auditor
  - (5) The opinion on the transactions that may have conflict of interest
  - (6) The number of the Audit Committee's meeting and the meeting attending of each Audit Committee
  - (7) The overall opinion or remark that the Audit Committee obtained from performing its duties according to the charter
  - (8) Other transactions as deemed that shareholders and general investors should be informed under the scope of duties and responsibilities assigned by the Board of Directors;
7. In performing the Audit Committee's duties, if it is found or suspected that there is the following transaction or action which may materially affect to the Company's financial status and performance, the Audit Committee shall report to the Board of Directors of the Company in order to remedy within the period as the Audit Committee deems appropriate:
  - (1) A transaction having a conflict of interest
  - (2) A fraud or irregularity or major defect on the internal control system
  - (3) Violation of the Securities and Exchange laws, regulations of the Stock Exchange of Thailand, or law relating to the Company's business

If the Board of Directors or the Executives do not remedy within the above period, any of the Audit Committee member may report that there is such above mentioned transaction or action to the Securities and Exchange Commission and the Stock Exchange of Thailand;
8. To review policy and internal control system of anti-corruption;
9. To perform any other acts assigned by the Board of Directors, with the consent of the Audit Committee.

#### 4. Risk Management Committee

As of 31 December 2017, the Risk Management Committee consisted of following 3 members.

NAME	TITLE
1. Miss Jareeporn Jarukornsakul	Chairman of Risk Management Committee
2. Mr. Somsak Pratomsrimek	Risk Management Committee Member
3. Mrs. Kritsana Sukboonytasatit	Risk Management Committee Member

##### Scope of Authorities and Responsibilities of Risk Management Committee

1. Study, review and evaluate risks as well as tendency which may affect organization as well as inside and outside risk of the Company;
2. Set policy on risk management to be submitted to the Board of Directors;
3. Review risk, follow up and evaluate sufficiency, efficiency and productivity of overall risk management;
4. Give advice and approval for the organization's risk management.

Risk Management Committee consists of 3 directors. Each of them will have 3-year term but such term is renewable.

#### 5. Corporate Governance Committee

As of 31 December 2017, the Corporate Governance Committee consisted of 4 members as follows.

NAME	TITLE
1. Mr. Somsak Boonchoyruengchai	Chairman of the Corporate Governance Committee
2. Mr. Jakrit Chaisanit	Corporate Governance Committee Member
3. Mr. Arttavit Chalernsaphayakorn	Corporate Governance Committee Member
4. Mr. Narong Kritchanhai	Corporate Governance Committee Member

##### Scope of Authorities and Responsibilities of the Corporate Governance Committee

1. To consider, review and revise the policy on corporate governance and propose the same to the Board of Directors for consideration and approval. This policy is to be prepared in writing and adopted as guidelines for good practice.
2. To consider, review and revise the code of conduct and to prepare it in writing.
3. To set and plan the policy on social corporate responsibility.
4. To act as representative of the Company in communicating and conducting activities regarding the corporate governance with the management, officers and outside organizations.
5. To follow up, review and improve the performance to be in accordance with the designated plan and to prepare quarterly summary report to the Corporate Governance Committee.

The Corporate Governance Committee shall comprise at least 3 members and each of them shall have the 3-year term. After expiration of the term, it may be considered for renewal of the term.

## 6. Nomination and Remuneration Committee

As of 31 December 2017, the Nomination and Remuneration Committee consisted of 3 members as follows.

NAME	TITLE
1. Mr. Apichai Boontheerawara <sup>/1 /2</sup>	Chairman of the Nomination and Remuneration Committee
2. Miss Jareeporn Jarukornsakul	Nomination and Remuneration Committee Member
3. Mrs. Kritsana Sukboonytasatit	Nomination and Remuneration Committee Member

### Remark

<sup>/1</sup> The Board of Directors' Meeting No.1/2017 held on 23 January 2017 appointed the new committee member.

<sup>/2</sup> The Nomination and Remuneration Committee's Meeting No.1/2017 held on 22 February 2017 approved the election of Chairman of the Committee.

### Scope of Authorities and Responsibilities of the Nomination and Remuneration Committee

1. To consider structure, size and component of the board of directors of the Company to be appropriate to the organization and in line with changing circumstances;
2. To consider the rules for nomination of directors, chief executive officer as well as nominating and screening qualified persons to serve as directors or chief executive officer for approval by the board of directors;
3. To give opportunity to the minority shareholders with sufficient period of time to nominate a list of persons to be nominated as directors prior to the shareholders' meeting;
4. To have the succeeding plan for the chief executive officer and top management by constant review;
5. To consider strategy and policy on human resource to be in line with the business operation of the Company;
6. To propose rules and guideline for fixing the remuneration of directors, committee, senior management which are clear, fair and appropriate in accordance with their responsibility and propose them to the board of directors for consideration;
7. To improve the policy and structure on management of remuneration of the directors of the Company, the committee, top management to be consistent with the labor market condition at that time for further proposing it to the board of directors for consideration;
8. To determine the target and evaluate the performance of the chief executive officer for further review of the appropriateness for fixing the remuneration and to further propose it to the board of directors for consideration.

The Nomination and Remuneration Committee shall comprise at least 3 members and each of them shall have the 3-year term. After expiration of the term, it may be considered for renewal of the term.

## EXECUTIVES

The Company's executives as of 31 December 2017 consisted of 9 persons as follows:

NAME	TITLE
1. Mr. Somyos Anantaprayoon <sup>/1</sup>	Chairman of the Executive Committee
2. Miss Jareeporn Jarukornsakul <sup>/2</sup>	Vice Chairman of the Executive Committee / Chief Executive Officer
3. Mr. David Richard Nardone	Executive Committee Member
4. Mr. Vivat Jiratikarnsakul	Executive Committee Member
5. Mr. Krailuck Asawachatroj	Executive Committee Member / Chief Strategic Officer
6. Mr. Jakrit Chaisanit	Executive Committee Member / Chief Operating Officer
7. Mr. Arttavit Chalermaphayakorn	Executive Committee Member / Chief Financial Officer
8. Mr. Narong Kritchanhai	Executive Committee Member / Chief Legal Officer
9. Mr. Somsak Boonchoyruengchai	Executive Committee Member / Vice President

### Remark

<sup>/1</sup> Vacate office upon death on 9 February 2018.

<sup>/2</sup> The appointment of the chairman of the Board of Director and the Chairman of the Executive Committee in place in accordance BOD's Resolution no.1/2018 on 9 February 2018.

### Scope of authorities and duties of Chief Executive Officer

1. To supervise the Company's overall operation to be in accordance with the business objectives of the Company and those assigned from the Board of Directors;
2. To provide strategies and business plans to be proposed to the Board of Directors and implement to achieve the goal specified in the strategies and business plans approved by the Board of Directors;
3. To take actions and perform duties as assigned by the Board of Directors and as per the policies of the Board of Directors;
4. To give orders, issue regulations, make announcement and record in order to perform the work to be in accordance with the policies;
5. To approve and/or grant power for doing juristic acts binding the Company for normal transactions of the Company, including transactions the Chief Executive Officer is authorized from the Board of Directors to take action as well as any transactions not directly binding the Company's assets;
6. To coordinate with the executives and staff to perform in accordance with the policies and business direction given by the Board of Directors;
7. To seek for business opportunity on banking investment, securities, investment, business consultant, financial and accounting consultant, investment consultant, and new business to increase revenue to the Company and staff;
8. To consider taking the Company's rights and properties to create obligations with persons, companies, partnerships, shops or financial institutions for proposing to the Board of Director for approval;
9. To approve payment of expenditure for normal operation in the amount approved by the Board of Directors;
10. To approve investment in equity instruments and securities for the Company's account in the amount approved by the Board of Directors;
11. To approve in principle of investment for business expansion as well as joint investment with other business operator and propose to the Board of Directors for approval in the next meeting;

12. To approve payment for significant investment set forth in the annual budget or those approved in principle by the Board of Directors;
13. To take care of working of employees to be in accordance with the policies, regulations, and the corporate good governance;
14. To support development of employees' knowledge and capacity to enhance the organization's capability;
15. To appoint consultant necessary to the Company's operation;
16. To approve related transactions being on an arm-length basis such as sale and purchase goods at market price, service fees at the normal rate and giving credit terms similar to general customers, etc. under to the policies approved by the Board of Directors;
17. To appoint, transfer, or terminate employees in the level not requiring approval from the Executives Committee; and
18. To perform other work as assigned by the Board of Directors on a case by case basis. The Chief Executive Officer does not have authority to approve related transactions not being on an arm-length basis, transactions of acquisition and disposition of the Company's major assets, and/or the transactions with the Company and its subsidiaries in which the Chief Executive Officer or a person possibly conflict having interest and having conflict of interest in any nature, except for transactions being on an arm-length basis where the policies and conditions are provided and approval is granted in accordance with the policies and conditions approved by the Board of Directors and endorsed by the shareholders for entering into related transactions and transactions acquisition and disposition of major assets of the Company or its subsidiaries to be in accordance with the rules and regulations of the Stock Exchange of Thailand.

The Chief Executive Officer has authority to approve spending in specific cases or actions in the amounts as follows:

- (a) Approval of investment fund in an amount of not exceeding THB 210,000,000 per project
  - Approval on purchase of raw land in an amount of not exceeding THB 10,000,000 on each occasion
  - Approval on hiring contractors for the objectives of constructing warehouses or factories in an amount of not exceeding THB 200,000,000 on each occasion
- (b) Approval on purchase of construction materials and others for constructing warehouses or factories in an amount of not exceeding THB 50,000,000 on each occasion
- (c) Approval of payment of contractors' remuneration and creditors of construction materials in an amount of not exceeding THB 200,000,000 on each occasion
- (d) Approval of loans to be expense on normal business operation, marketing, purchase, investment in assets in an amount of not exceeding THB 200,000,000 on each occasion.

## THE COMPANY'S SECRETARY

Mr. Sirisak Kijraksa as company secretary, effective from 13 May 2016. His qualified and experienced and he used to be a company secretary of Hemaraj Land and Development Public Company Limited. He also has good knowledge and understanding of the business which is capable to advise accurately and appropriately to the Board of Directors of duties and responsibilities.

### Scope of authorities and duties of the Company Secretary

1. To provide preliminary suggestion to directors in respect of laws, rules and regulations
2. To provide advice on holding of shareholders' meeting in accordance with laws, regulations and guideline and prepare an invitation notice for shareholders' meeting
3. To record minutes of shareholders' meeting and directors' meeting and follow up compliance with shareholders' meeting and board of directors' meeting

4. To prepare and safe-keep the following documents:
  - (a) The register of director
  - (b) The invitation of meetings of the Board of Directors, minutes of meetings of the Board of Directors and the Company's annual report
  - (c) The invitation of meetings of shareholders and minutes of meetings of shareholders
5. To safe-keep reports of conflicts of interest reported by the directors or the executives
6. To procure disclosure of information and information memorandum to the public in accordance with laws and regulations
7. To perform other acts as specified by of the Capital Market Supervisory Board

## DIRECTOR AND EXECUTIVE REMUNERATIONS

### 1. Remuneration in Cash

#### 1) Director Remuneration

The 2016 Annual General Meeting, held on 28 April 2017, resolved to approve the 2017 remuneration for the directors as follows;

1. The emoluments of company director

POSITION	AMOUNT
Chairman of the Board of Director	250,000 per year *
Director	200,000 per year *

*\*Monthly*

2. The meeting allowances by pay only the director attend the meeting.

POSITION	MEETING ALLOWANCES
Chairman	40,000 Baht per time
Chairman of Audit Committee	35,000 Baht per time
Director	30,000 Baht per time

3. Sub - Committee meeting allowance by pay only the director attend the meeting.

POSITION	MEETING ALLOWANCES
Chairman of Sub - Committee	40,000 Baht per time
Director of Sub - Committee	35,000 Baht per time
Director	30,000 Baht per time

4. The bonus will be 0.17% of Net Profit of the end of year
5. Other benefits - None



The details of the meeting attendance and remuneration of all directors and sub-committee members are summarized as following.

Name	Meeting Attendance/No. of Meeting Held (2017)					
	Board of Directors	Executive Committee	Audit Committee	Nomination & Remuneration Committee Risk Management Committee	Good Governance Committee	Risk Management Committee Nomination & Remuneration Committee
Mr.Somyos Anantaprayoon	5/7	8/11	-	-	-	-
Ms.Jareeporn Jarukornsakul	7/7	11/11	-	2/2	-	2/2
Mr.Jakrit Chaisanit	7/7	9/11	-		3/3	-
Mr.Narong Kritchanhai	7/7	11/11	-		3/3	-
Mr.Somsak Boonchoyruengchai	7/7	11/11	-		3/3	-
Mr.Arttavit Chalernsaphayakorn	7/7	11/11	-		3/3	-
Mr.David Richard Nardone	6/7	11/11	-	-	-	-
Mr.Vivat Jiratikarnsakul	7/7	11/11	-	-	-	-
Mr Krailuck Asawachatroj	7/7	10/11	-	-	-	-
Dr.Kritsana Sukboonyasatit	6/7	-	4/4	2/2	-	2/2
Dr.Somsak Pratomsrimek	7/7	-	4/4	-	-	2/2
Dr.Apichai Boontheerawara	7/7	-	4/4	2/2	-	-
Mr.Chanvit Amatamatucharti	6/7	-	-	-	-	-

Unit : THB Thousand

Name	Directors' Remuneration (2017)								Bonus	Total
	Position Allowance	Meeting Allowance								
		Board of Directors	Audit Committee	Executive Committee	Risk Management Committee	Good Governance Committee	Nomination & Remuneration Committee			
Mr.Somyos Anantaprayoon	250	200	-	200.0	-	-	-	1,818.48	2,468.48	
Ms.Jareeporn Jarukornsakul	200	210	-	165	50	-	30.0	1,606.46	2,261.46	
Mr.David Richard Nardone	200	210	-	165	-	-	-	1,606.46	2,281.46	
Mr.Vivat Jiratikarnsakul	200	210	-	165	-	-	-	1,606.46	2,181.46	
Mr Krailuck Asawachatroj	200	210	-	150	-	-	-	1,606.46	2,166.46	
Mr.Jakrit Chaisanit	200	210	-	135	-	45	-	1,606.46	2,196.46	
Mr.Arttavit Chalernsaphayakorn	200	210	-	165	-	45	-	1,606.46	2,246.46	
Mr.Narong Kritchanhai	200	210	-	165	-	45	-	1,606.46	2,241.46	
Mr.Somsak Boonchoyruengchai	200	210	-	150	-	75	-	1,606.46	2,241.46	

Unit : THB Thousand

Name	Directors' Remuneration (2017)								Total
	Position Allowance	Meeting Allowance						Bonus	
		Board of Directors	Audit Committee	Executive Committee	Risk Management Committee	Good Governance Committee	Nomination & Remuneration Committee		
Dr.Apichai Boontheerawara	200	170	100		-	-	50	1,606.46	2,126.46
Dr.Somsak Pratomsrimek	200	210	60		30.0	-	-	1,606.46	2,106.46
Dr.Kritsana Sukboonyasatit	200	180	60		30.0	-	30.0	1,606.46	2,106.46
Mr.Chanvit Amatamatucharti	200	180			-	-	-	1,606.46	1,986.46
Total	2650	2620	220	1460	110.0	210	110.0	2,1096.00	28,476.00

## 2) Executive Remuneration

In 2017, the Company paid remuneration to executives as salary and bonus in total amount of THB 69.88 mm as table below;

2016		
	No.of Executives	Amount (THB mm)
Executives Compensation	5	69.88

## 2. Other Remunerations

The Company has provided fund program in which the Company contributes the amount of 4% - 10% of salary. In 2017, the Company contributed into the provident fund for the Company's Executives of THB 4.27 mm.

## PERSONNEL

### 1. Number of Employees

As of 31 December 2017, the Company employed 103 staff members.

THE COMPANY	NO. OF EMPLOYEES
Executives	4
Business Development Department	9
Logistics and Building Development Department	28
Operation Department	17
Accounting Department	15
Corporate Finance and IR Department	7
Human Resources Department	6
Legal, and Land Departments	7
Procurement, and IT Department	4
Executive Secretary	3
Quality Assurance	1
Executive Officer	2
<b>Total</b>	<b>103</b>

### 2. Material labor dispute during the past 3 years

- None -

### 3. Remuneration of personnel (excluding executive)

Officers of the Company receive remuneration in form of, among others, salary, bonus, overtime wage, provident fund allowance, social security allowance and compensation fund allowance. Officers also receive other welfares, such as annual public holidays, maternity leave, ordination leave, medical allowance and funeral assistance. The details of Personnel Remuneration which contributed in cash for 2017 were as follows;

REMUNERATION	AMOUNT (THB MM)
Salary	64.46
Bonus	21.65
Provident Fund Contribution	3.01
Social Security Contribution	0.84
Compensation Fund Allowance	0.01
Overtime	0.86
<b>Total</b>	<b>90.83</b>

#### 4. Policy on development of employees

The key vision of WHA group aims to be the learning and sustainability organization by enabling the various theoretical knowledge brought to the innovative working environment. The initial vision is also the pillar of every employee to develop themselves in respect of to be the knower, fully capability, innovative ideas and keeping up the trend timely so as to be responsible for their duties efficiently as well as driving the business in a sustainable way forward.

The development roadmap is under the umbrella of the Human Resources Department in collaboration with Chulalongkorn University and Thammasat University to uniquely customize the curriculum for the top through the middle executives in order to sharpen the Leadership Competency and the Readiness of Business Challenges Acumen.

The array of development models is consisted of the various theoretical frameworks, executions, on-the-job training concepts including the innovative activities to brighten the future leader. Last but not least, the mentioned above are the concept tailored for the leaders and officers are able to collaboratively design their development plans. The average of employees' training hour of the company in 2017 is 33 hours/person.

#### INVESTMENT POLICY IN SUBSIDIARIES, ASSOCIATED COMPANIES, PROPERTY FUND AND REAL ESTATE INVESTMENT TRUST

The Group of Companies has the policy of investment in the companies that engage the same business as the core business and related business of the Group of Companies, such as industrial estate business, real estate business, utility business, power business, and renewable energy business, to increase the earnings and competitiveness for the Group of the Companies.

However, in management of the subsidiaries and associated companies, the Group of Companies will appoint the representative from the Group of Companies to be involved as the director of those companies in appropriate proportion for governing the operations of the subsidiaries and associated companies to be in line the proper direction and create maximum benefit to the Group of Companies.

In addition, the Group of Companies also has the policy of investment in real estate business through Property Fund and Real Estate Investment Trust in the proportion of not more than 20% of total investment units or unit trusts (as the case may be) to generate steady dividend income annually. Nevertheless, the investment in Property Fund and Real Estate Investment Trust will depend on the requirement for investment and fundraising amount from sales of assets to Property Fund and Real Estate Investment Trust during such period. Therefore, the investment in Property Fund and Real Estate Investment Trust may be different from the determined investment policy. Moreover, the Company has no control and no participation in determining the policy of Property Fund and Real Estate Investment Trust.

# CORPORATE GOVERNANCE

The Company is aware of undertaking its business with responsibility and fairness and recognizes the importance of good corporate governance and management which will enhance its competitiveness in management by focusing on sustainable growth to add value in a long term to the Company, its shareholders and all stakeholders.

The good corporate governance will help the Company gain transparency and verifiability in business operation. The Company set the good corporate governance policy for directors, management and officers to use as the work guideline. The corporate governance of the Company will be reviewed annually and approved by the Board of Directors. The latest revision was made on March 24, 2017 by applying the OECD Principles of Corporate Governance to the Company's guideline, and applying CG Code year 2017 from Securities and Exchange Commission, Thailand.

## CORPORATE GOVERNANCE POLICY

The Good Corporate Governance Policy of the Company is divided into 6 categories as follows:

### 1. Rights of the Shareholders

The Company takes as a priority the right of shareholders to complete and accurate information in a timely and fair manner to support their decision making. The Board of Directors therefore sets the policy as follows.

- (1) The Company shall send a notice of shareholders' meeting together with sufficient data in supporting documents on various agendas with objectives, reasons and opinion of the Board of Directors on each of the agenda in order that the shareholders will have the opportunity to study the full information at least 30 days in advance. In case that the shareholders cannot attend the meeting by themselves, the Company allows the shareholders to appoint an independent director or any person as a proxy to attend the meeting by using the proxy form as enclosed in the notice. The shareholders can also download the proxy form from the Company's website.
- (2) To fairly facilitate all shareholders in attending the shareholders' meeting in terms of appropriate venue and timing.
- (3) In shareholders' meeting, agenda items will be considered and voted in order as specified in the notice without change of material information. Shareholders are given equal opportunity to review the Company's business performance, make enquiries, and present their views and suggestions. Directors and relevant management will attend the shareholders' meeting to answer questions raised in the meeting.
- (4) To increase channels for shareholders to access to information through website of the Company on which the information and details are uploaded. In particular, the notice for shareholders' meeting will be disseminated at least 30 days in advance so that the shareholders can conveniently and fully download information and agenda.
- (5) The Company has the policy that directors, top management and auditor will attend the shareholders' meeting to provide answers and acknowledge opinion from the shareholders.
- (6) Recording the minutes of shareholders' meeting will be made in full, on time and transparently. Material questions and opinion will be recorded in the minutes so that the shareholders will be able to review. In addition, the Company will upload the minutes of shareholders' meeting in the Company's website for shareholders' consideration. The Company will submit the minutes of shareholders' meeting to the Stock Exchange of Thailand within 14 days from the date of shareholders' meeting.

- (7) To facilitate shareholders to receive the dividends by transfer to bank account (in case of dividend payment) for convenience of shareholders in receipt of dividend on time and for prevention of cheque being damaged, lost or delayed.
- (8) The Company has policy to give an opportunity to shareholders to propose agenda and/or submit questions on the agenda in advance in order that the shareholders will gain ultimate benefits from the meeting as well as to fully preserve the rights of shareholders. This can be done via email or facsimile to the Company Secretary.
- (9) The Nomination and Remuneration Committee will consider scope of works, responsibility, completion of work and business performance as well as other factors including remuneration of directors of other companies in the same industry for determination of the remuneration of directors. The Nomination and Remuneration Committee will firstly consider the remuneration of the Board of Directors prior to submission to the Board of Directors for further approval.

## 2. The Equitable Treatment of Shareholders

The Company shall treat shareholders equally. Therefore, the Board of Directors has the following policy.

- (1) The Company shall send the invitation of meeting together with supporting information to the shareholders at least 30 days in advance in order to give an opportunity to the shareholders to fully study information prior to the shareholders' meeting date.
- (2) The voting right in the shareholders' meeting shall be in accordance with a number of shares held by shareholders. One share will have one vote. In addition, the Company allows the shareholders who attend the meeting after commencement of the meeting to vote for agenda being considered for agenda which are under consideration and has not been voted, and the vote of such shareholders will be included in the quorum.
- (3) With regard to the agenda item on the of directors to replace those who resign by rotation, the Company has policy to give an opportunity to the shareholders to vote on each individual director. This means that the shareholders will have the opportunity to truly select the directors of their choice and preference. The Company will enclose the details of the nominated directors enough for shareholders' consideration.
- (4) The Company will allow a shareholder who holds shares representing not less than 0.05% of the paid-up capital for not less than 12 months consecutively to propose via the email or facsimile to the Company Secretary agenda items the annual shareholders' meeting and nominate a qualified person to serve as a director.
- (5) The Company will set the preventive measures on insider trading of related persons which mean the Board of Directors, top management and officers in division which may be involved in the Company's information (including their spouse and minor child).
- (6) The Company will set the policy on conflict of interest on the basis that decision making of personnel at all levels will be made to the ultimate benefit of the Company and it shall be the duty of all personnel to avoid any financial involvement and/or relationships with third parties which may result in the Company's loss of benefit or cause the conflict of interest or prevent any effective performance of duty. The related persons or connected persons shall inform the Company of relationship or connected transactions and shall not participate in decision making and shall have no authority to approve such transactions. The approval on such transactions shall be in accordance with principle and have no more special terms and conditions than those of ordinary case.



- (7) To facilitate the shareholders who cannot attend the meeting by themselves by allowing the shareholders to give a proxy to any person or permit at least 1 independent director to attend the meeting and notify the name of such independent director in the notice of meeting.
- (8) To treat shareholders equally, no matter whether they are major shareholders or minority shareholders, or they are Thai or foreigners.

### 3. Conflict of Interest

The Company realizes the importance of transparency when considering matters taking into account the benefit of the Company. Therefore, the Company gives high priority to prevention of any transactions that could turn into conflict of interest, connected transactions, or related transactions, and imposes a policy for this purpose with material details as follows.

- (1) The management and the officers shall strictly comply with the Code of Conduct to earn trust of all stakeholders and disclose the information for understanding to all officers of the Company.
- (2) Directors and the management shall inform the Company of relationships or connected transactions which may cause the potential conflict of interest.
- (3) Connected transactions shall be submitted to the Audit Committee for consideration prior to submission to the Board of Directors for further approval in accordance with the good corporate governance. Compliance with the rules prescribed by the SET and the Office of the SEC shall be monitored.

### 4. Roles of Stakeholders

The Company recognizes and is aware of the rights of all stakeholders, whether they are insider stakeholders, i.e. shareholders, officers, or outsider stakeholders, i.e. customers, partners, creditors, competitors, public section or agencies as well as nearby communities as the Company earns the support from stakeholders which enhances the competitiveness and profitability and it is deemed as a long-term value to the Company. The Company set the following policy:

#### (1) Policy on treatment to officers

The Company realizes that officers are key factors to achieve the Company's target. The Company has policy to treat all officers fairly in respect of opportunity, remuneration, appointment as well as development of potential. To this ends, the Company has the following practices:

- 1) To treat officers with politeness and respect by taking into account the individualism
- 2) To give officers the fair remuneration, set up provident fund for officers and provide welfare
- 3) To preserve the work environment with safety to life and assets of officers
- 4) To appoint, promote or demote, give bonus and penalize officers at good faith and on a basis of their knowledge, capability and appropriateness of such officers
- 5) To give extensive and constant opportunity in respect of knowledge management and competency to officers to develop the officers' capability to empower officer to their full potential with professionalism
- 6) To acknowledge views and suggestions which are based on officers' professional knowledge
- 7) To strictly comply with relevant laws and regulations governing officers
- 8) To treat fairly and appropriately with officers' remuneration by considering officer's knowledge, competency, qualification, appropriateness of performance, individual performance evaluation based on Balanced Scorecard, survey result of labor market in a way that is seen as internally fair and externally competitive, as well as company's performance from each year earning profits.

**(2) Policy and Treatment to Shareholders**

The Company recognizes that the shareholders are the owner of business and the Company has the duty to enhance a long-term shareholders' value as follows:

- 1) to perform fiduciary duty and make decision in accordance with professional principles with due care and fairness to both of major and minority shareholders to the ultimate benefit of overall shareholders.
- 2) to constantly and fully present the report on the Company's status, business performance, financial status, accounting and other reports
- 3) to prohibit the exploitation of benefit to themselves or third parties by using of the Company's information which is not disclosed to the public or do any acts and things which may cause the conflict of interest with the Company

**(3) Policy and Treatment to Customers**

The Company recognized the importance of customers and set the policy to treat customers as follows.

- 1) to serve customers with politeness, eagerness and readiness to provide service with sincerity and willingness and care, take care of customers as closed cousin, and provide services on timely, accurate and reliable basis
- 2) to keep confidential the customers' information and not to use for its own benefits or related persons unduly
- 3) to give accurate, sufficient and timely information to customers on services of the Company to customers without exaggerate advertisement which may mislead customers regarding qualities or conditions of the Company's services
- 4) to provide suggestions on the Company's services to the best benefit of customers.

**(4) Policy and Treatment to Partners and/or Creditors**

The Company has the policy to officers to treat customers and/or creditors fairly and at good faith without taking advantage over competitors by taking into account the Company's ultimate benefit and mutual fair treatment to avoid situation which may cause the conflict of interest. Negotiation for settlement will be conducted on the basis of business relationship under the following practice:

- 1) not to claim or receive or pay any benefits in bad faith to partners and/or creditors
- 2) in case that there is any information that the claim, receipt or payment of any benefits was not made in good faith, details must be disclosed to partners and/or creditors and the problem shall be settled fairly and timely
- 3) to strictly comply with conditions as agreed upon. In case of non-compliance with any agreements, creditors shall be informed in advance to jointly find the solution.

**(5) Policy and Treatment to Competitors**

The Company has the policy to treat competitors without breaching the confidentiality or knowing the confidentiality of competitors with fraud and set the following policy:

- 1) to follow the rules on competition
- 2) not to seek confidentiality of competitors by bad faith or inappropriate means.
- 3) not to destroy competitors' reputation by malicious accusation.

## **(6) Policy and Treatment to Societies/Communities**

The Company has the policy on undertaking of business which renders benefits to economy, society and adheres to the principle on being a good citizen. The Company fully complies with laws and participates in activities which will promote or enhance the quality of life of societies and communities. In addition, the Company has the policy to return profit to society by allocating budget from the Company's income to support activities which will benefit societies, communities and environment as appropriate and it will proceed with this annually. In 2015, the Company donated money to support education, educational equipment, and other necessary things and gave lunches to students of the school located in area that the Company invested in. In addition, the Company held activities in its organization to support and cultivate consciousness of all level officers in sharing, such as activities to receive old calendars to support Foundation for the Blind in Thailand for bringing them to be used as the media for teaching to the blind and activity to give donation to temple.

## **(7) Policy on Welfare and Healthcare to Officers**

The Company recognizes the importance on preserving good work environment with safety to life and assets of officers by strictly complying with labor law, such as maintenance of buildings and office equipment in good condition and health, provision of necessary medical care services, setting rule on wearing of safety equipment on construction site as well as creating the awareness to all level officers on value and importance of constant workout. The Company arranges the healthcare welfare to officers as appropriate, such as sport activity on every Tuesday and Thursday, annual health check.

## **(8) Environment Policy**

The Company has the policy to support activities to promote quality, health and environment as well as work environment with safety to life and assets of officers. In addition, the Company realizes on giving knowledge and training to officers on environment and efficient use of resources, such as recycle of paper with one page used, recycle of files and campaign on electricity turn-off during lunch, using ladder instead of elevator, maintenance of equipment for readiness to use and for good safety and work environment and for enhancement of work efficiency of officers in organization.

