



บริษัท ฟุรุคาวา เมทัล (ไทยแลนด์) จำกัด (มหาชน)
FURUKAWA METAL (THAILAND) PUBLIC COMPANY LIMITED

Growth

ANNUAL
REPORT
รายงานประจำปี 2561

2018



FOR ENVIRONMENT AND DEVELOPMENT

Contents

2 Financial Highlight	4 Message from the Chairman	5 Board of Directors	15 Management
16 Organization Chart	17 General Information & Others	21 Nature of Business	24 Business Operations
25 Income Structure	26 Major Shareholders	27 Report on Directors Shareholding	28 Risk Factors
31 Connected Transactions	35 Good Corporate Governance	48 Corporate Social Responsibility in Process	56 Report from the Audit Committee
57 Management Discussion and Analysis	60 Statement of Financial Position	62 Report on the Responsibility of the Board of Directors on the Financial Report	63 Report of Certified Public Accountant and Financial Statements

Growth

FOR ENVIRONMENT AND DEVELOPMENT



บริษัท ฟุรุทาวา เมทัล (ไทยแลนด์) จำกัด (มหาชน)
FURUKAWA METAL (THAILAND) PUBLIC COMPANY LIMITED

Financial Highlight

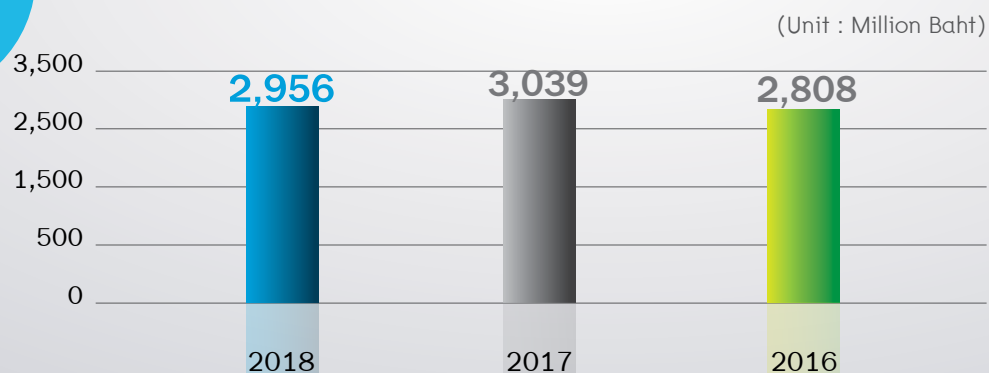
(Unit : Million Baht)

Financial Performance	2018	2017	2016
Net Sale	6,495	6,183	5,608
Total Revenues	6,516	6,210	5,619
Cost and Expense	6,334	6,036	5,400
Profit (Loss) Before Income Tax	182	174	219
Income Tax	37	35	44
Net Profit (Loss)	145	139	175
Other comprehensive income for the year	9	-	-
Total comprehensive Income for the year	154	139	175
Basic Earnings (Loss) Per Share (Baht)	3.01	2.89	3.66
Dividend Per Share (Baht)	1.50	2.00	1.25
Return on Total Revenue (%)	2.22	2.24	3.12
Return on Shareholders' Equity (%)	9.90	9.40	12.23
Return on Total Assets (%)	5.22	4.57	6.25

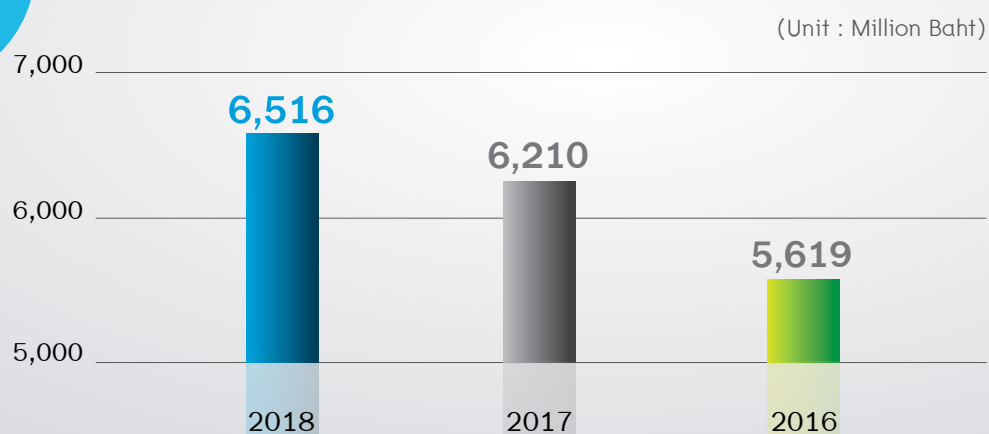
(Unit : Million Baht)

Financial Ratio	2018	2017	2016
Current Assets	2,496	2,551	2,280
Total Assets	2,956	3,039	2,808
Current Liabilities	1,289	1,439	1,252
Long-Term Loans	-	-	-
Total Liabilities	1,397	1,562	1,374
Shareholders' Equity	1,560	1,477	1,434
Issued & Paid-Up Capital	480	480	480
Par Value (Baht)	10	10	10
Book Value Per Share (Baht)	32.49	30.77	29.88

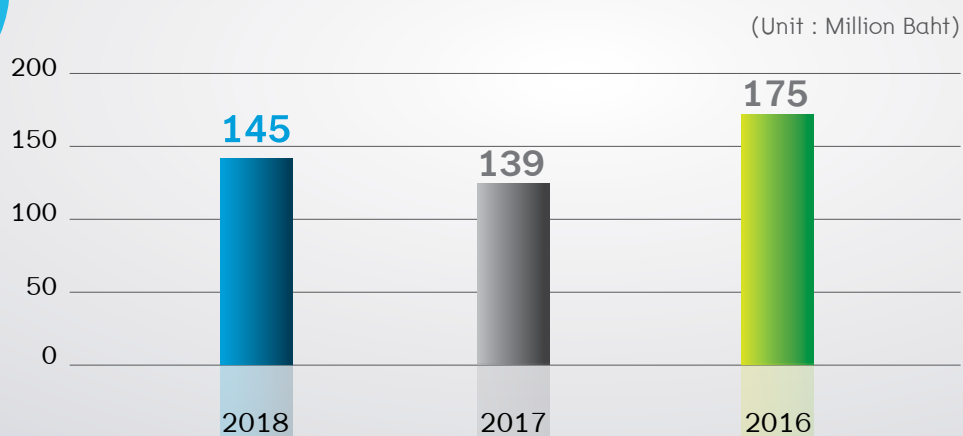
Total Assets



Total Revenues



Net Profit



Message from the Chairman



In 2018, Thailand's economic indicators showed that the public purchasing power increased. Coupled with the climate in Thailand that is becoming hotter every year, the result is an increase in air conditioning production in Thailand of 20 million sets, or 5% when compared to 2017. Although the market share of the copper pipe market declined in Thailand due to increasing export of air conditioners from China, the Company still received more orders for higher value copper pipe products. Although sales volume decreased in 2018 compared to 2017, the Company has maintained good performance due to cost reduction activities and exchange rates, with the total revenue of 6,515 Million Baht, an increase of 4.93% and with net profit of 145 Million Baht, an increase of 4.32% over 2017, resulting in the dividend payment for all shareholders at the rate of 1.625 Baht per share.

The Company has also continuously developed its products to respond to the needs of various customers and to support the changing production technology of customers at present. In 2019, the Company will develop products which will be well-received and distributed to customers around the world.

On behalf of the Board of Directors, we would like to express our appreciation to all management and employees for the dedication and commitment in performing their duties to their fullest capabilities. We would like to thank all shareholders, customers, business partners and stakeholders for their continued trust and support in the Company's operations. We are committed to managing the Company with utmost care and transparency to ensure business sustainability.

A handwritten signature in black ink, appearing to read 'Chai Sophonpanich'.

Mr. Chai Sophonpanich

Chairman

Board of Directors



Mrs. Chanida Asdathorn
Chairman
(To 10 November 2018)



Mr. Chai Sophonpanich
Chairman
(From 9 November 2018)



Mr. Tinnakorn Asdathorn
Director



Mr. Junichi Ishihara
Director & Managing Director
(From 27 April 2018)



Mr. Takeshi Nishizawa
Director



Mr. Nobutaka Taniguchi
Director



Mr. Takashi Yamamoto
Director



Mr. Makoto Kasuga
Director



Mr. Daisuke Hamada
Director
(From 9 August 2018)



Mr. Vibul Aunsuntha
Chairman of the Audit Committee
and Independent Director



Mr. Virojn Srethapramotaya
Audit Committee Member
and Independent Director



Mr. Seiji Tojo
Audit Committee Member
and Independent Director



Mr. Deja Tulananda
Independent Director



Mr. Hiroshi Kawaguchi
Director
(To 27 April 2018)



Mr. Shuichi Asano
Director
(To 9 August 2018)



Mr. Nopporn Moonsarn
Director
(To 9 August 2018)

Board of Directors



Mrs. Chanida Asdathorn
Chairman
(To 10 November 2018)

Education

- Bachelor Degree of Business Administration,
Pasadena College, California, U.S.A.

Experience

- **Executive Director**
Thai Roong Ruang Industry Co., Ltd.
(1974 – Present)
- **Executive Director,**
Cholburi Sugar & Trading Corporation, Ltd.
(1979 – Present)
- **Executive Director,**
Siam Sugar Export Corporation, Ltd.
(1984 – Present)
- **Director,**
Furukawa Metal (Thailand) Public Company Limited
(1988 – Present)
- **Chairman,**
Furukawa Metal (Thailand) Public Company Limited
(10 Aug 2017–10 November 2018)
- **Director,**
Kerry Flour Mills Limited.
(1989 – Present)
- **Director,**
Kerry Siam Seaport Limited.
(1990 – Present)
- **Director,**
Shangri – La Hotel Public Co., Ltd.
(1992 – Present)
- **Director,**
Thai Ruam Chareon Sugar (2000) Co., Ltd.
(2000 – Present)
- **Director,**
TRR Molasses Trading Co., Ltd.
(2015 – Present)



Mr. Chai Sophonpanich
Chairman
(From 9 November 2018)

Education

- Bachelor Degree of Science, University of Colorado, U.S.A.
(Y. 1967)
- Advanced Management Program, The Wharton School
(Y. 1984)
- The joint State – Private Sectors Class 6,
Thailand National Defence College
- Directors Certification Program Class 16/2002,
Thai Institute of Directors Association
- Chairman 2000 Class 10/2004,
Thai Institute of Directors Association

Experience

- **Chairman,**
Furukawa Metal (Thailand) Public Company Limited
(1988 – Jun 2017 and Nov 2018 – Present)
- **Chairman,**
Bangkok Insurance Public Company Limited
(1978 – Jun 2017 and Nov 2018 – Present)
- **Chairman,**
Bumrungrad Hospital Public Company Limited
(1979 – Jun 2017 and Aug 2018 – Present)
- **Chairman,**
Charoong Thai Wire & Cable Public Company Limited
(1986 – Jun 2017 and Sep 2018 – Present)
- **Chairman,**
Thai Reinsurance Public Company Limited
(2016 – Jun 2017 and Nov 2018 – Present)

Board of Directors



Mr. Tinnakorn Asdathorn
Director



Mr. Junichi Ishihara
Director & Managing Director
(From 27 April 2018)

Education

- Bachelor Degree of Electrical Engineering,
King Mongkut's Institute of Technology, Ladkrabang.

Experience

- **Director,**
Furukawa Metal (Thailand) Public Company Limited
(1996 – Present)
- **Managing Director**
Kerry Flour Mills Limited
(2013 – Present)

Education

- Bachelor Degree, Faculty of Mechanical Engineering,
Keiko University, Tokyo, Japan

Experience

- **Manager, Special Material Department,**
Production Engineering Department, Planning & Administration
Department, Metal Division
Furukawa Electric Co.,Ltd. (Japan)
(1983 – 2009)
- **Manager, Manufacturing Department,**
Copper Strip Division, Metal Group,
Furukawa Electric Co.,Ltd. (Japan)
(2009 – 2012)
- **Managing Director,**
Furukawa Precision (Thailand) Co.,Ltd.
(2012 – 2015)
- **Senior Manager, Plating Unit,**
Furukawa Electric Co.,Ltd. (Japan)
(2015 – 2016)
- **General Manager, High Performance Plating Department,**
Copper & High Performance Material Product Division,
Furukawa Electric Co.,Ltd. (Japan)
(2016 – 2018)
- **Director & Managing Director,**
Furukawa Metal (Thailand) Public Company Limited
(2018 – Present)

Board of Directors



Mr. Takeshi Nishizawa
Director

Education

- Bachelor Degree in Nuclear Engineering,
Kobe University, Japan.

Experience

- **Production Engineering Section**
Furukawa Electric Co.,Ltd. (Japan)
- **Manager, Production Engineering Section**
Furukawa Electric Co.,Ltd. (Japan)
- **Manager, Production System Development Section**
Furukawa Electric Co.,Ltd. (Japan)
- **General Manager of Planning Development**
Furukawa Electric Co.,Ltd. (Japan)
- **General Manager of Quality & Engineering Department**
Furukawa Electric Co.,Ltd. (Japan)
- **Deputy General Manager Copper Tube Division**
Furukawa Electric Co.,Ltd. (Japan)
- **Director,**
Furukawa Metal (Thailand) Public Company Limited



Mr. Nobutaka Taniguchi
Director

Education

- Bachelor Degree of Commercial,
Tokai University, Japan

Experience

- **Chairman**
Tani International Trading Co., Ltd.
(1975 – Present)
- **Chairman**
Tani Guchi Metal Co., Ltd.
(1988 – Present)
- **Director**
Furukawa Metal (Thailand) Public Company Limited
(1993 – Present)

Board of Directors



Mr. Takashi Yamamoto
Director



Mr. Makoto Kasuga
Director

Education

- Bachelor Degree, Faculty of Engineering in Metallurgy, Kyoto University, Japan

Experience

- **Production Engineering Section,**
Furukawa Electric Co., Ltd. (Japan)
Nikko Works, Metal Division
- **Quality Assurance Division**
Furukawa Electric Co., Ltd. (Japan)
- **Optical Device Division,** FITEL Product Division Information System Business Headquarters, Yokohama Works
Furukawa Electric Co., Ltd., (Japan)
- **Second Plan Division,** Equipment Department, Nikko Works
Furukawa Electric Co., Ltd., (Japan)
- **Manager of Manufacture Department,**
Nikko Works, Metals Company
Furukawa Electric Co., Ltd., (Japan)
- **Engineering Department,** Metals Company, Head Office
Furukawa Electric Co., Ltd., (Japan)
- **Manager of Casting & Sheet Manufacturing Section,**
Manufacturing Department, Osaka Works, Metals Company,
Furukawa Electric Co., Ltd., (Japan)
- **Manager of the First Tube Manufacturing Section,**
Manufacturing Department, Copper Tube Division,
Metals Company
Furukawa Electric Co., Ltd., (Japan)
- **General Manager of Manufacturing Department First Tube Manufacturing Section,** Copper Tube Division, Metals Company
Furukawa Electric Co., Ltd., (Japan)
- **Director,**
Furukawa Metal (Thailand) Public Company Limited

Education

- Bachelor Degree in Law, Meiji University, Japan

Experience

- **Accounting Section, Administration,**
Department Nikko Works, Metal Division Planning & Administration Department, Metals Division
Furukawa Electric Co., Ltd. (Japan)
Shanghai Sunshine Copper Products Co., Ltd.
- **Planning & Administration Department, Metals Company**
Furukawa Electric Co., Ltd. (Japan)
- **Manager of Osaka Office Finance & Accounting Center**
Furukawa Finance & Business Support Co., Ltd.
- **Manager of Accounting Section, Copper, Tube Division and IFRS Preparation Team, Finance Department,** Manager of Finance & Accounting Department Finance & Procurement Division and Planning Unit Copper Tube Division
Furukawa Electric Co., Ltd. (Japan)
- **Director & General Manager of Finance & Accounting Department,**
Furukawa Metal (Thailand) Public Company Limited

Board of Directors



Mr. Daisuke Hamada
Director
(From 9 August 2018)

Education

- Bachelor Degree in Sociology,
Kwansei Gakuin University, Japan

Experience

- **Sales Department,**
Furukawa Electric Co., Ltd. (Japan)
- **Electronic Sales Department,**
Furukawa Electric Co., Ltd. (Japan)
- **Chubu/Kansai Sales Department,**
Furukawa Electric Co., Ltd. (Japan)
- **Sales Section, Memory Disk Department,**
Furukawa Electric Co., Ltd. (Japan)
- **ELC Planning unit,**
Furukawa Electric Co., Ltd. (Japan)
- **Planning Unit, Memory Disk Division,**
Furukawa Electric Co., Ltd. (Japan)
- **Sales Planning & Marketing Department,**
Furukawa Electric Co., Ltd. (Japan)
- **Department 2, Planning Department,**
Furukawa Electric Co., Ltd. (Japan)
- **Business promotion Department,**
Furukawa Electric Co., Ltd. (Japan)
- **Planning & Administration Department,**
Furukawa Electric Co., Ltd. (Japan)
- **Director**
Furukawa Metal (Thailand) Public Company Limited



Mr. Vibul Aunsunnta
Chairman of the
Audit Committee

Education

- Bachelor Degree in Business Administration, U.S.A.
- Master Degree in Economic, U.S.A.
- Thailand National Defense College (Class 30)
- Director Accreditation Program Class 53/2006
Thai Institute of Directors Association

Experience

- **Advisor to the Board of Directors, Member of Nomination & Remuneration Committee**
Muang Thai Life Assurance Co., Ltd.
- **Chairman of the Audit Committee & Independent Director,**
Furukawa Metal (Thailand) Public Company Limited
- **Member of Remuneration & Nomination Committee Good Governance,**
Muang Thai Life Assurance Co., Ltd.

Board of Directors



Mr. Virojn Srethapramotaya
Audit Committee Member

Education

- MBA, Jacksonville State University, USA
- Bachelor of Accountancy, Chulalongkorn University
- Loan Structuring Documentation Course at Citibank Training Center, New York, USA in 1988
- Certificate of Financial Executive Class 1, The Thai Institute of Banking And Finance Association, The Thai Bankers' Association, In 1990
- Advanced Management Program for International Bankers, The Wharton School, University of Pennsylvania, USA in 1997
- Asean Summit for Southeast Asian Leaders at GE Training Center-Crotonville, Connecticut, USA in 2007
- Certificate of Training and Seminar, Thai Institute of Directors Association (IOD)
- Director Accreditation Program (DAP4/2003)
- Director Certification Program (DCP 34/2003)
- Director Diploma Examination Program – Fellow Member 2003
- Refresher Course DCP (DCP Re 4/2007)
- Roll of The Chairman Program (RCP 18/2008)
- Successful Formulation & Execution of Strategy (SFE 8/2010)
- Financial Institution Governance Program (FGP 1/2010)
- Chartered Director Class (CDC 6/2012)
- Audit Committee Program (ADC 40/2012)
- Advanced Audit Committee Program (AACP) Training- MIA, MFM, MFR, 2012-2013
- Corporate Governance for Capital Market Intermediaries (CGI 0/2014)

Experience

- **Director, (Authorize Signature)**
Sri Ayudhya Capital PCL.
(February 1998 – Present)
- **Acting President, (Authorize Signature)**
Sri Ayudhya Capital PCL.
(May 2017 – June 2017)
- **President and CEO,**
Sri Ayudhya Capital PCL.
(April 2018 – Present)
- **Director,**
Bank of Ayudhya PCL.
(February 2010 – December 2013)
- **Director,**
Sri Ayudhya General Insurance PCL.
(December 2010 – January 2011)
- **Chairman, (Authorize Signature)**
Sri Ayudhya General Insurance PCL.
(January 2011 – Present)
- **Director and Audit Committee Member,**
Allianz Ayudhya Assurance PCL
(February 2012 – Present)
- **Advisor to the Board of Directors,**
Bank of Ayudhya PCL.
(January 2014 – March 2015)
- **Chairman of the Audit Committee and Governance & Independent Director,**
Globex Securities Co., Ltd.
(April 2014 – Present)
- **Independent Director and Audit Committee Member,**
Furukawa Metal (Thailand) Public Company Limited.
(March 2016 – Present)
- **Independent Director**
Shangra-La Hotel PCL.
(April 2017 – Present)

Board of Directors



Mr. Seiji Tojo
Audit Committee Member

Education

- Bachelor Degree of Mechanical, Kyushu University, Japan

Experience

- **Production Department Manager**
Furukawa Electric Co., Ltd. (Osaka Works, Japan)
- **Managing Director**
Furukawa Metal (Thailand) Co., Ltd.
- **President**
Furukawa Precision (Thailand) Co., Ltd.
- **Director, Audit Committee & Independent Director,**
Furukawa Metal (Thailand) Public Company Limited



Mr. Deja Tulananda
Director

Education

- Executive Program, Pennsylvania State University, U.S.A.
- Bachelor Degree of Economics, Leicester University, U.K.