## **(9) Intellectual Property Policy**

The Company has the clear policy not to infringe the intellectual properties, irrespective of copyright, patent, trademark, trade secret and other intellectual properties prescribed by law, such as infringement of computer software. All computer software must be investigated and downloaded by the information technology division to prevent illegal usage of software.

## **(10) Policy on Legal Compliance and Human Rights**

The Company has policy against any infringement of human rights in all respects to be consistent with the society under the rule of laws. Citizen has the freedom right under the law. The practice of the Company is as follows:

- 1) The Company respects and treats all stakeholders with fairness, on the principle of human dignity, without discrimination on origin, citizen, sex, age, skin color, religion, body condition, status, family and promotes monitoring of treatment in accordance with terms on human rights in the Company.
- 2) To act against any human trade, use of child labour with age under those prescribed by law and not to do any transactions with manufacturer or service provider who does as such.
- 3) To support and respect human right by reviewing and controlling the business transaction of the Company with third parties not to promote or support the violation of human right and not to violate the staff's right protected by law.

### (11) Policy on Fraud and Anti-Corruption

The Company expresses its intention to join the private sector on anti-corruption group which is held by joint effort of Thai Institute of Directors, Thai Chamber of Commerce, International Chamber of Commerce, Thai Listed Companies Association and The Thai Bankers' Association since January 30, 2014. The Board of Directors set the policy on anti-corruption as follows:

- 1) To set the appropriate check and balance structure among procurement division, accounting division, management division and audit division to prevent misuse of authorities.
- 2) To train officers on knowledge, policy and practice on anti-corruption of the Company.
- 3) To support and cooperate with public sector organization and regulatory authorities as well as all sectors in the Thai society with the aim to reduce corruption and enhancement of country development.
- 4) To prohibit director, executive and officers from any forms of direct or indirect corruption, i.e. receipt of gift, giving gift, wining and dining, donation and any other benefits to themselves from partners of the Company.

The Company expresses its intention to join the private sector on anti-corruption group which is held by joint effort of Thai Institute of Directors, Thai Chamber of Commerce, International Chamber of Commerce, Thai Listed Companies Association and The Thai Bankers' Association. On 18 August 2017, Thai Institute of Directors acting as the secretary of CAC had the resolution on the CAC Meeting to certify WHA Corporation Public Company Limited to be the member of Private Sector Collective Action Coalition Against Corruption Council (CAC) onward.

The Company has the channel for interested persons to inform, suggest or complain in case of corruption or any acts which is not in compliance with the Company's rules to the Board of Directors by sending a letter to the below address:

- |                               |   |
|-------------------------------|---|
| a) To Audit Committee         | Email: <a href="mailto:auditcommittee@wha.co.th">auditcommittee@wha.co.th</a> |
| b) To Chief Executive Officer | Email: <a href="mailto:info@wha.co.th">info@wha.co.th</a>                     |

The Company is strongly aware to security and damage of complainer by keeping complainer's personal information confidentially whereas they will be treated fairly and appropriately.

## 5. Disclosure of Information and Transparency

The Board of Directors has the policy to accurately, fully, sufficiently, constantly and timely disclose financial information memorandum and others on business and the Company's performance which reflect the financial condition and performance of the Company including the future business of the Company.

The Board of Directors has strong intention to supervise to strictly and transparently comply with laws, regulations and rules in relation to information disclosure and distribute the information via the Company's website, SET's disclosure media in order that shareholders and relevant persons will receive the information of the Company and will adjust it to be in line with the applicable guideline of SET and the Office of the SEC.

The Company procures staff responsible for communication with investors, shareholders as well as institutional investors and minority shareholders. The Company will regularly hold the meeting for analysis of business performance and disclose information of organization and financial information and general information to investors, securities analysts, credit rating agencies and relevant governmental authorities via various channels, such as reporting to SET, the Office of the SEC and website of the Company. Moreover, the Company recognizes the importance to regularly disclose the information in order that the shareholders continually receive information via the Company's website. The information thereof will be constantly updated, such as vision, mission, financial statements, public relation news, annual report, corporate structure, management, shareholding structure and major shareholders.

In addition, the Company realizes the importance of financial statements which truly reflect the financial status and performance of the Company on the basis that the accounting information must be correct, complete and sufficient per the generally accepted accounting principles. The Company will disclose information regarding each of directors as well as roles and duties of the Board of Directors and the committees of the Company in the Annual Report (Form 56-2) and Annual Report (Form 56-1) and will disclose remuneration of directors and top executive in Annual Report (Form 56-2) and Form on Annual Information Disclosure (Form 56-1).

## 6. Responsibility of Board of Directors and Committees

### (1) Structure of Board of Directors

The Board of Directors has responsibilities to the shareholders on business undertaking, supervision of business to its goal and guideline to maximize the shareholders' value by taking into account benefits of all stakeholders.

As of December 31, 2016, the Board of Directors of the Company comprises 13 persons<sup>/1</sup> as follows.

- a. Directors who are executives numbering 9 persons<sup>/1</sup>
- b. Directors who are not executives numbering 4 persons inclusive of 3 members of the audit committee.

*Remark <sup>/1</sup> One Director, who was executive, has passed away, and his vacating office was on expiration of office term dated 9 February 2018*

Although the Chairman of the Company is the Chairman of the Executive Committee, the consideration on material issues will be screened by the Executive Committee and, if it exceeds the authority of the Executive Committee, it will be submitted to the Board of Directors. With regard to the structure of the Executive Committee, 3 out of 3 executive committee members are not related to Chairman of the Board, Chairman of Executive Committee and Chief Executive Officer. And, in the Board of Directors, 10 out of 11 directors are not related to the Chairman of the Board of Directors and Chairman of Executive Committee. The Company also has the audit committee's which comprises 3 independent directors, or one-thirds of all directors. The Company also provided for the scope of authorities of the Board of Directors, committees and Chief Executive Officer in writing to set the clear scope of works and responsibilities of Committees which reflects the transparency and due care in making decisions.

### (2) Roles, Duties and Responsibilities of the Board of Directors

The Board of Directors has the duty to perform in accordance with law, objectives, articles of association and resolution of shareholders' meeting by performing the fiduciary duty and duty of care to the benefit of shareholders and stakeholders in long term and short term to ensure that the Company operates the business in the direction that maximizes the benefit of shareholders and stakeholders. The Board of Directors will monitor to procure the preparation of vision, mission, target, policy, direction, strategic plans, work plans and annual budget of the Company. The Board of Directors will share opinions to ensure mutual understanding of the overall the business prior to giving approval and shall follow up the management to meet target by adhering to guidelines as set forth by the SET and the Office of the SEC.

**(3) Nomination of Directors**

Nomination and Remuneration Committee is responsible for director nomination by considering of diversity on qualification, experiences, appropriateness, and skill

as director. The appointment of new director shall be complied with Public Company Limited Act. The criteria of director nomination are follows:

- 1) The nominated director shall have knowledge, competency and experience of company business including professional and specific skill, education, age and gender
- 2) The nominated director shall have leadership, vision, ethic, good attitude to company as well as time to devote themselves to company
- 3) The nominated director shall not be in Black list from any organization including the securities and exchange commission or have been sentenced to any crime
- 4) In case of independent director, the nominated director shall be qualified with independent director qualification
- 5) To consider any other qualifications based on Board's structure and component and company's direction through transparent nomination process to build trust with shareholders

After nomination process, the Nomination and Remuneration Committee shall propose the nominated director to Board Meeting for appointment as required by law. In case of the appointment shall be approved by shareholder meeting. The Board shall be proposed to shareholder meeting for approval.

The Company has prescribed qualification of independent director who have well knowledge in Finance, Economic, Accounting, public administration and other field of businesses suitable as standard factors to safeguard benefit of the shareholders and others. Additionally, to have higher qualification compare to the qualification according to such prescribed in regulation of SET and SEC which the Company's Independent Director's Definition as follows :

1. holding share not exceeding 0.5% of paid up capital of the company, subsidiaries, associates or related companies or juristic persons with potential conflict of interest including also share held by related persons.
2. uninvolved in management, not being an employee, staff, consultant earning permanent salary in the company or the company's management, its subsidiaries, associates, related companies or other persons with potential conflict of interest except in the case that such interests finished at least 2 years prior to the appointment date.
3. shall have no blood relationship or relationship through legal registration in the forms of parents, spouse, siblings and children, or children's spouses with executive directors, management, controllers, or major shareholders of the company or its subsidiaries of executive directors, management, controllers, or the persons who are nominated for an executive position or executives of the company or its subsidiaries.

4. not holding business relationship with the company, principal company, subsidiary companies, affiliated companies, major shareowner, or person holding controlling power of the company, which may hinder the exertion of his/her independent discretion, and not being or having ever been a shareowner, with significant implication, or person holding controlling power of the person holding business relationship with the company, principal company, subsidiary companies, affiliated companies, major shareowner, or person holding controlling power of the company, unless having vacated from said tenure for not less than two years before appointment as an independent director. Business relationship as in first paragraph shall include the normal course of trading transaction for business undertaking, lease or grant of lease of immovable asset, transactions relating to asset or service, or grant or receipt of financial assistance through acceptance or grant of loans, guaranty, grant of asset as guaranty for loans, including other similar behavior, thus making the person applying for permission or a contract party liable to payment of debt to another party, from 3 percent of net tangible assets of the person applying for permission, or from Baht 20 million or over, whichever is lower. The calculation of debt burdens as referred to above shall comply with the valuation of connected transaction in compliance with the notification of the Capital Market Supervisory Board on the criteria of the connected transaction, with the respective differences having been considered (*mutatis mutandis*). However the consideration of the said debt burdens shall include the debt burden incurred within one year before having business relationship with the same person.
5. shall not be or used to be auditors of the company, its subsidiaries, joint venture companies, the major shareholders or the company's executives. The Independent Directors shall not be major shareholders, executives or business partners of juristic person under the management of the auditor of the company, its subsidiaries, joint venture companies, major shareholders or the company's executives except when such activities finished at least 2 years prior to the appointment date.
6. shall not work or used to work in a profession that included law and financial consultant services and asset appraising, which receives service fees of over 2 million baht per year from the company, its subsidiaries and joint venture companies or major shareholders or the company's executives. In the case that the profession is registered as a person juristic, this rule covers the case of being the major shareholder, executives, or business partner of that professional service, except such services ended at least 2 years prior to the appointment date.
7. not being the director who is appointed to safeguard benefit of the company director, major shareholder or shareholder who is related to the major shareholder of the company.
8. able to perform his duties and express comment independently.
9. Independent directors can serve as directors of the Company for a period of no more than 9 consecutive years.
10. At least 1 independent director shall be a female.



**(4) Meeting of Board of Directors**

Regular attendance of meetings of the Board of Directors is an important duty of the directors to acknowledge and participate in decision making on business undertaking of the Company. In each year, there will be at least 4 meetings of Board of Directors. At each meeting, the agenda will be clearly prepared in advance. A special meeting of Board of Directors may be held to consider urgent matters.

For the Board of the Directors' Meeting, the document for the said Meeting shall be distributed to the Directors for acknowledgement and consideration in advance 5 working days before the said Meeting occurs. However, for the confidential agenda will be revealed to discuss in the said Meeting.

Top executives of the Company may attend the Board of Directors' meetings to give information which may be useful and directly take policy from the Board of Directors. The Company also has the policy that the non-executive directors will have a meeting at least once a year. It is intended that the non-executive directors have the opportunity to meet with one another to discuss issues of their interest without attendance by the executive or management.

In determining the agenda for Board of Directors, Executive Committee will consider issues which will be the agenda in the Board of Directors' meetings. All executive directors are able to propose any agenda and independently and freely give an opinion and the Company Secretary will prepare such issue to be the agenda of the Board of Directors' meetings and prepare notice of Board of Directors' meetings. The approval in the Board of Directors' meetings will be made by majority votes and one director has one vote. Interested director will not attend the meeting or refrain from voting on such agenda.

After the end of the meetings, the Company Secretary will prepare the minutes of the Board of Directors and submit it to the Chairman to sign and will propose it to next Board of Directors' meeting for certification. The directors may give their opinions on revision of the minutes of the Board of Directors' meetings in order that the details of the minutes will be accurate as much as possible.

The certified minutes of the meetings will be systematically kept as classified in electronic form for ease of searching.

**(5) Orientation of New Directors**

In performing duty of director, the director must understand the nature of business of the Company. Therefore, in case of change of directorship, the Company will arrange the orientation for a new director to have him/her understand the nature and guideline on business operation as a whole and will give the material information memorandum and corporate governance guideline necessary for performance by director of the duty. The Company Secretary will coordinate for such orientation.

**(6) Policy on Restriction on Number of Companies and Number of Terms of Director**

The Company has the policy for its directors to serve as director in other listed companies at no more than 5 companies without exception. All directors currently serve as director of no more than 5 listed companies.

Moreover, the Company has the policy that Chief Executive Officer shall not be a director in other companies in the same or similar type of business except related companies and/or subsidiaries to ensure that the Company will have no conflict of interest.

Independent directors can serve as directors of the Company for a period of no more than 9 consecutive years. The Board of Directors considers this policy is appropriate in respect of the performance by directors of duty as nomination of qualified directors is the time-consuming process.

## **(7) Evaluation of Performance of Board of Directors**

The Company provides for the annual self-evaluation of directors to jointly consider and conclude the performance for reviewing operation, problems and obstacles and seeking solutions. The Company set the guideline for evaluation of the Board of Directors as a whole pursuant to the evaluation guideline of the SET. The result of the evaluation will play an important role in developing the efficient performance of duty of the Board of Director. The evaluation form outlines the following topics.

1. Satisfaction regarding the following:
  - 1) Result of performance of the Board of Directors as a whole,
  - 2) Result of business operation of the Company, and
  - 3) Proceeding with solving the problem by the management.
2. Understanding on
  - 1) Role and Duty
  - 2) Company's Business and
  - 3) Company's Strategy
3. Good relationships between the Board of Directors and Management
4. Efficiency of subsidiary and committees
5. Sufficient and appropriate time allocation by the Board of Directors to consider the following issues:
  - 1) Policy and direction of the Company
  - 2) Business performance of the Company
  - 3) Solution in case of non-achievement
6. Preparation by the Board of Directors to attend the meeting
7. Independence of the Board of Directors in expressing the opinion
8. Neutral opinion of the Board of Directors
9. Opportunity and support given by the Chairman to every director to independently express his opinion
10. Opinion of the Board of Directors on investors' confidence to the Board of Directors
11. Acceptability among officers on corporate governance practice of the Company

The Company Secretary will provide the evaluation form to directors at the end of each year and will collect the same and report the summary to the Board of Directors for further consideration and discussion annually.

## **(8) Succession Plan**

The Company recognizes the importance of succession plan. The Company, therefore, prepared the succession plan to cover significant positions by selecting qualified persons to serve in such positions and arranging the training for readiness to serve such positions in the future and ensure that the Company will have knowledgeable and capable executive to succeed such significant positions in the future.

### (9) Risk Management

The Company will assign Risk Management Committee to be in charge of setting up a working group comprising the Company executives to jointly discuss and regularly evaluate the risk in the organization for inside and outside risks and set risk management measures. Working group will monitor the risks as identified with support from various divisions and report the result to Risk Management Committee for acknowledgement. Risk Management Committee will, subsequently, evaluate the efficiency in respect of risk management and report it to the Board of Directors at least once a year to identify the weakness and to adjust the policy with more efficiency.

## 7. Promoting of knowledge to directors, Member of Audit Committee, Executive, Secretary and Officers

- (1) The Company provides a policy to support Directors, Member of Audit Committee, Executive, Secretary and officer to participate training relating to governance system, business ethics. In order to improve working continually, especially, directors and company secretary so as to promote them to participate in training courses from IOD.
- (2) The Company provides the director manual as to support new director to perform his/her duties effectively.
- (3) The Company promotes to conduct the executive development plan which CEO shall report such plan to Board of Director annually.
- (4) In case that CEO or high level executive could not perform his duties or retiring and mitigation of risk and impact for business continuity. The Company provides training and development plan to executive so as to gain profound and experience, and readiness for working.

## 8. Code of Conducts

The Company has developed the Code of Business Ethics. As the guideline for the board, management and officers to understand the ethical measures that companies use in conducting business. The Company will follow frequently the Code of Business Conduct in compliance with the Code of Business Ethics. In addition, the Company's Code of Business Ethics has been published through the company's website as well.

## 9. Director's Remuneration

The Nomination and Remuneration Committee will consider remuneration for Board and sub-committee before propose to annual shareholder meeting for approval. The remuneration is in line with the market, industry, and information from the Stock Exchange of Thailand. For the remuneration of senior management and the Managing Director is the Executive Committee's authority of. Taking into account the internal rate, employment in the market labor, work effectiveness, performance, including the necessity of hiring to the Company. The aforementioned conditions are an appropriate complement to attract and retain qualified employees for the benefit of the Company.

## COMMITTEES

The Board of Directors set up the committees to perform the specific duties and to propose matters to the Board of Directors to consider or acknowledge and provided for the qualifications and scope of duties of committees as follows.

### 1. Executive Committee

Executive Committee consists of a group of persons of not less than 3 who are authorized by the Board of Directors to screen the business plan and budget the Company prior to submission to the Board of Directors and will coordinate with the management in undertaking the ordinary course of business in accordance with business plan and budget the Company.

### 2. Audit Committee

Audit Committee consists of 3 independent directors. All of them have the knowledge, understanding and experience. At least one member of the Committee must have accounting knowledge, expertise and experience. The Audit Committee will ensure that the Company has accurate and sufficient financial statements and appropriate and efficient internal control system. The Audit Committee has scheduled the meeting at least 4 times a year.

### 3. Risk Management Committee

Risk Management Committee consists of 3 persons with scope of authorities to study, review and evaluate associated risks and trend which may affect organization as well as inside and outsider risks of the Company and set the risk management policy and propose it to the Board of Directors.

### 4. Corporate Governance Committee

Corporate Governance Committee consists of 4 persons with scope of works to review, revise corporate governance policy to be proposed to the Board of Directors for consideration. The corporate government policy will be in line with the guidelines of the SET and the Office of the SEC.

### 5. Nomination and Remuneration Committee

Nomination and Remuneration Committee consists of 3 members with scope of authorities and responsibilities to nominate qualified persons to serve as directors and top executives and propose them to the Board of Directors or shareholders' meeting (as the case maybe) as well as proposing principles and guidelines to clearly, fairly and appropriately fix remuneration for directors, committee members and top executives in line with their responsibilities, to the Board of Directors for consideration. Nomination and Remuneration Committee has scheduled a meeting at least 2 times a year.

### 6. Company Secretary

The Board of Directors appointed Mr. Sirisak Kijraksa as the Company Secretary with scope of works to assist in preparing agenda of meetings and preparing notice of meeting, to take care of holding the Board of Directors' meetings and shareholders' meetings and keep documents as required by law and to arrange directors and the Company to fully and transparently disclose information memorandum. The Company Secretary is a person whom the Board of Directors is of the opinion that he is qualified to serve as the Company Secretary.

## NOMINATION OF DIRECTORS AND TOP EXECUTIVES

Nomination and Remuneration Committee consists of 3 members with scope of authorities and responsibilities to nominate qualified persons to serve as directors and top executives and propose them to the Board of Directors or shareholders' meeting (as the case maybe) as well as proposing principles and guidelines to clearly, fairly and appropriately fix remuneration for directors, committee members and top executives in line with their responsibilities, to the Board of Directors for consideration.

The appointment of new director shall be complied with Public Company Limited Act. The criteria of director nomination are follows:

- 1) The nominated director shall have knowledge, competency and experience of company business including professional and specific skill, education, age and gender
- 2) The nominated director shall have leadership, vision, ethic, good attitude to company as well as time to devote themselves to company
- 3) The nominated director shall not be in Black list from any organization including the securities and exchange commission or have been sentenced to any crime
- 4) In case of independent director, the nominated director shall be qualified with independent director qualification
- 5) To consider any other qualifications based on Board's structure and component and company's direction through transparent nomination process to build trust with shareholders

After nomination process, the Nomination and Remuneration Committee shall propose the nominated director to Board Meeting for appointment as required by law. In case of the appointment shall be approved by shareholder meeting. The Board shall be proposed to shareholder meeting for approval.

The Company has prescribed qualification of independent director who have well knowledge in Finance, Economic, Accounting, public administration and other field of businesses suitable as standard factors to safeguard benefit of the shareholders and others. Additionally, to have qualification according to such prescribed in regulation of SET and SEC.

## SUPERVISION OF THE SUBSIDIARIES AND ASSOCIATED COMPANIES' OPERATIONS

From 2015, the Company has prescribed the rules and guidelines requiring that nomination of persons to be the director in the subsidiaries and associated companies and the exercise of voting right at their shareholders' meetings require approval of the Board of Directors except for the following cases:

- (1) Agenda items to be adopted by the shareholders' meeting in accordance with the joint venture agreement to which the Company is a party.
- (2) Following regular agenda in the annual general meetings where the executive committee may consider on casting the vote:
  - To certify the minutes of the previous shareholders' meeting
  - To consider and approve the report of the board of directors and performance of the past year
  - To consider and approve the financial statement for the year.
  - To consider and approve the allocation of net profits for the legal reserve fund and payment of dividends
  - To elect new directors to replace the directors who are due to retire by rotation
  - To appoint the auditor for the year

In the case of the subsidiaries, the Company prescribes the rules stipulating that the persons appointed by the Company accurately and fully comply with the rules for execution of connected transactions, acquisition and disposal of assets, or execution of any other material transactions, and that they apply the rules related to disclosure of information and execution of the said transactions in the same manner as applying the Company's rules. They shall supervise the subsidiaries to ensure that they keep information and accounting records in such a way that makes it possible for the Company to verify and collect them in a timely manner for the purpose of preparing financial statements.

## USE OF INSIDER INFORMATION

The Board of Directors recognizes the importance of good corporate governance and for transparency and prevention of conflict of interest arising from use of insider information of the Company which has not been disclosed to the public, the Company set following policy:

- (1) Give knowledge to directors, executive and persons with position of accounting manager or financing manager or higher position on the duty to prepare and submit the report on holding of securities, their spouse and minor children to the Office of the SEC under Section 59 and penalty under Section 275 of the Securities and Exchange Act B.E. 2535.
- (2) Arrange directors or persons with position of accounting manager or financing manager or higher position to prepare and submit every report on holding of securities through Company Secretary prior to filing with the Office of the SEC. The report shall be prepared and filed within 30 days from appointment date of directors, executive, or within 3 business days from the date on which securities is purchased, sold, transferred or received the transfer of such securities.
- (3) Arrange directors or persons with position of accounting manager or financing manager or higher position to acknowledge the material inside information which affects the change of securities price and refrain from sale and purchase of securities of the Company during the period prior to disclosure of financial statement or financial status of the Company until such information has been disclosed to the public. The Company will inform in writing directors, executive including persons with position of accounting manager or financing manager or higher position to refrain from sale and purchase of securities of the Company. Such informing shall be made at least 30 days in advance prior to disclosure of information to the public and shall wait for at least 24 hours after disclosure of information to the public. The disclosure of material information to other persons is prohibited.
- (4) Disciplinary action will apply in case of breach of duty on using of insider information for personal benefit. It may be done by issuance of warning letter, deduction of wage, temporary suspension of work without payment, or termination of employment to the extent permitted by law, taking into account the intention and seriousness of such violation.

## THE SECURITY HOLDING OF THE COMPANY'S DIRECTORS

The Corporate Secretary collects the Security Holding of the Company's Directors including spouses or cohabiting couple and non-sui juris children proposing to the Board of Directors' Meeting quarterly.

The Summary of the Security Holding of the Company's Directors as of 2017 below:

NO.	DIRECTOR	SECURITIES	NO.OF SECURITIES HOLDING		
			AS OF 31 DECEMBER 2016	CHANGE DURING THE YEAR	AS OF 31 DECEMBER 2017
1.	Mr. Somyos Anantaprayon	Share Warrants Derivateives Contra	3,327,972,629 33,292,260 -	(159,627,801) (1,910,001) -	3,168,344,828 31,382,259 -
2.	Ms. Jareeporn Jarukomsakul	Share Warrants Derivateives Contra	3,439,531,315 34,234,254 -	(153,227,801) - -	3,286,303,514 34,234,254 -
3.	Mr. David Richard Nardone	Share Warrants Derivateives Contra	- - -	- - -	- - -
4.	Mr. Vivat Jiratikamsakul	Share Warrants Derivateives Contra	- - -	- - -	- - -
5.	Mr. Krailuck Aswachatroj	Share Warrants Derivateives Contra	- - -	- - -	- - -
6.	Mr. Jakrit Chaisanit	Share Warrants Derivateives Contra	82,979,996 727,878 -	(4,479,296) 900,000 -	78,500,000 1,627,878 -
7.	Mr. Narong Kritchanhai	Share Warrants Derivateives Contra	- - -	- - -	- - -
8.	Mr. Somsak Boonchoyreungchai	Share Warrants Derivateives Contra	2,060,310 23,557 -	- - -	2,060,310 23,557 -
9.	Mr. Arttavit Chalermasaphayakorn	Share Warrants Derivateives Contra	28,349,992 229,090 -	(23,076,500) (100,000) -	5,273,492 129,090 -



NO.	DIRECTOR	SECURITIES	NO.OF SECURITIES HOLDING		
			AS OF 31 DECEMBER 2016	CHANGE DURING THE YEAR	AS OF 31 DECEMBER 2017
10.	Dr. Apichai Boontharawara	Share	-	-	-
		Warrants	-	-	-
		Derivateives Contra	-	-	-
11.	Dr. Somsak Pratomsrimek	Share	-	-	-
		Warrants	-	-	-
		Derivateives Contra	-	-	-
12.	Dr. Kritsana Sukboonyasatit	Share	-	-	-
		Warrants	-	-	-
		Derivateives Contra	-	-	-
13.	Mr. Chanwit Amatamatuchart	Share	-	-	-
		Warrants	-	-	-
		Derivateives Contra	-	-	-

## AUDITOR'S FEE

In 2017, the Company and its subsidiaries paid compensation to the auditors and the audit firm that the auditors work for as an audit fee and non-audit fee as followed.

### 1. Audit Fee

The Company and its subsidiaries paid the auditors and the audit firm, PricewaterhouseCoopers ABAS Ltd., amounted to THB 15.90 mm.

### 2. Non-Audit Fees

Apart from the audit fee, the Company paid the fees to PricewaterhouseCoopers ABAS Ltd. for the review of tax exemption privileges form submitted to the Board of Investment (BOI) in order to obtain the tax benefit at the total amount of THB 0.21 mm.

## THE CONDUCT FOLLOW BY CORPORATE GOVERNANCE

The Corporate Governance Committee (CG Committee) has duties to consider, review, and revise Corporate Governance Policy every year for proposing to the Board of Directors' consideration and approval. While CG Committee being on the review process in accordance with CG Code year 2017 from The Securities and Exchange Commission, Thailand is for the purpose of CGR Assessment reference to ASEAN CG Scorecard leading to the global standard of sustainability development.

[ Management and Corporate Governance ]

## CORPORATE SOCIAL RESPONSIBILITIES: CSR



### OVERALL POLICIES

The Group of Companies has specified its operational policies on Corporate Social Responsibilities (CSR) towards the society, community, and environment in a sustainable manner through the process of disclosing “CSR In-Process” information that the Company is currently operating and organizing “CSR After-Process” activities, whereby the Company communicates through its annual reports, Code of Conduct, website, brochures, and newsletters, in order to let every stakeholders be informed about the Company’s vision, mission, and strategies about CSR towards the society and environment. The company has involved its CSR concepts into their business operations, both newly developed or current cooperative activities.

In 2016, WHA Group initiated the “Clean Water for Planet” project to improve water quality, while remaining focused on CSR activities that involve its primary businesses including industrial estates, utilities and energy, and property development. Since water is of utmost importance, it is necessary to raise awareness on the preservation of this natural resource. Daily life is greatly affected by the availability and quality of water. Through effective management, people living in neighboring communities can have access to clean and safe water.

In the same year, WHA Group jointly signed an MoU with Chulalongkorn University on wastewater management and wastewater treatment engineering project, for knowledge exchange. The MoU aims to support the development and training of future engineers by combining their classroom learning with practical experience in a real industrial environment -the Hemaraj industrial estates, which are part of the WHA Group. The ultimate goal is to help enhance the efficiency of wastewater management and treatment techniques to officials in Laem Chabang Municipality.

In 2017, the company signed a Memorandum of Understanding with Chulalongkorn University's Faculty of Engineering and the municipality of Laem Chabang to exchange knowledge in the field of wastewater management and treatment. This MoU, part of WHA Group's Clean Water for Planet CSR initiative, is a collaboration between WHA Corporation and Chulalongkorn University's Faculty of Engineering for practical training courses on wastewater management and treatment. This has been designed for the management and staff of the Municipality of Laem Chabang.

Furthermore, the company also signed a MoU with Pluak Daeng Sub-District Administrative Organization ("Pluak Daeng") in Rayong Province, for collaboration in the field of wastewater treatment. As part of WHA Group's Clean Water for Planet CSR initiative, this MoU agreement covers a pilot project for the construction of an eco-friendly wastewater treatment system for the community, through a Constructed Wetland in Pluak Daeng. WHA Group will provide the engineering and financing for the Constructed Wetland, with a capacity of 400 cubic meter per day. After the construction, WHA Group shoulder the expenses for the operation system and the engineering team to run it for one year.

WHA Group has also continued its CSR activities in education, society and environment.

**Education:** The company conducted several projects such as donations to improve local schools, youth scholarships, Adopt-A-School program, Art Camp at Hometown, Art Camp for Teachers, Drawing Contest, Art Camp Trip, Industrial Skill Training for Secondary School Students (for extended schools), Dual Vocational Training and Hemaraj Industrial Skill Cooperation Academy. These projects aim to develop human resources and enhance labor skills to meet the growing demand of Thailand's industries.

**Social care:** WHA Group provides free medical check-ups for residents through Mobile Medical Units. It also helps the youth by promoting sports through football competitions in its industrial estates and sponsorships of local soccer teams such as the Chonburi Football Club, the Rayong Football Club and Pluak Daeng Football Club. The company also provides career training and study tours for the local people, in line with the sufficiency economy philosophy promoted by the late King Bhumibol Adulyadej.