Experience

- **Executive Chairman,**
Bangkok Bank Public Company Limited
- **Director and Independent Director,**
Furukawa Metal (Thailand) Public Company Limited

Board of Directors



Mr. Hiroshi Kawaguchi
Director
(To 27 April 2018)



Mr. Shuichi Asano
Director
(To 9 August 2018)

Education

- Bachelor Degree, in Engineering (Mechanical)
Osaka University, Japan

Experience

- **Production Engineering Section Manager**
Furukawa Electric Co., Ltd. (Japan)
- **General Manager of Planning & Administration Department**
Furukawa Electric Co., Ltd. (Japan)
- **Corporate Senior Vice president and General Manager/
Electronics Component Material Division**
Furukawa Electric Co., Ltd. (Japan)
- **Director**
Furukawa Metal (Thailand) Public Company Limited

Education

- Bachelor Degree in Commerce, Waseda University Tokyo,
Japan

Experience

- **Production Control Section, Manufacturing Department,**
Osaka Works,
Metals Division Furukawa Electric Co., Ltd. (Japan)
- **Assistant Manager, Sales Section Metals Division**
Metals Division Furukawa Electric Co., Ltd. (Japan)
- **Assistant Manager, Sales Department Metals Division**
Metals Division Furukawa Electric Co., Ltd. (Japan)
- **Assistant Manager, Metals Sales Department,
Kansai Branch Office**
Metals Division Furukawa Electric Co., Ltd. (Japan)
- **Planning & Administration Department, Metals Group**
Metals Division Furukawa Electric Co., Ltd. (Japan)
- **Director & General Manager of Sales Department,**
Furukawa Metal (Thailand) Public Company Limited

Board of Directors

**Mr. Nopporn Moonsarn**

Director

(To 9 August 2018)

Education

- Bachelor's degree in Faculty of Education,
Major Mathematics-Physics, Khonkaen University
-

Experience

- **Production Manager,**
Furukawa Metals (Thailand) Public Company Limited
Y. 1990 – 1998
- **Assistant General Manager Production,**
Furukawa Metals (Thailand) Public Company Limited
Y. 1999 – 2001
- **General Manager Production,**
Furukawa Metals (Thailand) Public Company Limited
Y. 2001 – 2016
- **Factory Manager,**
Furukawa Metals (Thailand) Public Company Limited
Y. 2016 – Present
- **Director,**
Furukawa Metal (Thailand) Public Company Limited

Management

Management

1. **Mr. Takashi Yamamoto**
Managing Director (Until 27 April 2018)
2. **Mr. Junichi Ishihara**
Managing Director (Start 27 April 2018)
3. **Mr. Nopporn Moonsarn**
Factory Manager

Department General Manager

1. **Mr. Shuichi Asano**
General Manager of Sales Department
2. **Mr. Makoto Kasuga**
General Manager of Finance & Accounting Department
3. **Mr. Tetsuya Sumitomo**
General Manager of Production Engineer Department
4. **Mr. Tsuyoshi Fumeno**
General Manager of Maintenance Department
(Until 8 July 2018)
5. **Mr. Shingo Nishijima**
General Manager of Maintenance Department
(Start 2 July 2018)
6. **Mr. Toshihisa Katsumata**
General Manager of CSR Department
(Start 11 June to 31 December 2018)
7. **Mrs. Siriporn Luengrachanee**
General Manager of Administration Department
(Until 31 December 2018)

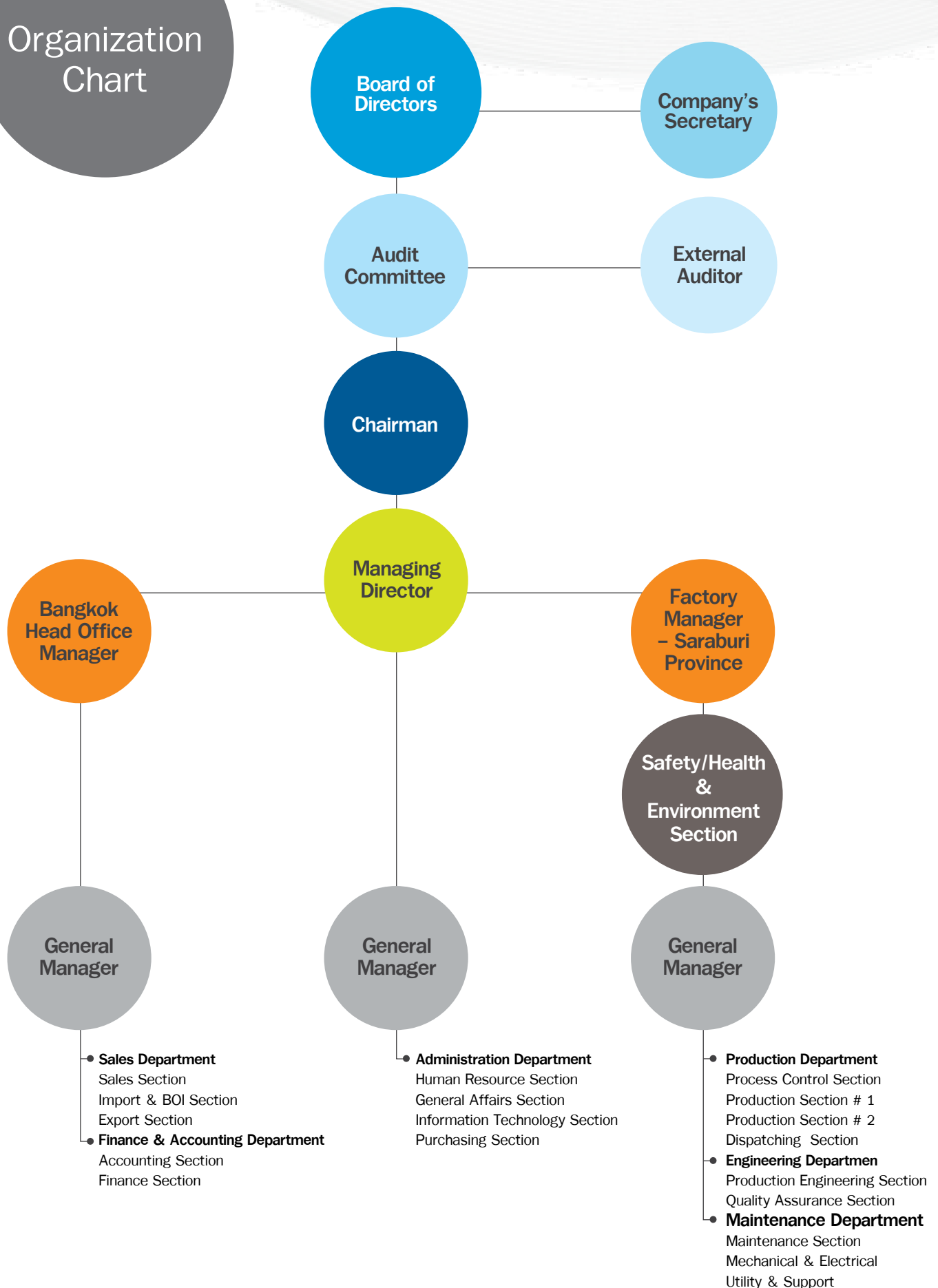
Department Assistant General Manager

1. **Ms. Arpaporn Jitsuteesiri**
Assistant General Manager of Finance & Accounting Department
2. **Mrs. Subin Seesaengtor**
Assistant General Manager of Environment & ISO
(Until 31 December 2018)
3. **Mr. Prasarn Sawangsri**
Assistant General Manager of Production Engineering Department
(Until 30 September 2018)
4. **Mr. Kriengsak Pankamnerd**
Assistant General Manager of Production Department
(Until 2 October 2018)
5. **Mr. Chirawat Ritthinee**
Manager of Process Control Section (Until 28 February 2018)
Assistant General Manager of Purchasing Department
(Start 1 March 2018)
6. **Mr. Daisuke Hamada**
Assistant General Manager of Sales Department
(Start 20 November 2018)

Department Manager

1. **Mr. Mana Wongsarasin**
Human Resources Section Manager (Start 4 January 2018)
Safety & Health Section Manager (Start 1 February 2018)
2. **Mr. Metha Arunchaipong**
Production#1 Section Manager (Start 4 January 2018)
3. **Mr. Narongrit Samranjit**
Production Engineer Section Manager (Start 4 January 2018)
4. **Mr. Sanguan Wattanawirun**
Export Section Manager (Start 1 January 2018)
5. **Mrs. Chanatthorn Jaikamheang**
Import & BOI Section Manager (Until 30 June 2018)
6. **Ms. Thanvadee Pananuraksa**
Purchasing Section Manager (Until 28 February 2018)
Import & BOI Section Manager (Start 1 July 2018)
7. **Mr. Adisak Singthorash**
Maintenance Section Manager (Start 1 February 2018)
8. **Mr. Likhit Samaibuaing**
Process Control Section Manager
(Start 1 March to 30 June 2018)
9. **Mr. Phinyo Sodasit**
Process Control Section Manager (Start 1 June 2018)
10. **Mr. Manoon Chalermwat**
Information Technology Section Manager
11. **Mr. Choosak Trakoonlarpphan**
Sales Section Manager (Until 28 February 2018)
12. **Mr. Thanayos Hapomechai**
Production#2 Section Manager (Start 2 August 2018)
13. **Mr. Teeravit Pongsittichok**
Sales Section Manager (Start 22 October 2018)
14. **Mr. Prakrit Panomrattanak**
Maintenance#1 Section Manager – Mechanical
(Until 31 January 2018)
15. **Mr. Wirat Suksomdaen**
Maintenance#2 Section Manager – Utilities
(Until 31 January 2018)
16. **Mr. Khomkrit Phenkoh**
Quality Assurance Section Manager
(Until 31 December 2018)

Organization Chart



General Informations & Others

Furukawa Metal (Thailand) Public Company Limited Securities Symbol is “FMT” Listed Company in SET was established on June 15, 1988 under the name Furukawa Metal (Thailand) Company Limited under a joint venture between a Thai holding company called Tampa Co., Ltd., and 2 Japanese companies. The Furukawa Electric Co., Ltd. and Shoko Trading Co., Ltd. to manufacture and distribute various types of copper tube to the manufacturers of air-conditioners, refrigerators and others cooling system. The factory was built on 82 Rai of land at Factory Address No. 213 Moo 4, Mittraparb Road, Tambol Tub-Kwang, Amphur Kaeng Khoi, Saraburi Province 18260.



Major Changes Since its Establishment

Year 1988

- Established the Company with registered capital of Baht 140 million. BOI privilege for the seamless copper tube production of 3,000 tons p.a. since October 1987.

Year 1989

- Started the construction of seamless copper tube plant on the area of 56 Rai at 213 Moo 4 Friendship Highway km.125th, Tab-kwang, Kaeng Khoi, Saraburi.
- Received BOI's approval to expand the promoted production capacity from 3,000 tons p.a. to 4,200 tons p.a.

Year 1992

- Increased registered capital from Baht 140 million to Baht 195 million for capacity expansion by raising funds from the three existing shareholders.

Year 1993

- Started construction and purchased machinery in order to increase its capacity from 4,200 tons p.a. to 8,400 tons p.a. This increased the capacity of Smooth Tube, Multi Grooved Tube and Large Diameter Tube also allowed the company to prepare capacity for the production of Capillary Tube, a new product, in 1994.
- Received additional BOI privileges for the increased capacity of an additional 4,200 tons p.a. Total promoted production capacity would then become 8,400 tons p.a.

Year 1994

- Increased registered capital from Baht 195 million to Baht 335 million from the existing shareholders.

Year 1995

- Split Company's par value from 100 baht/share to 10 baht/share.

General Informations & Others

Year 1996

- February 22, Transformed the company status to Public Company Limited and changed the company's name from Furukawa Metal (Thailand) Company Limited to Furukawa Metal (Thailand) Public Company Limited.
- Increased registered capital from Baht 335 million to Baht 480 million from general investors.
- Received BOI privileges of the capacity expansion of 10,600 tons p.a.
- In December purchased of new land 26 Rai for future expansion project.

Year 1999

- Received the ISO 9001: 2000 Certification from RWTUV Anlagentechnik GmbH.

Year 2000

- Started construction and purchased machinery to increase its production capacity of additional 6,000 p.a. from 16,000 tons p.a. to 22,000 tons p.a., and completed the construction at the end of 2001.
- Received BOI privilege of this capacity and receive BOI Operation Licence on July 24, 2003.

Year 2003

- In November; the Company Increase production capacity from 22,000 tons p.a. to 25,000 tons p.a.

Year 2004

- In April ; the Company received certificate from Center of Administration of Against Narcotics, Amphur Khang Koi, Saraburi Province, to be Excellent Factory Without Narcotics on 2 April 2004.
- In August ; the Company participated in the Green Factory Project for Her Majesty Queen Sirikit Celebration celebration of the 72 years Queen's Birthday on 12 August 2004 from Director General Labour Protection and Welfare.
- In October ; the Company Increase production capacity from 25,000 tons p.a. to 28,000 tons p.a.

Year 2005

- In March ; the Company was presented from the Club TO BE NUMBER ONE, establishment of large size category.
- In September ; the Company was presented for 2005 Outstanding Workplace of Labor Relationships and Labor Welfare from Department of Labor Protection and Welfare, Ministry of Labor on 26 September 2005.
- In October ; the Company increase production capacity from 28,000 tons p.a. to 31,000 tons p.a.

Year 2006

- In March ; the Company received the ISO 14001:2004 Certification from Tuv Nord (Thailand) Ltd.
- In September ; the Company was presented for 2006 Outstanding Workplace of Labor Welfare on 18 September 2006.

Year 2008

- In March ; the Company was presented from the Club TO BE NUMBER ONE Outstanding ; Central / Eastern, establishment of large size category.

Year 2009

- In March ; the Company was presented from the Club TO BE NUMBER ONE Outstanding ; Central / Eastern, establishment of large size category.
- In June ; the Company was presented from the Club TO BE NUMBER ONE and Runner National Level, establishment. of large size category.

Year 2010

- In March ; the Company was presented from the Club TO BE NUMBER ONE maintain standard outstanding of 1st Year, Central / Eastern, establishment of large size category.
- The Company was receive certificates and factory white lable sustainable from Protection and welfare Office of Suraburi.
- In June ; the Company was presented from the Club TO BE NUMBER ONE maintain standard outstanding of 1st Year National Level, establishment of large size category.

Year 2011

- In March ; the Company was presented from the Club TO BE NUMBER ONE maintain standard outstanding of 2nd Year, Central / Eastern, establishment of large size category.
 - In June ; the Company was presented from the Club TO BE NUMBER ONE maintain original silver standard outstanding of 2nd Year ; National Level, establishment of large size category.
-

Year 2012

- In March ; the Company was presented from the Club TO BE NUMBER ONE original silver standard, Central / Eastern, establishment of large size category.
 - In July ; the Company was presented from the Club TO BE NUMBER ONE original silver standard, National Level, establishment of large size category
-

Year 2013

- In July; the Company was presented from the Club TO BE NUMBER ONE original gold standard outstanding of 1st Year ; National Level, establishment of large size category from Her Royal Highness Princess Ubolratana Rajakanya Siriwatana Bhanawadee.
-

Year 2014

- In March ; the Company was presented from the Club TO BE NUMBER ONE original gold standard, outstanding of 2nd Year ; National Level, establishment of large size category., Central/Eastren, establishment of large size category.
 - In July ; the Company received TO BE NUMBER ONE maintain original gold, establishment of large size category from Her Royal Highness Princess Ubolratana Rajakanya Siriwatana Bhanawadee.
-

Year 2015

- In March ; the Company was presented from the club TO BE NUMBER ONE original diamond standard outstanding of 1st Year ; Central / Eastern, establishment of large size category.
 - In July ; the Company was joined the Club TO BE NUMBER ONE held at Muang Thong Thani.
-

Year 2016

- The Company received "Green Factory Certificate" from Ministry of Industry is shown the Company achievement in Level 3 with Green System is an environment management system to monitor, evaluate and review for continuous improvement since 30 September 2015
 - In May, the Company received Certificate Drive Motorcycle with Wearing Helmet 100% Campaign from Saraburi Governor and Kaeng Khai Police Station, Saraburi Province.
-

Year 2017

- In February 7, the company received standard ISO 9001: 2015 certification from TUV NORD (Thailand) Ltd
 - In August 1, the company received certificate " Drive Motorcycle with Wearing Helmet 100% Campaign (Phase 3/2015)" from Saraburi Governor and Provincial Police Station 1 In order to be part of the decade of road safety in Thailand
-

Year 2018

- The Company continues to maintain the green industry level 3 and follow ongoing environmental operations. To prevent pollution going out form Factory.

General Information

Furukawa Metal (Thailand) Public Company Limited

Registration no : 0107539000057

website : <http://www.fmt.co.th>

Bangkok Office

183 Regent House Building, 14th floor, Rajadamri Road,
Kaweng Lumpini, Pathumwan District, Bangkok 10330

Tel. 0-2256-0641-50

Fax. 0-2256-0651-2

Factory Location

213 Moo 4, Mitrapard Road, Tambal Tub-Kwang,
Ampher Kaeng Khoi, Saraburi Province. 18260

Tel. (036) 329-811-9

Fax. (036) 329-822

Type of Business

Manufacture of Seamless Copper Tube including foamed
polyethylene insulated and non-insulated copper tube.

Registered Capital 480 Million Baht

by 48,000,000 Ordinary Share at per value of 10 Baht

Number of Employee

583 Persons (At 31 December 2018)

Male 432 Persons / Female 151 Persons

Reference Persons

Register

Thailand Securities Depository Co.,Ltd.

93 Ratchadaphisek Road, Kaweng Din Daeng,

Dindaeng District, Bangkok 10400

Tel. 02-009-9000

Fax. 02-009-9991

Contact Center: 02-009-9999

website : <http://www.set.or.th/tsd>

E-mail : SETContactCenter@set.or.th

Auditor Year 2018

Miss Munchupa Singuksawat

Certificated Public Accountant no. 6112 or

Miss Sirinuch Vimolsathi

Certificated Public Accountant no. 8413 or

Mr. Sumate Jangsamsee

Certificated Public Accountant no. 9362

KPMG Phoomchai Audit Limited

Empire Tower, 50th – 51st Floor

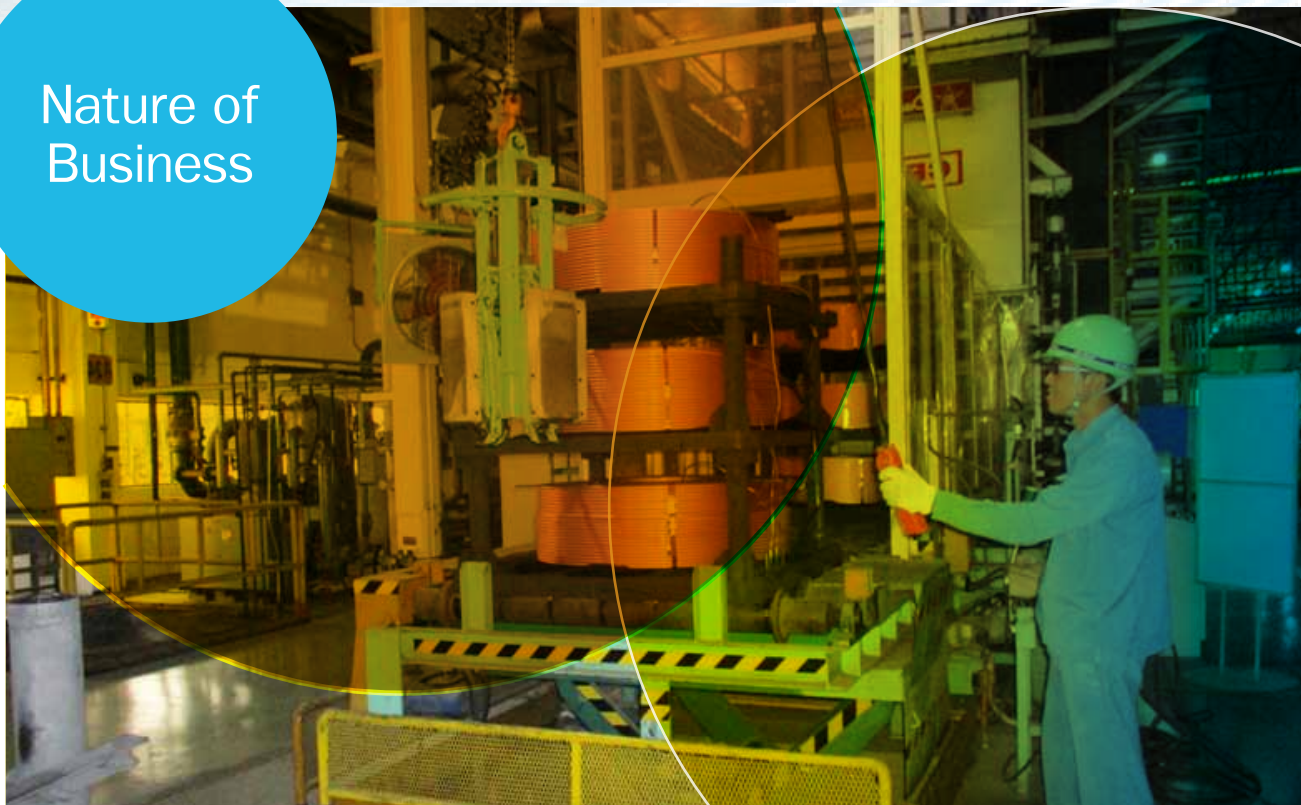
1 South Sathorn Road, Kaweng Yanawa, Sathorn District,
Bangkok 10120

Tel. 0-2677-2000

Fax. 0-2677-2222

<http://www.kpmg.co.th>

Nature of Business



Furukawa Metal (Thailand) Public Company Limited

is a producer and distributor of copper tube which is a vital part in the manufacturer of air-conditioners and refrigerators.

As copper tube can give maximum heat transfer and high resistance of chemical corrosion, it serves as a passage for the chemical substance in the cooling equipment and any other piping application which requires a superior heat transfer quality and endurance

The main products are Smooth Tube, Furukawa Multi Grooved Tube, Large Diameter Tube and Capillary Tube.

The company has 4 product lines. Each line has specific characteristics as follows

- (1) Smooth Tube is a seamless copper tube that has smooth inner tube. There are two types
 - 1.1 Smooth Tube for heat exchanger which is used for carrying refrigerant within refrigeration equipment.
 - 1.2 Smooth Tube for piping which is used for carrying refrigerant outside refrigeration equipment.
- (2) Multi grooved Tube is seamless tube that the inner wall is threaded to act as the first type of

copper tube, but the efficiency on better heating is up to twice, which is popular in the production of the air conditioner of the small type with highly efficient and expensive.

- (3) Accumulator Tube is the straight and large seamless copper tube popular to use as the pressure reservoir tank for refrigerant.
- (4) Capillary Tube is the small seamless copper tube to act as the flow of the refrigerant after adjusting the temperature to lower from the compressor to go through the refrigerant inside the room and help to adjust and reduce the pressure of the refrigerant at the suitable level before going to the refrigeration machine

In summary, the product of the Company is the seamless copper tube solely, which sold to the customers at the desired size of the customers. It shall designate the sales price based on the world's market copper price at the time of trading according to the conditions of each customer.

The factory is located at address 213 Moo 4, Mittraphap Road, Tambon Tub-Kwang, Amphur Kaeng-Khoi, Saraburi Province. It has a modern and complete production line. Quality control procedures are performed at every stage of production to ensure full compliance with the stringent standards.

Nature of Business

Overall Policy

Furukawa Metals (Thailand) Public Co., Ltd. is a manufacturer and distributor of copper pipes, which is a key component in manufacturing refrigeration equipment, such as refrigerators and air conditioners. Because of the copper pipes have a good heat conductor and resists corrosion, suitability for use as a chemical pipeline in the refrigeration. and is used in piping work required high quality of heat conductor, and long shelf life. The Company has given the great importance to creating the good corporate governance system with transparent and fair to all stakeholders. There is the good corporate governance required by law and ethical duty. The Board of Directors has delegated duties and an important responsibility to the President, the Board of Executive Committee, including the Audit Committee. The company has set the basic management standard for executives and employees who work with environmental protection and will strive to create social value through technological innovation, respect for the law Comply with social norms and morals, ethics, including maintain and enhance good relationships with all stakeholders and responsible for the sustainable development of society.

Visions

- 1) Aim to become a copper tube manufacturer in Southeast Asia and accepted at the world's level on the quality, service, price and delivery of products to its customers as scheduled.
- 2) Aim to the management system that maintains the profit from the business operations.
- 3) Determine to maintain the domestic market share as much as possible and expand its export to the world's market.
- 4) The executive and the company's employee shall comply with the Code of Conduct regarding the corporate social responsibility.

Management philosophy

Management philosophy consists of four basic principles and considered a commitment to our stakeholders; employees, business partners, shareholders, customers or society which discusses operational measures and the values we hold In compliance with our company philosophy

- 1) The Company will responds the expectations and trust that receive from society with honesty and justice.
- 2) The Company will devote all of our expertise to the satisfaction of our customers and grow together.
- 3) The Company will continuously strive to create world-class technological innovations and improve in every way
- 4) The Company will take care of human resources at all levels for become to more creative and diverse organization.

Target and Strategy on Sustainable Growth

The Company defines an annual plan that the executives of each division will provide as operation plan to be consistent with policy and goal of the company. The Company will always monitor and assess performance with KPI indicators to measure real success compared with the operation plan which is reviewed and reported on monthly basis by management to Executive..

In 2018, the Management provided annual budget, prepared operation plan approved by the Board of Directors by emphasizing on operating business to be successful and sustainable in long term and to respond needs of stakeholders. In 2018, the Company determined policy and goal of business operations as follows :

- 1) Developing potential of competition to meet the needs of customers in terms of quality, product and service delivery, capital management, and new innovation promotion to be in accordance with the management of the Company. The Company measures satisfaction of customers by assigning quality check division and purchase division to provide and conduct assessment.
- 2) Developing potential of personnel in the Company by creating skills and capability of production to support personnel to have proficiency and can perform works by themselves.
- 3) The Company reviews target of growth in term of turnover and profit of the Company as well as provide strategies to achieve annual target.