**Environment:** The company is committed to manage their operations in an eco-friendly environment integrating factories, warehouses and facilities with nature and the local communities, in accordance with global standards.

The company aims to incorporate CSR into any business, including the development of distribution centers, warehouses, and industrial estates, and services for public utility systems and real estate, such as implementing the policy of changing equipment in office buildings and warehouses to preserve the environment and reduce expenses in the long-term to create optimal benefits for the community and customers of the Group of Companies. Moreover, the Group of Companies also uses Public Participation 1 (PP1) and Public Participation 2 (PP2) policies, in which the Company meets with leaders of the communities nearby its industrial estates, to let the Company learn about the real needs of each community on the specific areas of help and support that each community requires. Since the communities' needs in each time duration varies, the Group of Companies meets regularly with the communities, whereby these said policies will respond to and help the communities continuously and specifically by addressing the real needs of the communities.

After starting the development of each project, the Group of Companies will ask the stakeholders' opinions regarding the project, namely the communities and related state agencies, at least once a year. Furthermore, the Group of Companies sets up a procedure to listen to complaints from the communities or stakeholders through detailed series of steps and channels to gather various feedback or complaints precisely.

Regarding its business operations or development of industrial estates, the Group of Companies has been focusing to incorporate CSR into the said processes, whereby the Group of Companies has used the ISO 14001:2004, ISO 9001:2008, and CSR DIW systems, which are under control of Department of Industrial Works, in all business operational processes in order to let stakeholders receive products and services that are of the highest quality and are environmentally-friendly.

Throughout the course of its business operations, the Group of Companies has always been fully aware of the importance in the development of society and environment alongside with business development. The Group of Companies has specified policies that will initiate various projects that will be beneficial to the society continuously. Hence, the Group of Companies has defined 8 policies about "Corporate Social Responsibilities" as follows;

**(1) Fair Business Operation**

Transparency in business undertaking is always the Group of Companies' priority, emphasizing prevention of transaction that could lead to conflict of interest. The company also imposes policies on employees to treat business partners, creditors, shareholders and customers fairly and without taking advantage in accordance with the Group of Companies' corporate governance policy.

**(2) Anti-corruption**

The Group of Companies implements policies to deal with corruption in all circumstances. These policies are incorporated in the anti-corruption policies and guidelines section of the corporate governance principles. In order to follow the policies, on 30 January 2014 the Company declared its intent to join the Thai private sector to participate in campaigns organized by the Thai Institute of Directors in collaboration with the Thai Chamber of Commerce, International Chamber of Commerce, Thai Listed Companies Association, and The Thai Bankers' Association to counter corruption.

**(3) Human Right**

The Group of Companies has in place human right policies and policies to counter violation of human rights in all circumstances. These policies are included in legal compliance and human right policies and guidelines section of the Group of Companies' corporate governance principles.

**(4) Fair Labor Treatment**

The Group of Companies gives equal opportunity to employees of all races, languages and genders. Every step in providing services is undertaken with honesty and transparency. The Group of Companies also strictly complies with the labor laws. This policy is provided in the section of employment treatment and guidelines and the employee safety and hygiene policies of the corporate governance principles.

**(5) Consumer Responsibility**

The Group of Companies establishes the policy that focuses on doing business and treating customers (also considered consumers) with honesty, adhering to the terms under contracts made with the customers and in compliance with the standards set by law. It has a policy to provide accurate and complete information on use of warehouse building to customers as well as emphasizing keeping of customer data and information. The Group of Companies implements the policy on customer treatment and includes it in the customer policies and treatment section of its corporate governance principles.

**(6) Environment**

The Group of Companies establishes the policy that supports activities that will promote quality of life, occupational hygiene and environment as well as maintaining work environment in such a way to ensure safety of employee health and property. Such policy is provided in the environmental policy section of the Group of Companies' corporate governance principles.

**(7) Community and Social Development**

The Group of Companies has the policy to support social activities on various occasions aiming at maximizing social and community benefit so as to help and promote sustainable quality of life of the youth and Thai society.

**(8) Innovation and Innovation Dissemination**

The Group of Companies has the policy that always focuses on design innovation of environmental friendly warehouses, ranging from energy saving, production of solar energy to environment care. It also implements the policy to educate customers and related agencies about and exchange knowledge of the use of building.

## OPERATIONS AND REPORT PREPARATION

### 1. Operations

In the operations process, the Group of Companies has planned and implemented the works, whereby the Group of Companies has created the Code of Conduct to become a tool for the committees, directors, and employees to fully aware of the business ethics that the Group of Companies has used to operate the business for thorough implementation.

#### Risk Assessment

The committee places great importance about risk management by specifying the Group of Companies to assess risk factors in its business operations regularly, including analyzing the impact that may occur from the risks, creating defensive measures or risk reduction, and report to the risk management committee and the Company committee consistently.

Moreover, the Group of Companies has incorporated its risk assessment policy into business operations, especially in the Company's product development. The Group of Companies continuously studies and assesses its products and services that could have a potential impact on customers, such as the project to improve rainwater drainage system in the Hemaraj Saraburi Industrial Land. The objective of this project is to improve the rainwater drainage and the flood protection system inside the estate to prevent and minimize the impact to clients in Hemaraj Saraburi Industrial Land. Hemaraj has engaged a consulting engineer to survey, analyze, and assess the risks, and propose recommendations to improve the rainwater drainage and the flood protection system. After the study result, Hemaraj has adopted the measures suggested and set up a team to ensure constant follow-up, examination and maintenance of the systems, and to record data that could help reduce risks of flooding and other disasters at the industrial land efficiently.

#### Procedures Definition

The Group of Companies also emphasizes on operation and procedure, defining the procedure guidelines, controlling the inspection, operating according to international standards, and preserving the environment for stakeholders, such as:

The Group of Companies focuses on innovation in designing warehouses that are environmentally-friendly to increase product efficiency and reduce energy consumption, such as designing warehouses that can utilize natural lighting more to reduce electricity usage inside the buildings, and designing warehouses by considering the air circulation from outdoor to indoor, which will help lower the temperature inside the building. In addition, the Group of Companies also manages the sewerage system inside the warehouses before releasing into wastewater pipe that will always work with maximum efficiency.

In the development of industrial estates, The company have set up the Environmental Monitoring and Control Center (ESIE) or E:mc<sup>2</sup> at Eastern Seaboard Industrial Estate (Rayong). It is considered the first center that was opened in an industrial estate, through the collaboration with the Industrial Estate Authority of Thailand, with the objective to report the information about the environment that is real-time, transparent, and can be inspected in 3 industrial estates e.g. Eastern Seaboard Industrial Estate (Rayong), Hemaraj Eastern Seaboard Industrial Estate, Hemaraj Chonburi Industrial Estate. The center is equipped with an automated water quality monitoring system and is a center to gather complaints through its website, whereby various communities can inspect all the time.

The Group of Companies initiated and has sold the solar PV rooftop energy to Metropolitan Electricity Authority and Provincial Electricity Authority since 2014. This project not only supports the energy conservation under the green energy concept but also provides utmost benefit to the customers as the solar cell will function as the heat insulator for roof of warehouses. Accordingly, the customers are able to preserve the goods quality and save the energy.

In addition, the Group of Companies also plans to prevent pollution in the long-term, since the Group of Companies foresees the importance in preventing pollution that may occur from the Company's business operations. The Group of Companies has specified long-term preventive measures against pollution, in which the preventive measures were generated from the Environment Impact Assessment (EIA) in various areas since prior to the start of operations, in order to expand perspectives and connect all impacts that occurred from business operations. These are then used to develop measures to prevent and reduce impact to the environment, and measures to monitor quality of the environment, whereby these various measures will cover all activities and effects that may happen from the project. However, consent from stakeholders and the Office of Natural Resources and Environmental Policy and Planning shall be received first, in order to start the operations. Moreover, Hemaraj Company has utilized the ISO 14001 Environmental Management System to manage the industrial estate, which will include a process for analyzing environmental issues that cover every activity, and can be used to define objectives, goals, and appropriate procedures to significantly prevent environmental issues. Furthermore, the system also includes monitoring of various processes and using the results to evaluate in environmental management.

The Group of Companies used measures in accordance to EIA as tools to control pollution that are created in the project, by which both the project and plants must conform to the EIA of each project. Examples of preventive measures against pollution include wastewater quality standards, criteria to release pollutants from plant chimneys, and measures for industrial waste management. In the case of emergency that can create pollution, the project has emergency plan and personnel to react to particular emergency situations, as well as restoration measures to bring the environment back to its normal conditions at the earliest.

### **Communication with Personnel and Employees**

The Group of Companies supports the work performance development of employees continuously and provides confidence in the quality of working life for employees, in order to build relationship with the organization. Apart from this, the Group of Companies also places importance to every employees regardless of which unit or department they are working in by creating good and safe working environment, paying remuneration that are suitable with the work, allow generous benefits, and source innovation and new technologies to support working alongside with environment preservation, such as;

The Group of Companies has replaced the conventional HID bulbs with T5 and/or LED lights. They save 2-3 time energy despite higher cost and they last longer.

The Group of Companies has implemented the royal project of the constructed wetland wastewater treatment system to use in its operations, then train the employees who are responsible for the environmental conservation of the Group of Companies and apply and transfer knowledge to people in the communities to create further value inside their communities.

The Group of Companies encourages employees to save energy and resources, for instance, turning off lights, air conditioners and electrical equipment during lunch time, reuse of the other side of paper, replacing 80-gram office paper with 70-gram office paper, printing only necessary documents, etc.

The Group of Companies also encourages the employees to participate in campaigns that aim to improve overall Thai society, such as promoting employees to participate in social activities organized by the Group of Companies, including the annual scholarships and support on school supplies to schools located in the areas that the Group of Companies invested in including 69 local schools, or more than 18,000 students. Furthermore, the the Group of Companies also helped communities during drought situations, in which the Group of Companies' Safety department is the key unit in providing water to various communities that face the drought crisis, or aiding communities during emergency periods. Moreover, the Group of Companies supports every employee to participate in tree-planting activities to preserve the environment inside the industrial estates and surrounding communities.

In addition, the Group of Companies has specified guidelines in communicating with employees in both formats of employee handbook and Code of Conduct while encouraged employees to anti-corruption, respect other people's rights, value intellectual properties and human rights.

### Monitoring

The Group of Companies promotes corporate transparency in every aspects of company operation, including all the CSR activities. All the projects have been closely investigated by the Group of Companies' executives and the Company's directors, from the budget proposal, the operation, to the end of the project, showcased the transparency of the company without any fraud.

## 2. Report Preparation Process

The Group of Companies is committed to publishing Corporate Social Responsibility report on its CSR activities that the Company is currently operating, considering all stakeholders, both internal and external, including shareholders, employees, customers, creditors, suppliers and competitors, environment and society, and government agencies.

Regarding the procedure or process of developing the industrial estates, the Group of Companies is required to issue regular reports according to the Environmental Impact Assessment (EIA) rules and submit these reports every 6 months to the Office of Natural Resources and Environmental Policy Planning, Ministry of Natural Resources and Environment.

### BUSINESS EFFECT ON CSR

In 2017, The Group of Companies emphasizes undertaking of business that supports and does not adversely affect society and environment. It has never been subject to investigation or challenged by any related government authorities into environmental matters or any acts that could affect the environment. However, the Group of Companies has defined measures to deal with environmental complaints, as follows:

- 1) In case of compliant request, the company will assemble related information and conduct a primary investigation
- 2) Once the investigation is completed, if the case is groundless, a detailed explanation will be provided through appropriate communication channels.
- 3) If the case is accurate and factual, but not related to the company, the complainant will be notified and a further investigation into the real cause will be launched
- 4) If the case is not related to the company, a meeting of the stakeholders shall be called in order to determine the causes and effects, and look for preventive measures and solutions. Results will be communicated to the complainant through appropriate communication channels.

### CSR AFTER-PROCESS ACTIVITIES

a) The Group of Companies believes that children are key social foundation. Good education in parallel with cultivation of ethics and morality will help communities and society exist in a sustainable way. For this reason, the Group of Companies decided to initiate the campaign, "WHA Campaign to Motivate Children and Youth Morality" aimed to support education to the community and underprivileged youth. To do so, the Company has allocate a part of its income as a budget to give scholarship to schools in the community, build libraries and donate teaching and learning equipment to needy schools, etc. The Group of Companies is determined to pursue the said campaign.

Among the notable CSR activities include "Adopt a School", a collaboration between The Group of Companies and The American Chamber of Commerce in Thailand (AMCHAM), initiated in 2005. The "Teacher Fellowship Program" has been one of the project created to support the shortage of teachers in Rayong and Chonburi area. Moreover, the initiative project of "Teacher English Camp 2017" is to improve English language skill to those 66 school teachers.





The Group of Companies in cooperation with private companies in Hemaraj's industrial estates and other partners, held its annual outreach project to support education for the youth for 20 consecutive years.



In 2017, The Group of Companies organized CSR activities as follows;

- The Group of Companies donated chairs for the school library and educational materials to the Khlong Bang Kasi School. The Group of Companies also hosted lunch and organized leisure activities for the young students, under the theme "Creating Dreams, Bringing Happiness".



- The Group of Companies distributed care packs to senior residents and donated medical equipment total 100 sets to Tasit Municipality in Rayong Province and other activities such as free health check-up and influenza vaccines to senior citizen, free eye exams and eye glasses and free health check up,





- The Group of Companies organized community visits to Eastern Seaboard Industrial Estate (Rayong) and Hemaraj Eastern Seaboard Industrial Estate to provide information, relay updates and share thoughts that could enhance mutual understanding. Leaders, representatives and villagers 140 people from 14 communities were invited for informal talks in terms of land development and industrial estate management. The company also explained how Hemaraj's strict factory supervision ensures that all manufacturing activities are done in compliance with the rules and regulations set by the Industrial Estate Authority of Thailand. This reassured community members that their industrial neighbors would not do anything to jeopardize their safety and health.



- The Group of Companies has organized annual CSR project for students through Art Camp since 2009. The objective is to develop the students' interest in the arts so they can use their creativity and imagination in a positive way. Since the first workshop, the Art Camp has continuously provided basic principles and knowledge about arts to help enhance students' skills in arts. To date, 4,309 students have participated in the Hemaraj Art Camp. The Group of Companies also initiated the "Art Camp for Teachers" program. The objective is to equip primary teachers with basic knowledge of art, which can be applied in their teachings. The program has produced 196 teachers who are able to deliver knowledge of art to students.

b) The company is always aware that the preservation of religion and inheritance of moral traditions have importance that is no less than activities in other areas. In order to build sustainable development for the organization, society, and surrounding communities, the Group of Companies thus created a policy to promote various activities that are supportive of Buddhism religion and cultural arts, such as merit-making during important religious days, ceremony of presenting robes to Buddhist monks at the end of Buddhist Lent, as well as supporting in terms of budget for restoration of religious places.

c) The Group of Companies has placed importance with every group of stakeholders and consider it as a policy to aid others when emergency situations occur to various organizations, being the public or private sectors, as well as providing support in terms of manpower and finance to operate various charitable activities as appropriate.

#### ANTI-CORRUPTION

The Group of Companies has the policy to take all measures to counter corruption and ensure that its business operates in a lawful manner. Therefore, an anti-corruption policy has been in place and is included in the anti-corruption policy and guideline section of the corporate governance principles.

## INTERNAL CONTROL AND RISK MANAGEMENT

The Company realized the importance of the continuous internal control system; therefore, aimed at applying the sufficient and suitable internal control system in order to enhance the efficiency of the operation and to protect the properties and to ensure that the accounting system and the financial statements are accurate and credible in compliance with the laws, regulations, and rules relating to the business operation of the Company. The Board of Directors assigned the Audit Committee to review the evaluation result of internal control and the risk management on annual basis. The Company acted in compliance with the principle of good governance to ensure transparency and to prevent the use of Company's inside information that has not be publicized to seek personal benefits

In the Audit Committee's meeting no. 1/2018 on 20 February 2018, the Audit Committee evaluated the sufficiency of the internal control system for 2017 in accordance with the evaluation form prescribed by the Securities and Exchange Commission, covering five dimensions which are control environment, risk assessment, control activities, information and communication, and monitoring activities. After putting questions to the executives and internal auditors, the Audit Committee concluded that the Company's key internal control measures, which covered the operation, risk management, and supervision by the Board of Directors and the Executive Committee, are sufficient and suitable without any significant flaws. Additionally, the internal control system for the subsidiary companies was also sufficient, that is, it could protect the properties of the Company and its subsidiary companies from being wrongfully exploited by an executive or a director and also prevent the conflict of interests.

In 2017 the Company assigned Dharmniti Internal Audit Co., Ltd. to conduct the internal audit and appointed their President, Mr. Saksri Amphawan, as a head of internal audit of the Company. The Audit Committee considered that Dharmniti Internal Audit Co., Ltd. and Mr. Saksri Amphawan were suitable for the internal audit because of their independency and experience in conducting internal audit for other companies in the same business and industry as the Company.

Moreover, the Company appointed Pricewaterhousecoopers ABAS Ltd. as the auditor of the Company and its subsidiary companies for 2017. After conducting inspection and evaluation on the accounting internal audit system in accordance with the general accounting standard, the auditor informed the Audit Committee that there was no observation from the auditing in 2017.



## CONNECTED TRANSACTIONS

Connected transactions of the Company and its subsidiaries with persons who may have conflict of interests in 2017

PERSON/ENTITY WHO MAY HAVE CONFLICT OF INTERESTS	RELATIONSHIP	TYPE OF CONNECTED TRANSACTION	TRANSACTION AMOUNT (THB THOUSAND)	NECESSITY AND APPROPRIATENESS OF TRANSACTION	AUDIT COMMITTEE'S OPINION
FOR THE FISCAL YEAR ENDED OF 31 DEC 2017					
■ S&J Holding Co., Ltd.	<p>■ Having common major shareholders with the Company whereas:</p> <ul style="list-style-type: none"> <li>• Mr. Somyos Anantaprayoon holds 52.50 percent of shares in S&amp;J Holding Co., Ltd.</li> <li>• Ms. Jareeporn Jarukornsakul holds 42.50 percent of shares in S&amp;J Holding Co., Ltd</li> </ul> <p>■ Having common director with the Company, namely Mr. Somyos Anantaprayoon.</p>	<p>■ Office-service-fee charged to the Company and its subsidiaries.</p>	10,821.69	<p>■ The Company acquired the service for use of building space owned by S&amp;J Holding Co., Ltd. as an office under the 3-year service agreement commencing from 1 January 2015 to 30 June 2016 at the rate of THB 870,171.50 per month (excluding VAT) and from 1 July 2016 to 31 December 2017 at a rate of THB 768,971.50 per month (excluding VAT). The service fee was charged at the rate of THB 275 per sq.m., which has been increased by 10 percent from the rate in the previous contract. Such rate was comparable to the rental rate for the area nearby.</p> <p>■ WHA Real Estate Management Co., Ltd. acquired the service for use of building space from S&amp;J Holding Co., Ltd. as office under the service agreement for 3 years from 1 January 2015 to 31 December 2017 at a rate of THB 31,636.00 per month (excluding VAT). This amount was charged for the service area of 115.04 square meters at the service charged rate of THB 275 per square meter, which has been increased by 10 percent from the rate in the previous contract ended 31 December 2014. This rate is comparable to the rate charged to area nearby</p>	<p>■ It was deemed appropriate to enter into the transaction in order to support the Company business. The service fee in 2017 was comparable to the market rate.</p>

PERSON/ENTITY WHO MAY HAVE CONFLICT OF INTERESTS	RELATIONSHIP	TYPE OF CONNECTED TRANSACTION	TRANSACTION AMOUNT (THB THOUSAND)	NECESSITY AND APPROPRIATENESS OF TRANSACTION		AUDIT COMMITTEE'S OPINION
				FOR THE FISCAL YEAR ENDED OF 31 DEC 2017		
■ RL Counsel Co., Ltd.	■ Mr. Narong Kritchanchai is a director and an executive of the Company (has been appointed as an executive since 24 February 2016) ■ Mr. Narong Kritchanchai holds 33.3% of the shares in RL Counsel Co., Ltd. (as of 31 December 2017), and is the director of RL Counsel Co., Ltd.	■ Legal counselor fee for the Company and its subsidiaries  Accrued expenses	6,563.25  1,421.52	■ WHA Infonite Co., Ltd. acquired the service for use of building space from S&J Holding Co., Ltd. as office under the service agreement for 1 year 6 months from 1 July 2016 to 31 December 2017 at a rate of THB 101,200 per month (excluding VAT). This amount was charged for the service area of approximately 368 square meters, translating into the service fee rate of THB 275 per square meter, which is comparable to the rate charged to area nearby	■ It was deemed appropriate to enter into the transaction in order to support the Company and its subsidiaries' business and the transaction complied with the normal business practice. ■ The fee as well as its commercial terms and conditions were reasonable. ■ The fee was comparable to and did not exceed the market rate.	
				■ Due to substantial amount of complicated legal transactions of the Company and its subsidiaries which require specialized lawyers; however, with just a few legal officers in the Company along with the limited experience and expertise, the Company and its subsidiaries have engaged to external legal consultant in providing legal advice on various matters to the Company and its subsidiaries, as well as to review documents and agreements relating to their business operation. The legal counselor fee charged was in the range of THB 2,000 - 4,000 per hour (in 2017) which was not higher than the market rate.		

## Necessity and Rationality of the Connected Transactions

The Audit Committee's meeting no. 1/2018 held on 20 February 2018 has considered the connected transactions for the fiscal year ended 31 December 2017, together with the information interviewed from the management of the Company and its subsidiaries, persons and entities who may have conflict of interests for the fiscal year ended 31 December 2017, as well as the review of the auditor's notes to financial statements. It has viewed that the connected transactions of the Company and its subsidiaries with persons or entities who may have conflict of interests for the fiscal year ended on 31 December 2017 were reasonable and was for the ultimate benefit of the Company. In addition, such connected transactions were in accordance with the normal business terms and practices and were conducted as normal business operation of the Company where there was no transfer of benefit between the Company and persons or entities who may have conflict of interests. They were also conducted in same manner as the normal person would have done with its counterparty in the same circumstance at an arm's length basis without influence from a party who might be a person having conflict of interests (Arm's Length Basis).

## Policy and Procedure for Approval of the Connected Transactions

The Meeting of the Board of Directors No. 1/2012 held on 25 May 2012 set the policy and procedures for entering into connected transactions to ensure transparency of the transactions between persons or juristic persons who may have the conflict of interests and to protect the benefits of the Company. The policy and procedure can be summarized as follows.

The connected transactions or related transactions of the Company and its subsidiaries were to be in compliance with the principle of the SEC Act and the notifications of the Capital Market Supervisory Board No. TorJor. 21/2551 Re: Rules for Entering into Related Party Transactions and the Notification of the Securities and Exchange Commission Re: Disclosure of information and Other Acts of Listed Companies Concerning to the Connected Transactions including other relevant regulations of the SEC and the SET as well as to be in compliance with the disclosure of the connected transactions in the auditor's notes in the financial statement audited by the Company's auditor and in the annual registration statement (56-1).

For the case of the connected transactions of the Company and its subsidiaries with persons or entities who have conflict of interests or may have a conflict of interest in the future, the Audit Committee shall opine on the necessity for entering into the transaction and the appropriateness of transaction price by taking into account the conditions to be in compliance with the normal business operation in the industry and to compare with the third party's or the market price. If the Audit Committee does not have expertise to determine the potential connected transactions, the Company will arrange for an independent advisor or the Company's auditor to opine on such connected transactions for consideration of the Board of Directors, the Audit Committee, or the shareholders, as the case may be. To such extent, the director who has a conflict of interest shall not have a right to vote on such transaction. The connected transactions shall be disclosed in the notes to the financial statements audited or reviewed by the Company's auditor.

## Policy or Tendency for Connected Transaction in the Future

The Company may enter into connected transactions in the future as deemed appropriate by complying with the Securities and Exchange Commission Acts, rules, notification, order or requirements of the Securities and Exchange Commission and the Stock Exchange of Thailand, as well as accounting standards Re: disclosure of information in relation to related persons or activities as prescribed by the Federation of Accounting Professions.

In the case where the transaction normally occurs and will continually occur in the future, the Company sets the criteria and guidelines to be in accordance with the normal business by referring to the appropriate, fair, reasonable and transparent prices and conditions, and then proposes to the Audit Committee to consider and approve such criteria and guidelines.

However, to enter into connected transactions, the Company will assign the Audit Committee to opine for the appropriateness of such transactions. If the Audit Committee has no expertise on considering such connected transactions, the Company will arrange for an expertise who have specialized knowledge and proficiency on the transaction such as independent auditor or asset appraiser to opine on the connected transactions. Those comments of the Audit Committee or the experts will be considered by the Board of Directors or the shareholders, as the case may be, to ensure that such transactions will not be migrated or transferred of benefit between the Company and its shareholders, but will be for the ultimate benefit of all shareholders.



# REPORT OF THE AUDIT COMMITTEE

## TO THE SHAREHOLDERS

WHA CORPORATION PUBLIC COMPANY LIMITED

As of 20 February 2018, The Audit Committee comprises the 3 honorable and independent members, namely Mr. Apichai Boontherawara, the Chairman of the Audit Committee, Mrs. Kritsana Sukboonyasatit and Mr. Somsak Pratomsrimek, the Audit Committee. The Audit Committee has sufficient knowledge and experience in reviewing the reliability of financial statements.

In 2017, there were four Audit Committee meetings. The Audit Committee consulted with the Chairman, the Directors, the Management, the auditor, and the Internal Auditor in many occasions as appropriate, and gave independent opinion and suggestion. The Audit Committee had reported its resolution of those meetings as concluded on the following matters:

### Accuracy, Completeness and Reliability of Financial Report

The Audit Committee reviewed both quarterly and annual financial reports, significant accounting policy, and sufficiency of information disclosure, including jointly considered with the Management and the auditor the auditing plan, method and identified issues. The Audit Committee viewed that the Company's financial reports were prepared in compliance with the generally accepted accounting principles, accurate, relevance with the decision, and faithful representation, as well as the accounting policies were properly selected to reflect the Company's operating performance and the financial position.

### The adequacy of internal controls, risk management and good corporate governance

The Audit Committee reviewed the reports of the internal auditor and the auditor on the evaluation of the internal controls, risk management and good corporate governance, including gave comments on improvement of the operations as a result of the said reports. The Audit Committee viewed that the Company's internal controls were adequate and appropriate supporting the Company's sustainable growth.

The Audit Committee reviewed the annual internal auditing program which was prepared in accordance with the Risk-Based Audit Plan that focused on auditing to identify the high impact risk in the business operations, as well as gave helpful suggestions to manage the risk at the acceptable level. The Audit Committee always consulted with the internal auditor without the management, and viewed that the internal audit was independent and appropriate.

### Oversight of Anti-Corruption

The Company has been certified its membership by the Thailand's Private Sector Collective Action Coalition Against Corruption (Thai CAC) on 18 August 2017. The Audit Committee is responsible for supervising the Company's operation to be in line with the Anti-Corruption Policy. The Internal Audit Department is assigned to assess the risks associated with corruption, establishing criteria and measures to reduce the risk of corruption, as well as extending the scope of practice to customers and partners, such as the establishment of guidelines for the abstention of gifts.

## **Compliance with the Securities and Exchange laws, regulations of the Stock Exchange of Thailand, and laws related to the Company's business**

The Audit Committee reviewed the compliance with the Securities and Exchange laws, regulations of the Stock Exchange of Thailand, and laws related to real estate business and industrial estate business which is the Company's core business, as well as evaluated the Management's compliance with legal requirements on a regular basis. The Audit Committee viewed that the Company conducted in compliance with the Securities and Exchange laws, regulations of the Stock Exchange of Thailand, and laws related to the Company's business properly.

## **Transactions which may cause conflict of interests**

The Audit Committee paid significant attention on considering the transactions that might cause conflict of interest in order to comply with the regulations of the Stock Exchange of Thailand, as well as the relevant accounting standard in every quarter. The Audit Committee assigned the internal audit to review the compliance and reported to the Audit Committee, including evaluated the connected transactions as disclosed in the auditor's notes in the financial statements in every quarter. The Audit Committee had the opinion that the connected transactions considered were the transactions in normal business having commercially ordinary conditions that were reasonable, fair and of optimized benefit to the Company.

## **Appropriateness, selection, and appointment of the auditor**

The Audit Committee evaluated the independence and performance of the auditor for the year 2017 and it concluded that the performance in overall was at the satisfied level with sufficient independence.

According the company has compared the audit fee last year, on selection and appointment of the audit for 2018, The Audit Committee considered the performance, scope of service, and volume of transactions compared with the audit fee in 2018 proposed by the auditor, and agreed to propose to the Board of Directors to appoint Mr. Chanchai Chaiprasit, Certified Public Accountant Registration number 3760, or Mr. Pisit Thangtanagul, Certified Public Accountant Registration number 4095, or Miss Nopanuch Apichatsatien, Certified Public Accountant Registration number 5266, on behalf of PricewaterhouseCoopers ABAS Ltd. to be the auditor of the Company and its subsidiaries for 2018.

## **Overall opinion and remark of the Audit Committee**

The Audit Committee evaluated self-performance by evaluating the committee as a whole in 2017 in 2 parts; the overall performance of the Audit Committee, and the specific performance of the Audit Committee in the 6 areas, i.e. 1) reviewing for the completeness and sufficiency of the Company's financial reports; 2) reviewing for efficiency and effectiveness of the Company's internal controls and Internal audit; 3) reviewing for the Company's compliance with the Securities and Exchange laws, regulations of the Stock Exchange of Thailand, and relevant law; 4) selecting and proposing to appoint the auditor; 5) considering the connected transactions; and 6) preparing the report of the Audit Committee. The Audit Committee viewed in overall that it performed sufficiently and completely.