Nature of Business

- 4) The Company gives precedence to promoting and developing society and environment starting from the design, material selection for production process, and product and service delivery by recognizing of responsibility and impacts on environment and social livelihood. It also focuses on operating creative activities to support and assist the society along with activities beneficial to the society and community. It also emphasizes on operation of corporate social responsibility.

As Furukawa Metal (Thailand) Public Company Limited has been operating the business for 30 years, it realizes needs of customers that they do not only care about product price but they also hope for product quality and serviceability as well as trust in products of the Company. Therefore, it makes a marketing plan to be consistent with business operation structure, competitiveness and how to make the company's business grow in sustainable way. So, the committee and executives of the Company define management strategies with emphasis on responding customers' need as follows :

- 1) Product quality : it must product standard copper pipe with quality accepted by customers and competitiveness with other domestic and international producers.
- 2) Production Cost : The Company will control production cost and other expenses by increasing productivity and minimizing wastes from production.

- 3) It has effective and punctual product delivery system or customers including short-term delivery and quick after-sale service to bring satisfaction to customers.
- 4) It has effective communication inside and outside the organization for correct and same understanding and to prevent potential errors or to prevent recurrence.
- 5) Continuous development product to meet the needs of various customers and support the changing technology of current customers.

For such principles of management, it is what the company, executives, leader and employees realize and strictly comply with

In 2017 and 2018 the Company had following essential changes and development

- 1) Increase Productivity in productivity by reduce cycle time.
 - 2) Increase weight per coil in delivery process for reduce delivery cost.
 - 3) Produce Furukawa Multi Grove Tube thinner thickness.
 - 4) Increase Capillary Tube production capacity for higher production to support customer demand.
-

Business Characteristics

Furukawa Metal (Thailand) PCL incorporated with the starting registered capital of 140 million baht. On 15 June 1988 under the initial incorporation as "Furukawa Metal (Thailand) Co., Ltd." is the trade cooperation between Tampa Ltd. , which is the holding company, Thai nationality, at the rate of 51 percent and two Japanese companies are The Furukawa Electric Co., Ltd. The manufacture and distributor of various products such as telephone line, electrical wire, automotive component, copper tube products and aluminum products with Soko Trading Co., Ltd., which the company selling products made from metals such as aluminum, brass and copper slabs, etc.

The Company started the business on 2 July 1990 and was converted to a public company on 22 February 1996, registration No. PCL 606 and changed its name from Furukawa Metal (Thailand) to Furukawa Metal (Thailand) Public Company Limited.

At present Furukawa Metal (Thailand) PCL has the registered capital of 480 million baht with the paid-up capital of 480 million baht. The Company operated the business as the manufacturer and distributor of seamless copper tube with foam and non-foamed wrapping to be used as the component for air conditioner, refrigerator

and general refrigeration machine. Moreover, the Company also has the capability on the design and development of the of product to improve the manufacturing technique, including the design of the products to have the quality in consistent with the demand of the customers under the contract to provide technical help from Furukawa Electric Ltd.

Furukawa Metal (Thailand) PCL received the investment promotion from the BOI for four certificates since 1988.

At the present, The Company also received the rights and benefits according to Sections 36 (1) and 36(2) of the Investment Promotion 1977 additionally as follows :

Pursuant to Section 36 (1)

received exemption for import duty for raw material and necessary material to be imported from overseas to be manufactured for export from 14 January 2017 up to 13 January 2019.

Pursuant to Section 36 (2)

received exemption for import duty for the promoted person to import for export from 14 January 2017 up to 13 January 2019.

Income Structure

Product	2016		2017		2018	
	Million Baht	%	Million Baht	%	Million Baht	%
Domestic						
1. Smooth Tube	1,834.68	32.72	2,120.23	34.29	2,147.72	33.07
2. Multi Grooved Tube	1,045.62	18.65	1,199.90	19.41	1,415.74	21.8
3. Large Diameter Tube	319.64	5.70	356.11	5.76	355.04	5.47
4. Capillary Tube	294.55	5.25	272.96	4.41	306.98	4.72
Sub Total	3,494.49	62.32	3,949.20	63.87	4,225.48	65.06
Export						
1. Smooth Tube	1,354.59	24.16	1,408.38	22.77	1,383.74	21.30
2. Multi Grooved Tube	604.26	10.78	648.42	10.49	707.58	10.89
3. Large Diameter Tube	109.83	1.96	132.32	2.14	138.53	2.13
4. Capillary Tube	44.36	0.79	44.90	0.73	40.12	0.62
Sub Total	2,113.04	37.68	2,234.02	36.13	2,269.97	34.94
Total Sales						
1. Smooth Tube	3,189.27	56.87	3,528.61	57.07	3,531.46	54.37
2. Multi Grooved Tube	1,649.88	29.43	1,848.32	29.89	2,123.32	32.69
3. Large Diameter Tube	429.47	7.66	488.43	7.90	493.57	7.60
4. Capillary Tube	338.92	6.04	317.86	5.14	347.10	5.34
Total	5,607.54	100%	6,183.22	100%	6,495.45	100%

Type of Shareholders

As of 28 December 2018

Type	No. of Shareholders	Number of Share	%
<u>Juristic Persons</u>			
- Thai	16	12,683,920	26.42%
- Foreigners	4	21,564,280	44.93%
Total	20	34,248,200	71.35%
<u>Private Individual</u>			
- Thai	54	13,521,170	28.17%
- Foreigners	8	230,630	0.48%
Total	62	13,751,800	28.65%
Grand Total	82	48,000,000	100%

Major Shareholders

No.	Name of Share Holders	Number of Share	% of Shareholder
1.	Furukawa Electric Co.,Ltd. (1)	20,280,280	42.25
2.	Thailand Security Depository Company Limited for Depositors	7,706,930	16.06
3.	Bangkok Insurance Public Company Limited (2)	4,566,100	9.51
4.	Mr. Chai Sophonpanich	2,265,200	4.72
5.	Mr. Chartchai Lisahapanya	1,674,710	3.49
6.	Mr. Veeradej Kittiorat	1,674,710	3.49
7.	Mr. Surin Asdathorn	1,564,910	3.26
8.	Mr. Suthin Asdathorn	1,726,610	3.60
9.	Mrs. Chanida Asdathorn	1,225,810	2.55
10.	2-J Construction Ltd., Part.	800,000	1.67

Remarks

The shareholders of this group (1) are the parent company in Japan (Former name is The Furukawa Electric Co.,Ltd) that produces copper tube used in the air conditioner and refrigeration machine. The major shareholders of Furukawa Electric Co., Ltd. have the status of a bank and financial institution in Japan consisting of :

1. The Master Trust Bank of Japan, Ltd. (Trust Account)
2. Japan Trustee Services Bank, Ltd. (Trust Account)
3. Japan Trustee Services Bank, Ltd. (Trust Account 4)
4. Trust & Custody Services Bank, Ltd. (Mizuho Trust & Banking; Employee Retirement Benefit Trust, Mizuho Bank Account)
5. Asahi Mutual Life Insurance Co. Ltd.
6. FURUKAWA Co., Ltd.
7. Fuji Electric Co., Ltd.
8. Trust & Custody Services Bank, Ltd. (Mizuho Trust & Banking; Employee Retirement Benefit Trust, Furukawa Co., Ltd. Account)

9. Trust & Custody Services Bank, Ltd (Mizuho Trust & Banking ; Employee Retirement Benefit Trust, Asahi Mutual Life Insurance Co. Account)
10. Furukawa Electric Employee stock ownership plan

The ultimate shareholders cannot be disclosed

In the contract to provide the technical help stipulates on the condition of shareholding directly and indirectly of FEC may not be less than 30 percent to be able to distribute the product under the trademark of FURUKAWA." As of 31 December 2018 Furukawa Electric Co., Ltd. had the shareholdingratio in the Company equals to 42.25 percent did not affect the Company due to this possession ratio is still higher than 30 percent according to the condition of the contract on providing technical help. Also Furukawa Electric Co., Ltd. intended not to reduce the shareholding to less than 30 percent.

Other issued securities

Share issue-binding burden in the future

- The Company has no obligation in the issue of shares in the future

Information on the debentures, bills of exchange or debt instruments

- None.

Policy on the Payment of Dividends

The Board of Directors has the policy on the meeting of the shareholders of the Company considers paying the annual dividends to the shareholders at the rate is no less

than 50 percent of the net profit after deducting the annual corporate income tax. It shall present to the Shareholders' Meeting for consideration of approval.

The payment dividend of past dividends of the Company three year in retrospective

Year	Baht per Share
2016	2.00 Baht per share
2017	1.50 Baht per share
2018	1.625 Baht per share

Report on Directors Shareholding

Date 28 December 2018

No.	Name of Director		Number of Share	Change during the year
1.	Mr. Chai	Sophonpanich	2,265,200	-
2.	Mrs. Chanida	Asdathorn	1,225,810	-
3.	Mr. Tinnakorn	Asdathorn	653,300	-
4.	Mr. Junichi	Ishihara	-	-
5.	Mr. Takeshi	Nishizawa	-	-
6.	Mr. Nobutaka	Taniguchi	648,010	-
7.	Mr. Takashi	Yamamoto	-	-
8.	Mr. Daisuke	Hamada	-	-
9.	Mr. Makoto	Kasuga	-	-
10.	Mr. Deja	Tulanada	-	-
11.	Mr. Vibul	Aunsunnta	-	-
12.	Mr. Virojn	Srethapramotaya	-	-
13.	Mr. Seiji	Tojo	-	-

Risk Factors

In 2018, risk factors that may affect the business operations of the Company in analyzing the issue of risk, The Company has reviewed and determined measures to reduce the risk of not affecting the business operations of the Company. Which the risks of the company are as follows

1. Risk from fluctuation of raw material price of cathode copper sheet

The Company realizes the procurement of raw materials by giving importance to price, quality and time of delivery of raw materials. The Company have regular and effective communication with the seller in order to receive accurate information about the procurement and delivery of raw materials to make the company receive the raw materials delivery on time

As price of main raw material, including copper sheet having fluctuation of price in world market is very high, the company has policy not to stock raw materials of copper sheet. The company will produce raw materials according to the purchase order of customers; the plan for marketing in three months in advance, joining with Raw Materials Purchase Section and Marketing Section, by Purchasing raw materials suitably for match order. For the price of copper can't answer that tended to decrease or increase. However, in Y. 2018 the price of copper increase from 2017 with the average about 450 US\$ per ton. This trended that can't hold permanent because the price of copper also depend on factors of price of oil, gold, war and spinning price in the world market, to prevent risk from fluctuation of raw material price, the Company made hedging cost of material.

Measures supporting risk from depending of raw material purchase ordering

The Company determines policy of raw material purchase ordering. The company plans in advance for about three months, coordinating with Sales Section, Manufacturing Section and Import Section to provide raw materials. The Company buys raw materials as follows :

1. **Copper Sheet** : as presently there is no copper sheet manufacturer in Thailand, the Company has to import copper sheet from foreign countries. The price of raw

materials, or copper sheet, is determined from the price of copper in London Metals Exchange (LME) plus other expense. Due to the fact that copper is commodity, price of copper has dynamics all the time. Therefore, in order to prevent risk which occurs from fluctuation of copper price, the Company has measures to support risk from depending of raw material purchase ordering from abroad, by ordering raw material of copper residue in the country as well, in the ratio of 50:50. In order to prevent problems to be occurred from risk factors which cannot be controlled, resulting in delay because of transport of raw materials, for example, monsoon happening, or disaster events, etc. and in order to prevent such problems, presently, the Company buys copper residue inside the country to melt again, in order to be another type of raw material of the company, making the Company to be able to determine the amount, quantity and time of delivery independently and more certainly.

Customers of the Company can select conditions of determining of ordering of raw materials suitably for purchase order of customers, as follows :

- 1.1 Buying/selling in type of determining copper price in advance in the acceptable level (Hedging) is the method of purchase order that customers want to reduce risk of price fluctuation of world market copper price, by booking for buying/selling in advance.
- 1.2 Buying/selling with average price, rather popular for customers, as the price is that which customer can determine the cost, for example, customer determines to use price of raw material of copper sheet in arrears for one month, or in arrears for two months in the condition of ordering of raw materials in Clause 1.1 and 1.2, the Company will summarize the buying amount and the sales amount at every end day of each month, to make paper trade to reduce stock of raw materials or buying/selling parts to prevent

Risk Factors

risk for another time. In determining orders of raw materials by customer, the Company will divide price of raw materials according to London Metals Exchange (LME) and fee. Customer pays expense.

- 1.3 The Company purchased and procured raw materials from supplier which customer arranged in basic condition.
- 1.4 The Company have monthly plan to control and manage inventory in suitable situation. The Company set a target and have production planing every month to comply with customers' orders. By the way the Company review customers order and production capacity between Sales Department, Production Department and Production Planning to control our production process.

2. Risk in Marketing

Risk from importing of copper tube from abroad and price competition of goods is the risk from import competition of copper tube from China, Malaysia and Korea. Competitors from those countries propose sales price of copper tube having cheap price. However, customers have problems on quality of products and service, when products of the company are compared, the problems of quality and service of import of copper tube cannot compete with the quality of the Company. In the year 2018, there is import of copper tube from China about 81%; from Malaysia 11 % from Korea about 6% and other country 2%, however the risk of price competition that increases violence. The Company has set guidelines for the operation, by focusing on producing good quality products for customers. In accordance with the Company policy In order to be a leader in the production of copper pipes in Southeast Asia, the Company has developed and improved various operating systems and technologies.

3. Competition risk

Copper pipe manufacturing industry in Thailand is an industry that focuses on both domestic sales and export markets, which apart from competing from local manufacturers also have to compete with foreign country manufacturers especially products imported from China that have a large amount and products imported from Korea. Causing increased price competition and the economic conditions had changed the concept of consumers who want

quality products and reasonable prices, the company has focused on increasing productivity, providing services and delivering products that can respond to customers for able to compete with other suppliers as well. The company still developed products to support new technology requirement from customer.

4. Labor Risk

We could see that the problem of Thai labor shortage still existed in private sectors because currently, technology is changing so fast and Thai people are interested in and give precedence to education in higher level along with values for children to get higher education for better future of working. This made private organizations have problems about labor shortage that some companies offered higher return and welfare so as to motivate those labors to work for long time as they have more skill and proficiency than new batch of labors and most labors still change their job frequently leading to the fact that the company needs to waste time for new training.

5. Risk on Investment of Securities Holder

Major shareholder of the company is Furukawa Electric Co., Ltd which is the mother company in Japan holding shares of the company for 20,280,280 shares accounted for 42.25% of all shares with rights of voting. Therefore, Furukawa Electric Co., Ltd is a major shareholder of the Company with power to manage and control almost every resolution in shareholder's meeting including appointment of committee or asking for resolution that needs major votes in shareholder's meeting except matters related to laws and company's regulations that require $\frac{3}{4}$ votes of shareholder's meeting. So, other shareholders maynot be able to gather vote to verify or balance the matters proposed by major shareholder. However, management structure of the Company contains

- 1) Board of Directors
- 2) Audit Committee
- 3) Management committee

Details of such management structure define scope of power and duty of each committee clearly and the audit committee includes 3 independent committees with knowledge and ability in business administration and understanding about financial budget and financial report. This made the operations of the company conducted with transparency and auditability. Besides, the Company has a policy about transactions of committee, executives, major shareholder along with other parties that may have conflict

Risk Factors

of interest by comparing conditions with outsiders first before bringing such transaction into consideration of audit committee before proposed to committee's meeting for further approval.

6. Industrial Risk

Seamless copper tube that customers use as main material in making air-conditioners, presently there are new raw materials for testing in use instead of copper tube, in making of air-conditioner, that is aluminum. Even though cost of raw materials for production, aluminum is cheaper than copper, and air-conditioner makers still use copper tube products.

For effect to be occurred in the future, if manufacturers of aluminum pipe develop quality of production to be used will and there is no problem in welding, when customers user the aluminum pipe, it will affect customers as more customers will use aluminum pipe, but the quality of aluminum pipe dose not tolerate like copper tube. In addition, customers demand smaller copper pipes and higher efficiency to support the new inverter air conditioner. In this part, the company has developed and innovates to produce smaller copper pipes and higher efficiency for support this demand.

7. The Risk from Customer Relocating their Production Base to Other Countries

The major customer of the Company is a manufacturer and a distributor of an air conditioning and a refrigeration, the majority of production base located in Thailand. If the customer moved production base to other country, which production costs is cheaper Thailand in the future, such as Vietnam. It might affect the operating result of the Company but it is not much. However, the Company agrees that Thailand still has the main factor basis decent to continue the production, and be also a potential country on the production with modern technologies, develops production continuously. Moreover, those customers are partners who deal business with the Company for a long time; customers have confidence in the Company's products till today. However, the Company continues to seek new markets and customers both domestic and abroad additionally.

8. The Risk of Relying on Personnel

The Company's business requires the knowledgeable, skilled and experienced personnel in order to obtain products with standard and high accuracy to meet the various customers' requirement, the Company has a policy to promote human resource development by providing a training employee course.

In addition, the Company also provides the switching functions of employee to work in another department. These are the encouraging and developing employee to have more skill and learn working and using of machine in various types of each process, including the employee can work replacing it. This reduces the risk of the Company on personnel reliance. The Company provides training on the topic of learning production by managers and supervisor is a trainer and training in basic knowledge about quality with all employees.

9. Financial Risk Management

Financial Risk Management Policies

The Company is exposed to normal business risks from changes in market interest rates and currency exchange rates and from non-performance of contractual obligations by counterparties. The Company does not hold or issue derivative financial instruments for speculative or trading purposes.

Risk management is integral to the whole business of the Company. The Company has a system of controls in place to create an acceptable balance between the cost of risks occurring and the cost of managing the risks. The management continually monitors the Company's risk management process to ensure that an appropriate balance between risk and control is achieved.

Capital Management

The Board of Directors' policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Board monitors the return on capital and also monitors the level of dividends to ordinary shareholders.

Therefore Interest rate risks, Foreign currency risk, Credit risk and Liquidity risk all mentioned risk detail shown on Company's Notes to the Financial Statements.

Connected Transactions Y.2018 and Y.2017

The Company has considered the related items to be justified and necessary for the business operations, with the request for approval to make the related items according to the necessary with justification by adhering the same practice with making the items with the third party.

Thus, in the case there is a related item of the Company the audit committee shall provide the opinion on the necessity to do such the item, including the consideration on the various conditions to comply with the characteristics on the normal business in the industry. However, in the case there is a related item with essence, the Company shall arrange to pass the consideration of Audit Committee before submit to the Board of Directors approving it.

Related Items in 2018 and 2017

Related person	Relations	Characteristic of the Item	Value of the Item in 2018 (Thousand baht)	Value of the Item in 2017 (Thousand baht)	Comment by the Audit Committee
1. Furukawa Electric Co., Ltd. (Japan)	It is the parent company in Japan and is the major shareholder of the Company. At present it holds 20,280,280 shares holds 20,280,280 shares, or 42.25% of the paid-up registered capital.	It has signed the contract to receive technical help by paying the fees to Furukawa Electric and sign the contract to prevent the risk from fluctuations of copper product sales to the customers in Thailand (see details in important contract with the relevant business Re: Contract for technical and risk prevention contract)	<ul style="list-style-type: none"> - No transaction in 2018 - Fee on technical service at 18,597 thousand baht. - No service fees and others. - With the credit balance of 17,604 thousand baht. 	<ul style="list-style-type: none"> - No transaction in 2017 - Fee on technical service at 18,364 thousand baht - Service fees and others at 330 thousand baht with the credit balance of 11,706 thousand baht. 	The audit committee asked the management to present the consideration on renewing the contract for technical assistance. The Company proposed to the Board of Directors to consider appropriateness of contractual conditions every year. However, the technical assistance in 2018 has been approved by the Board Meeting on 20 November 2017
		The Company sold copper tube to Furukawa Electric as well	<ul style="list-style-type: none"> - No Transaction in 2018. - Loss from copper risk of 28,969 thousand baht. 	<ul style="list-style-type: none"> - No Transaction in 2017. - Gain from copper risk of 18,172 thousand baht. 	
2. Furukawa Sangyo Kaisha (Thailand) Co.,Ltd.	It is a trade partner in the group of Furukawa Electric Co.,Ltd with Furukawa Sangyo (Kaisha) holding 57% and Furukawa (Thailand) Holding 43%	Supply of copper sheets, tools and consumables to the Company	<ul style="list-style-type: none"> - No goods purchasing - No creditor balance 	<ul style="list-style-type: none"> - No goods purchasing - No creditor balance 	The audit committee did not give any additional comment.
		The Company sold copper tube to Furukawa Sangyo (Kaisha) (Thailand) Co.,Ltd.	<ul style="list-style-type: none"> - Total goods sales of 102,759 thousand baht - With total debtor balance of 35,228 thousand baht 	<ul style="list-style-type: none"> - Total goods sales of 157,622 thousand baht - With total debtor balance of 27,632 baht 	

Connected Transactions Y.2018 and Y.2017

Related person	Relations	Characteristic of the Item	Value of the Item in 2018 (Thousand baht)	Value of the Item in 2017 (Thousand baht)	Comment by the Audit Committee
3. Furukawa Electric (Singapore) Co.,Ltd.	It is a trade partner in the group of Furukawa Electric Co.,Ltd with the same major shareholder is Furukawa Electric Co.,Ltd. Holding 100 share.	The Company signed a contract to purchase copper from Furukawa Electric Singapore (See details in the important contract with the related business Re : long-Term Contract for the Purchase of Copper Cathodes)	- Total goods purchase of 1,485,655 thousand baht with the total creditor of 255,352 thousand baht.	- Total goods purchase of 1,927,947 thousand baht with the total creditor of 344,341 thousand baht.	The audit committee did not give any additional comment
		The company sold copper tubes to Furukawa Electric Singapore Plc.,Ltd.	- Total goods sales of 132,787 thousand baht with the remaining debtor of 28,816 thousand baht.	- Total goods sales of 212,623 thousand baht with the remaining debtor of 27,504 thousand baht.	
4. Furukawa (Thailand) Co.,Ltd.	It is a trade partner in the group of Furukawa Electric with 1. Furukawa Electric is the same major shareholder holding 41.36% 2. Furukawa Thai Holding of 43.93 % share 3. Thai Furukawa Unicorn Engineering in Thailand holding 7.78% 4. Furukawa Electric Singapore holding of 7.47% share	Furukawa (Thailand) provides this project maintenance service on the management of the production with the company system with the Company (See details in the related business Re : System Development Service Support and Basic Trading Agreement)	- Total goods purchase (Cost of production maintenance service 246 thousand baht) - No creditor balance	- Total goods purchase (Cost of production maintenance service 602 thousand baht) - With remaining creditor balance of 65 thousand baht.	The audit committee did not give any additional comment
5. P.T. Furukawa Electric Indonesia (Indonesia)	It is a trade partner in the group of Furukawa Electric Co.Ltd. with the major shareholder is Furukawa Electric holding share of 100%	The company sold copper tube to Furukawa Electric Indonesia.	- Total goods sales of 49,199 thousand baht with the remaining debtor of 13,430 thousand baht.	- Total goods sales of 72,797 thousand baht with the remaining debtor of 20,256 thousand baht	The audit committee did not give any additional comment
			- Total goods purchase (Others) 4 thousand baht. - No creditor balance	- Total goods purchase (Others) 19 thousand baht - No creditor balance	
6. FITEC Corporation (Japan)	It is a company in the group of Furukawa Electric Co.Ltd. in Japan with the same major shareholder is Furukawa Electric holding share of 100%	FITEC Corp. provided the maintenance service of the production management with the contract was terminated on 31 March 2013 (see the details in the important contract with the business related on maintenance consulting agreement of total production management system)	- No transaction in 2018	- No transaction in 2017	The audit committee did not give any additional comment

Connected Transactions Y.2018 and Y.2017

Related person	Relations	Characteristic of the Item	Value of the Item in 2018 (Thousand baht)	Value of the Item in 2017 (Thousand baht)	Comment by the Audit Committee
7. Furukawa Thai Holding Co.,Ltd.	It is a company in the group of Furukawa Electric Co.,Ltd with the same major shareholder is Furukawa Electric holding share 48.73% and hold 339,990 shares, or 0.71% of the paid-up registered capital.	- The company signed the contract on the management of finance with Furukawa Thai Holding Ltd. To provide better financial management (see the details in the important contract with the related business Re : Cash management agreement)	- Short term loan 564,405 thousand baht with the remaining creditor balance of - 784 thousand baht	- Short term loan 725,089 thousand baht with the remaining creditor balance of - 732 thousand baht	If there is a related item, the Audit committee would like the management to present the financial management contract with Furukawa Thai Holding approved to review the suitability first. How ever the management shall report the status on the financial management to the Audit Committee and report to the board of directors for acknowledge on each meeting
		- Supply and provide transporation service to the company (start 1 May 2018)	- Total good purchase (service) of 304 thousand baht with the remaining creditor balance of 24 thousand baht.	No transaction in 2017.	
8. Tani Internation trading Co.,Ltd.	It is a shareholder of the company and director of the Company with the power and reposibility in planning, command and control of various activites of the business, regardless of directly or indirectly.	The Compay sold copper tube to the Tani Internation Trading Co.,Ltd.	- Total good sales of 753,291 baht with the remaining debtor balance of 159,107 thousand baht	- Total good sales of 784,404 baht with the remaining debtor balance of 210,590 thousand baht	The audit committee did not give any additional comment
			- Total good purchase (Cost of production maintenance service) 144 thousand baht with the remaining creditor balance of 1 thousand baht	- Total good purchase (Cost of production maintenance service) 111 thousand baht with the remaining creditor balance of 2 thousand baht	
9. Furukawa Logistic Coportation Co.,Ltd.	It is a company in the group of Furukawa Electric Co.,Ltd. With the same major shareholder is Furukawa Electric Co.,Ltd. Holding share 100%	Supply and distribution of consumable to the Company	- Total goods purchase of 162 thousand baht with the remaining creditor balance of 27 thousand baht	- Total goods purchase of 1,051 thousand baht with the remaining creditor balance of 56 thousand baht	The audit committee did not give any additional comment
10. Okumura Metal (Malaysia) Co.,Ltd.	It is a trade partner in the group of Okumura Metal and the same major shareholder is Furukawa Electric Co.,Ltd Holding share 100%	The Company sold copper Tube to Okumura Metal (Malaysia) Co.,Ltd.	- Total goods sales of 448,511 thosand baht with the remaining bedtor balance of 102,767 thousand baht	- Total goods sales of 490,802 thosand baht with the remaining bedtor balance of 110,514 thousand baht	The audit committee did not give any additional comment

Connected Transactions Y.2018 and Y.2017

Related person	Relations	Characteristic of the Item	Value of the Item in 2018 (Thousand baht)	Value of the Item in 2017 (Thousand baht)	Comment by the Audit Committee
11. Okumura Metal (Thailand) Co.,Ltd.	It is a trade partner the group of Okumura Metal and the same major shareholder is Furukawa Electric Co.,Ltd. Holding share 100%	The Company sold copper tube to Okumura Metal (Thailand) Co.,Ltd.	- Total goods sales of 287,437 thousand baht with the remaining debtor balance of 98,479 thousand baht	- Total goods sales of 248,836 thousand baht with the remaining debtor balance of 99,566 thousand baht	The audit committee did not give any additional comment
12. Furukawa Precision (Thailand) Co.,Ltd.	It is a Company in the group of Furukawa Electric Co.,Ltd. with the major share holder is Furukawa Electric Co.,Ltd. Holding Share 100%	Supply and provide transporation service to the company (until 30 April 2018)	- Total good purchase (service) of 90 thousand baht - No creditor balance	- Total good purchase (service) of 270 thousand baht with the remaining creditor balance of 24 thousand baht	The audit committee did not give any additional comment
13. Bangkok Insurance Public Co.,Ltd.	It is a shareholder of the company	Supply and provide insurance service to the company	- Total good purchase (insurance) 5,032 thousand baht	- Total good purchase (insurance) 4,166 thousand baht	The audit committee did not give any additional comment

Good Corporate Governance

Policy of Compliance with Principle and Code of Best Practices for Directors in consistency with Code of Best Practices for Directors of Listed Company in accordance with the Guideline of Stock Exchange of Thailand. However, the determination of legal provisions can be adhered as actual regulation. Moreover, the Company has applied the principle of Good Corporate Governance as the guideline of policy development covering the right and equality of the shareholders and stakeholders. The structure, role, duty, responsibility, and independence of the Board, information disclosure and transparency of control and risk management as well as business ethics are for the Company's effective and transparent management and business operation

The Company realizes and focuses on importance of effective, transparent and auditable management that will bring confidence to all relevant parties and lead the company to sustainably grow under code of conduct and compliance with law. Therefore, the Company defines a policy of good corporate governance with concrete practice to promote everybody in the organization to strictly abide by. Nevertheless, the policy of good corporate of the Company has following details

1. Rights of Shareholders

The Company realizes importance of shareholder's rights as they are investors in securities such as rights of purchase, sale, transfer of securities they are holding, rights of receiving profit share from the Company, right of receiving sufficient data of the company, right of attending shareholder's meeting, rights of giving opinions, rights of making a decision on subject matters of the company, appointment or removal of committee, appointment of auditor and amendment of memorandum of association and regulations of the Company etc. The Company has a policy in operating works to promote and facilitate exercising shareholder's rights as follows :

- 1.1 The Company supports the company's committee, executives and relevant institutes along with auditor to attend shareholder's meeting.

- 1.2 The Company will deliver a letter of meeting appointment to shareholders along with supporting details in different agenda in advance and it will publish the letter of invitation to annual shareholder's meeting in newspaper for 3 consecutive days and in each agenda, there will be opinions of the Company's committee to support consideration so that the shareholders will have time to study details. The company will not add agenda without making prior notice to shareholders.
- 1.3 In annual general meeting, the Company will give a chance to shareholders equally to give opinions, suggestions or ask a question in each agenda freely before voting in each agenda. Nevertheless, in shareholder's meeting, the company's committee and relevant executive will attend it to answer questions in the meeting and there will be recording questions and opinions in the minutes at any times so that the shareholders can verify them.
- 1.4 The Company gives a chance to shareholders that cannot attend the meeting by themselves to exercise rights of voting by authorizing others or independent committee to attend the meeting and vote for them.
- 1.5 The Company attaches a power of attorney form which the shareholder can select to vote by himself/herself in each agenda together with letter of invitation to meeting in both Thai and English versions.
- 1.6 In the shareholders' meeting the chairman of the meeting will clarify the rules used in the meeting. Including process of voting and allocate sufficient time for.
- 1.7 In annual general meeting year 2018, for agenda of electing the Committee that leaves by rotation, the Company gave an opportunity to shareholders to vote and elect a committee individually so that they have real rights of selecting a committee.

- 1.8 After the meeting, the Company will provide minutes that are auditable by shareholders.

2. Equitable Treatment of Shareholders

The Company has a policy of equitable treatment of shareholders including major or minor shareholders, institution or foreigners in order to bring equality with following details

- 2.1 The company gives shareholders the right to vote, one share per one vote. The company only one type of common stock.
- 2.2 In each meeting the company will give a chance to all shareholders equally and before the meeting starts, the president will explain about how to exercise right of voting, how to count votes of shareholders that shall resolve in each agenda. All participants are also given a chance to give opinions and make inquiry and the Company will not add agenda in the meeting without making prior notice to shareholders.
- 2.3 Giving information to the committee and executives to perceive duties that shall be reported assess possession of the Company when buying, selling, transferring or accepting assess possession or a contract that sells in advance will reporting via electronic systems as required by the Securities and Exchange Commission and SET.
- 2.4 The Company supervised usage of company' internal data strictly to prevent taking advantages from such data for themselves or other people in illegitimate ways to bring fairness to all stakeholders. It also defined that the committee, executives and employees shall not trade securities of the Company by using internal data that may cause damage to the Company directly or indirectly and importantly, committee, executives and employees shall not use internal data before published.
- 2.5 In considering transactions between the company and stakeholders or relevant parties, it must be reported to the company immediately and they shall not join decision or voting in that matter.
- 2.6 In the year 2018, there was never the case Director or Executive of The Company have securities trading by using internal information and the company does not have any violations.

3. Role of Stakeholders

● Shareholder

In addition to basic rights specified in the laws and regulations of the company such as the right to attend the meeting and independently vote at the shareholders' meeting, etc. The company is also committed to conducting business with knowledge and management with integrity and fairness to major and minor shareholders, for the maximum benefit of the shareholders as a whole Including regularly disclosing information and completely according to reality.

● Employee

The Company promoted and developed employees to have knowledge about working together with having morality and ethics. In 2018, the Company had a policy to develop learning organization so that employees could increase skills in working as Quality School and Safety School that they will have proficiency to work with all machines and can perform operations on their own and know how to solve unexpected problems very well. Since Year 2015, the Company improved work environment continually to create good atmosphere with safety all day long. At any times the employees work in the Company, the executives seriously emphasized on campaign about 5S Activities, continuously enhance the safety of working with intimate awareness (KYT) activities monthly, Including organizing Walk Rally activities to develop and strengthen to create consciousness to love in corporate culture.

● Customers

The Company is committed to produce quality products to provide customer satisfaction with highest satisfaction, aim to develop and maintain a relationship customer with confidentiality seriously and consistently.

● Trade Partner and Creditor

The Company holds principles of administration by not taking advantages and having integrity in business operation, includes maintaining common benefit with trade partners and creditors by complying with mutual laws and conditions strictly, treating creditors fairly and reimbursing debts in time in accordance with agreements

● Government Sector

The Company gives precedence to doing transactions with transparency and honesty to officers or government sectors and opposing any kinds of bribery to government officials to facilitate or to obtain business profit of the Company. Including focusing on operations that use resources efficiently and not taking any action that will adversely affect society natural resources and the environment also find opportunities to support community social activities.

● Community and Environment

The Company operates the business with community and environmental responsibility and always recognizes that natural resource and environment conservation is important that needs to be seriously practiced by all employees. Thus, in every procedure of operation, the Company needs to be sure that products and services of the company are correctly operated in accordance with rules, regulations or measures. It also promotes employees to have

Conflict of interest

In operating business activities of the Company, there should be avoiding any actions that cause conflict of interest. The audit committee will present company's committee transactions and reports with conflict of interest that has been thoroughly considered and will comply with regulations of Stock Exchange of Thailand.

The Company will operate the business according to the law and other rules and regulations in order to maintain the benefits of the shareholders.

4. Shareholders' Meeting

Year 2018, there were 14 directors attending the Annual General Shareholder's Meeting, which included the audit committee members. (The Company's Board of Directors consists of 14 members). The Chairman of the meeting has provided equal, opportunity and treatment to all Shareholders' to inquire about the company operation, and encourage shareholders to express their opinions and raise any questions at the meeting.

5. Leadership and Vision

The Board of Directors comprised of members with knowledge, skill and understanding of the roles and responsibilities as well. They have the duty for supervision, monitoring and review the Company's operation and responsible for the Company's business to comply with law, regulation and shareholder's resolution with honesty and the Board of Directors participates in determining the vision, task, strategy, business plan and target and budget of the company and supervising the management performance to ensure that the business plan and budget have been carried out efficiently and effectively for the maximum economic value of the business and the maximum stability for the shareholders.

To make duty division about Company's policy making and administration clearly separated, the Company defines that the committee chairman and managing director are not the same person

The Chairman has following power and duty

1. Calling for committee's meeting and being the president in the committee's meeting and shareholder's meeting as well as having roles in determining agenda together with the managing director.
2. Playing roles in controlling the meeting to be effective in accordance with company's regulations, supporting and giving chances to company's committee to freely give opinions.
3. Taking care of communication between directors and shareholders to be effective.
4. Supporting and promoting company's committee to perform duties with full potentials according to scope of duty and responsibility and principles of good corporate governance.

Good Corporate Governance

5. Supervising and monitoring administration of company's committee and other committees to achieve specified objectives.
6. Giving final vote in case the committee' meeting had voting with equal result.

Authorization of the Board of Directors

1. The Board of Directors is authorized to perform duties in accordance with objects and Articles of Association of the Company as well as the resolution of the Meeting of Shareholders.
2. The Board of Directors shall elect one director to be the Chairman.
3. The Board of Directors shall appoint any director to be Managing Director and empower such Managing Director as may be reasonable.
4. The Board of Directors is empowered to consider, determine and the name (s) of authorized directors to sign on behalf of The Company.
5. Approve the appointment of new directors to replace the resigned directors.
6. Approve the connected transaction of the Company according to the criteria of the Securities and Exchange Commission.
7. Approve the Company's financial statements.
8. Approval of opening and closing the Company's account with various banks.

Responsibility of Company's Committee

The Board of Directors has duties to define policy, vision, strategy of business operation, goal and budget of the company as well as supervise the management to control and manage works in accordance with the specified policy effectively under objectives of the Company's regulation and resolution of shareholder's meeting with responsibility, integrity, carefulness and principles of good practice. The Board of Directors also controls and monitors administration of the management to be transparent and consistent with code of conduct of executives and employees and supervises communication and data disclosure to be properly conducted. The Board of Directors performs works according to law on securities and exchange, regulations of Office of Securities and Exchange Commission, requirements of Stock Exchange of Thailand, practices for committee of

registered company of Stock Exchange of Thailand along with Capital Market Supervisory Board and laws related to business operation of the Company.

Duties of the Board of Directors

1. To perform duties in accordance with objects and Articles of Association of the Company.
2. The Board of Directors shall elect a qualified person without legally forbidden nature to be director.
3. The Board of Directors shall held a meeting of shareholders in the form of the annual ordinary general meeting within 4 months from the last day of the Company's accounting period. Any meeting of shareholders other than the meeting above shall be called the extraordinary meeting which may be summoned by the Board of Directors any time as may be reasonable.
4. The Board of Directors shall hold a meeting at least once every 3 month, The Board of Directors will set the meeting date in advance of the next year. By having a meeting at least 4 times a year and presenting to the Board of Directors for consideration in the last Board of Directors Meeting of the year, So that the Boards can plan and attend every meeting.
5. The Board of Directors shall produce a balance sheet and profit and loss account on the last day of the Company's accounting period and submits such documentation to the meeting of shareholders at the annual ordinary general meeting. To consider approval of the said balance sheet and profit and loss account, the Board of Directors shall have an auditor verify such documentation completely before submitting it to the meeting shareholders.

Authorization of the Executive Committee

1. Having duties to carry out the management of Company business in compliance with the Company business objectives provided that in accordance with policy prescribed by the Company Board of Directors.
2. Having the power to approve and/or assent on any Company normal business operations and general business management.
3. Considering and screening the Company annual policy, target work plan budget and any other

recommendations to be proposed to the Company Board of Directors for approval.

4. Considering the guidelines, policy and target on the investment prior to submission to the Company Board of Director for approval in order to establish work frame for management factions to function accordingly.
5. Performing any other tasks as assigned by the Company Board or Directors.

Duties of Company's Secretary

1. Providing and storing following documents, committee register, letter of appointment for committee meeting, minutes of committee's meeting and annual report along with letter of appointment for shareholder's meeting and minutes of shareholder's meeting.
2. Retaining interest report by the committee or executives.
3. Arranging shareholder's meeting and committee's meeting to be in accordance with laws, regulations of the company and practices
4. Recording the shareholder's meeting and committee's meeting along with monitoring compliance with resolution of shareholder's meeting and committee's meeting.
5. Supervising the disclosure of data and information in responsible part with the institute that monitors the company according to regulations and requirements of government sectors.
6. Monitoring the company and committee to comply with laws and regulations of Office of Securities and exchange Commission and Stock Exchange of Thailand.
7. Taking care of activities of the company's committee as assigned.

Approval of Business Transaction

For business transaction, there shall be necessity and reasonability of transaction doing to produce maximum benefit of the Company. The future business transaction doing depends on cause and effect and necessity to pay and receive remuneration to be line with fair price of market price upon requirement of consent from the Audit Committee. In the event that the said transaction occurs, the Audit Committee will consider the necessity and reasonability of the transactions and inform their opinions to the Board of Directors' Meeting.

Policy of Future Business Transaction

According to inter-transactions that may occur in the future, the Board of Directors shall not approve any transactions of which they themselves or the persons may have conflict of interest in any other natures with the Company. The said transactions shall be disclosed to the Audit Committee for consideration and opinion expression that the said transaction is the transaction which is in line with the nature of the general business and takes place in fair price, and proposed to the Board of Directors for consideration.

Supervision on inside information

The Company has the policy in supervising and controlling not to allow the executive to use the Company's internal information for their personal benefits including for the advantage of their security purchasing also the management are required to report on change in shareholding of securities to The Securities Exchange Committee under Article 59 of the Securities and The Stock Exchange of Thailand Act, A.D. 1992. The management or any agencies informed of the insider information are required not to disclose the inside information to the third parties or the person whose duties are not related.

6. Business Ethics

The Company has provided the Conducts of the Board of Directors, the management and the employees so the related party has a guideline to perform his duties for the company with integrity, honesty and equity and His manner toward the company and all related persons, the public and the society. The related party has acknowledged and agreed to comply with such ethic conducts. The company has consistently communicated with the employees and monitored the work in accordance with such guideline from time to time. Moreover, the disciplinary action has been established.

7. Balance of Power for Non-Executive Directors

The Board of Directors 13 Persons comprises of

- | | | |
|---------------------------|---|---------|
| - Executive Directors | 3 | Persons |
| - Non-Executive Directors | 6 | Persons |
| - Independent Directors | 4 | Persons |

(Equals 1/3 of total directors)

Good Corporate Governance

The Company independent directors' consist of one third of the overall directors, and due to the Company structure, the Company Chairman is not an executive and is not the same person with Managing Director, therefore, it is confident that said directors could fully perform their duties in the capacity of the representatives of the shareholders with proper balancing. In this respect, all the independent directors are able to independently perform their duties, express their views or give their report as they should be and as assigned by the Company Board of Directors.

8. Aggregation or Segregation of Positions

The Chairman is a representative of the major shareholders and the Chairman is not the same person as the Managing Director, but both persons are representatives from two groups of major shareholders. The Managing Directors has the authority and responsibility to manage the Company as directed and supervised by the Board of Directors. However, the structure of the Board of directors comprises of one-third (1/3) independent directors to provide a balance of power and proper supervision on the management performance.

9. Remuneration for Directors and the Management

Directors' Remuneration The Company has set a clear and transparent policy on the level of directors, remuneration

that is comparable within the industry and adequate to attract and retain the high caliber directors. The level of remuneration was approved by the resolution at the shareholders' meeting. Directors who are appointed to be a member of the Audit Committee would receive higher remuneration to correspond with the amount of additional works.

Management's Remuneration The management's remuneration are set in line with the policy of the Board of Directors in relation with the Company's operating results and each individual management performance.

The amounts of each type of remuneration for such as meeting attendance, Bonus, and others Directors and Management in 2018 are as follows :

Monetary Compensate

Company's directors comprised of 13 person

1. Chairman	480,000 baht/person/year
2. Chairman of the Audit Committee	420,000 baht/person/year
3. Audit Committee member	360,000 baht/person/year
4. Director	300,000 baht/person/year

Executive Directors and Management

	Y. 2017		Y. 2018	
	No. of Person (Persons)	Amount (baht)	No. of Person (Persons)	Amount (baht)
Attendant Payment	10	3,250,645.00	11	3,211,548.00
Bonus	-	-	-	-
Others	-	-	-	-
Total	10	3,250,645.00	11	3,211,548.00

Board of Directors

Year 2018 Furukawa Metal (Thailand) Public Company Limited Board of Directors has 13 members, which includes 6 non-executive independent directors. The directors are elected by the shareholders at the shareholders' meeting. At every Annual Shareholders' General Meeting, one-third (1/3) of the directors must retire from the board. In election, each shareholder shall have one vote for each share, and exercise all the votes in appointing one or more person to be a director. The remuneration for directors shall be at an appropriate level and approved by the shareholders. The Board of Directors shall elect a suitable director to be the Chairman, Managing Director and any other positions as necessary.

The Board of Directors is responsible for establishing the Company's policies, plans and business strategies, including overseeing the operations of the Company. The Managing Director is responsible to the Board of Directors in managing the business and operations of the Company in line with the Board's policies. The Board of Directors shall perform their duties and carry on the business of the Company in accordance with the laws, the Company's objectives and Articles of Association as well as the resolutions of the shareholder's meeting, and shall also be authorized to carry on any activities as prescribed in the Memorandum or those related thereto. The Board of Directors may assign to one or more persons as to carry on any activities of the Company on behalf of the Board of Directors.

The authorized signatories of the Company shall be two directors signing their names together with the Company's seal be affixed. The meetings of shareholders or the Board of Directors shall be entitled to determine the authorized signatories of the Company.