On behalf of Audit Committee



**Mr. Apichai Boontharawara**

Chairman of the Audit Committee

# MANAGEMENT DISCUSSION AND ANALYSIS (MD&A)

## OVERALL 2017 FINANCIAL PERFORMANCE

CONSOLIDATED FINANCIAL STATEMENTS	2016	2017	INCREASE/(DECREASE)	
	THB MM	THB MM	THB MM	%
Total Revenue <sup>/1</sup>	19,325.0	12,410.0	(6,915.0)	(35.8%)
Total Cost	11,414.6	5,001.5	(6,413.1)	(56.2%)
Gross Profit <sup>/2</sup>	7,446.9	6,475.5	(971.4)	(13.0%)
Net Profit	2,898.2	3,266.4	368.3	12.7%

<sup>/1</sup> Including other income and share of profit from investments in associates and JVs

<sup>/2</sup> Gross profit including share of profit from investments in associates and JVs

During 2017, the Company reported the record-high net profit of THB 3,266.4 mm, which increased by THB 368.3 mm or 12.7%, compared to the same period of last year.

## KEY HIGHLIGHTS

- The growth of gross profit was 87.0% y-o-y mainly attributable to the higher revenue from industrial land sale and improved profitability from 36.1% to 51.1%. The significant improvement of such GPM was as a result of the increase in land sale price.
- The gross profit margin from the asset monetization to WHART increase from 25.2% to 44.7% due mainly to the fact that WHART solely used the debt funding from financial institution which is deemed lower cost of fund compared to the fund raised from investors to acquire the asset from the Company.
- Share of profit from associates and joint ventures increased by 95.1% because there have been a completion of COD of 4 SPPs in this year i.e. Gulf VTP achieved on schedule the second quarter of 2017, Gulf TS1 and Gulf TS2 in the third quarter of 2017 and Gulf TS3 in the last quarter of this year, adding our Equity MW under operation, at the end of 2017, to 478.4 MW from 349.6 as the end of last year. There has also been full-year recognition of Bowin Clean Energy's performance which achieved COD in late 2016.
- Financial costs decreased by 33.5%, mainly from the fact that the Company has repaid the loan since late last year until this year as well as refinancing of the loan with lower financial cost.
- Completion of WHAUP's listing to Stock Exchange of Thailand (SET) by Initial Public Offering (IPO) in the second quarter of 2017.
- TRIS rating announced the company rating of WHA at "A-" with "Stable" outlook in the fourth quarter in 2017.
- Successful conversion of WHAPF to WHART in the fourth quarter of 2017.

## PERFORMANCE BY BUSINESS

### Rental Properties Business

	2016	2017	INCREASE/(DECREASE)	
	THB MM	THB MM	THB MM	%
Rental Revenue	1,688.7	1,148.3	(540.4)	(32.0%)
Gross Profit	1,143.5	650.4	(493.1)	(43.1%)
Gross Profit Margin	67.7%	56.6%		
GPM before adjustment with PPA	69.0%	57.5%		
Revenue from Sale of Investment Properties	11,737.2	3,079.3	(8,657.8)	(73.8%)
Gross Profit	3,617.9	1,310.9	(2,307.0)	(63.8%)
Gross Profit Margin	30.8%	42.6%		
GPM before adjustment with PPA	45.3%	44.2%		

#### 1. Rental and Service Income

- Rental and service income from warehouses, distribution centers and factories during the year of 2017 was THB 1,148.3 mm, which decreased by THB 540.4 mm or 32.0% from the same period of previous year. The main reason was due to the large number of assets monetization to HREIT and WHART last year, thereby reducing the leasable area.
- Gross profit from rental and service of warehouses, distribution centers and factories during the year of 2017 was THB 650.4 mm, which decreased by THB 493.1 mm or 43.1% from the same period of last year because of the decrease in leasable area from assets monetization to WHART and HREIT in the end of 2016. Moreover, the gross profit margin in the third quarter of 2017 was 56.6%. This gross margin had accounted for the fair value adjustment of the acquired business according to the accounting standards under WHA level. However, the genuine gross margin in 2017 was at 57.5% for the warehouse rental and service business which decreased from 69.0% last year, mainly due to change in product mix between Built-to-Suit and Ready-built facilities.

#### 2. Sale of Investment Properties

- Income from sale of investment properties during the year of 2017 was THB 3,079.3 mm, which decreased by 8,657.8 mm or 73.8%, compared to the same period of last year, mainly resulting from the asset monetization to only WHART, totaling rental area of approx. 85,867 sq.m., compared to 2016, which the Company monetized assets to both WHART and HREIT, totaling rental area of approx. 420,455 sq.m.
- Gross profit from sale of investment properties during the year of 2017 was THB 1,310.9 mm, which decreased by THB 2,307.0 mm or 63.8%, compared to the same period of previous year, mainly due to the decrease of income from sale of investment properties. Nonetheless the gross profit margin has improved from 30.8% last year to 42.6% this year, resulting from improvement of GPM from asset monetization to WHART from 25.2% to 44.7% due mainly to the fact that WHART solely used the debt funding from financial institution which is deemed lower cost of fund compared to the fund raised from investors to acquire the asset from the Company.

## Industrial Development Business

	2016	2017	INCREASE/(DECREASE)	
	THB MM	THB MM	THB MM	%
Revenue	2,425.5	3,210.8	785.3	32.4%
Gross Profit	876.7	1,639.9	763.2	87.0%
Gross Profit Margin	36.1%	51.1%		
GPM before adjustment with PPA	49.3%	56.6%		

**Income from sales of real estate** during the year of 2017 stood at THB 3,210.8 mm, which increased by THB 785.3 mm or 32.4% from the same period of last year as the result of higher land transfer in 2017, compared to last year.

**Gross profit from sale of real estate** stood at THB 1,639.9 mm during the year of 2017, which increased by THB 763.2 mm or 87.0% from the same period of previous year. The main reason was increase in revenue as well as improvement of gross profit margin, which was 51.1% in 2017. Moreover this gross margin had accounted for the fair value adjustment of the acquired business according to the accounting standards under WHA level. However, the genuine gross margin in 2017 was at 56.6%, compared to 49.3% in the same period of previous year. This was from higher average selling price and having gross margin for land transfer in this year.

## Utilities & Power Business

	2016	2017	INCREASE/(DECREASE)	
	THB MM	THB MM	THB MM	%
Revenue	2,004.0	2,075.2	71.2	3.6%
Gross Profit	802.6	910.9	108.3	13.5%
Gross Profit Margin	40.1%	43.9%		
GPM before adjustment with PPA	43.5%	47.2%		
Share of Profit from Investments in Power Associates	961.9	1,926.5	964.5	100.3%

**Utilities income** during the year of 2017 was THB 2,075.2 mm, which increased by THB 71.2 mm or 3.6%, compared to the same period of last year. If excluding the one-time excessive charge considered as one-off item, the utilities income still increased significantly from THB 1,788.2 mm last year to THB 1,939.1 mm in this year, which increased by THB 150.8 mm or 8.4%, compared to the same period of previous year. This was mainly from higher water demand from completion of COD of 5 SPPs since the fourth quarter of last year until this year.

**Gross profit from utilities services** was THB 910.9 mm during 2017, which increased by THB 108.3 mm or 13.5% from the same period of last year. Moreover, the gross profit margin in 2017 was 43.9%. This gross margin had accounted for the fair value adjustment of the acquired business according to the accounting standards under WHA level. However, the genuine gross margin in 2017 was at 47.2% for the utilities business which increased from 43.5% last year, resulting from change in product mix between industrial/processing water and raw water.

**Share of Profit from Investments in Associates from Power Business** during the year of 2017 was THB 1,926.5 mm, which increased by THB 964.5 mm or 100.3%, compared to the same period of last year, arising from a completion of COD of 4 SPPs in this year i.e. Gulf VTP achieved on schedule the second quarter of 2017, Gulf TS1 and Gulf TS2 in the third quarter of 2017 and Gulf TS3 in the last quarter of this year, adding our Equity MW under operation, as the end of 2017, to 478.4 MW from 349.6 as the end of last year. There has also been full-year recognition of Bowin Clean Energy's performance which achieved COD in late 2016.

## Other Income

	2016	2017	INCREASE/(DECREASE)	
	THB MM	THB MM	THB MM	%
Dividend and Management income	259.9	471.6	211.6	81.4%
Others	203.5	461.3	257.9	126.7%
Total other income	463.4	932.9	469.5	101.3%

**Other income** in 2017 stood at THB 932.9 mm, which increased by THB 469.5 mm or 101.3% from the same period of last year. The breakdowns are the details below:

- **Dividend and management income** in the year of 2017 was THB 471.6 mm, which increased by THB 211.6 mm or 81.4% from the same period of 2016. This was as the results of the increase in acquisition fees from conversion of WHAPF to WHART in the fourth quarter of 2017 as well as the increase in dividend received from investment in REITs and REIT management fee, in tandem with the growth in asset size.
- **Other income** in the year of 2017 stood at THB 461.3 mm, which increased by THB 257.9 mm or 126.7%, compared to the same period of the previous year as a result of right of way charged in industrial estates totaling of THB 208.7 mm in the third quarter of this year.

## Expenses analysis

	2016	2017	INCREASE/(DECREASE)	
	THB MM	THB MM	THB MM	%
Selling expense	223.4	317.2	93.8	42.0%
Administrative expense	1,271.9	1,385.2	113.3	8.9%
Finance costs	2,432.2	1,616.5	(815.6)	(33.5%)
Total expense	3,927.4	3,318.9	(608.5)	(15.5%)

**Selling expense** in 2017 stood at THB 317.2 mm, which increased by THB 93.8 mm or 42.0% from the same period of last year, mainly due to the higher land transfer. The selling expense includes the expense associated with the land sale including the transaction costs and taxes from land transfer as well as the marketing and promotion expenses.

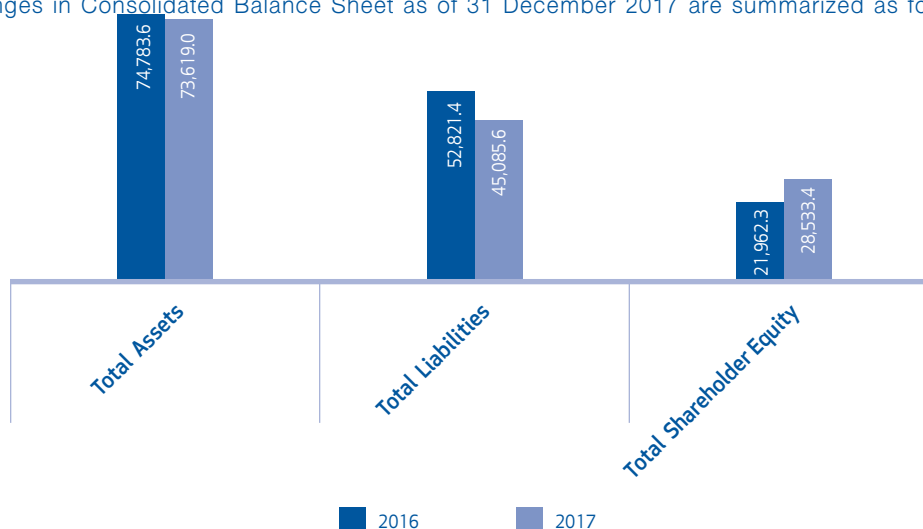
- Administrative expense in 2017 stood at THB 1,385.2 mm, which increased by THB 113.3 mm or 8.9% from the same period of last year, mainly due to increase in salary, resulting from increase in the number of staff to serve the business expansion.

- The finance costs in 2017 was THB 1,616.5 mm, which decreased by THB 815.6 mm or 33.5% from the same period of previous year, because the Company has repaid the loan since late last year until this year as well as refinancing of the loan with lower financial cost.

## FINANCIAL POSITION

Unit : THB mm

The changes in Consolidated Balance Sheet as of 31 December 2017 are summarized as follows.



## ASSETS

As of 31 December 2017, the Company had total assets of THB 73,619.0 mm, which decreased by THB 1,164.7 mm from THB 74,783.6 mm as of 31 December 2016. The main reasons are as follows:

1. Decrease in short-term investments of THB 1,539.6 mm, which was mainly from the Company divested some investment units to repay loan from financial institutions and debentures.
2. Decrease in short-term loans to related parties of THB 401.1 mm, mainly from the loan repayment from the joint venture.
3. Decrease in cost of real estate development (net) of THB 908.1 mm, due to land transfer during this year. Nonetheless the Company has further developed in the industrial land during this period as well.
4. Increase in investments in associates of THB 2,411.5 mm due to raising of share of profit from investments in associates and capital increase in associates proportionately.
5. Increase in investments in joint ventures of THB 168.3 mm, due to capital increase in joint ventures proportionately.
6. Increase in properties, plants and equipment of THB 553.5 mm, mainly from increase in assets from data center business during this year, amounting to THB 304.6 mm.
7. Decrease in investment properties (net) of THB 1,603.6 mm, resulting from assets monetization to WHART in the fourth quarter of 2017. Moreover the reclassification of assets, totaling 21 units of Ready-Built Factories and Warehouses, will be monetized to HREIT as well as the reclassification of a project, which will be sold to our customer in the first quarter of 2018. Nonetheless the Company has invested more in the investment properties during this period as well.
8. Increase in non-current assets held for sale of THB 835.2 mm due to the reclassification of assets, which will be sold HREIT and our customer as mentioned above.



## LIABILITIES

As of 31 December 2017, the Company had total liabilities of THB 45,085.6 mm, which decreased by THB 7,735.8 mm from THB 52,821.4 mm as of 31 December 2016. Furthermore, if considering the interest-bearing debt, it amounted THB 34,398.5 mm, decreased by THB 7,596.6 mm from THB 41,995.1 mm. The main reasons are as follows:

1. Decrease in short-term loans from financial institutions of THB 1,864.7 mm, mainly due to short-term loan repayment of THB 2,500 mm during this year, however the Company has issued B/E and P/N (net) totaling of THB 640.0 mm.
2. Long-term financial institutions loans repayment (net) of THB 6,484.5 mm, resulting from loan repayment of THB 2,500 mm by using WHAUP's IPO proceeds. Moreover WHAUP has issued debenture, totaling of THB 4,000 mm, which has lower interest rate, to re-finance long-term loan as well.
3. Decrease in trade and other payables of THB 456.8 mm, mainly due to decrease in income received in advance.
4. Increase in debentures (net) of THB 752.7 mm. Because during this year the Company has issued debenture, totaling of THB 6,600.0 mm. However the Company has also repaid some debentures as well.
5. Increase in liabilities related directly to non-current assets held for sale of THB 32.3 mm, mainly from the reclassification of liabilities to synchronize with the reclassification of the assets as mentioned above.
6. Decrease in deposits from long-term lease agreement of THB 35.8 mm. This was mainly caused from the deposits which have transfer to WHART as assets monetization. Moreover the reclassification of liabilities to synchronize with the reclassification of the assets as mentioned above. However there was a bit increase in deposits from long-term lease agreement as a result of the new contracts that the Company has secured during this period.

## SHAREHOLDER'S EQUITY

As of 31 December 2017, the Company had total shareholder's equity of THB 28,533.4 mm, which increased by THB 6,571.1 mm from THB 21,962.3 mm as of 31 December 2016, mainly from increase in non-controlling interest in WHAUP after its IPO.

## CASH FLOW ANALYSIS

	2016 THB MM	2017 THB MM
Net cash generated (used in) from operating activities	(1,581.3)	1,760.6
Net cash generated (used in) from investing activities	10,167.5	2,144.2
Net cash generated (used in) from financing activities	(8,491.2)	(4,596.6)
Net increase in cash and cash equivalents	95.0	(691.9)
Cash and cash equivalents - ending balance	2,635.4	1,919.7

### 1. Cash flows from operating activities

The Company had cash inflows (outflows) from operating activities during the year of 2017 was THB 1,760.6 mm which increased by THB 3,342.0 mm, compared to same period of last year, mainly from decrease in financial costs and increase in normal profit before tax expense.

## 2. Cash flows from investing activities

The Company had cash inflows (outflows) from investing activities during the year of 2017 stood at THB 2,144.2 mm, which decreased by THB 8,023.4 mm, compared to same period of last year, mainly from decrease in net proceeds from assets monetization to WHART. Because there has been asset monetization to only WHART, totaling rental area of approx. 85,867 sq.m., compared to the year of 2016, having asset monetization to both WHART and HREIT, totaling rental area of approx. 420,455 sq.m.

## 3. Cash flows from financing activities

The Company had cash inflows (outflows) from financing activities during the year of 2017 was THB (4,596.6) mm, which increased by THB 3,894.6 mm, compared to same period of last year, mainly resulting from the proceeds from WHAUP's listing by initial public offering (IPO), however the Company has repaid the short-term loan, long-term loan and debentures repayment as well as cash dividend payment.

### KEY INFLUENTIAL FACTORES EFFECTING BUSINESS OPERATION OR FUTURE FINANCIAL POSITION

In 2018, the Company has set a target for operating the 4 business hubs as follows:

#### 1. Logistic Hubs

Given the fact that Thailand is still holding a competitive edge, locating in ASEAN's logistic center, the Company expects to see growth opportunities for the Logistic Hubs. The Company targets to increase the proportion of revenue generation from the Recurring Income by focusing on the strategic development of the Built-to-Suit projects, meeting with all clients' specifications and located in logistic strategic location, and also focuses on the Sale-and-Lease-Back project. In addition, the Company plans to develop the E-Commerce warehouse to accommodate the growth of the E-Commerce business, which will be supported by a large infrastructure investment plan in accordance with the policy of the Eastern Economic Corridor (EEC). E-Commerce warehouse also build further on business from the Central JD Commerce Co., Ltd., that is the between collaboration Central group, huge retailer in Thailand, and JD.com, one of the leading E-Commerce leaders in China, signed a warehouse rental contract with a size of 6,848 square meters during end of 2017. Additionally, the Company plans to expand the warehouse rental business in overseas especially in Cambodia, Laos, Myanmar, Vietnam and Indonesia (CLMVI). The Company has already to build a warehouse and factory for rent in Indonesia with an area approximately 250,000 square meters. From the Company's strategy, the Company is aiming to obtain Pre-lease areas (pre-committed leased area with the tenants, allowing for future revenue recognition), and/or a new rental agreement of approximately 200,000 - 250,000 square meters in 2018

On early of January 2018, the Company sold their assets and / or leasehold rights to HREIT of 55,131 square meters. In addition, the Company is aiming to sell their assets and/or rights of lease the property to WHART and HREIT for an additional of approximately 160,000-170,000 square meters which the selling process is expected to be completed within Q4/2018.

#### 2. Industrial Development Hub

According to the draft of EEC Act. was already approved by the National Legislative Assembly (NIA) to be the law on February 8, 2018, announcing Chonburi, Rayong and Chachoengsao to be the special economic zone, aiming to promote trade and investment within the region. The area has high potential for future development, as for all key aspects for industrial development and all infrastructures have already been put in place i.e. transportation infrastructure, demand of enterprises, availability of resources, center of domestic economic connectivity. The Thai Government has a plan to invest the mega projects such as U-Tapao international airport, Laem Chabang deep sea port, Map Ta Phut Phase 3 port, Bangkok-Rayong High-Speed Rail track and Double Track railway. EEC Policy Committee approved 9 industrial estates of the Group as Industrial Promotion Zones for Target Industries in order to enhance benefits for foreign direct investing in the 10 target industries. The target industries consist of the expansion of 5 existing S-curve industries, including the Next-generation automotive, Smart electronics, Affluent medical and wellness tourism, Agriculture and biotechnology, and Food for the future, along with 5 new industries (the New S-Curve) including the Automation and Robotics, Medical hub, Aviation and Logistics, Bio

chemicals and Eco-friendly petrochemical and Digital industry. Therefore, the Company expected that the enactment of this law will support the industrial estate development will continue to grow in the future. Furthermore, the Company has expanded its industrial estates development business overseas. The Company has a plan to invest in the development of industrial estates in Vietnam with the 1st phase with approximately 3,100 rai in 2018, under the name of "WHA Hemaraj Industrial Zone" in Nghe An Province, in which the total project area of 20,000 rai. In conclusion, the Company targets to sell Hemaraj's industrial estate land both domestic and overseas of approximately 1,400 rai in 2018

### **3. Utilities & Power Hub**

#### **3.1 Utilities**

The Company aims to growth in utilities business in industrial estates areas by increasing the volume of water selling to the clients inside the industrial estates. This is in line with Hemaraj's industrial estate expansion plan which be supported by the officially announcement of the EEC Act. as mentioned above. In additional, the Company plans to sell water in industrial estates in Vietnam, according to the WHA Hemaraj Industrial Zone development plan. Moreover, the Company is also planning to expand its utilities business to operate outside the industrial estates, particularly selling to local administrative organizations nearby to industrial areas and the surrounding communities would gradually increase their water consumption level as the industrial estate. In 2018, the Company aims to sell raw water, tap water, industrial water and waste water treatment system of 113 million cubic meters, that is an increase of approximately 100 million cubic meters from previous year. Additionally, the company plans to develop services such as Reverse Osmosis (R.O.) used in the production of water in order to build more confidence and improve the quality of water sold to customers and also reduce the production costs.

#### **3.2 Power Business**

In 2018, the Company plans to increase its power generation equity megawatts to 511 megawatts from 478 megawatts in previous year from 3 solar power plants ,2-small power plant (SPP) projects and 1- very small power plant (VSPP) projects, and 1-waste-to-energy plant (VSPP) which the constructions are expected to completed and ready for commercial operation (COD) in 2018. For renewable energy, the Company plans to tryout the Solar Rooftop project with an area of over 2.1 million square meters in the industrial estate and logistics center of the Company, moreover, the roofs area from client's factories in the Company's industrial estates which will be an important channel in the production of solar energy.

Moreover, The Company also plans to invest in the retail natural gas business in Hemaraj's Industrial Estate (NGD). The construction of the WHA EASTERN SEABOARD NGD 2project is expected to be complete and ready for operate within Q3/2018.

### **4. Digital Platform Hub**

During the end of 2017, the Company has started to operate 3 data centers with 451 racks which services. The Company aims to expand the investments in digital business in line with the expected increasing in demand in the future focusing in the telecom companies and the technology companies. Moreover, the Company is implementing Local Loop (FTTx), laying high speed fiber optic in 9 of Hemaraj's industrial estates, which will increase from 5 industrial estates from previous year, as well as offering other managed services complimenting to the Data Center such as IT outsourcing, rental equipment and software etc., aiming to provide our clients with a comprehensive full IT solution and capture the digital trend which be supported by Thailand 4.0 a new era for Thailand's developing plan.

The Company initiates its strategic planning to coincide with its operating targets. Furthermore, to ensure of its business success, the Company has thoroughly conducted a feasibility study under a supervision of respective Board of Directors and executive management team of which are fully equipped with in-depth, insightful knowledge and an expertise in Information Technology area. Nevertheless, the Company always prepare to face with external influential factors such as global economic, Thailand political instability, change in government policies, market conditions and capital market conditions, which may affect the Company's business operation and its future financial performance.

## REPORT OF THE BOARD OF DIRECTORS' RESPONSIBILITY TO THE FINANCIAL STATEMENTS

The Board of Directors of the Company has responsibility in preparing the financial statements of the Company in order to represent the Company's financial status and performance for the year 2017 in accordance with the Public Company Act B.E. 2535.

The Board of Directors emphasized on its duties and responsibilities as the directors of a listed company on the Stock Exchange of Thailand to control the business in accordance with the good corporate governance. The Board of Directors was responsible for the financial statements to be accurate, complete, transparent and appropriate to maintain the Company's assets, prevent from fraud and abnormalities, as well as in accordance with generally accepted accounting principles for the interests of shareholders and investors in acknowledging correct and reasonable information of the Company's financial status and performance.

The Board of Directors views that the consolidated financial statements of WHA Corporation Public Company Limited and its subsidiaries for the year 2017 jointly reviewed by the Audit Committee in collaboration with the Management and the auditor, PricewaterhouseCoopers ABAS Limited, were presented in a complete and reliable in compliance with the generally accepted accounting principles and all governing rules and regulations, with appropriate and consistent accounting policies and adequate information disclosure.

  
**Ms. Jareeporn Jarukornsakul**  
 Chairman of the Board of Directors

[ Financial Information ]

# INDEPENDENT AUDITOR'S REPORT

## To the Shareholders and the Board of Directors of WHA Corporation Public Company Limited

### My opinion

In my opinion, the consolidated financial statements of WHA Corporation Public Company Limited (the Company) and its subsidiaries (the Group) and the separate financial statements of the Company present fairly, in all material respects, the consolidated and separate financial position of the Group and of the Company as at 31 December 2017, and its consolidated and separate financial performance and its consolidated and separate cash flows for the year then ended in accordance with Thai Financial Reporting Standards (TFRSs).

### What I have audited

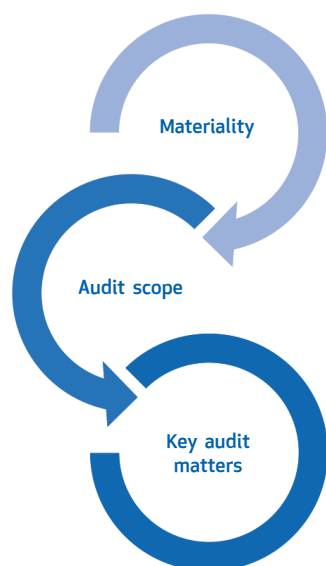
The consolidated financial statements and the separate financial statements comprise:

- the consolidated and separate statements of financial position as at 31 December 2017;
- the consolidated and separate statements of comprehensive income for the year then ended;
- the consolidated and separate statements of changes in equity for the year then ended;
- the consolidated and separate statements of cash flows for the year then ended; and
- the notes to the consolidated and separate financial statements, which include a summary of significant accounting policies.

### Basis for opinion

I conducted my audit in accordance with Thai Standards on Auditing (TSAs). My responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated and separate financial statements section of my report. I am independent of the Group and the Company in accordance with the Federation of Accounting Professions under the Royal Patronage of his Majesty the King's Code of Ethics for Professional Accountants together with the ethical requirements that are relevant to my audit of the consolidated and separate financial statements, and I have fulfilled my other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

### My audit approach - overview



#### Materiality

Overall group materiality: Baht 167 million which represents 5% of Group's profit before tax.

#### Audit scope

I conduct with audit work of the consolidated financial statements by focusing on the significant components which account for 98% of the Group's profit before tax and 99% of the Group's total assets.

#### Key audit matters

I identified goodwill impairment assessment as key audit matters:

## Materiality

The scope of my audit was influenced by my application of materiality. An audit is designed to obtain reasonable assurance whether the consolidated financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the consolidated financial statements.

Based on my professional judgement, I determined certain quantitative thresholds for materiality, including the overall group materiality for the consolidated financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped me to determine the scope of my audit and the nature, timing and extent of my audit procedures and to evaluate the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

<b>Overall group materiality</b>	Baht 167 million
<b>How I determined it</b>	5% of Group's profit before tax
<b>Rationale for the materiality benchmark applied</b>	I chose profit before tax as the critical measure because, in my view, it is the measure against which the performance of the Group is most commonly assessed. The 5% benchmark is a generally accepted auditing practice and there were no significant unusual elements that merited adjustments to this benchmark.

I agreed with the audit committee that I would report to them misstatements identified during my audit above Baht 16.7 million, in my view, warranted reporting for qualitative reasons.

## How I tailored my group audit scope

I tailored the scope of my audit in order to perform sufficient work to enable me to provide an opinion on the Group's consolidated financial statements as a whole, taking into account the structure of the Group, the accounting processes and controls, and the industry in which the Group operates.

## Key audit matters

Key audit matters are those matters that, in my professional judgment, were of most significance in my audit of the consolidated and separate financial statements of the current period. I determine one key audit matter: Goodwill impairment assessment. The matter was addressed in the context of my audit of the consolidated and separate financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on the matter.

KEY AUDIT MATTER	HOW MY AUDIT ADDRESSED THE KEY AUDIT MATTER
<p><b>Goodwill impairment assessment</b></p> <p>Refer to Note 2.15 Accounting policy and Note 21 Goodwill. As at 31 December 2017, the Group had goodwill of Baht 17,575 million arising from the acquisition of real estate, power and water businesses.</p>	<p>I obtained information about the forecasted future cash flow provided by the Group's management and gained an understanding of the procedure for preparing the forecast.</p>
<p>The Group tests goodwill acquired in a business combination for impairment annually irrespective of whether there is any indication of impairment, as required by TAS 36 Impairment of assets.</p>	<p>Then I challenged the reasonableness of the procedures and assumptions that underpin management's forecast of the gross margin and growth rate based on actual information from effective long-term contracts relating to the current and future periods, historical trend analysis and the future business plan.</p>
<p>I focused on this matter because management uses judgement and estimates about the future to determine the recoverable amount of cash-generating units that include goodwill.</p>	<p>The discount rate is determined using the weighted average cost of capital method. I specifically challenged the reasonableness of the assumptions by comparing them to recent performance and industry data.</p>
<p>The recoverable amount is based on fair value less costs of disposal determined using a present value technique. The key assumptions in relation to the forecast of the net future cash flow discounted to the net present value are the gross margin, growth rate and discount rate.</p>	<p>I also tested the mathematical accuracy of key figures estimated based on the above assumptions and used to calculate the recoverable amount and compare to the carrying amount.</p>
<p>Management concluded that there is no impairment of goodwill because the recoverable amount is higher than the carrying amount.</p>	<p>Based on these procedures, I found that the key assumptions were consistent with market and industry data.</p>

### Other information

The directors are responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated and separate financial statements and my auditor's report thereon. The annual report is expected to be made available to me after the date of this auditor's report.

My opinion on the consolidated and separate financial statements does not cover the other information and I will not express any form of assurance conclusion thereon.



In connection with my audit of the consolidated and separate financial statements, my responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated and separate financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

When I read the annual report, if I conclude that there is a material misstatement therein, I am required to communicate the matter to the audit committee.

### **Responsibilities of the directors for the consolidated and separate financial statements**

The directors are responsible for the preparation and fair presentation of the consolidated and separate financial statements in accordance with TFRSs, and for such internal control as the directors determine is necessary to enable the preparation of consolidated and separate financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated and separate financial statements, the directors are responsible for assessing the Group and the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group and the Company or to cease operations, or has no realistic alternative but to do so.

The audit committee assists the directors in discharging their responsibilities for overseeing the Group and the Company's financial reporting process.