The Board of Directors of the Company on 31 December 2018 consists of

1. Mr. Chai	Sophonpanich	Chairman
2. Mr. Junichi	Ishihara	Managing Director
3. Mrs. Chanida	Asdathorn	Director
4. Mr. Tinnakorn	Asdathorn	Director
5. Mr. Takashi	Yamamoto	Director
6. Mr. Takeshi	Nishizawa	Director
7. Mr. Makoto	Kasuga	Director
8. Mr. Daisuke	Hamada	Director
9. Mr. Nobutaka	Taniguchi	Director
10. Mr. Vibul	Aunsunnta	Chairman of Audit Committee, Independent Director
11. Mr. Virojn	Srethapramotaya	Audit Committee Member Independent Director
12. Mr. Seiji	Tojo	Audit Committee Member Independent Director
13. Mr. Deja	Tulananda	Independent Director

Executive Directors and Management

	Y. 2017		Y. 2018	
	No. of Person (Persons)	Amount (baht)	No. of Person (Persons)	Amount (baht)
Salary	8	222,827,060.00	10	23,848,674.00
Bonus	7	5,966,730.00	7	5,559,951.00
Attendant Payment	-	-	-	-
Total	-	28,793,790.00	-	29,408,325.00

10. Board of Directors' Meeting

Board Meetings are normally held every quarter to review the Company's business and may hold special meetings when necessary. These Meeting should have specific agendas and the company' secretary sends relevant documents to the directors in advance more than 7 days prior to the Meeting, so as to allow sufficient time for them

to review data and information prepare for asking in Board Meeting . All directors are free to express their opinions in the Meeting. In year 2018, there were 4 Board of Directors Meetings that included the following participants :

Directors Monetary Compensation Year 2018

No.	Name	Position	Meeting Fee (Baht/Year)
1.	Mrs. Chanida Asdathorn (To 10 November 2018)	Chairman	454,500.00
2	Mr. Chai Sophonpanich (From 9 November 2018)	Chairman	144,548.00
3.	Mr. Tinnakorn Asdathorn	Director	300,000.00
4.	Mr. Hiroshi Kawaguchi (To 27 April 2018)	Director	97,500.00
5.	Mr. Junichi Ishihara (From 27 April 2018)	Director	-
6.	Mr. Takeshi Nishizawa	Director	300,000.00
7.	Mr. Nobutaka Taniguchi	Director	300,000.00
8.	Mr. Takashi Yamamoto	Director	175,000.00
9.	Mr. Makoto Kasuga	Director	-
10.	Mr. Shuichi Asano (To 9 August 2018)	Director	-
11.	Mr. Daisuke Hamada (From 9 August 2018)	Director	-
12.	Mr. Vibul Aunsununta	Chairman of Audit Committee and Independent Director	420,000.00
13.	Mr. Seiji Tojo	Audit Committee Member and Independent Director	360,000.00
14.	Mr. Virojn Srethapramotaya	Audit Committee Member and Independent Director	360,000.00
15.	Mr. Deja Tulananda	Independent Director	300,000.00
16.	Mr. Nopporn Moonsarn (To 9 August 2018)	Director	-
Total			3,211,548.00

Meeting Attendance/All Meeting Attendance in Year 2018 (Times)

No	Director's Name	Term Appointed to Office	Board of Directors Meeting (Times)	Audit Committee Meeting (Times)
1.	Mr. Chai Sophonpanich (From 9 August 2018)	Apr 2016 - Apr 2019	2/2	-
2.	Mr. Nopporn Moonsarn (To 9 August 2018)	Apr 2016 - Apr 2019	3/3	-
3.	Mr. Deja Tulananda	Apr 2016 - Apr 2019	3/4	-
4.	Mr. Tinnakorn Asdathorn	Apr 2016 - Apr 2019	3/4	-
5.	Mr. Hiroshi Kawaguchi (To 27 April 2018)	Apr 2016 - Apr 2019	2/2	-
6.	Mr. Junichi Ishihara (From 27 April 2018)	Apr 2016 - Apr 2019	3/3	2/2
7.	Mr. Virojn Srethapramotaya	Apr 2017 - Apr 2020	4/4	4/4
8.	Mr. Vibul Aunsunnta	Apr 2017 - Apr 2020	4/4	4/4
9.	Mr. Takeshi Nishizawa	Apr 2017 - Apr 2020	4/4	-
10.	Mr. Seiji Tojo	Apr 2017 - Apr 2020	4/4	4/4
11.	Mr. Nobutaka Taniguchi	Apr 2017 - Apr 2020	4/4	-
12.	Mrs. Chanida Asdathorn	Apr 2018 - Apr 2021	4/4	-
13.	Mr. Takashi Yamamoto	Apr 2018 - Apr 2021	4/4	2/2
14.	Mr. Shuichi Asano (To 9 August 2016)	Apr 2018 - Apr 2021	3/3	-
15.	Mr. Daisuke Hamada (From 9 August 2018)	Apr 2018 - Apr 2021	2/2	1/1
16.	Mr. Makoto Kasuga	Apr 2018 - Apr 2021	4/4	4/4

The above summary occurs from recorded minutes of the meeting in writing. The minutes of the meeting are acknowledged by the Board of Directors and involved parties for review.

11. Committee

The Board of Directors has appointed a committee to monitor and supervise the Company's operations.

11.1 Audit Committee The Audit Committee comprises of 3 non-executive independent directors appointed on 30 December 1999 for a two-year term. Member of the Audit Committee are :

1. Mr. Vibul Aunsunnta
(Chairman of the Audit Committee,
Independent Director)
 2. Mr. Virojn Srethapramotaya
(Audit Committee Member,
Independent Director)
 3. Mr. Seiji Tojo
(Audit Committee Member,
Independent Director)
- Mrs. Siriporn Lueangrachanee
(Secretary to the Audit Committee)

Year 2018, the Audit Committee held 4 Meetings together with the management team to review the Company quarterly financial statements and the 2018 Financial Statements as well as

related documents, which deem to be correct, sufficient, creditable and in accordance with general accounting standards. The Committee reported all the Committee Meetings to the Board of Directors, the main points of which are summarized as follows :

1. Verifying quarterly Financial Statements and 2018 Annual Financial Statements for submission to the Board of Directors.
2. Reviewing internal control system and internal audit reports according to the annual audit plan of the Company.
3. Reviewing to ensure that the Company complies with the Securities and Exchange Act, regulations, notifications and all.
4. Considered and nominated the appointment of the Company's External Auditors or offer terminated, Including considering the remuneration of the auditor with regard to reliability, the amount of audit work office including the experience of personnel assigned to audit the company to request the appointment from the shareholders' meeting
5. Participated in the 2018 General Meeting of Shareholders.
6. Ensured that relevant laws, rules and regulations of the Stock Exchange of Thailand are observed.

11.2 Nomination and Remuneration Committee

The Company has no Nomination and Remuneration Committee because The Company is a small listed company. Appropriate preliminary process will be appointed as a committee will consider together by gender knowledge, ability, experience and qualifications as required by law with not less than half of the total number of directors must have residence in the Kingdom according to the Company's regulations. However but there is an appropriate

preliminary process of determining a suitable level of remuneration that is consistent with the remuneration in the same industry and the Company operating results before being submitted to the meeting of shareholders for final decision.

12. Internal Control

Internal Control

The Company's Board of Directors assigned audit committee to take care of monitoring the management to provide effective internal control system. Audit Committee had duties to examine and verify any operation to be effective. In 2018, internal control of the Company consisted of

1. Organization's internal control

- 1.1 The Company's Board of Directors monitored the company to define target of business operation, work plan, policy and regulations in writing that could be measured to be a guideline of practices in the way that the executives determines as annual policy and target which is regularly reviewed to be consistent with current situations. Each division department will be responsible for supervising and controlling performance.
- 1.2 The management provided management structure diagram including line of work, power of management, and duty and responsibility division.
- 1.3 The Company's Board of Directors realizes important and value of integrity, honesty and it provided code of conduct related to ethic of executives and employee at every level to attach and practice.
- 1.4 It defined anti-corruption policy in organization level to be perceived in every division by providing channels for sending clues of corruption to Managing Director or audit committee chairman to headquarter No. 183 Regent House Tower 14th

floor, Ratchadamri Road, Lumphini Sub-district, Pathumwan District, Bangkok 10330 To perceive the opinions, clues or complaints about legal offence or misconduct of executives or employees of the company without disclosing the name of clue reporter.

However, according to company's regulations, it is specified as practices to prevent corruption in section 10 : discipline and disciplinary punishment "Not accepting commission or bribe in exchange for works or purchase order of the company under one's duty and power". Furthermore, it also defines clear punishment kept with human resource department.

- 1.5 Creating and maintaining proficient employees: The Company supports and promotes employees that have capability, diligence, and attention to grow in career path in higher level by their own knowledge and ability without discrimination in terms of wage, remuneration and welfare along with continual development of skill and knowledge, and succession planning connected with annual assessment system.

2. Risk Assessment

The management provided risk assessment to be consistent with objectives of business operation in terms of identification of risk event, analysis of internal and external risk factor, operational risk, marketing, labor and information technology. It also provided sufficient and efficient control system by internal control a part of ISO14001. The management will improve and review measures of internal control to be related to existing risks as well as find the ways to prevent that risk.

3. Action Control

The Company provides clear actions and procedures as follows :



- 3.1 Providing policy and action procedures in writing because the Company realizes that in every activity of operations is important such as finance and procurement including

- Setting amount and power in approval of each level and each field.
- Updating action procedures by providing flow chart for every work system so that every relevant employee perceives and correctly perform.

- 3.2 Defining to divide clear duties and responsibilities in approval

Good Corporate Governance

- 3.3 Focusing on each division to have discussion and not to take any actions that cause conflict of interest of their own or others without permission.
- 3.4 Promoting employees to apply their knowledge and proficiency and to put their full effort and capacity in working for the company.
- 3.5 Specifying that the Company's secretary will gather information of interest of the committee and executives of the company.
- 3.6 Defining to have process in reporting, verifying and approving transactions or contracts obligating the Company and monitoring them to be in accordance with the agreement through duration of obligation.
- 3.7 Determining infrastructure and safety of data in information system, development and maintenance of information technology system to have highest security with supervision of information system policy, general control system of information system, control of system access by limiting rights for only authorized people and Disaster Recovery Plan so as to have appropriate and adequate control monitored by Information Technology section.

4. Information system and Data communication

In information system and data communication the company specifies to have report presentation and effective communication system to ensure that executives and employees at every level understand the policy and regulations of the company in the same way to prevent possible issues. It provides operation manual, regulations and notices that are always updated along with thorough communication channels inside the organization by using internet system for inter-communication. It also develops information and data system that reflects truth with complete

updated necessary details and it's secure under the policy of information system security. The company has assigned the Information Technology Section to be the agency that monitor the information system and review the information system for security. The company provides websites to collect information of the company on www.fmt.co.th for allowing interested people to enter study company information.

5. Tracking System

The Company's Board of Directors will follow up performance of the management regularly on quarterly basis to assess effectiveness and efficiency of working to ensure that internal control of the Company can be properly implemented for work supervision.

13. Directors' Reporting

The Board of Directors is responsible for the Company's financial statements and the financial information presented in the annual report. Such financial statements are prepared in accordance with generally accepted accounting principles in Thailand. The accounting policies are appropriately selected and employed in a consistent manner with through judgment and proper evaluation in the preparation process while the disclosure on key information has been sufficiently made in the notes to financial statements.

The Board of Directors has ensured that the internal control system is effectively maintained for proper and correct accounting information with sufficiency to safeguard the properties and to indicate weakness for prevention of fraud or material misconduct.

In this connection, the Board of Directors has appointed an audit committee consisting of the independent directors who are not in the management position responsible for the quality of the financial reports and the internal

Good Corporate Governance

control system. The opinion of the Audit Committee related to this issue has been presented in the report of the Audit Committee in the annual report.

In the opinion of the Board of Directors, the overall internal control system of the company was satisfactory and could provide reasonable assurance of the reliability on the financial statements of the company as of 31 December 2018.

14. Relations with Investors

The Board of Directors of the Company is aware that the information of the Company, whether related or not related to financial information, would affect the decision process of the investors and the stakeholders of the Company. The management has been asked to ensure that disclosure of information is complete, accurate, reliable, consistent and timely. The management of the Company has put its focus on this matter and complied with the requirement at all times. With regard to the relationship with investors, no specific unit has been formed to directly handle this matter because the number of activities in this area is not much. For corporate information can

contact with Khun Siriporn Lueangrachanee; Tel. 036-329811-9 Ext. 201 or Khun Sittikorn Muenngern Ext. 311.

However, the investors can study the information of the Company additionally from the annual information (56-1 Form) of the Company shown in www.set.or.th or www.fmt.co.th

External Auditors Fee

- Audit Fee in 2018, the Company's external auditors by KPMG Phoomchai Audit Limited is 1,365,000 Baht
- Non Audit Fee
 - None -

Corporate Social Responsibility in Process

For over 30 years in copper manufacturing business and sell seamless copper pipes which is an important part in various cooling industries. The company can produce products that cover responding to the requirement of consumers with sincere and responsible service, both before and after sales service with responsibility and social responsibility in parallel.

Overall Policy

Furukawa Metal (Thailand) Public Company Limited operates the business under principles of morality and good corporate governance along with taking care of society and environment with emphasis on developing the business to sustainably grow with transparency and corporate social responsibility. The Company realizes that responsibility for society, community and environment is not an extra activity of the Company but the main one. However, the Company holds principle of operation with business target together with corporate social responsibility (CSR). The company believes that the important thing that enables the Company to be successful needs to be connected with consumers and society. Therefore, the Company gives precedence to life quality, happiness, security and livelihood of employees, customers and all stakeholders as well as society and environment. In 2018, the Company promoted practices about "Corporate Social Responsibility" according to principles of Stock Exchange of Thailand that could be divided as 8 topics as follows

1. Business Operations with Equity

Fair business operation is what's important that company follow because it leads to confidence with relevant people. Whether it is maintaining relationships with customers and the company's partners which is based on equality and fairness. Which the company will consider the highest satisfaction of customers and avoid situations that may cause conflicts of interest which the company focuses on maintaining good relationships sustainable both for customers and the company's partners. Practices are based



on fairness with morality and virtue and the company promotes employees to be honest in works and to respect with each other. However, the Company set guidelines of fair practices for every employee to comply and it is defined in code of conduct about fair operations. previously, the company never had lawsuits about unfair business operation; nevertheless, fair competition of the Company is based on following principles of practices

- 1.1 Not seeking for confidential data of opponents with dishonest or inappropriate methods such as paying bribes for employees of the opponents
- 1.2 Not ruining fame of trade competitor by accusation
- 1.3 Not taking any actions that seem to be violating intellectual property or copyright of third party domestically and internationally and using products and services with copyright
- 1.4 In business operation, the company shall comply with laws and principles about trade competitors and prevent monopolism.
- 1.5 The Company has work regulations for employees in the organization to realize and be careful about sending data, information and pictures about the Company from personal communication device through application network, social media to prevent impacts on themselves.

2. Anti-Bribery/Anti-Corruption

Furukawa Metal (Thailand) Public Company Limited incorporates business with concentration on policy of anti-bribery and anti-corruption as well as supporting and encouraging the Company's all levels of personnel being conscious of taking and giving bribe, committing corruption in all of the Company's business activities as well as providing "Anti-Bribery/Anti-Corruption Policy by the Board of Directors No. 1/2015 dated on 6 March 2015. The policy is announced for acknowledgement and strictly complying with for the whole organization. In addition the Board of Directors Meeting on 9 November 2018 had studied informations and participated in The "Thailand's Private and Collective Coalition Against Corruption(CAC)" to apply this project.

Definition

Bribery/Corruption means performing or prevention from performing duty or abusing power in all forms regardless of whether giving or taking bribe, presentation, promising to give, asking for, or demanding money, assets, things, or any unsuitable benefits as competent official of government agency, private agency, or any other persons who incorporate business with the Company so as to acquire any other benefits unsuitable with business or any other unlawful benefits both directly or indirectly. As well as any performances which are contrary to the Company's business ethics, except cases practicable by laws, rules, announcements, regulations, local traditions or trading tradition.

Anti-Bribery/Anti-Corruption Policy

Company prohibits its directors, executives, employees and hirelings from demanding, carrying out, or accepting corruption, both directly and indirectly, to benefit business, organization, oneself, family, colleagues and acquainted persons. It is also applicable to Company's units. Regular enquiry of compliance with Company's anti-bribery/corruption policy should also be practiced. If the policy's defiance or any other performances which may support or collude resulting in bribery/corruption is found, culprit shall be liable to punishment in accordance with the Company's regulations.

Scope

This policy is applicable to Company's every Board of Directors, executive, employee, as well as hireling and sub-contractor in connection with Furukawa Metal (Thailand) Public Company Limited's business incorporation. Company anticipates that the Company's related business representatives or parties acting on behalf of the Company shall comply with this policy

Guidelines of Operation in Accordance with Anti-bribery/Anti-Corruption Policy

Company's all levels of employees must strictly comply with anti-bribery/-corruption by preventing to involve themselves with bribery and corruption, abuse of power indicating their taking/giving bribery to stakeholders in works under their responsibility either directly or indirectly as well as contacting work with contractors/ related sub-contractors by performing as follows :

1. Do not take or give gifts, cash, cheque or things in the same manner as approached or coordinated related parties for both public and private agencies.
2. Do not take any assets, things, gifts, articles for giving or any other benefits which may cause prevention of performing duty or persuasion for decision making or resulting in the receiver failure to perform the same trade practice as other trading partners
3. Procurement must be performed through Company's procedure with transparency and accountability.
4. Business entertaining expenses and other expenses in connection with performance in accordance with business contracts can be done. However, the expenses must be reasonable and accountable.
5. Charity donation must be performed on behalf of the Company only. While receivers must be foundations, public charity organizations, temples, schools, hospitals, nursing homes or organizations contributing to society with certificates or creditability and accountability. The donation must be performed through Company's procedure regulations.
6. Financial sponsoring must be the Company's finance or assets so as to sponsor projects. Donor must be specified on behalf of the Company only. Objective of the paid sponsor must be for the Company's business and good image as well as

Corporate Social Responsibility in Process

reputation purposes. Financial reimbursement must specify clear objectives with verified evidences and carrying out in accordance with the Company's procedure

7. Employees shall not be negligent or ignorant when they see acts or behavior which is within the scope of bribery and corruption or implying possible bribery and corruption relating to the Company both directly and indirectly. Employees must notify their superiors or responsible persons for acknowledgement. They must also be cooperative for inspection of facts. If there is question or inquiry, they should seek consultation with their superiors or persons assigned to be responsible for monitoring practice in accordance with this policy through channels specified by the Company.
8. Company shall be fair and protective to employees who refuse or notify bribery/corruption in connection with the Company.
9. Parties committing bribery/corruption shall be regarded as committing offense contrary to the Company's policy. They shall be liable for disciplinary action in accordance with the Company's regulations. Moreover, they may also be liable by laws if the performance is contrary to laws.
10. Company's Board of Directors and Executive Committee realize significance of dissemination to give knowledge, advice and try to understand personnel within the organization and related parties in connection with anti-bribery/-corruption so that the personnel and related parties abide by anti-bribery/-corruption as well as to be good precedent in terms of integrity, good morality and ethics.
11. This anti-bribery/-corruption policy covers personnel management procedures starting from recruitment or selection personnel, position promotion, training, and assessment of result of employees' performance. All levels of superiors are specified to communicate and try to understand employees to be effectively adopted in business activities under responsibility and supervision in accordance with the policy.
12. Company and employees shall not perform anything relating to the Company's internal politics. Company is organization adhering to principle of neutrality in politics. The Company shall support performance in accordance with laws and democracy. The Company has no guideline sponsoring any political parties, both directly and indirectly.

Grievances Against Bribery/Corruption

1. When witnessing bribery/corruption in connection with the organization either directly or indirectly, such as witnessing personnel within the organization offering/taking bribe with competent official within the government agency, private agency, trading partners, stores, contractors.
2. When witnessing acts contrary to Company's procedure or adversely affecting the Company's internal control system to the extent that doubt exists that they may become channel of bribery/corruption.
3. When witnessing acts which result in the Company losing benefits or adversely affecting the Company's reputation.

Headquarters

Furukawa Metal (Thailand)
Public Company Limited
183 Regent House Building, 14th
Floor Rajdamri Road, Lumpini,
Pathumwan, Bangkok 10330

or Saraburi Factory

213 Moo 4, Mittraparb Road,
T. Tub-Kwang, A. Kaeng Khoi,
Saraburi Province 18260

4. For complaints within the company, the company has announced the company notification date 19 September 2018, prescribing guidelines and matters to complain which is a violation of the rules or laws for the management and employees of the company by specifying the scope of actions that are illegal, break the rule or have a bribe to make a complaint directly to the Managing Director via "Hotline to MD" in the suggestion box or complain to the parent company, the major shareholder, to check the other way. Including the company has issued regulations and guidelines for donation and support in order to achieve good performance in the organization and support the policy of Company regarding the appropriation of donations and for the benefit of the donor in applying for the purpose and effect Including supporting the prevention of corruption in the company or occur to employees at all levels.

The Company has established a donation policy and support for executives and employees upheld and follow this regulation by aiming for donations and support of the Company is transparent without involvement in providing assistance or political support. The donation is considered a basic virtue of

living together, good conscious planting, let society have love Generous to each other unselfish and still considered a friendly friendship to know the common good of the public and inform executives and employees to acknowledge, practice together

Measure Protecting and Keeping Confidential for Whistle-Blower of Information of Bribery Corruption

In order to protect the rights of the complainant and the information provider acting in good faith, the company will conceal the name, address or information of the complainant or information provider and keeping all information confidential by limiting responsible of investigation that can access information.

However, the responsible person shall keep information and documents of the complainant in confidential. Do not disclose information to other persons who didn't have related duties unless it is disclosed in accordance with the law.

In the year 2018, the company didn't receiving a corruption complaint both within the organization and from any outside. The company has reviewed for directors, executives and employees include contractors who working with the company to be transparent when doing business by documenting the guidelines for preventing corrupt, giving or receiving various bribes. The company had training for employees at the management level and communication for the employees in the organization to be thoroughly informed. The Company is in the process of studying the guidelines to join the Thailand's Private Sector Collective Action Coalition Against Corruption (CAC)

3. Respect for Human Rights

The Company has a policy in complying with laws, regulations and principles about basic universal human rights by treating stakeholders, community and society in a way to respect human rights and not to violate basic rights. It prioritizes fairness and stability in work for employees and support and promote them to grow in their career path in higher level by their knowledge and capability without discrimination. It also gives a chance for people with disability to work with the company and take care of employees by providing welfares according to law

as well as treat them fairly. Previously, the Company has never been complaint about violating human right and the company has following guideline of practices.

- 3.1 Supporting and respecting human right protection by monitoring the business not to get involved in human right violation such as not supporting forced labor and opposing child labor.
- 3.2 The Company will protect personal information of employees under its supervision.
- 3.3 Employees shall treat with each other with respect and honor.
- 3.4 The process of recruiting and considering performance shall be operated fairly and righteously

4. Fair Treatment of Labor

The Company gives precedence to every employee with realization that employees are valuable human resource that will lead the company to operate business successfully according to the specified target. Therefore, the Company has a policy to treat everyone equally and fairly such as monitoring work condition, taking care of safety and sanitation in workplace as well as promoting learning and developing work process and giving remuneration and welfare apart from monetary return fairly. Practices of labor treatment are as follows :

- 4.1 Taking care of fair employment condition and providing proper return for employees as specified by labor law.
- 4.2 Defining policy and practices about return of employees and welfare apart from salary, bonus, provident fund. The company provides additional welfare for employees such as free lunch, subsidy in case of funeral of family member r of the employee, scholarship for children of employees that study in kindergarten level- upper secondary level or vocational course, and supporting gifts on children's day for schools in the community.
- 4.3 Proving welfare for employees such as annual holiday, special for take care family in hospital, go to funeral, proper OT working, medical care, annual medical checkup, and personal accident insurance and in the case of non-annual holiday the company will compensate to the employees.
- 4.4 Appointing, transferring and awarding employees is based in knowledge, proficient and suitability along with punishment of employees that shall be considered according to company's regulations fairly.

Corporate Social Responsibility in Process

- 4.5 Maintaining work environment to be safe to lives and property and the Company always recognizes that the employees shall perform works with safety all day long.
- 4.6 Determining security policy in the factory and workplace such as :
- Providing annual fire evacuation and fire extinguishing rehearsal to get preparedness.
 - Checking availability of fire equipment according to the plan.
 - The Company provides personal protection equipment for practitioners so that they can be confident and safe while working because safety is what the company prioritizes.
 - Making annual work plan to reduce safety impact such as setting a target to reduce serious accidents from work to be "0" and reducing injury from accident and sickness from work to meet the target, campaigning for employees to assess risks from work to find concrete prevention measures and resolution, promoting employees to know about critical thinking by doing activities KYT = Kiken Yoshi Training) meaning that critical thinking for safety by analyzing or predicting about what dangers are from works and finding methods to control and prevent such dangers.
- 4.7 Promoting employees to work with happiness by improving work environment in every term.
- 4.8 Promoting and developing employees to have more knowledge and expertise in relevant areas such as green industry certification courses, quantitative risk assessment for health and safety, production management techniques for supervisors, etc
- 4.9 Monitoring, checking and providing environmental measurement inside the factory and in production process to prevent impacts on employees' health, those in the factory and nearby community.
- 4.10 It had waste management system with legal license of the disposer.

5. Responsibility for the Consumers

With Company's Policy Customer Satisfaction is Our Supreme Priority, the Company and employees are determined to bring satisfaction and confidence to customers, take care of and take responsibility for them by realizing that customers need to receive good and quality product and service according to the specified standard.

It includes complying with conditions and agreement with the customers strictly and not disclosing information of customer to gain benefit for the Company or relevant people. If the company encountered problems with complaints from customers in product and service. The Company will hurry to solve problem with our customers.

6. Conservation of the Environment

The Company realizes the importance of environmental maintenance that may affect employee, community and society by complying with laws to prevent and not to originate pollution especially global warming which currently affects life quality of humans and environment. It also supports activities to promote environmental and natural resource maintenance by practicing as follows

- 6.1 Utilizing resources effectively and having serious energy-saving measure.
- 6.2 The Company manages release of wastes from production process by focusing on reducing waste as much as possible, abiding by environmental standard and relevant laws such as water quality standard, air quality standard. Previously, the Company complied with requirement of the government and promoted guidelines of environmental management and practices with standard of ISO 14001.
- 6.3 The Company defined energy and resource conservation policy so that every employee in the organization can mutually realize importance of energy conservation along with economic and worthwhile resource utilization as well as think about ways to reduce energy use or increase productivity to reduce energy cost.
- 6.4 In the year 2018, the Company promoted 5S activities by setting up a goal to achieve to 4S for maintains cleanliness and creates awareness to employees in caring and protects the environment in the factory for the beauty of the factory. When customers visit the factory to make an impression of cleanliness and create confidence for customers.

In 2018, the result of checking environmental quality in the factory showed that it met the standard and the Company hired United Analyst & Engineering Consultant Co., Ltd to undertake environmental quality inspection as follows :

- Waste water quality: the result of wastewater quality check showed that it met standard specified by the laws.
- Noise, heat, air quality, water quality, contaminants along with ecosystem: the check result indicated that it met standard specified by laws.
- The Company trained employees about energy conservation and campaigned about worthy and necessary resource utilization as well as supported activities about economical resource use such as turning off lights at noon, not opening water without using, scheduling time to turn off air conditioners during breaks and after works, providing carpool vehicle, using paper on two sides, and reducing color printing if unnecessary. In addition, the Company appointed energy conservation committee to provide an annual energy conservation plan such as replacing fluorescence bulbs with energy-saving lights in the factory and road lighting.
- The company provides various works training and testing to have a work permit such as driving a forklift, crane control, which the Company considers as a safety issue to help reduce accidents in work.
- The Company always strictly complied with regulations of environmental management standard ISO 14001.

7. Participation in the Community and Society Development

The Company has a policy to promote and support activities beneficial to society and community to develop life quality, create good economy and strengthen the community and society for common sustainable benefit. The Company practiced as follows

- 7.1 Building consciousness about social and environmental responsibility for all employees at every level.
- 7.2 Supporting employment in community where the factory is located.
- 7.3 Defining to strictly comply with laws about environment and labor law.
- 7.4 Assessing impacts from operational activities that affected safety and environment on monthly basis and determining measures of prevention and resolution an appointing undertakers and following up the result.
- 7.5 Cooperating with educational institutions by accepting students to join internship program during school holiday or during study to give a chance to students to enhance experiences and practice skills about works or any vocations they are studying.
- 7.6 Support the community to have a better living by organizing "community market activities" in canteen for allow the communities around the factory coming to sell OTOP in the factory every month, in order to distribute income to the community, including considering to purchasing products from the community produces to used in factory.

8. Innovation and Publication of Innovation from Social Responsibility Operations

The Company could operate business to grow continually and to respond needs of customers. With customer's expectation, the Company developed products and services with innovation and technology constantly. The company emphasized on innovation as the foundation of making a management plan that can make its business operation to be successful according to the target.

In 2018, the Company developed innovation about products and services as follows :

- 8.1 Increase Productivity in productivity by reduce cycle time.
- 8.2. Increase weight per coil in delivery process for reduce delivery cost.
- 8.3 Produce Furukawa Multi Grove Tube thinner thickness.
- 8.4 Increase Capillary Tube production capacity for higher production to support customers demand.

Business Operation Affecting Corporate Social Responsibility

In 2018, the Company did not operate business with impacts on corporate social responsibility.

Social Activities in 2018



The Company promotes the quality of life and wellbeing for staffs and neighbor by set the market in canteen in factory. For support neighboring community to sell products of the community to our staffs by didn't paid rental fee.



The company supports career of disabled people by encouraging people with disabilities to sell the lottery within the factory for promote career and make money to disabled people.



The Company sponsors the education of employees' children by offering scholarships every year.



Social Activities in 2018



The Company initiated the retirement day event. In order to thank the employees who have worked with the company for a long time until retirement.



The Company organized charity activities by put rice dry food to monk to be charitable to His majesty King Bhumibol Adulyadej every year.



To support the future of the Natural, the Company donates toys and other to the neighbor's school around the Company.



The Company donated money to staff whom is the victims of the fire her house.

The Company has initiated walk rally activities to develop employees to have a sense of working together, know good management practice to have ideas in the basic work of reality. With practice and knowledge on their own to be a part in developing the Company in the future



Report of the Audit Committee

To Shareholders Furukawa Metal (Thailand) Public Company Limited

The audit committee of Furukawa Metal (Thailand) Public Company Limited is comprised of 3 members as follows :

- | | | |
|---------------|-----------------|---------------------------------|
| 1. Mr. Vibul | Aunsnuntha | Chairman of the Audit Committee |
| 2. Mr. Virojn | Srethapramotaya | Audit Committee |
| 3. Mr. Seiji | Tojo | Audit Committee |

In 2018, the audit committee held 4 Meetings and has done their duties discreetly and employed their skills and knowledge in undertaking their duties and responsibilities independently. They have collaborated with the administrative section, internal auditors and account auditors for the benefit of the stakeholders. The summary is as follows.

- 1) To verify the regularity of the quarterly financial statement and the 2018 annual financial statement of the Company and its subsidiaries for 2018. To provide adequate open information to ensure that the accounting system and the financial reports are done in accordance to the general accounting principles and to also provide complete and reliable information.
- 2) To examine the internal control system and internal audit system to ensure that Company's internal control system and internal audit system are suitable, sufficient and effective.
- 3) To inspect the actions of the Company to ensure that it follows the guidelines determined by the law regarding property and the stock exchange, the rules and regulations of the stock exchange and other laws which is relevant to the business of the Company.
- 4) To check the adequacy and effectiveness of the Risk Management System.
- 5) To ensure the Company has good corporate governance in order to operate its business transparently and to disclose records that are relevant or records that might have conflicting interests.
- 6) Participated in the 2018 Annual Ordinary General Meeting of Shareholders.
- 7) To consider, nominate, appoint external auditors for the Company at the same time determine and offer their compensation package to present at the Shareholders' Meeting for approval.

From the inspection of the internal control system, the audit committee sees that the Company has a good internal control system. The financial reports are in adherence with the general accounting principles. An amount adequate of information is disclosed. Furthermore, the Company has a suitable risk management system, has good corporate governance, transparent and reliable. In addition, the Company continuously tries to improve and develop the effectiveness of its performances.



(Mr. Vibul Aunsnuntha)

Chairman of the Audit Committee

14 February 2019

Management Discussion And Analysis



Overview of Operation Results in 2018

The operational performance in 2018 showed the total revenue from net sales of 6,495 million baht, a increase of 312 million baht from the previous year, the earning from local sales was 4,225 million baht and earning from export was 2,270 million baht or equivalent to 65% and 35% respectively. The Company has a net profit of 145 million baht, increase by 6 million baht, or 4% was due to good control in production expenses and selling expenses.

Economy and Industry Status

In the year 2018, the air conditioner market grew slightly compared to year 2017 due to global weather conditions and the weather in Thailand with constant hot temperatures even raining in the rainy season including the short-term summer. Causing people increase to install more air conditioners, home business and condominiums had continuous expansion in many project, The Company has a proactive marketing adaptation to maintain efficiency of sales value and plan to support the demand of expected

to grow continuously. In year 2018, the company can still maintain sales values from the company, executives and employees cooperate in the intention of producing the best quality products and reduce costs seriously and continuously, including can innovate product for support new Converter Air Condition which increase popularity every year because the Converter Air Condition is a product that has the technology to produce cooling quickly, economically, with efficiency in use, higher than conventional air conditioners. The Company had awareness to produce and deliver products to customers on schedule and focus on providing services before and after sales include maintaining good relationships with customers until now.

Net Sales

In 2018, the net sales were 6,495 million baht, a increase of 312 million baht, from the previous year. The local sales were 4,225 million baht, or 65% and the export sales were 2,270 million baht or 35%, due to LME price was higher than the previous year.

Other Income

In 2018, other income was 6.9 million baht from sales of copper slag and others.

Cost and Expenses

The Company's total costs and expenses in 2018 was 6,334 million baht, a increase of 299 million baht from the previous year due to loss on hedging copper about 29 million baht and LME price was high.

Cost of Goods Sold

The cost of goods sold in 2018 was 6,044 million baht, or 95% of the total costs and expenses, a increase of 265 million baht from the previous year varied to a increase of LME price .

Selling and Administrative Expense

The selling and administrative expense in 2018 was 248 million baht, or 4% of the total costs and expenses.

Financial Costs

The financial cost in 2018 was 13 million baht decrease 2 million baht from the previous year due to entering into a cash management agreement with Furukawa group. The rate of interest is maintained more favorable for the Company than its bank rate.

Income Tax

The Company has payable corporate income tax in 2018 was 37 million baht.

Operations Results and Profitability

The product of the Company is seamless copper tube and inner grooved tube which sold to the customers in the required size, by setting the sale price base on the world's copper market at the time of reaching the sales agreement according to the conditions of each customer. In 2018 the Company had the net profit of 145 million baht, increase by 6 million baht or 4% from 2017 due to the Company can manage the expense for cost effectiveness.

The Company had a profit from the exchange rate of 13 million baht in 2018.

Asset Management Ability

1. Almost of Trade account receivable are long-term relationship partner and good payment history. Moreover the Company's policy of new customers will be based on cash basis or require Bank Guarantee and the Company also has Risk Management insurance for account receivable who may have the problem later.
2. Main inventory of the Company are copper tube which can be reproduced in case of damaged or deteriorated. So the impairment of inventory is not problem.
3. The Company had no goodwill.

Liquidity and Sufficiency of the Capital

1. Capital Structure

Capital Structure	Bath	Ratio
Current Liabilities	1,289,112,744	0.8266
Long-Term Liabilities	107,452,964	0.0689
Total Liabilities	1,396,565,708	0.8955
Shareholder Equity		
Common Share	480,000,000	0.3078
Share Premium	507,500,000	0.3254
Retained Earnings (Deficit)	572,030,606	0.3668
Shareholder Equity	1,559,530,606	1
Liabilities & Shareholders' Equity	2,956,096,314	

2. Most of the investment expense is for an increasing for production efficiency to generate future profit by using working capital and loan from financial institutions partially. The company entered into a cash management agreement with Furukawa Group. The rate of interest is maintained more favorable for the Company than its bank rate.
3. The Company's' current ratio is 1.9, same as 2017.
4. The interest coverage ratio is 15, shown the Company has ability for repayment.

Obligations on Liabilities and Management outside the Balance Sheet

- The Company has no burden outside the balance sheet

Financial Ratio Analysis

Liquidity Ratio

1. Current ratio for the year 2018 was 1.9 times which same as 2017.
2. Receivable turnover and collection period for the year 2018 was 4.1 times and 87 days respectively which was higher than 2017.
3. Account payable turnover and payment period for the year 2018 was 9.3 times and 39 days respectively due to FMT deal the new suppliers which give FMT the lowest price upon cost reduction policy but payment credit term may be shorter than.

Profitability Ratio

- Gross profit margin of the year 2018 was 7.0% higher than 2017 due to LME price was higher than 2017.
- Return on equity for the year 2018, 9.9% as a result of net profit increased.

Performance Efficiency Ratio

- Return on total assets for the year 2018, 4.9% come from net profit.
- Assets turnover of the year 2018 was 2.2 times higher than 2017.

Financial Policy Analysis Ration

- Debt to equity for the year 2018 was 0.9 nearly same year 2017.

Statement of Financial Position

Assets

As of 31 December 2018, the total assets of Furukawa Metal (Thailand) Public Company Limited amount to 2,956 million baht, decrease of 83 million baht or 2.73 from year 2017 which comprised of :

- Current assets amounted to 2,496 million baht, or 84.45% of the total assets,
- Property, plant and equipment amounted to 429 million baht, or 14.52% of the total assets

Summary of Financial Ratio as of 31 December 2018

Financial ratio	Year 2018	Year 2017	Year 2016
LIQUIDITY RATIO			
CURRENT RATIO (TIMES)	1.94	1.77	1.82
RECEIVABLES TURNOVER (TIMES)	4.12	4.46	4.44
COLLECTION PERIOD (DAYS)	87.38	80.74	81.10
INVENTORY TURNOVER (TIMES)	6.87	6.25	6.25
INVENTORY TURNOVER PERIOD (DAYS)	52.41	57.61	57.59
ACCOUNT PAYABLE TURNOVER (TIMES)	9.26	8.09	7.56
PAYMENT PERIOD (DAYS)	38.87	44.52	47.63
PROFITABILITY RATIO			
GROSS PROFIT MARGIN (%)	6.95	6.54	8.78
NET PROFIT MARGIN (%)	2.22	2.24	3.12
RETURN ON EQUITY (%)	9.90	9.40	12.23
EFFICIENCY RATIO			
RETURN ON TOTAL ASSETS (%)	4.89	4.57	6.25
ASSET TURNOVER (TIMES)	2.20	2.03	2.00
FIXED ASSET TURNOVER (TIMES)	15.14	13.60	11.33
FINANCIAL POLICY RATIO			
DEBT TO EQUITY (TIMES)	0.90	1.06	0.96
INTEREST COVERAGE (TIMES)	15.24	12.43	15.31

Statement of Financial Position

Analysis of Financial Ratio

The Company's debt to equity ratio for the year 2018 was 1 same as as 2017

Capital Structure	Year 2017		Year 2018	
	Baht	Ratio	Baht	Ratio
Current Liabilities	1,438,947,143	0.9742	1,289,112,744	0.8266
Long-Term Liabilities	122,692,557	0.0831	107,452,964	0.0689
Total Liabilities	1,561,639,700	1.0572	1,396,565,708	0.8955
Shareholder Equity				
Common Share	480,000,000	0.3250	480,000,000	0.3078
Share Premium	507,500,000	0.3436	507,500,000	0.3254
Retained Earnings (Deficit)	489,601,946	0.3315	572,030,606	0.3668
Shareholder Equity	1,477,101,946	1	1,559,530,606	1
Liabilities & Shareholders' Equity	3,038,741,646		2,956,096,314	

Report on
the Responsibility
of the Board of
Directors on
the Financial
Report

To Shareholders Furukawa Metal (Thailand) Public Company Limited

The Board of Directors of the Company is responsible for the financial statements of Furukawa Metal (Thailand) Public Company Limited, including financial information disclosed in the Annual Report for the year 2018 which have been prepared in accordance with generally accepted accounting principles prevailing in Thailand. The policies pursued are appropriate and applied consistently with regard to reasonableness and careful preparation. An important information is also adequately and transparently disclosed in the notes to financial statements for the Company's shareholders and investors.

The Board of Directors has appointed an audit committee to check and report on the financial operations of the Company to the Board. The opinions of the audit committee are already presented in the annual report.

The Company's Board of Directors considers that the internal control is in satisfying level and is able to guarantee that financial statement of Furukawa Metal (Thailand) Public Company Limited as of 31 December 2018 is credible according to accounting standards and related laws and regulations.



(Mr. Chai Sophonpanich)

Chairman



(Mr. Junichi Ishihara)

Managing Director

Independent Auditor's Report

To the Shareholders of Furukawa Metal (Thailand) Public Company Limited

Opinion


I have audited the financial statements of Furukawa Metal (Thailand) Public Company Limited (the "Company"), which comprise the statement of financial position as at 31 December 2018, the statements of comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

In my opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Company as at 31 December 2018, and its financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards ("TFRSs").

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 Financial Statements* section of my report. I am independent of the Company in accordance with the Code of Ethics for Professional Accountants issued by the Federation of Accounting Professions that is relevant to my audit of the 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.

Key Audit Matters

Key audit matters are those matters that, in my professional judgment, were of most significance in my audit of the financial statements of the current period. These matters were addressed in the context of my audit of the financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters. 

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

Valuation of inventories	
Refer to Notes 3(d) and 8 to the financial statements.	
The key audit matter	How the matter was addressed in the audit
The main raw material of the Company's products is copper cathode. Copper cathode price was then a significant factor of the cost of inventories. As copper cathode is commodities which can be subjected to market price volatility, in the case of the fluctuation according to the market condition, this may result that the net realisable value of inventories is lower than their cost. This matter involves management's judgment and the Company had a significant inventory balance, thus, this is focus area in my audit.	My procedures included an understanding the Company's policy to estimate the net realisable value of inventories. I performed testing the calculation of the measurement of net realisable value by comparing, on a sampled basis, the cost of inventories against expected net realisable value (i.e. selling price in the latest invoice or price list less estimated cost to complete and to make the sale), and also sampling checked with relevant documents. I also considered the adequacy of disclosures in relation to inventory in accordance with TFRSs.

Other Information

Management is responsible for the other information. The other information comprises the information included in the annual report, but does not include the 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 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 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 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 those charged with governance and request that the correction be made.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with TFRSs, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing 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 management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process. 


Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to obtain reasonable assurance about whether the 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 financial statements.

As part of an audit in accordance with TSAs, I exercise professional judgment and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the 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 Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's 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 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 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 Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with those charged with governance 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 those charged with governance 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 those charged with governance, I determine those matters that were of most significance in the audit of the 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.



(Sirinuch Vimolsathit)
Certified Public Accountant
Registration No. 8413

KPMG Phoomchai Audit Ltd.
Bangkok
22 February 2019

Furukawa Metal (Thailand) Public Company Limited

Statement of financial position

Assets	Note	31 December	
		2018	2017
		<i>(in Baht)</i>	
Current assets			
Cash and cash equivalents	5	7,822,979	9,081,207
Trade accounts receivable	4, 6	1,631,006,772	1,522,115,274
Other receivables	7	65,434,874	52,218,233
Inventories	8	792,202,023	967,730,039
Total current assets		2,496,466,648	2,551,144,753
Non-current assets			
Property, plant and equipment	9	429,144,377	454,754,108
Intangible assets	10	6,592,887	4,985,803
Deferred tax assets	11	21,518,913	25,282,794
Other non-current assets		2,373,489	2,574,188
Total non-current assets		459,629,666	487,596,893
Total assets		2,956,096,314	3,038,741,646

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

Furukawa Metal (Thailand) Public Company Limited**Statement of financial position**

Liabilities and equity	<i>Note</i>	31 December	
		2018	2017
		<i>(in Baht)</i>	
<i>Current liabilities</i>			
Trade accounts payable	4, 13	649,337,345	655,795,364
Other payables	4, 14	44,475,399	37,089,029
Short-term borrowings from related party	4, 12	564,405,278	725,089,395
Income tax payable		20,125,884	10,704,779
Other current liabilities		10,768,838	10,268,576
Total current liabilities		1,289,112,744	1,438,947,143
<i>Non-current liability</i>			
Provision for employee benefits	15	107,452,964	122,692,557
Total non-current liability		107,452,964	122,692,557
Total liabilities		1,396,565,708	1,561,639,700
<i>Equity</i>			
Share capital	16		
Authorised share capital		480,000,000	480,000,000
Issued and paid-up share capital		480,000,000	480,000,000
Share premium :			
Share premium on ordinary shares	16	507,500,000	507,500,000
Retained earnings			
Appropriated			
Legal reserve	17	48,000,000	48,000,000
Unappropriated		524,030,606	441,601,946
Total equity		1,559,530,606	1,477,101,946
Total liabilities and equity		2,956,096,314	3,038,741,646

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

Furukawa Metal (Thailand) Public Company Limited

Statement of comprehensive income

		For the year ended	
		31 December	
	<i>Note</i>	2018	2017
		<i>(in Baht)</i>	
Revenues			
Revenue from sale of goods	4, 18	6,495,438,777	6,183,220,930
Net gain on foreign exchange		13,299,903	1,762,179
Gain on copper hedging and service fee	4	-	18,171,579
Other income		6,892,184	6,477,190
Total revenues		6,515,630,864	6,209,631,878
Expenses			
Cost of sale of goods	4, 8	6,044,011,830	5,778,842,763
Distribution costs	19	127,789,246	133,186,023
Administrative expenses	4, 20	120,484,303	108,708,392
Loss on copper hedging and service fee	4	28,969,047	-
Finance costs	4	12,756,734	15,197,119
Total expenses		6,334,011,160	6,035,934,297
Profit before income tax		181,619,704	173,697,581
Income tax expense	23	(37,005,382)	(34,910,531)
Profit for the year		144,614,322	138,787,050
Other comprehensive income			
Items that will not be reclassified to profit or loss			
Gains on remeasurements of defined benefit plans	15	12,267,923	-
Income tax relating to items that will not be reclassified	23	(2,453,585)	-
Other comprehensive income for the year, net of tax		9,814,338	-
Total comprehensive income for the year		154,428,660	138,787,050
Basic earnings per share	25	3.01	2.89

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

Furukawa Metal (Thailand) Public Company Limited

Statement of changes in equity

	Note	Issued and paid-up share capital	Share premium	Legal reserve (in Baht)	Retained earnings Unappropriated	Total equity
Year ended 31 December 2017						
Balance at 1 January 2017		480,000,000	507,500,000	48,000,000	398,814,896	1,434,314,896
Transactions with owners, recorded directly in equity						
<i>Distributions to owners of the Company</i>						
Dividends to owners of the Company	26	-	-	-	(96,000,000)	(96,000,000)
<i>Total transactions with owners, recorded directly in equity</i>		-	-	-	(96,000,000)	(96,000,000)
Comprehensive income for the year						
Profit		-	-	-	138,787,050	138,787,050
Total comprehensive income for the year		-	-	-	138,787,050	138,787,050
Balance at 31 December 2017		480,000,000	507,500,000	48,000,000	441,601,946	1,477,101,946
Year ended 31 December 2018						
Balance at 1 January 2018		480,000,000	507,500,000	48,000,000	441,601,946	1,477,101,946
Transactions with owners, recorded directly in equity						
<i>Distributions to owners of the Company</i>						
Dividends to owners of the Company	26	-	-	-	(72,000,000)	(72,000,000)
<i>Total transactions with owners, recorded directly in equity</i>		-	-	-	(72,000,000)	(72,000,000)
Comprehensive income for the year						
Profit		-	-	-	144,614,322	144,614,322
Other comprehensive income		-	-	-	9,814,338	9,814,338
Total comprehensive income for the year		-	-	-	154,428,660	154,428,660
Balance at 31 December 2018		480,000,000	507,500,000	48,000,000	524,030,606	1,559,530,606

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

Furukawa Metal (Thailand) Public Company Limited

Statement of cash flows

	For the year ended	
	31 December	
	2018	2017
	<i>(in Baht)</i>	
<i>Cash flows from operating activities</i>		
Profit for the year	144,614,322	138,787,050
<i>Adjustments to reconcile profit to cash receipts (payments)</i>		
Income tax expense	37,005,382	34,910,531
Finance costs	12,756,734	15,197,119
Depreciation and amortisation	70,833,344	79,765,232
Reversal of impairment losses on equipment	(3,579,812)	(9,861,047)
Provision for employee benefits	9,028,429	10,648,924
Unrealised (gain) loss on foreign exchange	(3,403,798)	48,167
Loss on disposal of equipment	3,292,912	9,568,164
	<u>270,547,513</u>	<u>279,064,140</u>
<i>Changes in operating assets and liabilities</i>		
Trade accounts receivable	(111,186,320)	(271,700,282)
Other receivables	(13,216,641)	(27,392,401)
Inventories	175,528,016	(85,768,595)
Other non-current assets	200,699	(189,899)
Trade accounts payable	(759,399)	(116,915,408)
Other payables	8,715,160	1,709,740
Other current liabilities	493,597	(422,198)
Net cash generated from (used in) operating	<u>330,322,625</u>	<u>(221,614,903)</u>
Employee benefit paid	(12,000,099)	(9,759,606)
Income tax paid	(26,273,981)	(45,632,370)
Net cash flows from (used in) operating activities	<u>292,048,545</u>	<u>(277,006,879)</u>
<i>Cash flows from investing activities</i>		
Cash payments to purchase of equipment	(44,651,457)	(35,663,798)
Cash payments to purchase of intangible assets	(3,559,798)	(3,792,961)
Cash receipts from sale of equipment	286,900	292,883
Net cash flows used in investing activities	<u>(47,924,355)</u>	<u>(39,163,876)</u>

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

Furukawa Metal (Thailand) Public Company Limited**Statement of cash flows**

		For the year ended	
		31 December	
	<i>Note</i>	2018	2017
		<i>(in Baht)</i>	
<i>Cash flows from financing activities</i>			
Interest paid		(12,704,966)	(16,834,777)
Dividends paid		(71,993,335)	(92,972,436)
Proceeds from borrowings from financial institution		250,000,000	600,000,000
Repayment of borrowings from financial institution		(250,000,000)	(1,000,000,000)
Proceeds from borrowings from related party		4,221,344,967	4,192,504,627
Repayment of borrowings from related party		<u>(4,382,029,084)</u>	<u>(3,478,933,227)</u>
Net cash flows from (used in) financing activities		<u>(245,382,418)</u>	<u>203,764,187</u>
Net decrease in cash and cash equivalents			
		(1,258,228)	(112,406,568)
Cash and cash equivalents at 1 January		<u>9,081,207</u>	<u>121,487,775</u>
Cash and cash equivalents at 31 December	5	<u><u>7,822,979</u></u>	<u><u>9,081,207</u></u>
<i>Non-cash transaction</i>			
Payable for fixed assets purchased		6,760,258	8,140,817

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

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

Note	Contents
1	General information
2	Basis of preparation of the financial statements
3	Significant accounting policies
4	Related parties
5	Cash and cash equivalents
6	Trade accounts receivable
7	Other receivables
8	Inventories
9	Property, plant and equipment
10	Intangible assets
11	Deferred tax
12	Interest-bearing liabilities
13	Trade accounts payable
14	Other payables
15	Provision for employee benefits
16	Share capital
17	Legal reserve
18	Segment information
19	Distribution costs
20	Administrative expenses
21	Employee benefit expenses
22	Expenses by nature
23	Income tax
24	Promotional privileges
25	Basic earnings per share
26	Dividends
27	Financial instruments
28	Commitments with non-related parties
29	Events after the reporting period
30	Thai Financial Reporting Standards (TFRS) not yet adopted

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

These notes form an integral part of the financial statements.