### **Auditor's responsibilities for the audit of the consolidated and separate financial statements**

My objectives are to obtain reasonable assurance about whether the consolidated and separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with TSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated and separate financial statements.

As part of an audit in accordance with TSAs, I exercise professional judgment and maintain professional scepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the consolidated and separate financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit 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 Group and the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group and the Company's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the consolidated and separate financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Group and the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated and separate financial statements, including the disclosures, and whether the consolidated and separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with the audit committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide the audit committee with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

From the matters communicated with the audit committee, I determine those matters that were of most significance in the audit of the consolidated and separate financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

PricewaterhouseCoopers ABAS Ltd.



**Chanchai Chaiprasit**

Certified Public Accountant (Thailand) No. 3760

Bangkok

20 February 2018

[ Financial Information ]

# STATEMENTS OF FINANCIAL POSITION

## WHA Corporation Public Company Limited

As at 31 December 2017

		Consolidated financial statements		Separate financial statements	
		2017	2016	2017	2016
	Notes	Baht	Baht	Baht	Baht
Assets					
Current assets					
Cash and cash equivalents	7	1,919,710,972	2,635,395,451	79,167,781	173,120,210
Short-term investments	8	568,747,679	2,108,326,643	546,774,454	2,084,758,530
Trade and other receivables, net	9	531,050,728	503,240,031	21,098,210	77,787,094
Short-term loans to related parties	38	1,031,765,000	1,432,900,000	3,082,000,000	639,500,000
Real estate development costs	10	13,740,364,439	14,648,452,962	-	-
Other current assets		739,905,093	731,144,680	94,457,240	26,755,208
Non-current assets held for sale	11	835,204,143	-	133,566,120	-
Total current assets		19,366,748,054	22,059,459,767	3,957,063,805	3,001,921,042
Non-current assets					
Restricted bank deposits	7	-	285,599	-	136,712
Available-for-sale investments	12	3,836,231,359	4,025,075,674	3,131,131,613	3,170,538,054
Investments in associates	13	12,339,442,029	9,927,971,586	-	-
Investments in subsidiaries	14	-	-	23,502,921,939	23,328,121,939
Interests in joint ventures	15	1,576,407,625	1,408,112,963	1,238,450,000	1,238,450,000
Other long-term investments, net	16	283,085,894	296,958,582	-	-
Investment properties, net	17	9,422,007,467	11,025,585,139	5,442,077,663	6,199,796,080
Property, plant and equipment, net	18	4,385,368,737	3,831,907,853	23,828,654	27,665,208
Intangible assets, net	19	4,118,659,963	4,118,659,963	-	-
Goodwill	20	17,575,045,652	17,575,045,652	-	-
Deferred income tax assets	21	204,078,206	93,350,437	96,047,739	64,701,456
Other non-current assets		511,884,603	421,222,903	84,067,206	74,187,788
Total non-current assets		54,252,211,535	52,724,176,351	33,518,524,814	34,103,597,237
Total assets		73,618,959,589	74,783,636,118	37,475,588,619	37,105,518,279

The accompanying notes are an integral part of this financial statements.

[ Financial Information ]

# STATEMENTS OF FINANCIAL POSITION

## WHA Corporation Public Company Limited

As at 31 December 2017

		Consolidated financial statements		Separate financial statements	
		2017	2016	2017	2016
	Notes	Baht	Baht	Baht	Baht
Liabilities and equity					
Current liabilities					
Short-term loans from financial institutions	22	1,784,171,994	3,648,915,023	1,384,171,994	808,702,871
Trade and other payables	23	2,590,443,494	3,022,423,961	443,632,746	524,879,403
Current portion of long-term loans	22	-	2,491,534,108	-	-
Current portion of debentures	24	3,058,716,265	5,850,823,930	3,058,716,265	3,533,896,676
Current portion of deferred revenue	25	189,213,141	170,091,045	74,436,176	62,594,769
Short-term loans from related parties	22	-	-	1,302,000,000	320,500,000
Income tax payable		190,098,435	70,566,419	-	24,568,642
Other current liabilities		162,328,789	159,381,415	56,626,042	57,626,625
Liabilities directly associated with assets classified as held for sale	11	32,332,916	-	-	-
Total current liabilities		8,007,305,034	15,413,735,901	6,319,583,223	5,332,768,986
Non-current liabilities					
Long-term loans	22	3,936,901,708	7,929,904,298	-	-
Debentures	24	25,618,678,491	22,073,917,442	11,121,979,713	11,479,577,677
Deferred revenue	25	4,169,660,883	4,206,699,829	2,511,387,119	2,433,649,101
Deferred income tax liabilities	21	2,548,322,403	2,600,518,083	-	-
Deposits from long-term lease agreement		153,578,512	189,425,112	38,910,937	53,289,021
Employee benefit obligations	26	117,644,189	96,479,417	34,310,812	27,938,546
Other non-current liabilities		533,461,116	310,687,090	110,762,757	117,280,470
Total non-current liabilities		37,078,247,302	37,407,631,271	13,817,351,338	14,111,734,815
Total liabilities		45,085,552,336	52,821,367,172	20,136,934,561	19,444,503,801

The accompanying notes are an integral part of this financial statements.

[ Financial Information ]

# STATEMENTS OF FINANCIAL POSITION

## WHA Corporation Public Company Limited

As at 31 December 2017

		Consolidated financial statements		Separate financial statements	
		2017	2016	2017	2016
	Notes	Baht	Baht	Baht	Baht
Liabilities and equity (continued)					
Equity					
Share capital	27				
Authorised share capital					
Ordinary shares, 15,677,730,186 shares					
of par Baht 0.10 each		1,567,773,019	1,567,773,019	1,567,773,019	1,567,773,019
Issued and paid-up share capital					
Ordinary shares, 14,322,430,321 shares					
of paid-up Baht 0.10 each		1,432,243,032	1,432,243,032	1,432,243,032	1,432,243,032
Share premium on ordinary shares	27	12,391,309,606	12,391,309,606	12,391,309,606	12,391,309,606
Warrants	28	803,347,472	803,347,472	803,347,472	803,347,472
Capital surplus from share swap		172,861,100	172,861,100	202,175,962	202,175,962
Retained earnings					
Appropriated - legal reserve	29	156,433,000	127,150,000	156,433,000	127,150,000
Unappropriated		6,864,317,324	6,526,025,284	2,340,888,467	2,664,852,440
Other components of equity		3,423,220,996	(23,535,453)	12,256,519	39,935,966
Equity attributable to owners of the parent		25,243,732,530	21,429,401,041	17,338,654,058	17,661,014,478
Non-controlling interests		3,289,674,723	532,867,905	-	-
Total equity		28,533,407,253	21,962,268,946	17,338,654,058	17,661,014,478
Total liabilities and equity		73,618,959,589	74,783,636,118	37,475,588,619	37,105,518,279

The accompanying notes are an integral part of this financial statements.

[ Financial Information ]

# STATEMENTS OF COMPREHENSIVE INCOME

## WHA Corporation Public Company Limited

For the year ended 31 December 2017

	Notes	Consolidated financial statements		Separate financial statements	
		2017 Baht	2016 Baht	2017 Baht	2016 Baht
Revenues from leases and services		1,775,201,675	2,295,830,133	477,206,509	758,145,731
Revenues from sales of real estate		6,290,087,427	14,162,607,673	1,438,905,905	6,100,040,825
Revenues from sales		1,448,294,266	1,396,935,644	-	-
Costs of leases and services		(801,133,739)	(999,305,812)	(263,830,519)	(322,854,868)
Costs of sales of real estate		(3,339,334,846)	(9,667,986,224)	(940,891,396)	(4,935,317,784)
Costs of sales		(861,067,372)	(747,350,905)	-	-
<b>Gross profit</b>		<b>4,512,047,411</b>	<b>6,440,730,509</b>	<b>711,390,499</b>	<b>1,600,013,904</b>
Other income	32	932,887,843	463,382,675	2,936,784,804	258,516,755
Selling expenses		(317,183,897)	(223,365,839)	-	-
Administrative expenses		(1,385,228,747)	(1,271,913,251)	(400,004,414)	(378,332,251)
Finance costs	33	(1,616,527,334)	(2,432,152,246)	(668,423,941)	(799,673,895)
Share of profit of associates and joint ventures	13, 15	1,963,491,687	1,006,213,821	-	-
<b>Profit before income tax</b>		<b>4,089,486,963</b>	<b>3,982,895,669</b>	<b>2,579,746,948</b>	<b>680,524,513</b>
Income tax	35	(253,820,349)	(812,628,965)	24,426,421	(94,883,304)
<b>Profit for the year</b>		<b>3,835,666,614</b>	<b>3,170,266,704</b>	<b>2,604,173,369</b>	<b>585,641,209</b>
<b>Other comprehensive income</b>					
Items that will not be reclassified to profit or loss					
Remeasurements of employee benefit obligations		723,078	12,711,257	-	(2,743,137)
Income tax relating to items that will not be reclassified to profit or loss	21	(133,492)	(2,542,251)	-	548,627
Total items that will not be reclassified to profit or loss		589,586	10,169,006	-	(2,194,510)
Items that will be reclassified to profit or loss					
Change in value of available-for-sale investments		(143,254,276)	(80,862,714)	(34,599,309)	(79,614,842)
Currency translation differences		(53,778,009)	(9,691,145)	-	-
Share of other comprehensive income of joint ventures accounted for using the equity method		(10,459,539)	(9,433,707)	-	-
Income tax relating to items that will be reclassified to profit or loss	21	28,650,855	16,172,874	6,919,862	15,922,968
Total items that will be reclassified to profit or loss		(178,840,969)	(83,814,692)	(27,679,447)	(63,691,874)
<b>Other comprehensive expense for the year, net of tax</b>		<b>(178,251,383)</b>	<b>(73,645,686)</b>	<b>(27,679,447)</b>	<b>(65,886,384)</b>
<b>Total comprehensive income for the year</b>		<b>3,657,415,231</b>	<b>3,096,621,018</b>	<b>2,576,493,922</b>	<b>519,754,825</b>

The accompanying notes are an integral part of this financial statements.

[ Financial Information ]

# STATEMENTS OF COMPREHENSIVE INCOME

## WHA Corporation Public Company Limited

For the year ended 31 December 2017

	Note	Consolidated financial statements		Separate financial statements	
		2017 Baht	2016 Baht	2017 Baht	2016 Baht
<b>Profit attributable to:</b>					
Owners of the parent		3,266,429,382	2,898,155,661	2,604,173,369	585,641,209
Non-controlling interests		569,237,232	272,111,043	-	-
		<u>3,835,666,614</u>	<u>3,170,266,704</u>	<u>2,604,173,369</u>	<u>585,641,209</u>
<b>Total comprehensive income attributable to:</b>					
Owners of the parent		3,091,383,385	2,824,369,469	2,576,493,922	519,754,825
Non-controlling interests		566,031,846	272,251,549	-	-
		<u>3,657,415,231</u>	<u>3,096,621,018</u>	<u>2,576,493,922</u>	<u>519,754,825</u>
<b>Earnings per share</b>	22				
Basic earnings per share		<u>0.2281</u>	<u>0.2024</u>	<u>0.1818</u>	<u>0.0409</u>
Diluted earnings per share		<u>0.2281</u>	<u>0.2024</u>	<u>0.1818</u>	<u>0.0409</u>

The accompanying notes are an integral part of this financial statements.



## WHA Corporation Public Company Limited

For the year ended 31 December 2017

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The accompanying notes are an integral part of this financial statements.

# STATEMENTS OF CHANGES EQUITY

## WHA Corporation Public Company Limited

For the year ended 31 December 2017

	Notes	Separate financial statements									
		Issued and paid-up share capital		Premium on paid-up ordinary shares		Warrants		Capital surplus from share swap		Retained earnings	
		Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht
<b>Opening balance 2016</b>		1,432,234,167	12,390,954,530	803,407,236	202,175,962	97,000,000	2,109,361,231	110,209,873	(4,387,523)	17,140,955,476	
Capital increase from warrant conversion	27, 28	8,865	355,076	(59,764)	-	-	-	-	-	-	304,177
Legal reserve	29	-	-	-	-	30,150,000	(30,150,000)	-	-	-	-
Total comprehensive income (expense) for the year		-	-	-	-	-	585,641,209	(63,691,874)	(2,194,510)	519,754,825	
<b>Closing balance 2016</b>		1,432,243,032	12,391,309,606	803,347,472	202,175,962	127,150,000	2,664,852,440	46,517,999	(6,582,033)	17,661,014,478	
Legal reserve	29	-	-	-	-	29,283,000	(29,283,000)	-	-	-	-
Dividend paid		-	-	-	-	-	(2,898,854,342)	-	-	(2,898,854,342)	
Total comprehensive income (expense) for the year		-	-	-	-	-	2,604,173,369	(27,679,447)	-	2,576,493,922	
<b>Closing balance 2017</b>		1,432,243,032	12,391,309,606	803,347,472	202,175,962	156,433,000	2,340,888,467	18,838,552	(6,582,033)	17,338,654,058	

The accompanying notes are an integral part of this financial statements.

## [ Financial Information ]

**STATEMENTS OF CASH FLOWS****WHA Corporation Public Company Limited**

For the year ended 31 December 2017

	Notes	Consolidated financial statements		Separate financial statements	
		2017 Baht	2016 Baht	2017 Baht	2016 Baht
<b>Cash flows from operating activities</b>					
Profit before income tax		4,089,486,963	3,982,895,669	2,579,746,948	680,524,513
Adjustments for :					
(Reversal of) allowance for doubtful debt		25,870,295	(15,996,874)	-	-
Depreciation	17, 18	453,596,973	563,724,676	155,399,025	213,276,534
Amortisation		19,266,235	33,279,018	2,835,864	1,846,236
Write-off intangible assets	19	-	12,057,952	-	-
Write-off income tax		29,026,314	2,148,329	13,200,000	-
Gain from sale short-term investment	32	(9,530,550)	(14,301,884)	(9,486,399)	(4,535,068)
Gain from adjust available-for-sale investments value from merge	12, 32	(17,190,913)	-	(17,190,913)	-
Gain from sale available-for-sale investments	32	-	(3,708,371)	-	(3,644,119)
Gain from sale investments in associates	32	-	(388,305)	-	-
Gain from sale interests in joint ventures	32	-	(784,117)	-	(10,492,404)
Loss from liquidation of joint ventures	15	144,020	-	-	-
Gain from sale investment properties		(1,260,048,744)	(5,238,650,668)	(492,923,432)	(1,164,723,041)
Gain from sale property, plant and equipment	32	(2,299,955)	(2,921,178)	(117,687)	(485,702)
Amortisation of other long-term investments		13,872,688	13,910,695	-	-
Employee benefit obligations	26	22,504,850	18,358,964	6,372,266	5,534,542
Interest income	32	(91,846,719)	(109,212,352)	(71,237,849)	(38,722,721)
Dividend income	32	(299,852,362)	(183,236,783)	(2,801,978,085)	(178,107,909)
Finance costs	33	1,616,527,334	2,432,152,246	668,423,941	799,673,895
Share of profit from associates and joint ventures	13, 15	(1,963,491,687)	(1,006,213,821)	-	-
Changes in operating assets and liabilities :					
Trade and other receivables		21,261,810	(53,101,013)	(3,603,627)	74,092,759
Real estate development costs		512,601,974	673,876,981	-	-
Other current assets		(1,012,532)	(154,147,254)	(1,651,756)	2,926,394
Other non-current assets		(100,452,724)	(35,782,862)	(20,460,117)	(25,013,711)
Trade and other payables		(264,204,721)	(86,702,193)	49,143,921	58,367,120
Deferred revenue	25	(238,012,806)	(129,324,234)	(130,516,531)	(118,544,882)
Other current liabilities		2,947,374	3,642,367	(1,000,583)	8,620,073
Deposits from long-term lease agreement		(3,513,684)	(238,461,307)	(14,378,084)	(119,324,615)
Paid employee benefit	26	(617,000)	(4,540,248)	-	-
Other non-current liabilities		222,774,026	(56,045,961)	(6,517,713)	(18,946,135)
Cash generated from operation		2,777,806,459	402,527,472	(95,940,811)	162,321,759

The accompanying notes are an integral part of this financial statements.

[ Financial Information ]

# STATEMENTS OF CASH FLOWS

## WHA Corporation Public Company Limited

For the year ended 31 December 2017

		Consolidated financial statements		Separate financial statements	
		2017	2016	2017	2016
	Notes	Baht	Baht	Baht	Baht
Cash flows from operating activities (continued)					
Interest received		145,691,976	57,503,940	71,077,360	37,438,437
Interest paid		(1,825,020,303)	(2,620,794,740)	(708,657,441)	(845,566,502)
Dividend received from operating activities		953,857,137	879,929,179	213,137,807	155,908,575
Income tax received		2,828,089	25,957,242	-	
Income tax paid		(294,537,948)	(326,461,377)	(50,760,119)	(32,392,269)
Net cash receipts (payments) from operating activities		1,760,625,410	(1,581,338,284)	(571,143,204)	(522,290,000)
Cash flows from investing activities					
Payments of short-term investments acquisition	8	(5,875,000,000)	(6,248,000,000)	(5,875,000,000)	(6,188,000,000)
Proceeds from short-term investments disposal		7,424,571,696	5,668,395,150	7,422,571,696	4,125,352,000
Payments of short-term loans to related parties		(153,700,000)	(20,000,000)	(27,660,200,000)	(2,372,226,544)
Proceeds from short-term loans to related parties		554,835,000	20,000,000	25,217,700,000	1,732,726,544
Changes in restricted bank deposits		285,599	1,895,252	136,712	1,811,938
Payments of available-for-sale investments		(163,931,530)	(1,319,752,910)	(4,362)	(465,708,000)
Proceeds from capital reduction of available-for-sale investments	12	62,323,132	30,419,535	21,901,186	30,419,535
Proceeds from sale available-for-sale investments		-	217,673,770	-	217,591,664
Payments of investments in associates	13	(1,219,487,600)	(731,180,405)	-	-
Proceeds from capital reduction of investments in associates		16,183,065	36,720,000	-	-
Proceeds from sale investments in associates		-	7,323,555	-	-
Payments of investments in subsidiaries	14	-	-	(174,800,000)	(2,418,835,345)
Proceeds from sale investments in subsidiaries	14	-	-	-	324,618
Payments of interests in joint ventures	15	(171,747,500)	(789,220,002)	-	(739,450,000)
Proceeds from sale interests in joint ventures		-	1,274,999	-	56,555,012
Proceeds from liquidation of joint ventures	15	2,151,955	-	-	-
Payments of investment properties acquisition		(775,484,802)	(1,694,026,709)	(350,356,637)	(933,561,531)
Interest paid to capitalise for investment properties		(4,740,870)	(19,682,135)	(4,740,870)	(19,682,135)
Proceeds from sale investment properties		3,162,366,478	15,655,009,347	1,514,978,504	5,960,378,465
Payments of property, plant and equipment acquisition		(716,976,518)	(250,038,208)	(6,381,688)	(3,190,939)
Proceeds from sale property, plant and equipment		2,471,962	3,692,353	242,990	949,885
Payments of sold properties' income tax		(64,077,350)	(430,285,777)	(53,058,800)	(55,268,530)
Dividend received from investing activities		64,107,986	27,328,208	2,588,840,278	22,199,334
Net cash receipts (payments) from investing activities		2,144,150,703	10,167,546,023	2,641,829,009	(1,047,614,029)

The accompanying notes are an integral part of this financial statements.

[ Financial Information ]

# STATEMENTS OF CASH FLOWS

## WHA Corporation Public Company Limited

For the year ended 31 December 2017

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
	Baht	Baht	Baht	Baht
<b>Cash flows from financing activities</b>				
Proceeds from short-term loans	5,740,000,000	21,444,261,243	3,940,000,000	3,409,708,000
Repayments of short-term loans	(7,610,000,000)	(19,518,365,818)	(3,360,000,000)	(4,299,708,000)
Proceeds from short-term loans from related parties	-	-	981,500,000	1,035,000,000
Repayments of short-term loans from related parties	-	-	-	(1,513,000,000)
Repayments of short-term loans from others	-	(40,000,000)	-	-
Proceeds from long-term loans	-	13,612,623,900	-	2,718,613,900
Repayments of long-term loans	(6,500,000,000)	(24,317,609,143)	-	(5,219,601,400)
Proceeds from debentures	6,700,000,000	6,260,000,000	2,700,000,000	6,260,000,000
Payments of issuance debentures	(12,974,895)	(11,959,044)	(5,511,495)	(11,959,044)
Repayments of debentures	(5,835,000,000)	(3,130,000,000)	(3,535,000,000)	(1,630,000,000)
Proceeds from warrant conversion	13,227,603	836	13,227,603	836
Proceeds from change in parent's ownership interests in subsidiaries	2,664,268,994	-	-	-
Payments of change in parent's ownership interests in subsidiaries	-	(2,778,614,708)	-	-
Dividend paid	(2,953,957,769)	(11,523,783)	(2,898,854,342)	-
Proceeds from non-controlling interest	3,197,808,752	-	-	-
<b>Net cash receipts (payments) from financing activities</b>	<b>(4,596,627,315)</b>	<b>(8,491,186,517)</b>	<b>(2,164,638,234)</b>	<b>749,054,292</b>
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>(691,851,202)</b>	<b>95,021,222</b>	<b>(93,952,429)</b>	<b>(820,849,737)</b>
Cash and cash equivalents at the beginning of the year	2,635,395,451	2,554,719,161	173,120,210	993,969,947
Exchange effect on cash and cash equivalents	(23,833,277)	(14,344,932)	-	-
<b>Cash and cash equivalents at the end of the year</b>	<b>1,919,710,972</b>	<b>2,635,395,451</b>	<b>79,167,781</b>	<b>173,120,210</b>

### Non-cash transactions

Significant non-cash transactions for the year ended 31 December are as follows:

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
	Baht	Baht	Baht	Baht
Account payables from investment properties acquisition	167,549,065	335,624,230	150,841,884	251,024,322
Account payables from property, plant and equipment acquisition	78,133,965	13,399,477	-	-
Account receivables from capital reduction of interests in joint ventures	-	17,104,378	-	-

The accompanying notes are an integral part of this financial statements.

# NOTES TO THE CONSOLIDATED AND FINANCIAL STATEMENTS

## WHA Corporation Public Company Limited

For the year ended 31 December 2017

### 1 General information

WHA Corporation Public Company Limited ("the Company") is a public limited company which is listed on the Stock Exchange of Thailand and is incorporated and resident in Thailand. The address of the Company's registered office is as follows:

1121 Moo.3 Theparak Road, Theparak, A.Mueang Samut Prakarn, Samut Prakarn 10270.

For reporting purposes, the Company and its subsidiaries are referred to as the Group.

The principal business operations of the Group have engaged in providing rent and sale of lands, buildings, factories, warehouses, and other properties, developing and managing properties in industrial estates and industrial zones, providing public utilities, facilities and other related services, providing digital services, data center, Internet connection and other IT services.

These consolidated and separate financial statements were authorised for issue by the Board of Directors on 20 February 2018.

### 2 Accounting policies

The principal accounting policies applied in the preparation of these consolidated and separate financial statements are set out below:

#### 2.1 Basis of preparation

The consolidated and separate 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 Professions Act B.E. 2547, and the financial reporting requirements of the Securities and Exchange Commission under the Securities and Exchange Act.

The consolidated and separate financial statements have been prepared under the historical cost convention except as disclosed in the accounting policies below.

The preparation of financial statements in conformity with Thai generally accepted accounting principles requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 4.

An English version of the consolidated and separate financial statements have 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 Revised financial reporting standards

The Group has applied the revised financial reporting standards which are effective on 1 January 2017 and relevant to the Group. The application of those financial reporting standards does not have significant impact to the Group.

The Group has not yet early adopted the revised financial reporting standards which are effective on 1 January 2018.



## 2 Accounting policies (continued)

### 2.3 Group accounting - investments in subsidiaries and associates in joint arrangements

#### 1) Subsidiaries

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

The Group applies the acquisition method to account for business combinations except business combination under common control. The consideration transferred for the acquisition of a subsidiary is the fair value of the assets transferred, the liabilities incurred to the former owners of acquiree and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. On an acquisition-by-acquisition basis, the Group recognises any non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's net assets.

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is re-measured to fair value at the acquisition date; any gains or losses arising from such re-measurements are recognised in profit or loss.

Any contingent consideration to be transferred by the Group is recognised at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration that is deemed to be an asset or liability is recognised in profit or loss. Contingent consideration that is classified as equity is not re-measured, and its subsequent settlement is accounted for within equity.

The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired is recorded as goodwill. If the total of consideration transferred, non-controlling interest recognised and previously held interest measured is less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the difference is recognised directly in profit or loss.

Intercompany transactions, balances and unrealised gains on transactions between group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

#### 2) Transactions and non-controlling interests

The Group treats transactions with non-controlling interests as transactions with equity owners of the Group. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

#### 3) Disposal of subsidiaries

When the Group ceases to have control it shall cease to consolidate its subsidiaries. Any retained interest in the entity is re-measured to its fair value, with the change in carrying amount recognised in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities.



## 2 Accounting policies (continued)

### 2.3 Group accounting - investments in subsidiaries and associates in joint arrangements (continued)

#### 4) Associates

Associates are all entities over which the Group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting.

#### 5) Joint arrangements

Investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangements.

A joint venture is a joint arrangement whereby the Group has rights to the net assets of the arrangement. Interests in joint ventures are accounted for using the equity method.

#### 6) Accounting under equity method

Under the equity method, the investment is initially recognised at cost, and the carrying amount is increased or decreased to recognise the investor's share of the profit or loss of the investee after the date of acquisition. The Group's investment in associates includes goodwill identified on acquisition.

If the ownership interest in associates and joint ventures is reduced but significant influence is retained, only a proportionate share of the amounts previously recognised in other comprehensive income is reclassified to profit or loss where appropriate. Profit or loss from reduction of the ownership interest in an associate and joint ventures is recognised in profit or loss.

The Group's share of its associates and joint ventures' post-acquisition profits or losses is recognised in the profit or loss, and its share of post-acquisition movements in other comprehensive income is recognised in other comprehensive income. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. When the Group's share of losses in associates and joint ventures equals or exceeds its interest in the associates and joint ventures, together with any long-term interests that, in substance, form part of the entity's net investment in the associates or joint ventures, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associates and joint ventures.

The Group determines at each reporting date whether there is any objective evidence that the investments in the associates and joint ventures are impaired. If this is the case, the Group calculates the amount of impairment as the difference between the recoverable amount of the investments and its carrying value and recognises the amount adjacent to share of profit (loss) of associates and joint ventures in profit or loss.

Unrealised gains on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in the associates and joint ventures. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates and joint ventures have been changed where necessary to ensure consistency with the policies adopted by the Group.

#### 7) Separate financial statement

In the separate financial statements, investments in subsidiaries, associates and joint ventures 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.

## 2 Accounting policies (continued)

### 2.4 Foreign currency translation

#### 1) 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 financial statements are presented in Baht, which is the Company's functional and the Group's presentation currency.

#### 2) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are re-measured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the profit or loss.

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

#### 3) Group companies

The results and financial position of all the Group entities (none of which has the currency of a hyper-inflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- Assets and liabilities for each statement of financial position presented are translated at the closing rate at the date of that statement of financial position;
- Income and expenses for each statement of comprehensive income are translated at average exchange rates; and
- All resulting exchange differences are recognised in other comprehensive income.

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the closing rate.

### 2.5 Cash and cash equivalents

In the statements 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 statements of financial position, bank overdrafts are shown in current liabilities.

### 2.6 Short-term investments

Short-term investments comprise investment in debt mutual fund which is initially recognised at cost, which is equal to the fair value of consideration paid plus transaction cost and is subsequently measured at fair value. The fair value of investment is based on Net Asset Value (NAV) announced by the Asset Management Company. The unrealised gains and losses of available-for-sale investments are recognised in other comprehensive income.

### 2.7 Trade accounts receivable

Trade accounts receivable are carried at the original invoice amount and subsequently measured at the remaining amount less any allowance for doubtful receivables based on a review of all outstanding amounts at the year-end. The amount of the allowance is the difference between the carrying amount of the receivable and the amount expected to be collectible. Bad debts are written-off during the year in which they are identified and recognised in profit or loss within administrative expenses.

## 2 Accounting policies (continued)

### 2.8 Real estate development costs

Real estate development costs are stated at the lower of cost and net realisable value. Real estate development costs comprise land costs, development costs, pre-fabricated factory costs, condominium construction costs, and finance costs on borrowings for projects development, pre-fabricated factory, condominium construction, land deposits and advances for construction costs. These costs are transferred to cost of sales when revenue from sales is recognised.

### 2.9 Non-current assets held for sale

Non-current assets (or disposal groups) are classified as assets held for sale when their carrying amount is to be recovered principally through a sale transaction and a sale is considered highly probable. They are stated at the lower of the carrying amount and fair value less cost to sell.

In addition, the Group will also classify other assets and liabilities related to assets held for sale which comprise leasehold rights, deferred income from operating lease agreement and other non-current assets as non-current assets held for sale, and long-term loans, interest payable, deposits from long-term lease agreement and deferred expenses from operating lease agreement as liabilities directly associated with assets classified as held for sale since they will be disposed when the assets are sold.

### 2.10 Investments

Investments other than investments in subsidiaries, associates and joint ventures are classified as available-for-sale investments and 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.

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.

Investments in non-marketable equity securities are classified as general investments.

Investments are initially recognised at cost, which is equal to the fair value of consideration paid plus transaction cost.

Available-for-sale investments are subsequently measured at fair value. The fair value of investments is based on quoted bid price at the close of business on the statement of financial position date by reference to the Stock Exchange of Thailand or Net Asset Value (NAV) announced by the Asset Management Company. The unrealised gains and losses of available-for-sale investments are recognised in other comprehensive income.

General investments are carried at cost less impairment loss.

A test for impairment is carried out when there is a factor indicating that an investment might be impaired. If the carrying value of the investment is higher than its recoverable amount, impairment loss is charged to 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. When disposing of part of the Company's holding of a particular investment in debt or equity securities, the carrying amount of the disposed part is determined by the weighted average carrying amount of the total holding of the investment.

## 2 Accounting policies (continued)

### 2.11 Investment property

Property that is held for long-term rental yields or for capital appreciation or both, and that is not occupied by the companies in the Group, is classified as investment property. Investment property also includes property that is being constructed or developed for future use as investment property.

Land held under operating leases is classified and accounted for by the Group as investment property when the rest of the definition of investment property is met.

Investment property is measured initially at its cost, including related transaction costs

Subsequent expenditure is capitalised to the asset's carrying amount only when it is probable that future economic benefits associated with the expenditure will flow to the Group and the cost of the item can be measured reliably. All other repairs and maintenance costs are expensed when incurred. When part of an investment property is replaced, the carrying amount of the replaced part is derecognised.

After initial recognition, investment property is carried at cost less any accumulated depreciation and any accumulated impairment losses.

Land is not depreciated. Depreciation on other investment properties is calculated using the straight line method to allocate their cost to their residual values over their estimated useful lives, as follows:

Buildings and warehouses	30 and 40 years
Building improvements	20, 25 and 40 years
Utilities systems	10 and 20 years

### 2.12 Property, plant and equipment

Property, plant and equipment are stated at historical cost less accumulated depreciation. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to profit or loss during the financial period in which they are incurred.

Land is not depreciated. Depreciation on other assets is calculated using the straight line method to allocate their cost to their residual values over their estimated useful lives, as follows:

Building improvements	20 and 25 years
Utility system	10 and 20 years
Office equipment	5 years
Warehouse equipment	5 years
Vehicles	5 years
Assets for rent	5 and 15 years

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

The asset's carrying amount is written-down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Gains or losses on disposals are determined by comparing the proceeds with the carrying amount and are recognized in profit or loss.

## 2 Accounting policies (continued)

### 2.13 Leasehold rights

Expenditure on acquired leasehold right is capitalised and amortised using the straight line method over the lease period, generally over 20 - 30 years.

### 2.14 Intangible assets

#### 1) Exclusive right

Exclusive right, which has an indefinite useful life will be no reassessment on the asset value. Amortisation is reassessment on an annual basis, adjusted for impairment, if any.

#### 2) Order backlog

Order backlog acquired on business combination is recognised at fair value at the date of acquisition. Order backlog is shown at fair value less amortisation. Amortisation to cost occurs when the income from the related assets is recognised.

#### 3) Right to invest in power plant

Right to invest in power plant is recognised at fair value at the date of acquisition. Right to invest in power plant is recognized to cost of investment in associate as the first date acquisition.

### 2.15 Goodwill

Goodwill on acquisitions of subsidiaries is separately reported in the consolidated statement of financial position.

Goodwill is tested annually for impairment and carried at cost less accumulated impairment losses. Impairment losses on goodwill are not reversed. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity sold.

Goodwill is allocated to cash-generating units for the purpose of impairment testing. The allocation is made to those cash-generating units or groups of cash-generating units that are expected to benefit from the business combination in which the goodwill arose, identified according to operating segment.

### 2.16 Impairment of assets

Assets that have an indefinite useful life, for example goodwill, are not subject to amortisation and are tested annually for impairment. Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the carrying amount of the assets exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest level for which there are separately identifiable cash flows. Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at each reporting date.



## 2 Accounting policies (continued)

### 2.17 Leases

#### *Where the Group is the lessee*

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to profit or loss on a straight-line basis over the period of the lease.

When an operating lease is terminated before the lease period has expired, any payment required to be made to the lessor by way of penalty is recognised as an expense in the period in which termination takes place.

Leases of property, plant or equipment where the lessee has substantially all the risks and rewards of ownership are classified as finance leases. Finance leases are capitalised at the inception of the lease at the lower of the fair value of the leased property and the present value of the minimum lease payments.

Each lease payment is allocated between the liability and finance charges so as to achieve a constant rate on the liabilities balance outstanding. The corresponding rental obligations, net of finance charges, are included in other long-term payables. The interest element of the finance cost is charged to profit or loss over the lease period so as to achieve a constant periodic rate of interest on the remaining balance of the liability for each period. The property, plant or equipment acquired under finance leases is depreciated over the shorter period of the useful life of the asset and the lease term.

#### *Where the Group is the lessor*

When assets are leased out under a finance lease, the present value of the lease payments is recognised as a receivable. The difference between the gross receivable and the present value of the receivable is recognised as unearned finance income. Lease income is recognised over the term of the lease using the net investment method, which reflects a constant periodic rate of return. Initial direct costs are included in initial measurement of the finance lease receivable and reduce the amount of income recognised over the lease term.

Assets leased out under operating leases are included in investment properties and assets for rent in property, plant and equipment in the statement of financial position. They are depreciated over their expected useful lives on a basis consistent with other similar investment properties and property, plant and equipment owned by the Group. Rental income (net of any incentives given to lessees) is recognised on a straight-line basis over the lease term.

### 2.18 Borrowings

Borrowings are recognised initially at the fair value, net of transaction costs incurred. Borrowings are subsequently stated at amortised cost; any difference between proceeds (net of transaction costs) and the redemption value is recognised in profit or loss over the period of the borrowings using the effective yield method.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw-down occurs. To the extent that there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalised as a pre-payment for liquidity services and amortised over the period of the facility to which it relates.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the end of reporting date.

## 2 Accounting policies (continued)

### 2.18 Borrowings (continued)

#### *Borrowing costs*

General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognised in profit or loss in the period in which they are incurred.

### 2.19 Deferred revenue

Cash received from sales of real estate to Real Estate Investment Trust but was not recognised since the Group entered into agreements to guarantee the minimum rental and service income from sale of real estate with no lessees for a period of 1 to 25 years. Revenue will be recognised based on the present value of the discounted cash flows which pay to the trust.

Cash received from land leasehold right to Real Estate Investment Trust for a lease term of 30 years and renew 30 years, totally 60 years. Revenue will be recognised based on the present value of the monthly revenue installments.

### 2.20 Current and deferred income taxes

The tax expense for the period comprises current and deferred tax. Tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case the tax is also recognised in other comprehensive income or directly in equity, respectively.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of reporting period in the countries where the Company and 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 recognised, using the liability method, on temporary differences arising from differences between the tax base of assets and liabilities and their carrying amounts in the 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 or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred income tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised. Deferred income tax is provided on temporary differences arising from investments in subsidiaries, associates and joint arrangements, except where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.



## 2 Accounting policies (continued)

### 2.21 Employee benefits

The Group operate various post-employment benefits schemes. The Group has both defined benefit and defined contribution plans.

The Group recognises a liability and an expense for bonuses and expected benefit. The Group recognises a provision where contractually obliged or where there is a past practice that has created a constructive obligation.

A defined contribution plan is a plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions once the contributions have been paid even 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 contributions are recognised as employee benefit expense when they are due. Prepaid contributions are recognised 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 depends on one or more factors such as age, years of service and compensation.

The liability recognised 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. 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 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.

Remeasurement 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. They are presented as a separate item in statements of changes in equity.

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

### 2.22 Provisions

Provisions are recognised when: the Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognised as interest expense.

## 2 Accounting policies (continued)

### 2.23 Share capital

Ordinary shares with discretionary dividends are classified as equity.

Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

### 2.24 Revenue recognition

#### *Revenues from leases and services*

Revenue comprises the value of the consideration received or receivable for the service net of output tax, returns, rebates and discounts. Revenue from leases is recognised on a straight-line basis over the lease term. Revenue from services is recognised when service is rendered.

#### *Revenues from sales of real estate*

Revenue from sales of real estate comprises the value of the consideration received or receivable for the sale of real estate net of output tax, returns, rebates and discounts which is recognised when significant risks and rewards of ownership of the real estate are transferred to the buyer.

#### *Revenues from sales of goods*

Revenue from sales of goods comprises the value of the consideration received or receivable for the sale of goods net of output tax, returns, rebates and discounts which is recognised when significant risks and rewards of ownership of the goods to the buyer.

#### *Other income*

Other income is recognised on an accrual basis. Interest income is recognised on a time proportion basis, taking account of the principal outstanding and the interest rate over the period to maturity, when it is determined that such income will accrue to the Company. Dividend income is recognised when the right to receive payment is established.

### 2.25 Dividend distribution

Dividend distribution to the Company's shareholders is recognised as a liability in the Group's financial statements in the period in which the dividends are approved by the Company's shareholders, and interim dividend are approved by the Board of Directors.

### 2.26 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 Board of Directors that makes strategic decisions.

### 3 Financial risk management

#### 3.1 Financial risk factors

The Group's activities expose it to a variety of financial risks: currency risk, cash flow interest rate risk, credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance.

Risk management is carried out by management under policies approved by the Board of Directors. They identify, evaluate and provide written principles for overall risk management, as well as written policies covering specific areas.

##### 1) Foreign exchange risk

The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures. Foreign exchange risk arises from future commercial transactions, recognised assets and liabilities and net investments in foreign operations.

Entities in the Group use forward contracts, transacted with the Group treasury, to hedge their exposure to foreign currency risk in connection with measurement currency. The Group treasury is responsible for hedging the net position in each currency by using currency borrowings and external forward currency contracts.

##### 2) Interest rate risk

The Group's income and operating cash flows are substantially independent of changes in market interest rates. All interest rate derivative transactions are subject to approval by the finance director before execution. The Group has no significant interest-bearing assets. The Group issued debentures at fixed rates and uses interest rate swaps from fixed rates to floating rates for some debenture balances in order to reduce finance costs.

##### 3) Credit risk

The Group has no significant concentrations of credit risk. The Group has policies in place to ensure that sales of products and services are made to customers with an appropriate credit history. Cash transactions are limited to high credit quality financial institutions.

##### 4) Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash and marketable securities, the availability of funding through an adequate amount of committed credit facilities, and the ability to close out market positions. Due to the dynamic nature of the underlying business, the Group treasury aims at maintaining flexibility in funding by keeping committed credit lines available.

#### 3.2 Accounting for derivative financial instruments and hedging activities

The Group is party to derivative financial instruments, which mainly comprise foreign currency forward contracts and interest rate swap agreements. Such instruments are not recognised in the financial statement on inception.

Foreign currency forward contracts protect the Group from movements in exchange rates by establishing the rate at which a foreign currency asset will be realised or a foreign currency liability settled. Any increase or decrease in the amount required to realise the asset or settle the liability is offset by a corresponding movement in the value of the forward exchange contract. The gains and losses on the derivative instruments and the underlying financial asset or liability are therefore offset for financial reporting purposes and are not recognised in the financial statement. The fee incurred in establishing each agreement is amortised over the contract period.

Interest rate swap agreements protect the Group from movements in interest rates. Any differential to be paid or received on an interest rate swap agreement is recognised as a component of interest revenue or expense over the period of the agreement. Gains and losses on early termination of interest rate swaps or on repayment of the borrowing are taken to profit or loss.

Disclosures about derivative financial instruments to which the Group is a party are provided in Note 37.

### 3 Financial risk management (continued)

#### 3.3 Fair value estimation

The fair values of the financial assets and liabilities are disclosed in relevant notes.

##### 1) Financial instruments in level 1

The fair value of financial instruments traded in active markets is based on quoted market prices at the statement of financial position date. The quoted market price used for financial assets held by the Group is the current bid price. These instruments are included in level 1.

##### 2) Financial instruments in level 2

The fair value of financial instruments that are not traded in an active market (over-the-counter) is determined using valuation techniques which maximise the use of observable market data and rely as little as possible on entity-specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

##### 3) Financial instruments in level 3

If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3.

Specific valuation techniques used to value financial instruments include:

- Quoted market prices or dealer quotes for similar instruments;
- The fair value of interest rate swaps is calculated as the present value of the estimated future cash flows based on observable yield curves;
- The fair value of forward foreign exchange contracts is determined using forward exchange rates at the statement of financial position date, with the resulting value discounted back to present value;
- Other techniques, such as discounted cash flow analysis, are used to determine fair value for the remaining financial instruments.

There were no transfers between levels 1 and 2 during the year.

## 4 Critical accounting estimates and judgements

Estimates 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.

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are outlined below.

### 4.1 Estimated impairment of goodwill

The Group tests annually whether goodwill has suffered any impairment, in accordance with the accounting policy stated in Note 2.15. The recoverable amounts of cash-generating units have been determined based on value-in-use by discounted forecast of future cash flow. The key assumptions in relation to forecast of net future cash flow discounted to be net present value are the gross margin, growth rate and discount rate which are additionally disclosed in Note 20.

### 4.2 Retirement benefits

The present value of the retirement benefits obligations depends on a number of factors that are determined on an actuarial basis using a number of assumptions. Including the discount rate. Any changes in these assumptions will have an impact on the carrying amount of retirement benefits obligation.

The Group determines the appropriate discount rate at the end of each year. This is the interest rate that should be used to determine the present value of estimated future cash outflows expected to be required to settle the retirement benefits obligations. In determining the appropriate discount rate, the Group considers the 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 the terms of the related retirement benefits liability.

Additional information of other key assumptions for retirement benefits obligations other is disclosed in Note 26.

## 5 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.

## 6 Segment information

The Group reported operating segments 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 Board of Directors that makes strategic decisions.

The factors used to identify the Group's reportable segments include types of products and services, and geographical areas. There are five reportable segments i.e. (1) real estate business (2) power business (3) water business (4) other domestic business and (5) holding company in overseas.

The Board of Director assesses the performance of the operating segments based on revenues from segment. Interest income and expenditure are not allocated to segments, as this type of activity is driven by the central treasury function, which manages the cash position of the Group.

The Company's revenues between segments are carried out at arm's length. The revenue from external parties reported to the Board of Director is measured in a manner consistent with that in the income statement.



## 6 Segment information (continued)

Incomes and profits information by business segment for the year ended 31 December are as follows:

	2017						2016					
	Domestic			Overseas			Domestic			Overseas		
	Real Estate business Baht	Power business Baht	Water business Baht	Other business Baht	Holding company Baht	Total Baht	Real Estate business Baht	Power business Baht	Water business Baht	Other business Baht	Holding company Baht	Total Baht
Revenue from lease and services	1,375,401,763	-	189,783,341	210,016,571	-	1,775,201,675	1,961,722,285	-	163,015,025	171,092,823	-	2,295,830,133
Revenue from sales of real estate	6,290,087,427	-	-	-	-	6,290,087,427	14,162,607,673	-	-	-	-	14,162,607,673
Revenue from sales	11,007,544	-	1,437,286,722	-	-	1,448,294,266	99,794,959	-	1,297,140,685	-	-	1,396,935,644
Total sales and services income	7,676,496,734	-	1,627,070,063	210,016,571	-	9,513,583,368	16,224,124,917	-	1,460,155,710	171,092,823	-	17,855,373,450
Profit (loss) from operations	2,059,883,924	(14,554,240)	590,913,056	175,014,461	(1,622,434)	2,809,634,767	4,255,331,204	(15,263,167)	623,043,715	83,140,063	(800,396)	4,945,451,419
Other income	797,289,994	131,116,594	3,241,133	965,354	274,768	932,887,843	374,148,718	83,897,374	581,055	4,755,414	114	463,382,675
Finance costs	(1,189,442,923)	(365,853,255)	(61,229,002)	(2,154)	-	(1,616,527,334)	(2,109,845,665)	(241,139,516)	(81,151,962)	(15,103)	-	(2,432,152,246)
Share of profit of associates	-	-	-	-	-	-	-	-	-	-	-	-
and joint ventures	28,409,866	1,935,081,821	-	(27,638,775)	-	1,963,491,687	44,272,688	961,941,133	-	-	-	1,006,213,821
Income tax	(204,550,743)	(18,171,253)	(3,459,578)	-	-	(253,820,349)	(745,884,279)	(13,706,504)	(30,764,925)	(22,273,257)	-	(812,628,965)
Profit (loss) for the period	1,491,590,118	1,667,619,667	529,465,609	148,338,886	(1,347,666)	3,835,666,614	1,818,022,666	775,729,320	511,707,883	65,607,117	(800,282)	3,170,266,704
Profit attributable to non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	-
Profit attributable to owners of the parent	-	-	-	-	-	(569,237,232)	-	-	-	-	-	(272,111,043)
	-	-	-	-	-	3,266,429,382	-	-	-	-	-	2,898,155,661

## 6 Segment information (continued)

Assets and liabilities information by business segment as at 31 December are as following:

	2017					2016				
	Domestic		Overseas			Domestic		Overseas		
	Real Estate business Baht	Power business Baht	Water business Baht	Other business Baht	Holding company Baht	Real Estate business Baht	Power business Baht	Water business Baht	Other business Baht	Holding company Baht
Segment assets	38,448,090,452	14,269,951,082	9,503,109,900	162,171,454	42,866,238	41,378,037,034	11,722,604,823	8,775,680,164	200,600,462	9,288,912
Unallocated assets										
Total assets						62,426,189,126				62,086,211,395
						11,192,770,463				12,697,424,723
Segment liabilities	22,989,053,602	223,169,439	1,461,954,815	69,386,106	71,160	26,077,662,646	197,148,528	1,436,358,692	57,586,630	55,136
Unallocated liabilities										
Total liabilities						20,341,917,214				52,821,367,172
						45,085,552,336				
Segment depreciation and amortisation	337,760,823	-	97,309,636	15,230,958	-	447,324,806	-	121,678,128	15,235,459	-
Unallocated depreciation										
Unallocated amortisation										
Total depreciation and amortisation						450,301,417				584,238,393
						19,618,424				10,847,942
						2,943,367				1,917,359
						472,863,208				597,003,694



## 7 Cash and cash equivalents

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Cash on hand	5,997,128	12,387,531	260,109	56,019
Deposits held at call with banks	1,913,713,844	2,623,293,519	78,907,672	173,200,903
	1,919,710,972	2,635,681,050	79,167,781	173,256,922
<u>Less</u> Restricted bank deposits	-	(285,599)	-	(136,712)
	<u>1,919,710,972</u>	<u>2,635,395,451</u>	<u>79,167,781</u>	<u>173,120,210</u>

The interest rates on deposits are as follows:

	Consolidated financial statements		Separate financial statements	
	2017 %	2016 %	2017 %	2016 %
Deposits held at call with banks	0.10 - 0.75	0.05 - 2.08	0.10 - 0.40	0.10 - 0.40

## 8 Short-term investments

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Opening balance	2,108,326,643	1,515,244,772	2,084,758,530	17,137,868
Purchase of securities	5,875,000,000	6,248,000,000	5,875,000,000	6,188,000,000
Disposal of securities	(7,415,041,146)	(5,654,093,266)	(7,413,085,297)	(4,120,816,932)
Change in revaluation	462,182	(824,863)	101,221	437,594
Closing balance	<u>568,747,679</u>	<u>2,108,326,643</u>	<u>546,774,454</u>	<u>2,084,758,530</u>

The fair values of the short-term investments are as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Cost	567,303,724	2,107,344,870	546,018,780	2,084,104,077
Unrealised gain	1,443,955	981,773	755,674	654,453
	<u>568,747,679</u>	<u>2,108,326,643</u>	<u>546,774,454</u>	<u>2,084,758,530</u>

The fair values of short-term investments are based on Net Asset Value (NAV) announced by the Asset Management Company. The fair values are within level 1 of the fair value hierarchy.

## 9 Trade and other receivables, net

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Trade receivables	264,958,457	271,425,315	5,896,726	9,760,314
<u>Less</u> Allowance for doubtful debt	(32,875,325)	(7,005,030)	-	-
	232,083,132	264,420,285	5,896,726	9,760,314
Amounts due from related parties (Note 38.2)	22,759,943	6,040,729	1,847,679	2,025,624
Prepaid expenses	20,181,676	22,329,361	3,678,325	2,324,110
Advance payment for purchase investment in available-for-sale	163,927,168	-	-	-
Accrued income	53,038,353	66,838,773	197,807	2,466,393
Advance payment for construction	-	60,453,000	-	60,453,000
Others	39,060,456	83,157,883	9,477,673	757,653
	<u>531,050,728</u>	<u>503,240,031</u>	<u>21,098,210</u>	<u>77,787,094</u>

Outstanding trade receivables can be analysed as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Within due	146,629,036	238,708,780	2,578,046	5,549,688
Overdue				
Up to 3 months	80,197,372	17,106,389	1,104,106	2,167,285
3 - 6 months	29,716,758	7,738,294	1,642,608	-
6 - 12 months	2,612,135	3,202,940	-	1,747,157
Over 12 months	5,803,156	4,668,912	571,966	296,184
	264,958,457	271,425,315	5,896,726	9,760,314
<u>Less</u> Allowance for doubtful debt	(32,875,325)	(7,005,030)	-	-
	<u>232,083,132</u>	<u>264,420,285</u>	<u>5,896,726</u>	<u>9,760,314</u>

Outstanding amounts due from related parties can be analysed as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Within due	22,759,943	6,040,729	1,847,679	2,025,624

## 10 Real estate development costs

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Opening balance	14,648,452,962	15,425,268,393	-	-
Additions	1,246,863,490	1,143,280,210	114,908,924	-
Transfer from investment properties (Note 17)	-	281,796,653	-	-
Transfer to investment properties (Note 17)	(453,268,497)	(232,058,968)	-	-
Classify to other non-current assets	-	(154,539,133)	-	-
Recognise as expense	(1,701,683,516)	(1,815,294,193)	(114,908,924)	-
Closing balance	13,740,364,439	14,648,452,962	-	-

The partial of land has been pledged as securities for credit facilities.

### Consolidated

Borrowing costs of Baht 58,616,777 (2016: Baht 1,862,998) were capitalised during the year and are included in 'additions'. A capitalisation rate of 3.86% (2016: 4.50%) was used calculating the borrowing cost.

### Company

Borrowing costs of Baht 834,830 (2016: nil) were capitalised during the year and are included in 'additions'. A capitalisation rate 4.17% (2016: nil) was used calculating the borrowing cost

## 11 Non-current assets held for sale

### Consolidated

During the year, the assets and liabilities of 10 projects (2016: 4 projects) have been classified as held for sale following the approval of the Group's management and subsequently sold within the year 4 projects (2016: 4 projects).

### Company

During the year, the assets and liabilities of 3 projects (2016: 4 projects) have been classified as held for sale following the approval of the Group's management and subsequently sold within the year 2 projects (2016: 4 projects).

Non-current assets held for sale's assets and liabilities were premeasured to the lower of carrying amount and fair value less costs to sell at the date of held for sale classification.

**11 Non-current assets held for sale (continued)**

The major classes of assets and liabilities of non-current assets held for sale are as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
<b>Assets of disposal group classified as held for sale</b>				
Investment properties	823,583,713	-	132,971,875	-
Other non-current assets	11,620,430	-	594,245	-
	<u>835,204,143</u>	<u>-</u>	<u>133,566,120</u>	<u>-</u>
<b>Liabilities directly associated with assets classified as held for sale</b>				
Deposits from long-term lease agreement	32,332,916	-	-	-
	<u>32,332,916</u>	<u>-</u>	<u>-</u>	<u>-</u>

**12 Available-for-sale investment**

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Opening balance	4,025,075,674	2,286,296,330	3,170,538,054	2,285,800,350
Purchase of securities	4,362	2,063,202,130	4,362	1,209,157,220
Capital reduction of securities	(62,323,132)	(30,417,880)	(21,901,186)	(30,419,535)
Disposal of securities	-	(213,965,399)	-	(213,947,545)
Adjust securities value from merge	(9,310,787)	14	(9,310,787)	-
Change in revaluation	(117,214,758)	(80,039,521)	(8,198,830)	(80,052,436)
Closing balance	<u>3,836,231,359</u>	<u>4,025,075,674</u>	<u>3,131,131,613</u>	<u>3,170,538,054</u>

The fair values of the available-for-sale investments are as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Cost	3,920,176,854	3,967,400,521	3,106,252,615	3,113,054,336
Unrealised gain (loss)	(83,945,495)	57,675,153	24,878,998	57,483,718
	<u>3,836,231,359</u>	<u>4,025,075,674</u>	<u>3,131,131,613</u>	<u>3,170,538,054</u>

The fair values of available-for-sale investments are based on last quoted bid price by reference to the Stock Exchange of Thailand or Net Asset Value (NAV) announced by the Asset Management Company. The fair values are within level 1 of the fair value hierarchy.

### 13 Investments in associates

Associates	Place of business and country of incorporation	Proportion of ordinary shares held by the Company (%)		Proportion of ordinary shares held by the Group (%)	
		2017	2016	2017	2016
Hemaraj Industrial Property and Leasehold Fund	Thailand	-	-	23	23
GHECO - One Company Limited	Thailand	-	-	25	35
Gulf JP NLL Company Limited	Thailand	-	-	18	25
Gulf Solar Company Limited and its subsidiaries:	Thailand	-	-	18	25
Gulf Solar KKS Company Limited	Thailand	-	-	18	25
Gulf Solar BV Company Limited	Thailand	-	-	18	25
Gulf Solar TS1 Company Limited	Thailand	-	-	18	25
Gulf Solar TS2 Company Limited	Thailand	-	-	18	25
B.Grimm Power (WHA) 1 Limited (formerly named Bowin Clean Energy Limited)	Thailand	-	-	18	25
Gulf VTP Company Limited	Thailand	-	-	18	25
Gulf TS1 Company Limited	Thailand	-	-	18	25
Gulf TS2 Company Limited	Thailand	-	-	18	25
Gulf TS3 Company Limited	Thailand	-	-	18	25
Gulf TS4 Company Limited	Thailand	-	-	18	25
Gulf NLL2 Company Limited	Thailand	-	-	18	25

The fair value of the Groups interest in Hemaraj Industrial Property and Leasehold Fund, which is listed on the Stock Exchange of Thailand, was Baht 598,773,405 (2016: Baht 868,491,155) and the carrying amount of the Group's interest was Baht 923,918,982 (2016: Baht 938,212,162).

Other associates are private companies and there are no quoted market price available for its shares.

The movements of investments in associates are as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Opening balance	9,927,971,586	8,886,122,075	-	-
Additions	1,219,487,600	785,305,496	-	-
Capital reduction of associates	(16,183,065)	-	-	-
Disposals	-	(6,935,250)	-	-
Share of profit	1,936,279,527	988,053,114	-	-
Dividend	(728,113,619)	(724,020,604)	-	-
Reclassify to interests in joint ventures (Note 15)	-	(553,245)	-	-
Closing balance	12,339,442,029	9,927,971,586	-	-

During the year, the 6 associates issued increased ordinary shares. The Group purchased all increased ordinary shares to maintain their ownership interest. Moreover, an associate decreased par of ordinary shares. The Group received capital reduction as their ownership interest.

The Group has contingent liabilities relating to guarantee of associates' loans by ordinary shares of such associates.

**13 Investments in associates (continued)***Material associate*

The associate of the Group which, in the opinion of the directors, is material to the Group is GHECO - One Company Limited.

Set out below are the summarised financial information for the associates that are material to the Group. The information disclosed reflects the amounting presented in the financial statements of the relevant associates (not the Group's shares of those amounts). They have been amended to reflect adjustments made using the equity method, including fair value adjustments and modifications for differences in accounting policy.

**Summarised statement of financial position**

	<b>2017 Baht</b>	<b>2016 Baht</b>
Current assets	6,425,088,493	7,256,398,850
Non-current assets	33,302,621,184	34,191,778,841
Current liabilities	(5,977,216,366)	(7,241,943,680)
Non-current liabilities	(11,905,618,362)	(14,717,853,677)
Net assets	<u>21,844,874,949</u>	<u>19,488,380,334</u>

**Summarised statement of comprehensive income**

	<b>2017 Baht</b>	<b>2016 Baht</b>
Revenue	11,108,954,715	11,722,404,672
Profit before income tax	4,046,281,193	2,881,273,167
Income tax expense	(58,939,378)	(1,423,560)
Profit for the year	3,987,341,815	2,879,849,607
Other comprehensive income	-	-
Total comprehensive income	<u>3,987,341,815</u>	<u>2,879,849,607</u>
Dividends received from associate	570,796,516	651,350,835

Reconciliation of the summarised financial information presented to the carrying amount of its interest in the material associate is as follows:

	<b>2017 Baht</b>	<b>2016 Baht</b>
Closing net assets	<u>21,844,874,949</u>	<u>19,488,380,334</u>
Interest in associates	35 Percent	35 Percent
Carrying value	<u>7,645,401,252</u>	<u>6,820,628,136</u>

*Individually immaterial associates*

In addition to the interests in associates disclosed above, the Group also has interests in a number of individually immaterial associates that are accounted for using the equity method.

	<b>2017 Baht</b>	<b>2016 Baht</b>
Aggregate carrying amount of individually immaterial associates	<u>4,694,040,777</u>	<u>3,107,343,450</u>
Aggregate amounts of the Group's share of:		
Profit for the year	540,709,899	19,894,242
Other comprehensive income	-	-
Total comprehensive income	<u>540,709,899</u>	<u>19,894,242</u>

## 14 Investments in subsidiaries

Subsidiaries	Place of business and country of incorporation	Proportion of ordinary shares held by the Company (%)		Proportion of ordinary shares held by the Group (%)	
		2017	2016	2017	2016
Warehouse Asia Alliance Co., Ltd.	Thailand	100	100	-	-
WHA Venture Holdings Co., Ltd.	Thailand	100	100	-	-
WHA Real Estate Management Co., Ltd.	Thailand	100	100	-	-
WHA Infonite Co., Ltd. (formerly named WHA Infonite Holdings Co., Ltd.)	Thailand	95	90	-	-
WHA Corporation (International) Limited	Republic of Mauritius	100	100	-	-
WHA Alliance Co., Ltd.	Thailand	100	100	-	-
WHA Corporation (Hong Kong) Limited	Hong Kong	-	-	100	100
PT WHA International Indonesia	Indonesia	-	-	100	100
Hemaraj Land and Development Public Company Limited	Thailand	-	-	99	99
Eastern Industrial Estate Company Limited	Thailand	-	-	99	99
Eastern Seaboard Industrial Estate (Rayong) Company Limited	Thailand	-	-	59	59
Hemaraj Eastern Seaboard Industrial Estate Company Limited	Thailand	-	-	99	99
Hemaraj Saraburi Industrial Land Company Limited	Thailand	-	-	99	99
Hemaraj Rayong Industrial Land Company Limited	Thailand	-	-	99	99
Rayong 2012 Company Limited	Thailand	-	-	99	99
Hemaraj Eastern Seaboard Industrial Estate 4 Company Limited	Thailand	-	-	99	99
Eastern Pipeline Services Company Limited	Thailand	-	-	99	99
H-Construction Management and Engineering Company Limited	Thailand	-	-	99	99
SME Factory Company Limited	Thailand	-	-	99	99
The Park Residence Company Limited	Thailand	-	-	99	99
Hemaraj Reit Management Company Limited	Thailand	-	-	99	99
Eastern Seaboard Property and Marina Services Company Limited	Thailand	-	-	99	99
WHA Hemaraj International Company Limited	Thailand	-	-	99	99
Hemaraj International Limited	Cayman Island	-	-	99	99
H-International (BVI) Company Limited	British Virgin	-	-	99	99
H-International (SG) Pte. Ltd.	Singapore	-	-	99	99
WHA Hemaraj Land and Development (SG) Pte. Ltd.	Singapore	-	-	99	99
WHA Hemaraj Cienco4 Nghe An Joint Stock Company	Vietnam	-	-	98	-
WHA Hemaraj Management Services Vietnam Company Limited	Vietnam	-	-	99	-
WHA Utilities and Power Public Company Limited	Thailand	-	-	69	99
WHA Water Company Limited (formerly named Hemaraj Water Company Limited)	Thailand	-	-	69	99
WHA Energy Company Limited (formerly named Hemaraj Energy Company Limited)	Thailand	-	-	69	99
WHA Energy 2 Company Limited (formerly named Hemaraj Energy 2 Company Limited)	Thailand	-	-	69	99
WHAUP International Company Limited	Thailand	-	-	69	-
WHAUP (SG) 1 Pte. Ltd.	Singapore	-	-	69	-
WHAUP (SG) 2 Pte. Ltd.	Singapore	-	-	69	-

All subsidiary undertakings are included in the consolidation. The proportion of the voting rights in the subsidiary undertakings held directly by the parent company do not differ from the proportion of ordinary shares held.