The financial statements issued for Thai statutory and regulatory reporting purposes are prepared in the Thai language. These English language financial statements have been prepared from the Thai language statutory financial statements, and were approved and authorized for issue by the Board of Directors on 22 February 2019.

1 General information

Furukawa Metal (Thailand) Public Company Limited, the “Company”, is incorporated in Thailand and has its registered offices as follows:

- (a) Head Office : 183 Regent House Building, 14th Floor, Rajdamri Road, Lumpini, Pathumwan, Bangkok 10330
- (b) Factory : 213 Moo 4 Friendship Highway Km. 125th, Tab Kwang, Kaeng Khoi, Saraburi 18260

The Company was listed on the Stock Exchange of Thailand in 1996.

The immediate and ultimate parent company during the financial year was Furukawa Electric Co., Ltd. (42.25% shareholding), a company incorporated in Japan.

The principal activity of the Company is the manufacturing and distributing of seamless copper tube, which is an important component for air-conditioner and refrigerator equipment.

2 Basis of preparation of the financial statements

(a) Statement of compliance

The financial statements are prepared in accordance with Thai Financial Reporting Standards (“TFRS”); guidelines promulgated by the Federation of Accounting Professions (“FAP”); and applicable rules and regulations of the Thai Securities and Exchange Commission.

The FAP has issued new and revised TFRS effective for annual accounting periods beginning on or after 1 January 2018. The initial application of these new and revised TFRS has resulted in changes in certain of the Company’s accounting policies. These changes have no material effect on the financial statements.

In addition to the above new and revised TFRS, the FAP has issued a number of new and revised TFRS which are not yet effective for current periods. The Company has not early adopted these standards in preparing these financial statements. Those new and revised TFRS that are relevant to the Company’s operations are disclosed in note 30.

(b) Basis of measurement

The financial statements have been prepared on the historical cost basis except for the following items.

Items

Defined benefit liability

Measurement bases

Present value of the defined benefit obligation, as explained in note 3 (j)

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

(c) Functional and presentation currency

The financial statements are prepared and presented in Thai Baht, which is the Company's functional currency.

(d) Use of judgments and estimates

The preparation of financial statements in conformity with TFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised prospectively.

Assumption and estimation uncertainties

Information about assumption and estimation uncertainties that have a significant risk of resulting in a material adjustments to the carrying amounts of liability within the year ending 31 December 2019 is included in note 15 to the financial statements: *Measurement of defined benefit obligations: key actuarial assumptions.*

Measurement of fair values

A number of the Company's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities.

The Company has an established control framework with respect to the measurement of fair values. This includes a valuation team that has overall responsibility for overseeing all significant fair value measurements, including Level 3 fair values, and reports directly to the chief financial officer.

The valuation team regularly reviews significant unobservable inputs and valuation adjustments. If third party information, such as broker quotes or pricing services, is used to measure fair values, then the valuation team assesses the evidence obtained from the third parties to support the conclusion that these valuations meet the requirements of TFRS, including the level in the fair value hierarchy in which the valuations should be classified.

Significant valuation issues are reported to the Company's Audit Committee.

When measuring the fair value of an asset or a liability, the Company uses observable market data as far as possible. Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

If the inputs used to measure the fair value of an asset or liability might be categorised in different levels of the fair value hierarchy, then the fair value measurement is categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

The Company recognises transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

Further information about the assumptions made in measuring fair values is included in the note 27 to the financial statements: *Financial instruments*.

3 Significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these financial statements.

(a) Foreign currency transactions

Transactions in foreign currencies are translated to the functional currency at exchange rates at the dates of the transactions.

Monetary assets and liabilities denominated in foreign currencies are translated to the functional currency at the exchange rate at the reporting date.

Non-monetary assets and liabilities measured at cost in foreign currencies are translated to the functional currency at the exchange rates at the dates of the transactions.

Foreign currency differences arising from the translation are recognised in profit or loss.

(b) Cash and cash equivalents

Cash and cash equivalents in the statements of cash flows comprise cash balances, call deposits and highly liquid short-term investments. Bank overdrafts that are repayable on demand are a component of financing activities for the purpose of the statement of cash flows.

(c) Trade and other receivables

Trade and other receivables are stated at their invoice value less allowance for doubtful accounts.

The allowance for doubtful accounts is assessed primarily on analysis of payment histories and future expectations of customer payments. Bad debts are written off when incurred.

(d) Inventories

Inventories are measured at the lower of cost and net realisable value.

Cost is calculated using the weighted average cost principle, and comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition. In the case of manufactured inventories and work-in-progress, cost includes an appropriate share of production overheads based on normal operating capacity and is calculated using standard cost adjusted to approximate average cost.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs to complete and to make the sale.

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

(e) Property, plant and equipment

Recognition and measurement

Owned assets

Property, plant and equipment are measured at cost less accumulated depreciation and impairment losses.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the assets to a working condition for their intended use, the costs of dismantling and removing the items and restoring the site on which they are located, and capitalised borrowing costs. Cost also may include transfers from other comprehensive income of any gain or loss on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Any gains and losses on disposal of item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment, and are recognised in profit or loss.

Subsequent costs

The cost of replacing a part of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the Company, and its cost can be measured reliably. The carrying amount of the replaced part is derecognised. The costs of the day-to-day servicing of property, plant and equipment are recognised in profit or loss as incurred.

Depreciation

Depreciation is calculated based on the depreciable amount, which is the cost of an asset, or other amount substituted for cost, less its residual value.

Depreciation is charged to profit or loss on a straight-line basis over the estimated useful lives of each component of an item of property, plant and equipment. The estimated useful lives are as follows:

Land improvements	5 - 20 years
Buildings and improvements	5 - 20 years
Machinery and equipment	5 - 20 years
Furniture, fixtures and office equipment	5 - 10 years
Transportation equipment	5 years

No depreciation is provided on freehold land or assets under construction and machinery under installation.

Depreciation methods, useful lives and residual values are reviewed at each financial year-end and adjusted if appropriate.

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

(f) Intangible assets

Intangible assets that are acquired by the Company and have finite useful lives are measured at cost less accumulated amortisation and accumulated impairment losses.

Subsequent expenditure

Subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure is recognised in profit or loss as incurred.

Amortisation

Amortisation is based on the cost of the asset, or other amount substituted for cost, less its residual value.

Amortisation is recognised in profit or loss on a straight-line basis over the estimated useful lives of intangible assets from the date that they are available for use, since this most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset. The estimated useful lives for the current and comparative periods are as follows:

Computer software	5 years
-------------------	---------

Golf membership is measured at cost less accumulated impairment losses.

Amortisation methods, useful lives and residual values are reviewed at each financial year-end and adjusted if appropriate.

(g) Impairment

The carrying amounts of the Company's assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the assets' recoverable amounts are estimated.

An impairment loss is recognised if the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. The impairment loss is recognised in the profit or loss unless it reverses a previous revaluation credited to equity, in which case it is charged to equity.

Calculation of recoverable amount

The recoverable amount of a non-financial asset is the greater of the asset's value in use and fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

Reversals of impairment

Impairment losses recognised in prior periods in respect of non-financial assets are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

(h) Interest-bearing liabilities

Interest bearing liabilities are recognised at cost.

(i) Trade and other payables

Trade and other payables are stated at cost.

(j) Employee benefits

Defined contribution plans

Obligations for contributions to defined contribution plans are expensed as the related service is provided.

Defined benefit plans

The Company's net obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in the current and prior periods, discounting that amount.

The calculation of defined benefit obligations is performed by a qualified actuary using the projected unit credit method. When the calculation results in a potential asset for the Company, the recognised asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. To calculate the present value of economic benefits, consideration is given to any application minimum funding requirements.

Remeasurements of the net defined benefit liability, actuarial gain or loss are recognised immediately in other comprehensive income. The Company determines the interest expense on the net defined benefit liability for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period, taking into account any changes in the net defined benefit liability during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognised in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in profit or loss. The Company recognises gains and losses on the settlement of a defined benefit plan when the settlement occurs.

Other long-term employee benefits

The Company's net obligation in respect of long-term employee benefits is the amount of future benefit that employees have earned in return for their service in the current and prior periods. That benefit is discounted to determine its present value. Remeasurements are recognised in profit or loss in the period in which they arise.

Short-term employee benefits

Short-term employee benefits are expensed as the related service is provided. A liability is recognised for the amount expected to be paid if the Company has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

(k) Provisions

A provision is recognised if, as a result of a past event, the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognised as finance cost.

(l) Revenue

Revenue excludes value added taxes and is arrived at after deduction of trade discounts.

Sale of goods

Revenue is recognised in profit or loss when the significant risks and rewards of ownership have been transferred to the buyer. No revenue is recognised if there is continuing management involvement with the goods or there are significant uncertainties regarding recovery of the consideration due, associated costs or the probable return of goods.

Interest income and other income

Interest income and other income are recognised in the profit or loss as they accrue.

(m) Finance costs

Interest expenses and similar costs are charged to profit or loss for the period in which they are incurred, except to the extent that they are capitalised as being directly attributable to the acquisition, construction or production of an asset which necessarily takes a substantial periods of time to be prepared for its intended use or sale.

(n) Lease payments

Payments made under operating leases are recognised in profit or loss on a straight-line basis over the term of the lease.

Contingent lease payments are accounted for by revising the minimum lease payments over the remaining term of the lease when the lease adjustment is confirmed.

(o) Income tax

Income tax expense for the year comprises current and deferred tax. Current and deferred tax are recognised in profit or loss except items recognised directly in equity or in other comprehensive income.

Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes.

The measurement of deferred tax reflects the tax consequences that would follow the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Furukawa Metal (Thailand) Public Company Limited

Notes to the financial statements

For the year ended 31 December 2018

Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, using tax rates enacted or substantively enacted at the reporting date.

In determining the amount of current and deferred tax, the Company takes into account the impact of uncertain tax positions and whether additional taxes and interest may be due. The Company believes that its accruals for tax liabilities are adequate for all open tax years based on its assessment of many factors, including interpretations of tax law and prior experience. This assessment relies on estimates and assumptions and may involve a series of judgments about future events. New information may become available that causes the Company to change its judgment regarding the adequacy of existing tax liabilities; such changes to tax liabilities will impact tax expense in the period that such a determination is made.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realised simultaneously.

A deferred tax asset is recognised to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilised. Future taxable profits are determined based on the reversal of relevant taxable temporary differences. If the amount of taxable temporary differences is insufficient to recognise a deferred tax asset in full, then future taxable profits, adjusted for reversals of existing temporary differences, are considered, based on the business plans for the Company. Deferred tax assets are reviewed at each reporting date and reduced to the extent that it is no longer probable that the related tax benefit will be realised.

(p) Earnings per share

The Company presents basic earnings per share ("EPS") data for its ordinary shares. Basic EPS is calculated by dividing the profit or loss attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the period.

(q) Segment reporting

Segment results that are reported to the Company's CEO (the chief operating decision maker) include items directly attributable to a segment as well as those that can be allocated on a reasonable basis.

4 Related parties

For the purposes of these financial statements, parties are considered to be related to the Company if the Company has the ability, directly or indirectly, to control or joint control the party or exercise significant influence over the party in making financial and operating decisions, or vice versa, or where the Company and the party are subject to common control or common significant influence. Related parties may be individuals or other entities.

Furukawa Metal (Thailand) Public Company Limited

Notes to the financial statements

For the year ended 31 December 2018

Relationships with key management and other related parties were as follows:

Name of entities	Country of incorporation/ nationality	Nature of relationships
Furukawa Electric Co., Ltd.	Japan	Parent, 42.25% shareholding
Bangkok Insurance Public Company Limited	Thailand	A common shareholder, 9.27% shareholding
Furukawa Sangyo Kaisha Co., Ltd.	Japan	A common shareholder, 1.04% shareholding
Furukawa Thai Holdings Co., Ltd.	Thailand	A common director and shareholder, 0.71% shareholding
Tani International Trading Co., Ltd.	Thailand	A common director and shareholder
Furukawa (Thailand) Co., Ltd.	Thailand	A common shareholder
Furukawa Precision (Thailand) Co., Ltd.	Thailand	A common shareholder
Furukawa Sangyo Kaisha (Thailand) Ltd.	Thailand	A common shareholder
Furukawa Electric Singapore Pte. Ltd.	Singapore	A common shareholder
P.T. Furukawa Electric Indonesia	Indonesia	A common shareholder
FITEC Corporation	Japan	A common shareholder
Furukawa Logistics Corporation	Japan	A common shareholder
Okumura Metals (Thailand) Co., Ltd.	Thailand	A common shareholder
Okumura Metals (Malaysia) Sdn. Bhd.	Malaysia	A common shareholder
Furukawa Sangyo Kaisha (Malaysia) Sdn. Bhd.	Malaysia	A common shareholder
Key management personnel	Thailand/ Japan	Persons having authority and responsibility for planning, directing and controlling the activities of the entity, directly or indirectly, including any director (whether executive or otherwise) of the Company.

The pricing policies for particular types of transactions are explained further below:

Transactions	Pricing policies
Revenue from sale of goods	Market price or contractually agreed price
Purchase of raw material	Market price or contractually agreed price
Technical assistance fee	Contractually agreed price
(Gain) loss on copper hedging and service fee	Contractually agreed price
Service fee and others	Contractually agreed price
Interest income or interest expense	Contractually agreed rate
Directors' remuneration	Approved by shareholders' meeting

Significant transactions for the years ended 31 December with related parties were as follows:

<i>Year ended 31 December</i>	2018	2017
	<i>(in thousand Baht)</i>	
Parent		
Technical assistance fee	18,597	18,364
(Gain) loss on copper hedging and service fee	28,969	(18,172)

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

	2018	2017
	<i>(in thousand Baht)</i>	
Other related parties		
Revenue from sales of goods	1,774,782	1,968,859
Purchase of raw material	1,485,655	1,927,947
Service fee and others	6,117	6,225
Interest expense	10,367	5,090
Directors' remuneration	3,212	3,251
Key management personnel		
Key management personnel compensation		
Short-term employee benefits	32,620	32,045
Post-employment benefits	317	304
Total key management personnel compensation	32,937	32,349

Balances as at 31 December with related parties were as follows:

	2018	2017
	<i>(in thousand Baht)</i>	
Trade accounts receivable from related parties		
Other related parties	437,827	496,062
Trade accounts payable to related party		
Other related party	255,352	344,341
Other payables to related parties		
Parent	17,603	11,706
Other related parties	853	879
Total	18,456	12,585
Short-term borrowings from related party		
Other related party	564,405	725,089

Movements during the years ended 31 December of borrowings from related party were as follows:

Borrowings from related party	2018	2017
	<i>(in thousand Baht)</i>	
Short-term borrowings		
Other related party		
At 1 January	725,089	11,518
Increase	4,221,345	4,192,504
Decrease	(4,382,029)	(3,478,933)
At 31 December	564,405	725,089

As at 31 December 2018, short-term borrowings from related party bears interest at the rate of 1.75% per annum (2017: 1.50% per annum).

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

Significant agreements with related parties

Long-term Contract for the Purchase of Copper Cathodes

On 28 December 2007, the Company entered into a Long-term Contract for the Purchase of Copper Cathodes contract with Furukawa Electric Singapore Pte. Ltd., a related company, under the terms of which the Company has agreed to purchase copper cathodes from the said related company at the market price averaged during the contractual month of shipment plus the rate prescribed in the agreement.

As at 31 December 2018, the Company had no outstanding agreed purchase orders for copper cathodes with Furukawa Electric Singapore Pte. Ltd. (2017: U.S. Dollars 2.2 million, equivalent to Baht 71.9 million).

Hedge Agreement

On 1 March 2015, the Company entered into a master hedging agreement with Furukawa Electric Co., Ltd. ("FEC"), a parent company, to hedge against the price fluctuation for the sale of copper product made by the Company to its customers in Thailand. Under the terms of agreement, FEC shall provide hedge service to the Company by entering into hedge contracts with the London Metal Exchange in accordance with the terms and condition stated in each hedge application requested by the Company. In consideration thereof, the Company is committed to pay a hedge service fee at the rate of U.S. Dollars 3 per ton. In addition, the difference between the hedge price and the market price shall be payable by the Company or FEC, as the case maybe, at the end of each hedge period or within 15 days or other periods as agreed by both parties after the end of hedge period. This agreement is effective on the agreement date and shall be terminated by either party giving at least 90 days notice in writing to the other party.

As at 31 December 2018, the Company had outstanding future contracts with Furukawa Electric Co., Ltd., a parent company, to hedge the copper cathode price of 4,341 tons, in amount of U.S. Dollars 27.2 million, equivalent to Baht 888.0 million (2017: 317 tons, in amount of U.S. Dollars 2.5 million, equivalent to Baht 81.1 million).

Technical Collaboration Agreement

On 1 January 2018, the Company entered into technical collaboration agreement with Furukawa Electric Co., Ltd., the parent company, for a period of 1 year effective on 1 January 2018. The agreement shall be automatically extended for successive periods of one year each. Under the terms of the agreement, Furukawa Electric Co., Ltd. shall provide the Company with technical collaboration and information on the manufacturing operations including an exclusive right to manufacture and sell the product in the countries as specified in the agreement. In consideration thereof, the Company is committed to pay a technical assistance fee computed from the net sales volume of seamless copper tube (Inner grooved tube) at the rate of Baht 2.25 per kilogram.

System Development Service Support Agreement

On 1 June 2018, the Company entered into the System Development Service Support Agreement with Furukawa (Thailand) Co., Ltd., a related company. Under the terms of agreement, Furukawa (Thailand) Co., Ltd. shall provide the Company with support for maintenance project of Total Production Management System. In consideration thereof, the Company is committed to pay a service fee computed from consulting service hour at the rates as stipulated in the agreement. The agreement will be expired on 31 May 2019.

Furukawa Metal (Thailand) Public Company Limited

Notes to the financial statements

For the year ended 31 December 2018

Basic Trading Agreement

On 1 April 2013, the Company entered into the Basic Trading Agreement with Furukawa (Thailand) Co., Ltd., a related company. Under the terms of agreement, Furukawa (Thailand) Co., Ltd. shall provide the Company with services relating to the information system such as outsourcing, sale and purchase of electronic equipment, etc. In consideration thereof, the Company is committed to pay a consulting fee computed from consulting service. This agreement is effective on the agreement date and shall be terminated by either party giving at least 3 months notice in writing to the other party.

Cash Management Agreement

On 28 September 2012, the Company entered into a cash management agreement with Furukawa Thai Holdings Co., Ltd., a related company, to improve treasury management of the group of companies which are directly or indirectly owned by Furukawa Electric Co., Ltd. equal to or more than 25%, as provided under this agreement. Any interest on the advance to/from transactions will be calculated on the last business day of each month. Interest income or expense incurred from such agreement is derived from the outstanding balance with the related parties on a daily basis. The rate of interest is maintained more favorable for the Company than its bank rate. The Company may terminate this agreement by giving the related company at least one month prior written notice.

5 Cash and cash equivalents

	2018	2017
	<i>(in thousand Baht)</i>	
Cash on hand	113	113
Cash at banks - current accounts	4,246	8,741
Cash at banks - savings accounts	3,464	227
Total	7,823	9,081

6 Trade accounts receivable

	Note	2018	2017
		<i>(in thousand Baht)</i>	
Related parties	4	437,827	496,062
Other parties		1,193,180	1,026,053
Total		1,631,007	1,522,115

Aging analyses for trade accounts receivable were as follows:

	2018	2017
	<i>(in thousand Baht)</i>	
Related parties		
Within credit terms	437,827	496,062
	437,827	496,062
Other parties		
Within credit terms	1,192,477	1,025,292
Overdue:		
Less than 3 months	703	761
	1,193,180	1,026,053
Total	1,631,007	1,522,115

The normal credit term granted by the Company ranges from 30 days to 90 days and extra credit term of 270 days is granted for a customer.