**14 Investments in subsidiaries (continued)**

The movements of investments in subsidiaries are as follows:

	<b>Consolidated financial statements</b>		<b>Separate financial statements</b>	
	<b>2017 Baht</b>	<b>2016 Baht</b>	<b>2017 Baht</b>	<b>2016 Baht</b>
Opening balance	-	-	23,328,121,939	20,909,832,657
Additions	-	-	174,800,000	2,418,613,900
Disposals	-	-	-	(324,618)
Closing balance	-	-	23,502,921,939	23,328,121,939

During the year 2017, WHA Infonite Co., Ltd. issued increased ordinary shares. The Company purchased increased ordinary shares more than its previous ownership interest that caused proportion increased from 90% to 95% and WHA Utilities and Power Public Company Limited issued increased ordinary shares. The Group did not purchase increased ordinary shares as its previous ownership interest that caused proportion decreased from 99% to 69%. Because of these changes, the owners of the parent net increased Baht 3,621,802,446.

During the year, the Group incorporated total 6 subsidiaries and subsequently solved 1 subsidiary which is WHA Hemaraj Cienco4 Joint Stock Company.

Ordinary shares of WHA Energy 2 Company Limited have been pledged as securities for loans (Note 22).

*Subsidiary with material non-controlling interests*

The subsidiary of the Group which, in the opinion of the directors, has material non-controlling interests to the Group is WHA Utilities and Power Public Company Limited and subsidiaries. The proportion of ownership interests held by non-controlling interests is 31% (2016: 1%).

Set out below are the summarised financial information for subsidiary that has non-controlling interests that are material to the Group. The amounts disclosed for subsidiary are before inter-company eliminations.

<b>Summarised statement of financial position</b>	<b>2017 Baht</b>	<b>2016 Baht</b>
Current assets	2,081,742,159	2,135,522,985
Non-current assets	19,296,444,157	16,516,572,595
Current liabilities	(386,031,709)	(2,824,603,560)
Non-current liabilities	(8,415,176,643)	(8,408,008,928)
Net assets	12,576,977,964	7,419,483,092
Non controlling interests	2,941,482,047	137,710,814
<b>Summarised statement of comprehensive income</b>	<b>2017 Baht</b>	<b>2016 Baht</b>
Revenue	1,633,756,626	1,467,519,162
Profit for year	1,980,915,605	1,054,467,312
Other comprehensive income	(6,261,917)	(15,551,560)
Total comprehensive income	1,974,653,688	1,038,915,752
Profit for the year allocated to non-controlling interests	531,966,290	14,509,095
Total comprehensive income allocated to non-controlling interests	528,605,293	14,282,602
Dividends paid to non-controlling interests	-	-

## 14 Investments in subsidiaries (continued)

*Subsidiary with material non-controlling interests (continued)*

### Summarised statement of cash flows

	2017 Baht	2016 Baht
Net cash receipts from operating activities	870,317,781	709,824,184
Net cash payments from investing activities	(1,101,605,350)	(12,334,701,964)
Net cash payments from financing activities	675,377,780	11,676,509,968
Net increase(decrease) in cash and cash equivalents	444,090,211	51,632,188
Cash and cash equivalents at the beginning of the year	147,476,373	95,844,185
Cash and cash equivalents at the end of the year	591,566,584	147,476,373

## 15 Interests in joint ventures

Joint ventures	Place of business and country of incorporation	Proportion of ordinary shares held by the Company (%)		Proportion of ordinary shares held by the Group (%)	
		2017	2016	2017	2016
WHA KPN Alliance Co., Ltd.	Thailand	65	65	-	-
Central WHA Alliance Co., Ltd.	Thailand	50	50	-	-
WHA Daiwa Logistics Property Co., Ltd.	Thailand	51	51	-	-
Genesis Data Center Co., Ltd.	Thailand	-	-	32	30
WHA Gunkul Green Solar Roof 1 Co., Ltd.	Thailand	-	-	52	74
WHA Gunkul Green Solar Roof 2 Co., Ltd.	Thailand	-	-	-	74
WHA Gunkul Green Solar Roof 3 Co., Ltd.	Thailand	-	-	52	74
WHA Gunkul Green Solar Roof 4 Co., Ltd.	Thailand	-	-	-	74
WHA Gunkul Green Solar Roof 5 Co., Ltd.	Thailand	-	-	-	74
WHA Gunkul Green Solar Roof 6 Co., Ltd.	Thailand	-	-	52	74
WHA Gunkul Green Solar Roof 8 Co., Ltd.	Thailand	-	-	-	74
WHA Gunkul Green Solar Roof 9 Co., Ltd.	Thailand	-	-	-	74
WHA Gunkul Green Solar Roof 10 Co., Ltd.	Thailand	-	-	-	74
WHA Gunkul Green Solar Roof 16 Co., Ltd.	Thailand	-	-	-	74
WHA Gunkul Green Solar Roof 17 Co., Ltd.	Thailand	-	-	52	74
Houay Ho Thai Company Limited and its associate:	Thailand	-	-	36	50
Houay Ho Power Company Limited	Lao People's Democratic Republic	-	-	9	13
Eastern Seaboard Clean Energy Company Limited and its subsidiaries:	Thailand	-	-	23	33
Glow Hemaraj Wind Company Limited	Thailand	-	-	23	33
Chonburi Clean Energy Company Limited	Thailand	-	-	23	33
Rayong Clean Energy Company Limited	Thailand	-	-	23	33
Gulf WHA MT Gas Distribution Company Limited (formerly named Gulf Eastern Seaboard NGD Co.,Ltd.) and its subsidiaries:	Thailand	-	-	35	-
WHA Eastern Seaboard NGD2 Co., Ltd.	Thailand	-	-	35	-
WHA Eastern Seaboard NGD4 Co., Ltd.	Thailand	-	-	35	-

The Group has joint control over this arrangement as under the contractual agreements, unanimous consent is Group required from all parties to the agreements for all relevant activities.

The Group's joint arrangement is structured as a limited company and provides the Group and the parties to the agreements with rights to the net assets of the limited company under the arrangements. Therefore, this arrangement is classified as a joint venture.

All joint ventures are private companies and there are no quoted market price available for its shares.

**15 Interests in joint ventures (continued)**

The movements of interests in joint ventures are as follows:

	<b>Consolidated financial statements</b>		<b>Separate financial statements</b>	
	<b>2017 Baht</b>	<b>2016 Baht</b>	<b>2017 Baht</b>	<b>2016 Baht</b>
Opening balance	1,408,112,963	724,877,696	1,238,450,000	545,062,608
Additions	171,747,500	789,220,002	-	739,450,000
Disposals	-	(490,882)	-	(46,062,608)
Dividend	(15,313,035)	-	-	-
Capital reduction of joint ventures	-	(53,824,378)	-	-
Liquidation of joint ventures	(2,295,975)	-	-	-
Share of profit	27,212,160	18,160,707	-	-
Elimination	(2,596,449)	(60,949,720)	-	-
Currency translation differences	(10,459,539)	(9,433,707)	-	-
Reclassify from investments in associates (Note 13)	-	553,245	-	-
Closing balance	<u>1,576,407,625</u>	<u>1,408,112,963</u>	<u>1,238,450,000</u>	<u>1,238,450,000</u>

During the year 2017, the Group jointly invested in 3 joint ventures and 2 joint ventures issued increased ordinary shares. The Group purchased all increased ordinary shares to maintain their ownership interest. Moreover, the Group has received return fund from 7 joint ventures' liquidation in the total amount of Baht 2,151,955 and recognised loss in the amount of Baht 144,020 in the statements of comprehensive income.

There are no commitments and contingent liabilities relating to the Group's interests in joint ventures.

*Individually immaterial joint ventures*

The Group has interests in a number of individually immaterial joint ventures that are accounted for using the equity method.

	<b>2017 Baht</b>	<b>2016 Baht</b>
Aggregate carrying amount of individually immaterial joint ventures	<u>1,576,407,625</u>	<u>1,408,112,963</u>
Aggregate amounts of the Group's share of:		
Profit for the year	27,212,160	18,160,707
Other comprehensive expense	<u>(7,321,677)</u>	<u>(9,433,707)</u>
Total comprehensive income	<u>19,890,483</u>	<u>8,727,000</u>

**16 Other long-term investments, net**

	<b>Consolidated financial statements</b>		<b>Separate financial statements</b>	
	<b>2017 Baht</b>	<b>2016 Baht</b>	<b>2017 Baht</b>	<b>2016 Baht</b>
Cost	283,802,894	297,675,582	-	-
Allowance for impairment	<u>(717,000)</u>	<u>(717,000)</u>	-	-
	<u>283,085,894</u>	<u>296,958,582</u>	-	-

The Group has contingent liabilities relating to guarantee of Glow IPP Co., Ltd.'s loans by ordinary shares of such company.

The Group does not disclose information regarding the fair value of other long-term investments, as the fair value cannot be measured reliably due to are investments in non-marketable equity securities and cannot find sufficient and appropriate reference information.

17 Investment properties, net

	Consolidated financial statements				
	Land Baht	Buildings and utilities systems Baht	Building improvement Baht	Construction in progress Baht	Total Baht
<b>As at 1 January 2016</b>					
Cost	5,549,252,165	7,256,697,871	428,755,670	2,046,089,057	15,280,794,763
Less Accumulated depreciation	-	(600,783,376)	(41,448,967)	-	(642,232,343)
Net book amount	5,549,252,165	6,655,914,495	387,306,703	2,046,089,057	14,638,562,420
<b>For the year ended 31 December 2016</b>					
Opening net book amount	5,549,252,165	6,655,914,495	387,306,703	2,046,089,057	14,638,562,420
Additions	117,974,882	138,068	866,098	1,108,217,741	1,227,196,789
Transfers	3,831,908	2,018,051,019	263,207,992	(2,285,090,919)	-
Depreciation charge	-	(288,371,588)	(21,201,577)	-	(309,573,165)
Currency translation differences	1,629,612	1,838,714	1,185,460	-	4,653,786
Transfer from real estate development costs (Note 10)	28,412,672	203,646,296	-	-	232,058,968
Transfer to real estate development costs (Note 10)	-	(88,199,380)	-	(193,597,273)	(281,796,653)
Classify to assets held for sale	(1,191,754,745)	(3,109,997,417)	(338,003,796)	-	(4,639,755,958)
Cease to classify to assets held for sale	-	133,164,425	21,074,527	-	154,238,952
Closing net book amount	4,509,346,494	5,526,184,632	314,435,407	675,618,606	11,025,585,139
<b>As at 31 December 2016</b>					
Cost	4,509,346,494	6,288,753,349	360,437,112	675,618,606	11,834,155,561
Less Accumulated depreciation	-	(762,568,717)	(46,001,705)	-	(808,570,422)
Net book amount	4,509,346,494	5,526,184,632	314,435,407	675,618,606	11,025,585,139

## 17 Investment properties, net (continued)

	Consolidated financial statements				
	Land Baht	Buildings and utilities systems Baht	Building improvement Baht	Construction in progress Baht	Total Baht
<b>For the year ended 31 December 2017</b>					
Opening net book amount	4,509,346,494	5,526,184,632	314,435,407	675,618,606	11,025,585,139
Additions	54,182,882	286,968,600	2,100,774	376,369,787	719,622,043
Transfers	17,376,908	517,266,639	52,616,917	(587,260,464)	-
Disposals	(31,630,639)	(162,159,622)	(5,881,529)	-	(199,671,790)
Depreciation charge	-	(210,727,970)	(14,446,389)	-	(225,174,359)
Currency translation differences	(10,889,542)	(11,489,801)	(7,511,363)	-	(29,890,706)
Transfer from real estate development costs (Note 10)	57,185,810	342,075,336	-	54,007,351	453,268,497
Transfer to property, plant and equipment (Note 18)	-	-	-	(548,450)	(548,450)
Classify to assets held for sale	(120,550,775)	(2,064,474,776)	(136,157,356)	-	(2,321,182,907)
Closing net book amount	4,475,021,138	4,223,643,038	205,156,461	518,186,830	9,422,007,467
<b>As at 31 December 2017</b>					
Cost	4,475,021,138	4,936,529,892	246,934,387	518,186,830	10,176,672,247
Less Accumulated depreciation	-	(712,886,854)	(41,777,926)	-	(754,664,780)
Net book amount	4,475,021,138	4,223,643,038	205,156,461	518,186,830	9,422,007,467

17 Investment properties, net (continued)

	Separate financial statements				
	Land Baht	Buildings and utilities systems Baht	Building improvement Baht	Construction in progress Baht	Total Baht
<b>As at 1 January 2016</b>					
Cost	3,975,232,447	5,386,256,676	406,918,994	743,325,467	10,511,733,584
<u>Less</u> Accumulated depreciation	-	(286,541,693)	(25,736,641)	-	(312,278,334)
Net book amount	3,975,232,447	5,099,714,983	381,182,353	743,325,467	10,199,455,250
<b>For the year ended 31 December 2016</b>					
Opening net book amount	3,975,232,447	5,099,714,983	381,182,353	743,325,467	10,199,455,250
Additions	3,089,780	-	481,098	684,982,851	688,553,729
Transfers	(5,204,700)	1,254,475,994	129,712,022	(1,378,983,316)	-
Depreciation charge	-	(188,899,509)	(13,796,384)	-	(202,695,893)
Classify to assets held for sale	(1,191,754,745)	(3,109,997,417)	(338,003,796)	-	(4,639,755,958)
Cease to classify to assets held for sale	-	133,164,425	21,074,527	-	154,238,952
Closing net book amount	2,781,362,782	3,188,458,476	180,649,820	49,325,002	6,199,796,080
<b>As at 31 December 2016</b>					
Cost	2,781,362,782	3,537,313,431	203,534,006	49,325,002	6,571,535,221
<u>Less</u> Accumulated depreciation	-	(348,854,955)	(22,884,186)	-	(371,739,141)
Net book amount	2,781,362,782	3,188,458,476	180,649,820	49,325,002	6,199,796,080
<b>For the year ended 31 December 2017</b>					
Opening net book amount	2,781,362,782	3,188,458,476	180,649,820	49,325,002	6,199,796,080
Additions	-	-	-	315,368,070	315,368,070
Transfers	-	314,090,295	34,881,920	(348,972,215)	-
Depreciation charge	-	(138,033,025)	(7,436,359)	-	(145,469,384)
Classify to assets held for sale	(25,241,500)	(827,132,126)	(75,243,477)	-	(927,617,103)
Closing net book amount	2,756,121,282	2,537,383,620	132,851,904	15,720,857	5,442,077,663
<b>As at 31 December 2017</b>					
Cost	2,756,121,282	2,913,367,173	148,092,977	15,720,857	5,833,302,289
<u>Less</u> Accumulated depreciation	-	(375,983,553)	(15,241,073)	-	(391,224,626)
Net book amount	2,756,121,282	2,537,383,620	132,851,904	15,720,857	5,442,077,663



**17 Investment properties, net (continued)**

The fair values of investment properties are as follows:

	<b>Consolidated financial statements</b>		<b>Separate financial statements</b>	
	<b>2017 Baht</b>	<b>2016 Baht</b>	<b>2017 Baht</b>	<b>2016 Baht</b>
Investment properties ready to use and used	12,416,184,549	13,465,193,775	6,752,348,831	7,306,137,716
Investment properties under construction	1,281,035,436	1,106,741,337	392,207,235	425,811,381
	<u>13,697,219,985</u>	<u>14,571,935,112</u>	<u>7,144,556,066</u>	<u>7,731,949,097</u>

The fair values of investment properties are within level 3 of the fair value hierarchy which uses significant unobservable inputs.

The fair values of investment properties ready to use and used were valued using the income method with discounted cash flows expected to be generated in the future to their present value and sales comparison approach by independent professionally qualified valuers who hold a recognised relevant professional qualification and have recent experience in the locations and segments of the investment properties valued. For all investment properties, their current use equates to the highest and best use.

The Company's finance department includes a team that review the valuations performed by the independent valuers for financial reporting purposes. This team reports directly to the chief financial officer (CFO) and the audit committee (AC). Discussions of valuation processes and results are held between the CFO, AC, the valuation team and the independent valuers at least once every year, in line with the Company's yearly reporting dates. The finance department:

- verifies all major inputs to the independent valuation report;
- assesses property valuation movements when compared to the prior year valuation report;
- holds discussions with the independent valuer.

Investment properties under construction were not assessed fair value by independent professionally qualified valuers. Management considered that the fair values of those assets approximated their net book value.

There were no changes to the valuation techniques during the year.

Amounts recognised in profit and loss that are related to investment properties are as follows:

	<b>Consolidated financial statements</b>		<b>Separate financial statements</b>	
	<b>2017 Baht</b>	<b>2016 Baht</b>	<b>2017 Baht</b>	<b>2016 Baht</b>
Rental and service income	687,562,981	1,110,826,567	356,146,705	451,550,760
Direct operating expense arise from investment properties that generated rental income	367,745,141	425,752,001	260,582,320	320,030,282
Direct operating expense arise from investment properties that did not generate rental income	13,047,505	9,221,152	-	-



## 17 Investment properties, net (continued)

The future aggregate minimum lease income under non-cancellable operating leases are as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Not later than 1 year	527,575,274	674,301,988	290,819,708	374,048,037
Later than 1 year but not later than 5 years	1,386,805,728	1,814,736,007	986,764,964	1,224,638,300
Later than 5 years	853,482,521	1,230,356,605	491,342,355	778,571,198
	<u>2,767,863,523</u>	<u>3,719,394,600</u>	<u>1,768,927,027</u>	<u>2,377,257,535</u>

Borrowing costs of Baht 4,740,870 (2016: Baht 19,682,135) were capitalised during the year and are included in 'additions'. A capitalisation rate 4.17% (2016: 4.19 - 4.27%) was used calculating the borrowing cost.

## 18 Property, plant and equipment, net

	Consolidated financial statements							
	Land Baht	Building improvement Baht	Utility System Baht	Warehouse equipment Baht	Vehicles Baht	Assets for Rent Baht	Construction in progress Baht	Total Baht
<b>As at 1 January 2016</b>								
Cost	2,198,289	800,439,455	3,455,037,834	805,656,232	165,410,801	338,005,148	120,021,068	5,686,768,827
Less Accumulated depreciation	-	(557,264,627)	(388,924,468)	(567,729,628)	(116,297,793)	(214,417,069)	-	(1,844,633,585)
Net book amount	2,198,289	243,174,828	3,066,113,366	237,926,604	49,113,008	123,588,079	120,021,068	3,842,135,242
<b>For the year ended 31 December 2016</b>								
Opening net book amount	2,198,289	243,174,828	3,066,113,366	237,926,604	49,113,008	123,588,079	120,021,068	3,842,135,242
Additions	-	28,547,091	14,424,487	36,221,732	8,503,163	552,000	175,189,212	263,437,685
Transfers	-	2,355,140	249,427,802	3,447,442	-	-	(255,230,384)	-
Disposals	-	-	-	(380,261)	(390,914)	-	-	(771,175)
Depreciation charge	-	(18,303,853)	(159,566,645)	(40,488,612)	(21,007,921)	(14,784,480)	-	(254,151,511)
Reclassify to other non-current assets	-	-	-	(152,480)	-	-	-	(152,480)
Classify to assets held for sale	-	-	-	(18,589,908)	-	-	-	(18,589,908)
Closing net book amount	2,198,289	255,773,206	3,170,399,010	217,984,517	36,217,336	109,355,599	39,979,896	3,831,907,853
<b>As at 31 December 2016</b>								
Cost	2,198,289	831,341,685	3,718,890,122	818,115,723	157,630,305	338,557,148	39,979,896	5,906,713,168
Less Accumulated depreciation	-	(575,568,479)	(548,491,112)	(600,131,206)	(121,412,969)	(229,201,549)	-	(2,074,805,315)
Net book amount	2,198,289	255,773,206	3,170,399,010	217,984,517	36,217,336	109,355,599	39,979,896	3,831,907,853

18 Property, plant and equipment, net (continued)

	Consolidated financial statements							
	Land Baht	Building improvement Baht	Utility System Baht	Warehouse equipment Baht	Vehicles Baht	Assets for Rent Baht	Construction in progress Baht	Total Baht
<b>For the year ended 31 December 2017</b>								
Opening net book amount	2,198,289	255,773,206	3,170,399,010	217,984,517	36,217,336	109,355,599	39,979,896	3,831,907,853
Additions	-	52,142,181	238,912,639	54,722,229	12,296,933	1,544,000	422,093,026	781,711,008
Transfers	7,979,577	(119,955,964)	308,015,937	(57,691,184)	(2)	-	(138,348,364)	-
Disposals	-	(3)	-	(46,686)	(125,318)	-	-	(172,007)
Depreciation charge	-	(16,312,625)	(143,435,886)	(35,592,075)	(17,988,858)	(15,093,170)	-	(228,422,614)
Currency translation differences	-	-	-	(40,658)	-	-	-	(40,658)
Transfers from investment properties	-	-	-	-	-	-	-	-
(Note 17)	-	-	-	-	-	-	-	-
Classify to assets held for sale	-	-	-	(163,295)	-	-	548,450	548,450
	-	-	-	-	-	-	-	(163,295)
Closing net book amount	10,177,866	171,646,795	3,573,891,700	179,172,848	30,400,091	95,806,429	324,273,008	4,385,368,737
<b>As at 31 December 2017</b>								
Cost	10,177,866	651,139,573	4,643,291,894	434,366,389	158,187,436	340,101,148	324,273,008	6,561,537,314
Less Accumulated depreciation	-	(479,492,778)	(1,069,400,194)	(255,193,541)	(127,787,345)	(244,294,719)	-	(2,176,168,577)
Net book amount	10,177,866	171,646,795	3,573,891,700	179,172,848	30,400,091	95,806,429	324,273,008	4,385,368,737

## 18 Property, plant and equipment, net (continued)

	Separate financial statements			
	Building improvement Baht	Office equipment and Warehouse equipment Baht	Vehicles Baht	Total Baht
<b>As at 1 January 2016</b>				
Cost	13,206,112	40,516,231	38,955,340	92,677,683
<u>Less</u> Accumulated depreciation	(2,395,492)	(14,677,459)	(21,495,731)	(38,568,682)
Net book amount	<u>10,810,620</u>	<u>25,838,772</u>	<u>17,459,609</u>	<u>54,109,001</u>
<b>For the year ended 31 December 2016</b>				
Opening net book amount	10,810,620	25,838,772	17,459,609	54,109,001
Additions	85,704	2,451,605	653,630	3,190,939
Disposals	-	(247,886)	(216,297)	(464,183)
Depreciation charge	(662,568)	(3,037,609)	(6,880,464)	(10,580,641)
Classify to assets held for sale	-	(18,589,908)	-	(18,589,908)
Closing net book amount	<u>10,233,756</u>	<u>6,414,974</u>	<u>11,016,478</u>	<u>27,665,208</u>
<b>As at 31 December 2016</b>				
Cost	13,291,816	16,730,429	38,022,270	68,044,515
<u>Less</u> Accumulated depreciation	(3,058,060)	(10,315,455)	(27,005,792)	(40,379,307)
Net book amount	<u>10,233,756</u>	<u>6,414,974</u>	<u>11,016,478</u>	<u>27,665,208</u>
<b>For the year ended 31 December 2017</b>				
Opening net book amount	10,233,756	6,414,974	11,016,478	27,665,208
Additions	151,930	1,831,358	4,398,400	6,381,688
Disposals	-	-	(125,303)	(125,303)
Depreciation charge	(669,944)	(2,430,475)	(6,829,223)	(9,929,642)
Classify to assets held for sale	-	(163,297)	-	(163,297)
Closing net book amount	<u>9,715,742</u>	<u>5,652,560</u>	<u>8,460,352</u>	<u>23,828,654</u>
<b>As at 31 December 2017</b>				
Cost	13,443,746	18,385,050	42,109,719	73,938,515
<u>Less</u> Accumulated depreciation	(3,728,004)	(12,732,490)	(33,649,367)	(50,109,861)
Net book amount	<u>9,715,742</u>	<u>5,652,560</u>	<u>8,460,352</u>	<u>23,828,654</u>

Leased assets included above, where the Group is a lessee under a finance lease, comprise group of assets in digital services and vehicles:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Cost - capitalised finance leases	305,164,716	35,360,657	10,111,649	5,713,249
<u>Less</u> Accumulated depreciation	(20,723,518)	(20,369,996)	(5,752,652)	(4,002,662)
Net book amount	<u>284,441,198</u>	<u>14,990,661</u>	<u>4,358,997</u>	<u>1,710,587</u>

## 19 Intangible assets, net

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Opening net book amount	4,118,659,963	4,184,843,006	-	-
Amortisation charge	-	(12,057,952)	-	-
Cost of investments in associates	-	(54,125,091)	-	-
Closing net book amount	<u>4,118,659,963</u>	<u>4,118,659,963</u>	<u>-</u>	<u>-</u>

The balance is only exclusive right.

## 20 Goodwill

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Opening balance	17,575,045,652	17,575,045,652	-	-
Closing balance	<u>17,575,045,652</u>	<u>17,575,045,652</u>	<u>-</u>	<u>-</u>

Goodwill is allocated to the Group's cash-generating units (CGUs) identified according to business segment as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Synergy	4,245,408,918	4,245,408,918	-	-
Real Estate business	9,942,006,923	9,942,006,923	-	-
Power business	2,162,207,653	2,162,207,653	-	-
Water business	1,225,422,158	1,225,422,158	-	-
	<u>17,575,045,652</u>	<u>17,575,045,652</u>	<u>-</u>	<u>-</u>

The recoverable amount of a CGU is determined based on fair value less costs of disposal calculations by using a present value techniques that are within level 3 of the fair value hierarchy. These calculations use cash flow projections based on financial budgets approved by management covering a five-year period. Cash flows beyond the five-year period are extrapolated using the estimated growth rates that does not exceed the long-term average growth rate for the business in which the CGU operates.

The key assumptions used for fair value less costs of disposal calculations are as follows:

	Synergy %	Real Estate %	Power %	Water %
Gross margin	39.1	49.8	-	33.9
Growth rate	14.8	9.6	(8.4)	7.8
Discount rate	8.9	11.9	8.3	6.2

Management determined budgeted gross margin based on past performance and its expectations of market development. The weighted average growth rates used are consistent with the forecasts included in industry reports. The discount rates used reflect specific risks relating to the relevant segments.

**20 Goodwill (continued)**

The recoverable amount will be equal to the carrying amount if the key assumptions used for fair value less costs of disposal changes to be as follows:

	<b>Synergy %</b>	<b>Real Estate %</b>	<b>Power %</b>	<b>Water %</b>
Gross margin	34.3	34.9	-	24.6
Growth rate	14.5	6.3	(21.2)	6.3
Discount rate	11.0	14.1	10.5	9.1

**21 Deferred income tax**

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

	<b>Consolidated financial statements</b>		<b>Separate financial statements</b>	
	<b>2017 Baht</b>	<b>2016 Baht</b>	<b>2017 Baht</b>	<b>2016 Baht</b>
Deferred tax assets:				
to be recovered within 12 months	11,796,659	1,666,326	-	-
to be recovered after more than 12 months	192,281,547	91,684,111	96,047,739	64,701,456
	<u>204,078,206</u>	<u>93,350,437</u>	<u>96,047,739</u>	<u>64,701,456</u>
Deferred tax liabilities:				
to be settled within 12 months	(11,925,430)	(18,894,494)	-	-
to be settled after more than 12 months	(2,536,396,973)	(2,581,623,589)	-	-
	<u>(2,548,322,403)</u>	<u>(2,600,518,083)</u>	<u>-</u>	<u>-</u>
Deferred tax asset (net)	<u>(2,344,244,197)</u>	<u>(2,507,167,646)</u>	<u>96,047,739</u>	<u>64,701,456</u>

The movements in the deferred income tax account are as follows:

	<b>Consolidated financial statements</b>		<b>Separate financial statements</b>	
	<b>2017 Baht</b>	<b>2016 Baht</b>	<b>2017 Baht</b>	<b>2016 Baht</b>
Opening balance	(2,507,167,646)	(2,015,769,670)	64,701,456	30,883,723
Recognised to profit or loss (Note 35)	134,406,086	(505,028,599)	24,426,421	17,346,138
Recognised to other comprehensive income (Note 35)	28,517,363	13,630,623	6,919,862	16,471,595
Closing balance	<u>(2,344,244,197)</u>	<u>(2,507,167,646)</u>	<u>96,047,739</u>	<u>64,701,456</u>

## 21 Deferred income tax (continued)

The movements in deferred income tax assets and deferred income tax liabilities are as follows:

	Consolidated financial statements					
	At 1 January 2016		Recognised to other comprehensive income		At 31 December 2016	
	Baht		Baht		Baht	
Deferred income tax assets						
Allowance for doubtful debt	2,980,867	(1,579,861)	-	5,174,059	-	6,575,065
Available-for-sale investments	-	-	-	-	16,917,604	16,917,604
Prepaid expenses	15,506,460	5,406,390	-	(1,759,232)	-	19,153,618
Allowance for impairment of other long-term investments	143,400	-	-	-	-	143,400
Allowance for impairment of assets	2,033,199	-	-	-	-	2,033,199
Provisions from guarantee	15,557,943	(2,652,280)	-	-	-	12,905,663
Provision for repair and maintenance	300,920	900,213	-	(232,296)	-	968,837
Interest paid on loans	9,964,089	(1,419,812)	-	5,206,073	-	13,750,350
Deferred revenue	65,052,442	31,007,449	-	(226,601)	-	95,833,290
Deposits from long-term lease agreement	2,882,231	(1,018,414)	-	22,750	-	1,886,567
Employee benefit obligations	18,651,618	3,255,603	(2,542,251)	3,937,392	(133,492)	23,168,870
Deferred expenses from operating lease agreement	1,648,777	(1,255,230)	-	193,012	-	586,559
Gain/loss from intercompany	-	-	-	50,227,284	-	50,227,284
Tax loss carry forward	80,659,099	(56,835,079)	-	74,068,287	-	97,892,307
	215,381,045	(24,191,021)	(2,542,251)	136,610,728	16,784,112	342,042,613
Deferred income tax liabilities						
Fair value adjustment from business combination	(2,042,671,777)	286,718,922	-	34,655,468	-	(1,721,297,387)
Available-for-sale investments	(27,906,125)	-	16,172,874	-	11,733,251	-
Depreciation	(2,032,021)	2,032,021	-	(2,480,958)	-	(2,480,958)
Deferred income from operating lease agreement	(10,568,721)	1,213,590	-	(2,929,060)	-	(12,284,191)
Bond underwriting	(2,127,205)	(1,050,439)	-	444,175	-	(2,733,469)
Finance lease	-	-	-	(102,374)	-	(102,374)
Unearned income from rental	(145,844,866)	(769,751,672)	-	(31,791,893)	-	(947,388,431)
	(2,231,150,715)	(480,837,578)	16,172,874	(2,204,642)	11,733,251	(2,686,286,810)
Deferred income tax, net	(2,015,769,670)	(505,028,599)	13,630,623	134,406,086	28,517,363	(2,344,244,197)



## 21 Deferred income tax (continued)

The movements in deferred income tax assets and deferred income tax liabilities are as follows: (continued)

	Separate financial statements					
	At 1 January 2016		Recognised to other comprehensive income		Recognised to other comprehensive income	
	Baht	Recognised to profit or loss	Baht	At 31 December 2016	Recognised to profit or loss	At 31 December 2017
		Baht		Baht	Baht	Baht
Deferred income tax assets						
Deferred revenue	65,052,442	16,719,024	-	81,771,466	3,408,937	85,180,403
Deposits from long-term lease agreement	2,882,230	(1,018,414)	-	1,863,816	22,750	1,886,566
Employee benefit obligations	3,580,688	1,099,134	548,626	5,228,448	1,274,024	6,502,472
Tax loss carry forward	-	-	-	-	73,599,576	73,599,576
Deferred expenses from operating lease agreement	1,648,778	(1,648,778)	-	-	-	-
	73,164,138	15,150,966	548,626	88,863,730	78,305,287	167,169,017
Deferred income tax liabilities						
Available-for-sale investments	(27,552,468)	-	15,922,969	(11,629,499)	-	(4,709,637)
Depreciation	(2,032,021)	2,032,021	-	-	-	-
Deferred income from operating lease agreement	(10,568,721)	1,213,590	-	(9,355,131)	(1,499,095)	(10,854,226)
Bond underwriting	(2,127,205)	(1,050,439)	-	(3,177,644)	444,175	(2,733,469)
Unearned income from rental	-	-	-	-	(52,823,946)	(52,823,946)
	(42,280,415)	2,195,172	15,922,969	(24,162,274)	(53,878,866)	(71,121,278)
Deferred income tax, net	30,883,723	17,346,138	16,471,595	64,701,456	24,426,421	96,047,739

## 21 Deferred income tax (continued)

Deferred income tax assets are recognised 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 Group did not recognise deferred income tax assets in respect of losses that can be carried forward against future taxable income as follows:

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
Unused tax loss carry forwards (Baht)	(2,535,539,286)	(1,940,123,191)	-	-
Unrecognised deferred income tax (Baht)	507,107,857	388,024,638	-	-
Expired year	2018 - 2022	2017 - 2021	-	-

## 22 Loans

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
<b>Current</b>				
Short-term loans from financial institutions	1,784,171,994	3,648,915,023	1,384,171,994	808,702,871
Current portion of long-term loans	-	2,491,534,108	-	-
Short-term loans from related parties (Note 38.5)	-	-	1,302,000,000	320,500,000
	1,784,171,994	6,140,449,131	2,686,171,994	1,129,202,871
<b>Non-current</b>				
Long-term loans	3,936,901,708	7,929,904,298	-	-
	3,936,901,708	7,929,904,298	-	-
<b>Total loans</b>	<b>5,721,073,702</b>	<b>14,070,353,429</b>	<b>2,686,171,994</b>	<b>1,129,202,871</b>

Long-term loans are secured by subsidiary's ordinary shares (Note 14)

The interest rate exposure on the loans of the Group is as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Fixed rates	1,784,171,994	3,648,915,023	2,686,171,994	1,129,202,871
Floating rates	3,936,901,708	10,421,438,406	-	-
	5,721,073,702	14,070,353,429	2,686,171,994	1,129,202,871

## 22 Loans (continued)

The effective interest rates at the statement of financial position date were as follows:

	Consolidated financial statements		Separate financial statements	
	2017 %	2016 %	2017 %	2016 %
Short-term loans from financial institutions	2.20 - 3.20	2.38 - 4.20	2.20 - 3.20	2.38 - 2.40
Short-term loans from related parties	-	-	1.15	1.15
Long-term loans	4.92	3.58	-	-

The carrying amounts and fair values of certain long-term loans are as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Carrying amounts	3,936,901,708	10,421,438,406	-	-
Fair values	4,037,286,929	10,425,034,530	-	-

The fair value of current loans equal their carrying amount, as the impact of discounting is not significant.

The fair values are based on discounted cash flows using a discount rate based upon the loan rate of 4.92% (2016: 3.58%) and are within level 2 of the fair value hierarchy.

Maturity of long-term loans is as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Within 1 year	-	-	-	-
Between 2 years and 5 years	3,936,901,708	-	-	-
Over 5 years	-	10,421,438,406	-	-
	3,936,901,708	10,421,438,406	-	-

## 23 Trade and other payables

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Trade payables	343,060,499	367,185,954	15,054,302	24,500,668
Amounts due to related parties (Note 38.4)	1,800,000	9,761,168	2,985,138	28,970,064
Other payables	20,510,723	15,123,667	15,175,038	13,093,645
Accrued cost of real estate development	1,267,881,506	1,279,735,635	109,088,308	130,214,323
Accrued expenses	543,437,835	595,221,649	134,444,918	150,825,740
Dividend payable	14,198,029	19,801,128	-	-
Retention	72,974,424	159,683,777	68,823,926	136,558,410
Advance received income	244,919,426	562,706,162	41,375,379	29,044,121
Advance received from sale asset	38,000,000	-	38,000,000	-
Provisions from guarantee	5,189,512	8,100,764	5,189,512	8,100,764
Others	38,471,540	5,104,057	13,496,225	3,571,668
	2,590,443,494	3,022,423,961	443,632,746	524,879,403

## 24 Debentures

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Current portion of debentures	3,058,716,265	5,850,823,930	3,058,716,265	3,533,896,676
Debentures	25,618,678,491	22,073,917,442	11,121,979,713	11,479,577,677
	<u>28,677,394,756</u>	<u>27,924,741,372</u>	<u>14,180,695,978</u>	<u>15,013,474,353</u>

The interest rate on all debentures of the Group is fixed rates. The effective interest rates at the statement of financial position date were as follows:

	Consolidated financial statements		Separate financial statements	
	2017 %	2016 %	2017 %	2016 %
Debentures	3.15 - 5.79	3.70 - 5.96	3.15 - 5.00	3.70 - 5.00

The carrying amounts and fair values of debentures are as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Carrying amounts	28,677,394,756	27,924,741,372	14,180,695,978	15,013,474,353
Fair values	28,943,264,931	27,871,175,975	14,405,854,942	15,104,354,749

The fair values of debentures are based on clean price announced by Thai Bond Market Association that are within level 2 of the fair value hierarchy.

Maturity of debentures is as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Within 1 year	3,058,716,265	5,850,823,930	3,058,716,265	3,533,896,676
Between 2 years and 5 years	18,860,841,882	14,319,870,864	10,843,012,528	11,199,927,761
Over 5 years	6,757,836,609	7,754,046,578	278,967,185	279,649,916
	<u>28,677,394,756</u>	<u>27,924,741,372</u>	<u>14,180,695,978</u>	<u>15,013,474,353</u>

## 25 Deferred revenue

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Current portion of deferred revenue	189,213,141	170,091,045	74,436,176	62,594,769
Deferred revenue	4,169,660,883	4,206,699,829	2,511,387,119	2,433,649,101
	<u>4,358,874,024</u>	<u>4,376,790,874</u>	<u>2,585,823,295</u>	<u>2,496,243,870</u>

The movements of deferred revenue are as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Opening balance	4,376,790,874	2,733,294,901	2,496,243,870	2,569,829,577
Additions	220,095,956	1,772,820,207	220,095,956	44,959,175
Recognise income	(238,012,806)	(129,324,234)	(130,516,531)	(118,544,882)
Closing balance	<u>4,358,874,024</u>	<u>4,376,790,874</u>	<u>2,585,823,295</u>	<u>2,496,243,870</u>

## 26 Employee benefit obligations

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Statement of financial position				
Retirement benefits	117,644,189	96,479,417	34,310,812	27,938,546
Profit or loss				
Retirement benefits	22,504,850	18,358,964	6,372,266	5,534,542
Other comprehensive income				
Remeasurements	(723,078)	(12,711,257)	-	2,743,137

The movements of retirement benefit obligations are as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Opening balance	96,479,417	95,371,958	27,938,546	19,660,867
Current service cost	19,907,910	15,079,881	5,603,942	4,918,442
Interest cost	2,596,940	3,279,083	768,324	616,100
	<u>118,984,267</u>	<u>113,730,922</u>	<u>34,310,812</u>	<u>25,195,409</u>
Remeasurements				
(Gain)/loss from change in demographic assumptions	(226,318)	6,749,692	-	1,079,192
(Gain)/loss from change in financial assumptions	(613,516)	3,355,799	-	1,404,186
Experience (gain)/loss	116,756	(22,816,748)	-	259,759
	<u>(723,078)</u>	<u>(12,711,257)</u>	<u>-</u>	<u>2,743,137</u>
Benefits paid during the year	(617,000)	(4,540,248)	-	-
Closing balance	<u>117,644,189</u>	<u>96,479,417</u>	<u>34,310,812</u>	<u>27,938,546</u>

## 26 Employee benefit obligations

The principal actuarial assumptions used were as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Percentage	2016 Percentage	2017 Percentage	2016 Percentage
Discount rate	2.36 - 3.38	2.36 - 3.38	2.75	2.75
Future salary increases	5.00 - 8.00	6.63 - 8.00	8.00	8.00
Resignation rate	3.00 - 13.00	3.00 - 13.00	5.00 - 9.00	5.00 - 9.00
Retirement age	55 and 60 years	55 and 60 years	60 years	60 years

The sensitivity analysis for each significant assumption disclosed as follows:

Consolidated financial statements					
Impact on employee benefit obligations					
Change in assumption		Increase in assumption		Decrease in assumption	
		2017	2016	2017	2016
Discount rate	1%	Decrease by 6.46%-15.49%	Decrease by 6.93%-16.15%	Increase by 7.20%-18.76%	Increase by 7.24%-19.68%
Future salary increases	1%	Increase by 7.84%-19.09%	Increase by 6.87%-18.85%	Decrease by 7.15%-16.01%	Decrease by 6.23%-15.85%
Resignation rate	1%	Decrease by 6.83%-16.63%	Decrease by 6.78%-17.33%	Increase by 3.43%-12.07%	Increase by 3.81%-12.94%

Separate financial statements					
Impact on employee benefit obligations					
Change in assumption		Increase in assumption		Decrease in assumption	
		2017	2016	2017	2016
Discount rate	1%	Decrease by 15.49%	Decrease by 16.15%	Increase by 18.76%	Increase by 19.68%
Future salary increases	1%	Increase by 19.09%	Increase by 18.85%	Decrease by 16.01%	Decrease by 15.85%
Resignation rate	1%	Decrease by 16.63%	Decrease by 17.33%	Increase by 4.39%	Increase by 4.57%

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 employee benefit obligations to significant actuarial assumptions the same method has been applied as when calculating the employee benefit obligations recognised within the statement of financial position.

The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous year.

**27 Share capital**

	Authorised share capital		Issued and paid-up share capital		Premium on share
	Share	Baht	Share	Baht	Baht
Opening balance 2016	15,677,730,186	1,567,773,019	14,322,341,668	1,432,234,167	12,390,954,530
Capital increase from warrant conversion	-	-	88,653	8,865	355,076
Closing balance 2016	15,677,730,186	1,567,773,019	14,322,430,321	1,432,243,032	12,391,309,606
Capital increase from warrant conversion	-	-	-	-	-
Closing balance 2017	15,677,730,186	1,567,773,019	14,322,430,321	1,432,243,032	12,391,309,606

**28 Warrant**

	2017		2016	
	Unit	Baht	Unit	Baht
Opening balance	116,825,502	803,347,472	116,834,193	803,407,236
Exercise warrant	-	-	(8,691)	(59,764)
Closing balance	116,825,502	803,347,472	116,825,502	803,347,472

At the Company's shareholders' meeting on 28 April 2017, the shareholders approved a dividend at Baht 0.1536 per share amounting to a total of Baht 2,200 million which exceeded requirements of warrants to purchase the Company's ordinary share No. 1 ("WHA-W1"). Thus, the Company has to change exercise price from Baht 3.4311 per ordinary share to Baht 3.4181 per ordinary share which was effective since 5 May 2017.

The significant conditions of WHA-W1 are as follows:

Selling proportion	:	3 increased ordinary shares for 1 warrant
Exercise price	:	Baht 3.4181 per share (after change warrant)
Exercise rate	:	1 warrant per 10 ordinary shares (after change par value)
Exercise date	:	25 December 2015
Expire date	:	4 March 2020

**29 Legal reserve**

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Opening balance	127,150,000	97,000,000	127,150,000	97,000,000
Appropriation during the year	29,283,000	30,150,000	29,283,000	30,150,000
Closing balance	156,433,000	127,150,000	156,433,000	127,150,000

Under the public limited company 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 is not less than 10% of the registered capital. The legal reserve is non-distributable.

In consolidated financial statements, legal reserve of subsidiaries included in unappropriated retained earnings.



### 30 Dividend

At the Company's shareholders' meeting on 28 April 2017, the shareholders approved a dividend at Baht 0.1536 per share amounting to a total of Baht 2,200 million. The Company has paid dividend on 23 May 2017.

At the Company's Board of Directors' meeting on 10 November 2017, the Board of Directors approved an interim dividend at Baht 0.0488 per share amounting to a total of Baht 699 million. The Company has paid dividend on 8 December 2017.

### 31 Components of other comprehensive income

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Available-for-sale investments				
Unrealised gains (losses)	(58,357,538)	61,391,539	50,049,890	60,243,309
<u>Less</u> Reclassification adjustments for loss included in profit or loss	(26,501,700)	(2,986,367)	(26,501,700)	(2,095,810)
	(84,859,238)	58,405,172	23,548,190	58,147,499
Currency translation	(69,204,986)	(15,426,977)	-	-
Actuarial gains (losses)	7,862,874	7,051,220	(8,227,541)	(8,227,541)
Share of other comprehensive income of associates and joint ventures	(16,755,384)	(9,433,707)	-	-
Total other comprehensive income	(162,956,734)	40,595,708	15,320,649	49,919,958
Income tax relating to components of other comprehensive income	15,415,169	(13,091,277)	(3,064,130)	(9,983,992)
	<u>(147,541,565)</u>	<u>27,504,431</u>	<u>12,256,519</u>	<u>39,935,966</u>

### 32 Other income

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Dividend income	299,852,362	183,236,783	2,801,978,085	178,107,909
Management income and commission fee	171,716,770	76,686,745	-	-
Interest income	91,846,719	109,212,352	71,237,849	38,722,721
Gain from sale short-term investments	9,530,550	14,301,884	9,486,399	4,535,068
Gain from adjust available-for-sale investments from merge	17,190,913	-	17,190,913	-
Gain from sale available-for-sale investments	-	3,708,371	-	3,644,119
Gain from sale investments in associates	-	388,305	-	-
Gain from sale interests in joint ventures	-	784,117	-	10,492,404
Gain from sale property, plant and equipment	2,299,955	2,921,178	117,687	485,702
Compensation income	208,740,000	-	-	-
Others	131,710,574	72,142,940	36,773,871	22,528,832
	<u>932,887,843</u>	<u>463,382,675</u>	<u>2,936,784,804</u>	<u>258,516,755</u>

## 33 Finance costs

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Bill of Exchange	24,244,995	52,608,028	24,244,995	52,608,028
Loans from financial institutions	385,803,966	1,142,405,465	1,315,069	133,381,815
Debentures	1,133,291,956	1,161,343,852	609,570,017	558,099,844
Short-term loans from related parties	-	-	4,611,453	18,911,275
Finance lease agreements	3,865,601	201,934	268,015	201,934
Bond underwriting	11,371,258	13,741,182	7,733,119	6,669,700
Others	57,949,558	61,851,785	20,681,273	29,801,299
	<u>1,616,527,334</u>	<u>2,432,152,246</u>	<u>668,423,941</u>	<u>799,673,895</u>

## 34 Expense by nature

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Employee benefit expense	545,407,092	447,558,951	200,613,606	167,621,733
Depreciation and amortisation	472,863,208	597,003,694	158,234,889	213,276,534
Land rental expense	6,338,101	8,087,528	1,278,900	6,063,156
Consulting fee	81,429,316	168,499,004	13,712,319	36,979,169
Cost of real estate development sold	1,701,592,480	1,815,294,193	114,908,924	-
Special business tax and land transfer fee	257,988,426	268,216,968	9,214,425	-

## 35 Income tax

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Current income tax	388,225,404	307,601,397	-	112,229,442
Deferred income tax (Note 21)	(134,406,086)	505,028,599	(24,426,421)	(17,346,138)
Currency translation differences	1,031	(1,031)	-	-
	<u>253,820,349</u>	<u>812,628,965</u>	<u>(24,426,421)</u>	<u>94,883,304</u>

### 35 Income tax (continued)

The income tax on the Group and Company's profit before tax differs from the theoretical amount that would arise using the basic tax rate as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Profit before income tax	4,089,486,963	3,982,895,669	2,579,746,948	680,524,513
<u>Less</u> Profit of promoted activities which exempt income tax	(1,502,327,214)	(877,595,912)	7,248,244	-
Share of profit of associates and joint ventures	(1,963,491,687)	(1,006,213,821)	-	-
	<u>623,668,062</u>	<u>2,099,085,936</u>	<u>2,586,995,192</u>	<u>680,524,513</u>
Tax calculated at a tax rate of 20%	124,733,612	419,817,187	517,399,038	136,104,903
Tax effects of:				
Income not subject to tax	(36,211,917)	(173,682,326)	(543,042,200)	(22,582,506)
Income subject to tax	-	2,266	-	2,266
Expenses not deductible for tax purposes	40,161,069	212,287,594	16,492,918	1,848,200
Additional expenses deductible for tax purposes	(15,830,653)	(3,318,454)	(15,276,177)	(3,283,944)
Difference in overseas tax rate	14,384,868	107,532,423	-	-
Tax losses for which no deferred income tax asset was recognised	126,583,370	267,677,676	-	-
Adjustment in respect of prior year	-	(17,687,401)	-	(17,205,615)
Tax charge	<u>253,820,349</u>	<u>812,628,965</u>	<u>(24,426,421)</u>	<u>94,883,304</u>

## 35 Income tax (continued)

The tax relating to component of other comprehensive income is as follows:

	Consolidated financial statements					
	2017			2016		
	Before tax Baht	Tax Baht	After tax Baht	Before tax Baht	Tax Baht	After tax Baht
Change in value of available-for-sale investments	(143,254,276)	28,650,855	(114,603,421)	(80,862,714)	16,172,874	(64,689,840)
Currency translation differences	(53,778,009)	-	(53,778,009)	(9,691,145)	-	(9,691,145)
Remeasurements of employee benefit obligations	723,078	(133,492)	589,586	12,711,257	(2,542,251)	10,169,006
Share of other comprehensive income of associates and joint ventures	(10,459,539)	-	(10,459,539)	(9,433,707)	-	(9,433,707)
	(206,768,746)	28,517,363	(178,251,383)	(87,276,309)	13,630,623	(73,645,686)
	Separate financial statements					
	2017			2016		
	Before tax Baht	Tax Baht	After tax Baht	Before tax Baht	Tax Baht	After tax Baht
Change in value of available-for-sale investments	(34,599,309)	6,919,862	(27,679,447)	(79,614,842)	15,922,968	(63,691,874)
Remeasurements of employee benefit obligations	-	-	-	(2,743,137)	548,627	(2,194,510)
	(34,599,309)	6,919,862	(27,679,447)	(82,357,979)	16,471,595	(65,886,384)

### 36 Earnings per share

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

Diluted earnings per share is calculated by dividing the net profit attributable to shareholders of the Company by the number of dilutive potential ordinary shares from warrants. The number of ordinary shares from warrants is calculated by comparing the number of shares that could have been acquired at fair value (determined as the average annual market price of the Company's shares) based on the monetary value of the subscription rights attached to outstanding share options with the number of shares that would have been issued assuming the exercise of the share options.

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Profit attributable to ordinary shareholders of the Company (Baht)	3,266,429,382	2,898,155,661	2,604,173,369	585,641,209
Weighted average number of ordinary shares outstanding (shares)	14,322,430,321	14,322,427,052	14,322,430,321	14,322,427,052
Number of ordinary shares from warrants (shares)	-	-	-	-
Number of dilutive potential ordinary shares (shares)	14,322,430,321	14,322,427,052	14,322,430,321	14,322,427,052
Basic earnings per share (Baht)	0.2281	0.2024	0.1818	0.0409
Diluted earnings per share (Baht)	0.2281	0.2024	0.1818	0.0409

### 37 Financial instruments

	Consolidated financial statements		Separate financial statements	
	Assets Baht	Liabilities Baht	Assets Baht	Liabilities Baht
As at 31 December 2017				
Interest rate contracts	1,746,740	-	1,746,740	-
	1,746,740	-	1,746,740	-
As at 31 December 2016				
Interest rate contracts	1,554,288	-	1,554,288	-
	1,554,288	-	1,554,288	-

The net fair values of derivative financial instruments at the statement of financial position date and designated for cash flow hedges were:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Interest rate SWAP				
Contracts with positive fair values(Gain)	7,993,702	1,800,300	7,993,702	1,800,300
Contracts with negative fair values(Loss)	(86,879,873)	(63,712,507)	-	-

The fair values are within level 2 of the fair value hierarchy.

### 38 Related-party transactions

Enterprises and individuals that directly, or indirectly through one or more intermediaries, control, or are controlled by, or are under common control with, the company, including holding companies, subsidiaries and fellow subsidiaries are related parties of the company. Associates and individuals owning, directly or indirectly, an interest in the voting power of the company that gives them significant influence over the enterprise, key management personnel, including directors and officers of the company and close members of the family of these individuals and companies associated with these individuals also constitute related parties.

Company's major shareholders are WHA Holding Co., Ltd., the Anaprayoons and the Jarukornsakuls in proportion of 46.36%. The remaining 53.64% of the shares are widely held.

In considering each possible related-party relationship, attention is directed to the substance of the relationship, and not merely the legal form.

The following significant transactions were carried out with related parties:

#### 38.1 Revenues and expenses

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
<b>Subsidiaries</b>				
Management income	-	-	4,020,000	2,360,000
Project management income	-	-	-	3,550,000
Rental income	-	-	244,800	244,800
Dividend income	-	-	2,588,840,278	22,199,334
Interest income	-	-	68,497,313	37,573,183
Management fee expense	-	-	295,236	292,236
Interest expense	-	-	4,611,452	18,911,275
<b>Associates</b>				
Service fee income	134,517,459	28,876,594	-	-
Commission and management income	6,987,212	7,217,223	-	-
Interest income	71,889,401	75,295,951	-	-
Guarantee minimum rental expense	-	24,596,079	-	-
<b>Joint ventures</b>				
Management income	13,575,986	5,393,418	13,575,986	5,393,418
Interest income	1,773,293	297,370	1,773,293	297,370
<b>Other related parties</b>				
Rental expense	11,153,837	11,227,207	9,559,811	10,847,575

#### 38.2 Amounts due from related parties

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Subsidiaries	-	-	1,444,999	1,869,432
Associates	8,849,569	5,884,537	-	-
Joint ventures	517,608	156,192	402,680	156,192
Related party	13,392,766	-	-	-
	<u>22,759,943</u>	<u>6,040,729</u>	<u>1,847,679</u>	<u>2,025,624</u>

### 38 Related-party transactions (continued)

The following significant transactions were carried out with related parties: (continued)

#### 38.3 Short-term loans to related parties

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Subsidiaries	-	-	3,082,000,000	639,500,000
Associates	1,013,765,000	1,432,900,000	-	-
	<u>1,013,765,000</u>	<u>1,432,900,000</u>	<u>3,082,000,000</u>	<u>639,500,000</u>

##### Consolidated financial statements

Short-term loans to associates can be called at any time and are unsecured. The loans bear interest at MLR and 12.00% per annum (2016: MLR per annum).

##### Separate financial statements

Short-term loans to related parties can be called at any time and are unsecured. The loans bear interest at 4.18% - 5.40% per annum (2016: 5.40% per annum).

#### 38.4 Amounts due to related parties

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Subsidiaries	-	-	1,185,138	28,970,064
Associates	-	9,761,168	-	-
Joint ventures	1,800,000	-	1,800,000	-
	<u>1,800,000</u>	<u>9,761,168</u>	<u>2,985,138</u>	<u>28,970,064</u>

#### 38.5 Short-term loans from related parties

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Subsidiaries	-	-	1,302,000,000	320,500,000

Short-term loans from related parties can be called at any time and are unsecured. The loans bear interest at 1.15% per annum (2016: 1.15% - 1.85% per annum).



**38 Related-party transactions (continued)**

The following significant transactions were carried out with related parties: (continued)

**38.6 Key management compensation**

Key management includes directors (executive and non-executive), members of the Executive Committee, the Company Secretary and the Head of Internal Audit. The compensation paid or payable to key management for employee services is shown below:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Short-term benefits	409,978,929	330,840,495	78,436,910	95,110,117
Post-employment benefits	12,311,537	4,641,236	4,292,535	3,825,713
	<u>422,290,466</u>	<u>335,481,731</u>	<u>82,729,445</u>	<u>98,935,830</u>

**39 Commitment****39.1 Capital commitments**

Capital expenditure contracted for at the statement of financial position date but not recognised in the financial statements is as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Purchase of land and leasehold rights	7,000,000	7,000,000	7,000,000	7,000,000
Construction of warehouse	325,476,283	735,284,577	325,476,283	735,284,577
Construction of ready-built factories and public utilities	146,155,007	301,546,327	-	-
	<u>478,631,290</u>	<u>1,043,830,904</u>	<u>332,476,283</u>	<u>742,284,577</u>

**39.2 Operating lease commitments**

The future aggregate minimum lease payments under non-cancellable operating leases are as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Not later than 1 year	33,249,380	17,220,882	-	-
Later than 1 year but not later than 5 years	85,993,542	48,995,660	-	-
Later than 5 years	47,760,657	32,919,689	-	-
	<u>167,003,579</u>	<u>99,136,231</u>	<u>-</u>	<u>-</u>

## 40 Contingencies

### 40.1 Bank guarantees

Banks have provided guarantees on behalf of the Company and the Group as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
<b>Baht currency</b>				
Infrastructure	77,711,040	46,095,952	5,531,280	-
Industrial Estate Authority of Thailand	430,099,510	301,329,915	-	-
Joint operation agreement with power group	999,501,856	2,033,012,880	-	-
Others	185,032,018	157,231,330	10,000,000	-
	<u>1,692,344,424</u>	<u>2,537,670,077</u>	<u>15,531,280</u>	<u>-</u>
<b>USD currency</b>				
Joint operation agreement with power group	<u>9,042,844</u>	<u>-</u>	<u>-</u>	<u>-</u>
	<u>9,042,844</u>	<u>-</u>	<u>-</u>	<u>-</u>

The guarantees are issued in the ordinary course of business. No liabilities are expected to arise from the above guarantees.

### 40.2 Other guarantees

Guarantees for benefit in the normal course of business are as follows:

#### Consolidated financial statements

- 1) The Group has entered into land sale and purchase contracts, which the contract term requires the Group to contingently liable to repay deposits and installments in the event that buyers are unable to obtain satisfactory approvals from the Board of Investment and/or the IEAT to set up their operations.
- 2) The Group has guaranteed of the hire purchase agreements of its related parties in the total credit line of Baht 365.51 million (2016: Baht 50.70 million).

#### Separate financial statements

The Company has guaranteed of the hire purchase agreements of its related parties in the total credit line of Baht 327.27 million.

## 41 Subsequent events

On 25 December 2017, the Company increase paid-up share capital from warrant conversion 3,869,870 shares of value of Baht 0.10 each, amounting to Baht 386,987 with premium on share of Baht 15,439,455. The Company registered the increased share capital with the Ministry of Commerce on 17 January 2018.







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