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

7 Other receivables

	2018	2017
	<i>(in thousand Baht)</i>	
Refundable value added tax	62,056	51,513
Others	3,379	705
Total	65,435	52,218

8 Inventories

	2018	2017
	<i>(in thousand Baht)</i>	
Finished goods	283,525	476,346
Work in progress	190,602	259,640
Raw materials	63,651	30,654
Factory supplies	168,095	166,597
Goods in transit	86,329	34,493
Total	792,202	967,730

Inventories recognised as an expense in cost of sales of goods:

- Cost	6,044,012	5,778,843
--------	------------------	------------------

Furukawa Metal (Thailand) Public Company Limited

Notes to the financial statements
For the year ended 31 December 2018

9 Property, plant and equipment

<i>Cost</i>	Land and improvements	Buildings and improvements	Machinery and equipment	Furniture, fixtures and office equipment (in thousand Baht)	Transportation equipment	Assets under construction and machinery under installation	Total
At 1 January 2017	180,983	579,089	4,491,035	41,297	4,429	8,652	5,305,485
Additions	-	233	5,065	1,453	-	29,988	36,739
Transfers	-	3,543	19,039	68	-	(22,650)	-
Disposals	-	-	(129,804)	(223)	-	-	(130,027)
At 31 December 2017 and 1 January 2018	180,983	582,865	4,385,335	42,595	4,429	15,990	5,212,197
Additions	123	528	3,836	2,306	236	36,242	43,271
Transfers	494	4,850	41,004	67	-	(46,415)	-
Disposals	-	-	(33,939)	(869)	(550)	-	(35,358)
At 31 December 2018	181,600	588,243	4,396,236	44,099	4,115	5,817	5,220,110
<i>Depreciation and impairment losses</i>							
At 1 January 2017	59,542	460,602	4,250,142	35,955	4,382	-	4,810,623
Depreciation charge for the year	2,665	20,264	51,289	2,616	13	-	76,847
Reversal of impairment losses	-	-	(9,861)	-	-	-	(9,861)
Disposals	-	-	(119,943)	(223)	-	-	(120,166)
At 31 December 2017 and 1 January 2018	62,207	480,866	4,171,627	38,348	4,395	-	4,757,443
Depreciation charge for the year	2,695	18,248	45,973	1,931	33	-	68,880
Reversal of impairment losses	-	-	(3,580)	-	-	-	(3,580)
Disposals	-	-	(30,358)	(869)	(550)	-	(31,777)
At 31 December 2018	64,902	499,114	4,183,662	39,410	3,878	-	4,790,966
<i>Net book value</i>							
At 1 January 2017	121,441	118,487	240,893	5,342	47	8,652	494,862
At 31 December 2017 and 1 January 2018	118,776	101,999	213,708	4,247	34	15,990	454,754
At 31 December 2018	116,698	89,129	212,574	4,689	237	5,817	429,144

The gross amount of the Company's fully depreciated plant and equipment that was still in use as at 31 December 2018 amounted to Baht 4,133 million (2017: Baht 4,052 million).

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

10 Intangible assets

	Computer software	Golf membership (in thousand Baht)	Software under installation	Total
Cost				
At 1 January 2017	132,526	-	-	132,526
Additions	1,593	2,200	-	3,793
At 31 December 2017 and 1 January 2018	134,119	2,200	-	136,319
Additions	2,011	-	1,549	3,560
Write-off	(406)	-	-	(406)
At 31 December 2018	135,724	2,200	1,549	139,473
Amortisation				
At 1 January 2017	128,414	-	-	128,414
Amortisation for the year	2,919	-	-	2,919
At 31 December 2017 and 1 January 2018	131,333	-	-	131,333
Amortisation for the year	1,953	-	-	1,953
Write-off	(406)	-	-	(406)
At 31 December 2018	132,880	-	-	132,880
Net book value				
At 1 January 2017	4,112	-	-	4,112
At 31 December 2017 and 1 January 2018	2,786	2,200	-	4,986
At 31 December 2018	2,844	2,200	1,549	6,593

The gross amount of the Company's fully amortised intangible assets that was still in use as at 31 December 2018 amounted to Baht 132 million (2017: Baht 119 million).

11 Deferred tax

Deferred tax assets and liabilities as at 31 December were as follows:

	Assets		Liabilities	
	2018	2017	2018	2017
		(in thousand Baht)		
Total	21,519	25,283	-	-
Set off of tax	-	-	-	-
Net deferred tax assets	21,519	25,283	-	-

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

Movements in total deferred tax assets during the years were as follows:

	At 1 January 2018	(Charged) / credited to		At 31 December 2018
		Profit or loss (in thousand Baht)	Other comprehensive income	
Deferred tax assets				
Impairment loss of fixed assets	716	(716)	-	-
Provision for employee benefits	24,539	(594)	(2,454)	21,491
Others	28	-	-	28
Total	25,283	(1,310)	(2,454)	21,519

	At 1 January 2017	(Charged) / credited to		At 31 December 2017
		Profit or loss (in thousand Baht)	Other comprehensive income	
Deferred tax assets				
Impairment loss of fixed assets	2,688	(1,972)	-	716
Provision for employee benefits	24,361	178	-	24,539
Others	28	-	-	28
Total	27,077	(1,794)	-	25,283

12 Interest-bearing liability

	Note	2018 (in thousand Baht)	2017
Current			
Unsecured			
Short-term borrowings from related party	4	564,405	725,089
Total		564,405	725,089

The periods to maturity of interest-bearing liability as at 31 December were as follows:

	2018 (in thousand Baht)	2017
Within one year	564,405	725,089
Total	564,405	725,089

Unutilised credit facilities

As at 31 December 2018, the Company had unutilised credit facilities totalling U.S. Dollars 1 million and Baht 3,447 million (2017: U.S. Dollars 1 million and Baht 3,447 million).

13 Trade accounts payable

	Note	2018 (in thousand Baht)	2017
Related party	4	255,352	344,341
Other parties		393,985	311,454
Total		649,337	655,795

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

14 Other payables

	<i>Note</i>	2018	2017
		<i>(in thousand Baht)</i>	
Electricity and natural gas payable		12,507	13,209
Payable for copper hedging and service fee	4	9,215	1,983
Accrued technical assistance fee	4	8,388	7,669
Payable for fixed assets purchased	4	6,760	8,141
Others	4	7,605	6,087
Total		44,475	37,089

15 Provision for employee benefits

	2018	2017
	<i>(in thousand Baht)</i>	
Statement of financial position		
Provisions for:		
Post-employment benefits	91,024	102,520
Other long-term employee benefits	8,653	12,257
Others	7,776	7,916
Total	107,453	122,693

	2018	2017
	<i>(in thousand Baht)</i>	
Statement of comprehensive income		
Recognised in profit or loss:		
Post-employment benefits	8,188	8,035
Other long-term employee benefits	(665)	1,301
Others	1,505	1,313
Total	9,028	10,649
Recognised in other comprehensive income:		
Actuarial gains recognised in the year	12,268	-
Cumulative actuarial gains recognised	36,016	23,748

Defined benefit plan

The Company operates defined benefit plans based on the requirement of Thai Labour Protection Act B.E. 2541 (1998) to provide retirement benefits to employees based on pensionable remuneration and length of service.

The defined benefit plans expose the Company to actuarial risks, such as longevity risk, currency risk, interest rate risk and market (investment) risk.

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

Movements in the present value of the defined benefit obligations.

	Legal severance pay	
	2018	2017
	<i>(in thousand Baht)</i>	
At 1 January	102,520	100,067
Included in profit or loss:		
Current service cost	5,508	5,456
Interest on obligation	2,680	2,579
	8,188	8,035
Included in other comprehensive income		
Actuarial gain	(12,268)	-
	(12,268)	-
Other		
Benefit paid	(7,416)	(5,582)
	(7,416)	(5,582)
At 31 December	91,024	102,520

Actuarial gains and losses recognised in other comprehensive income arising from:

	Legal severance pay	
	2018	2017
Demographic assumptions	649	-
Financial assumptions	(7,481)	-
Experience adjustment	(5,436)	-
Net	(12,268)	-

Actuarial assumptions

The following were the principal actuarial assumptions at the reporting date (expressed as weighted averages).

	2018	2017
	(%)	
Discount rate	2.8	2.7
Future salary growth	3 - 4	4 - 5
Employee turnover	0 - 14	0 - 14

Assumptions regarding future mortality are based on published statistics and mortality tables.

At 31 December 2018, the weighted-average duration of the defined benefit obligation was 8.8 years (2017: 10 years).

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

Sensitivity analysis

Reasonably possible changes at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below.

	Legal severance pay (in thousand Baht)	
	Increase	Decrease
At 31 December 2018		
Discount rate (1% movement)	(5,804)	6,448
Future salary growth (1% movement)	6,323	(5,806)
Employee turnover (20% movement)	(1,088)	1,133
Future mortality (1% movement)	(134)	125
	Legal severance pay (in thousand Baht)	
	Increase	Decrease
At 31 December 2017		
Discount rate (1% movement)	(6,616)	7,386
Future salary growth (1% movement)	9,250	(8,363)
Employee turnover (20% movement)	(1,942)	2,037
Future mortality (1% movement)	(327)	301

Although the analysis does not take account of the full distribution of cash flows expected under the plan, it does provide an approximation of the sensitivity of the assumptions shown.

On 13 December 2018, the National Legislative Assembly passed a bill amending the Labor Protection Act to include a requirement that an employee who is terminated after having been employed by the same employer for an uninterrupted period of twenty years or more, receives severance payment of 400 days of wages at the most recent rate. The Company will amend its retirement plan in the period in which the amendment will have become law and is announced in the Royal Gazette. As a result of this change, the provision for retirement benefits as at that future period end as well as past service cost recognized during that period in the financial statements is estimated to increase by an amount of approximately Baht 29.2 million.

16 Share capital

	Par value per share (in Baht)	2018		2017	
		Number	Baht (thousand shares / thousand Baht)	Number	Baht
<i>Authorised</i>					
At 1 January					
- ordinary shares	10	48,000	480,000	48,000	480,000
At 31 December					
- ordinary shares	10	48,000	480,000	48,000	480,000
<i>Issued and paid-up</i>					
At 1 January					
- ordinary shares	10	48,000	480,000	48,000	480,000
At 31 December					
- ordinary shares	10	48,000	480,000	48,000	480,000

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

Share premium

Section 51 of the Public Companies Act B.E. 2535 requires companies to set aside share subscription monies received in excess of the par value of the shares issued to a reserve account ("share premium"). Share premium is not available for dividend distribution.

17 Legal reserves

Section 116 of the Public Companies Act B.E. 2535 requires that a public company shall allocate not less than 5% of its annual net profit, less any accumulated losses brought forward, to a reserve account ("legal reserve"), until this account reaches an amount not less than 10% of the registered authorised capital. The legal reserve is not available for dividend distribution.

18 Segment information

Business segments

Management considers that the Company operates in a single line of business, namely seamless copper tube, and has, therefore, only one reportable segment.

Geographical segments

The Company is managed and operates manufacturing facilities and sales office only in Thailand. In presenting information on the basis of geographical segments, segment revenue is based on the geographical location of customers.

Geographical information

	Revenue from sale of goods	
	2018	2017
	<i>(in thousand Baht)</i>	
Thailand	4,225,472	3,949,199
Malaysia	563,868	557,881
Singapore	132,787	212,623
Japan	106,924	124,435
Other countries	1,466,388	1,339,083
Total	6,495,439	6,183,221

Major customer

Revenues from major customers represent approximately Baht 2,579 million (2017: Baht 2,321 million) of the Company's total revenues.

19 Distribution costs

	2018	2017
	<i>(in thousand Baht)</i>	
Packaging and supplies	49,319	59,445
Freight charge	43,511	42,969
Employee benefit expenses	24,469	21,488
Others	10,490	9,284
Total	127,789	133,186

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

20 Administrative expenses

	Note	2018	2017
		<i>(in thousand Baht)</i>	
Employee benefit expenses		68,987	62,651
Technical assistance fee	4	18,597	18,364
Professional fee and training expenses		5,672	2,395
Insurance expenses		3,328	3,650
Others		23,900	21,648
Total		120,484	108,708

21 Employee benefit expenses

	Note	2018	2017
		<i>(in thousand Baht)</i>	
Wages, salaries and welfare		327,598	314,704
Defined benefit plans	15	9,028	10,649
Defined contribution plans		6,906	7,210
Total		343,532	332,563

Defined contribution plans

The defined contribution plan comprises a provident fund established by the Company for its employees. Membership to the fund is on a voluntary basis. Contributions are made monthly by the employees at rates ranging from 4% to 8% of their basic salaries and by the Company at rates ranging from 4% to 8% of the employees' basic salaries. The provident fund is registered with the Ministry of Finance as a juristic entity and is managed by a licensed Fund Manager.

22 Expenses by nature

The statements of comprehensive income include an analysis of expenses by function. Expenses by nature disclosed in accordance with the requirements of various TFRS were as follows:

	2018	2017
	<i>(in thousand Baht)</i>	
<i>Included in cost of sales of goods:</i>		
Changes in inventories of finished goods and work in progress	261,859	(202,950)
Raw materials and consumables used	5,223,947	5,396,165
Employee benefit expenses	250,076	248,424
Depreciation of property, plant and equipment	67,359	75,063
Amortisation of intangible assets	1,731	2,824
<i>Included in distribution costs:</i>		
Depreciation of plant and equipment	284	350
<i>Included in administrative expenses:</i>		
Depreciation of property, plant and equipment	1,238	1,433
Amortisation of intangible assets	222	95

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

23 Income tax

Income tax recognised in profit or loss

	Note	2018 (in thousand Baht)	2017
Current tax expense			
Current year		35,695	33,117
Deferred tax expense			
Movements in temporary differences	11	1,310	1,794
Total		37,005	34,911

Income tax recognised in other comprehensive income

	Before tax	2018 Tax expense	Net of tax (in thousand Baht)	Before tax	2017 Tax expense	Net of tax
Defined benefit plan actuarial gains	12,268	(2,454)	9,814	-	-	-

Reconciliation of effective tax rate

	Rate (%)	2018 (in thousand Baht)	Rate (%)	2017 (in thousand Baht)
Profit before income tax expense		181,620		173,698
Income tax using the Thai corporation tax rate	20	36,324	20	34,740
Expenses additionally deductible for tax purposes		(16)		(48)
Expenses not deductible for tax purposes		697		219
Total	20	37,005	20	34,911

24 Promotional privileges

By virtue of the provisions of the Industrial Investment Promotion Act of B.E. 2520, the Company has been granted privileges by the Board of Investment relating to the manufacturing of seamless copper tube, which include, among others, the following:

- exemption from the payment of import duty on raw material and essential materials imported for the Company's operation for export, from 14 January 2017 to 13 January 2019.
- exemption from the payment of import duty on item which the promoted company imports for re-export, from 14 January 2017 to 13 January 2019.

As a promoted company, the Company must comply with certain terms and conditions prescribed in the promotional certificate.

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

25 Basic earnings per share

The calculations of basic earnings per share for years ended 31 December 2018 and 2017 were based on the profit for the years attributable to ordinary shareholders of the Company and the number of ordinary shares outstanding during the years as follows:

	2018	2017
	<i>(in thousand Baht / thousand shares)</i>	
Profit attributable to ordinary shareholders of the Company (basic)	144,614	138,787
Number of ordinary shares outstanding	48,000	48,000
Earnings per share (basic) (in Baht)	3.01	2.89

26 Dividends

At the annual general meeting of the shareholders of the Company held on 27 April 2018, the shareholders approved the appropriation of dividend of Baht 1.50 per share, amounting to Baht 72 million. The dividend was paid to the shareholders in May 2018.

At the annual general meeting of the shareholders of the Company held on 28 April 2017, the shareholders approved the appropriation of dividend of Baht 2.00 per share, amounting to Baht 96 million. The dividend was paid to the shareholders in May 2017.

27 Financial instruments

Financial risk management policies

The Company is exposed to normal business risks from changes in market interest rates and currency exchange rates and from non-performance of contractual obligations by counterparties. The Company does not hold or issue derivatives for speculative or trading purposes.

Risk management is integral to the whole business of the Company. The Company has a system of controls in place to create an acceptable balance between the cost of risks occurring and the cost of managing the risks. The management continually monitors the Company's risk management process to ensure that an appropriate balance between risk and control is achieved.

Capital management

The Board of Directors' policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Board monitors the return on capital and also monitors the level of dividends to ordinary shareholders.

Interest rate risk

Interest rate risk is the risk that future movements in market interest rates will affect the results of the Company's operations and its cash flows because loan interest rates are mainly fixed. The Company is primarily exposed to interest rate risk from its borrowings (note 12 to the financial statements). The Company mitigates this risk by ensuring that the majority of its borrowings are at fixed interest rates from a related party.

Furukawa Metal (Thailand) Public Company Limited

Notes to the financial statements

For the year ended 31 December 2018

The effective interest rates of interest-bearing financial liabilities as at 31 December and the periods in which those liabilities mature or re-price were as follows:

	Effective interest rates (% per annum)	Within 1 year	After 1 year but within 5 years (in thousand Baht)	Total
2018				
Current				
Loans payable - Related party	1.75	564,405	-	564,405
Total		564,405	-	564,405
2017				
Current				
Loans payable - Related party	1.50	725,089	-	725,089
Total		725,089	-	725,089

Foreign currency risk

The Company is exposed to foreign currency risk relating to purchases and sales which are denominated in foreign currencies. The Company primarily utilizes forward exchange contracts with maturities of less than one year to hedge such financial assets and liabilities denominated in foreign currencies. The forward exchange contracts entered into at the reporting date also relate to anticipated purchases and sales, denominated in foreign currencies, for the subsequent period.

At 31 December, the Company was exposed to foreign currency risk in respect of financial assets and liabilities denominated in the following currencies:

	2018 (in thousand Baht)	2017 (in thousand Baht)
United States Dollars		
Trade accounts receivable	198,347	184,520
Trade accounts payable	(482,485)	(503,379)
Other payables	(9,215)	(1,983)
Gross statement of financial position exposure	(293,353)	(320,842)
Estimated forecast purchases	(217,599)	(147,480)
Gross exposure	(510,952)	(468,322)
Currency forwards purchase	670,055	365,385
Currency forwards sales	(84,122)	(50,101)
Net exposure	74,981	(153,038)
Japanese Yen		
Trade accounts receivable	9,041	8,811
Trade accounts payable	(25,245)	(61)
Other payables	(123)	(4,008)
Gross statement of financial position exposure	(16,327)	4,742
Currency forwards purchase	16,643	-
Currency forwards sales	(9,119)	(2,439)
Net exposure	(8,803)	2,303

Furukawa Metal (Thailand) Public Company Limited**Notes to the financial statements****For the year ended 31 December 2018**

	2018	2017
	<i>(in thousand Baht)</i>	
Euro		
Trade account payable	(706)	-
Net exposure	(706)	-

Credit risk

Credit risk is the potential financial loss resulting from the failure of a customer or counterparty to settle its financial and contractual obligations to the Company as and when they fall due.

Management has a credit policy in place and the exposure to credit risk is monitored on an ongoing basis. Credit evaluations are performed on all customers requiring credit over a certain amount. The maximum exposure to credit risk is represented by the carrying amount of each financial asset in the statement of financial position. However, due to the large number of parties comprising the Company's customer base, Management does not anticipate material losses from its debt collection.

Liquidity risk

The Company monitors its liquidity risk and maintains a level of cash and cash equivalents deemed adequate by management to finance the Company's operations and to mitigate the effects of fluctuations in cash flows.

Carrying amount and fair values

The following table shows the carrying amounts and fair values of financial assets and financial liabilities, including their levels in the fair value hierarchy. It does not include fair value information for financial assets and financial liabilities not measured at fair value if the carrying amount is a reasonable approximation of fair value.

	Carrying amount	Fair value			Total
		Level 1	Level 2	Level 3	
		<i>(in thousand Baht)</i>			
31 December 2018					
<i>Financial asset and financial liabilities not measured at fair value</i>					
Currency forward contracts					
Liabilities	-	-	(7,667)	-	(7,667)
Copper future contracts	-	-	(52,532)	-	(52,532)
31 December 2017					
<i>Financial asset and financial liabilities not measured at fair value</i>					
Currency forward contracts					
Liabilities	-	-	(5,357)	-	(5,357)
Copper future contracts	-	-	5,248	-	5,248

Furukawa Metal (Thailand) Public Company Limited
Notes to the financial statements
For the year ended 31 December 2018

Financial instruments not measured at fair value

Type	Valuation technique
Forward exchange contracts	<i>Forward pricing:</i> The fair value is determined using quoted forward exchange rates at the reporting date and present value calculations based on high credit quality yield curves in the respective currencies.
Copper future contract	<i>Market comparison technique:</i> The fair value is determined using broker quoted. Similar contracts are traded in an active market and the quotes reflect the actual transactions on similar instruments.

28 Commitments with non-related parties

	2018	2017
	<i>(in thousand Baht)</i>	
<i>Future minimum lease payments under non-cancellable operating lease commitments</i>		
Within one year	3,952	6,276
After one year but within five years	755	3,218
Total	4,707	9,494
<i>Other commitments</i>		
Purchase orders for raw materials	124,004	54,096
Bank guarantees for electricity use	13,369	13,369
Total	137,373	67,465

Lease and service agreements

As at 31 December 2018, the Company had lease agreements covering office premise and related service, vehicle and equipment for periods of 3 years up to 2021.

Forward contracts

As at 31 December 2018, the Company had outstanding sale forward contracts amounting to U.S. Dollars 2.6 million and Yen 31.3 million, equivalent to Baht 93.2 million (2017: U.S. Dollars 1.5 million and Yen 8.5 million, equivalent to Baht 52.5 million). The contracts will be due during January to May 2019.

As at 31 December 2018, the Company had outstanding purchase forward contracts amounting to U.S. Dollars 20.5 million and Yen 56.6 million, equivalent to Baht 686.7 million (2017: U.S. Dollars 11.1 million, equivalent to Baht 365.4 million). The contracts will be due during January to September 2019.

29 Events after the reporting period

At the Board of Directors' meeting held on 22 February 2019, the directors resolved to propose the dividend payment at Baht 1.625 per share. The dividend payment shall be approved by its shareholders at the annual general meeting of the shareholders.

Furukawa Metal (Thailand) Public Company Limited

Notes to the financial statements

For the year ended 31 December 2018

30 Thai Financial Reporting Standards (TFRS) not yet adopted

A number of new and revised TFRS which relevant to the Company's operations are expected to have significant impact on the financial statements on the date of initial application. Those TFRS become effective for annual financial reporting periods beginning on or after 1 January of the following years.

TFRS	Topic	Effective
TFRS 7*	Financial Instruments: Disclosures	2020
TFRS 9*	Financial Instruments	2020
TFRS 15	Revenue from Contracts with Customers	2019
TAS 32*	Financial Instruments: Presentation	2020
TFRIC 19*	Extinguishing Financial Liabilities with Equity Instruments	2020

* TFRS - Financial instruments standards

(a) TFRS 15 Revenue from Contracts with Customers

TFRS 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognised. Revenue should be recognised when (or as) an entity transfers control over goods or services to a customer, measured at the amount to which the entity expects to be entitled.

The Company has made a preliminary assessment of the potential impact of adopting and initially applying TFRS 15 on the financial statements. These changes have no material effect on the financial statements in the period of initial application.

(b) TFRS - Financial instruments standards

These TFRS establish requirements related to definition, recognition, measurement, impairment and derecognition of financial assets and financial liabilities, including accounting for derivatives and hedge accounting.

Management is presently considering the potential impact of adopting and initially applying TFRS - Financial instruments standards on the financial statements.



บริษัท ฟุรุคาวา เมทัล (ไทยแลนด์) จำกัด (มหาชน)
FURUKAWA METAL (THAILAND) PUBLIC COMPANY LIMITED

สำนักงานกรุงเทพฯ / Bangkok Office

183 อาคารริเจนต์เฮาส์ ชั้น 14
ถนนราชดำริห์ แขวงลุมพินี เขตปทุมวัน
กรุงเทพมหานคร 10330
โทรศัพท์ 0-2256-0641-50
โทรสาร 0-2256-0651-2

183 Regent House Building, 14 Floor,
Rajdamri Road, Lumpini, Pathumwan,
Bangkok 10330
Tel. 0-2256-0641-50
Fax. 0-2256-0651-2

ที่ตั้งโรงงาน / Factory Location

213 หมู่ 4 ถนนมิตรภาพ
ตำบลห้วยขวาง อำเภอแก่งคอย
จังหวัดสระบุรี 18260
โทรศัพท์ (036) 329-811-9
โทรสาร (036) 329-822

213 Moo 4, Mittraparb Road
Tambol Tub-Kwang, Amphur Kaeng Khoi,
Saraburi Province 18260
Tel. (036) 329-811-9
Fax. (036) 329-822