



The World's Leading Lime Producer

ANNUAL REPORT

2019



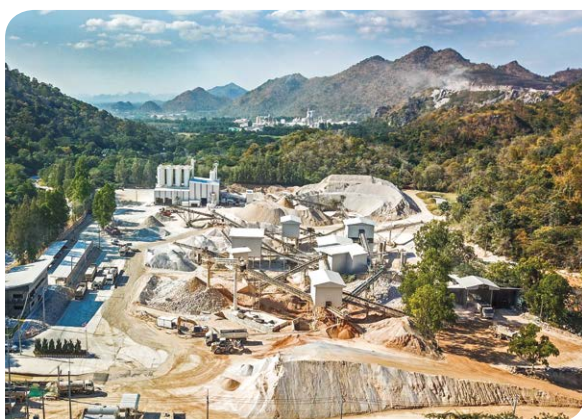
www.chememan.com



Operations - Thailand



Tubkwang Quarry
Saraburi Province



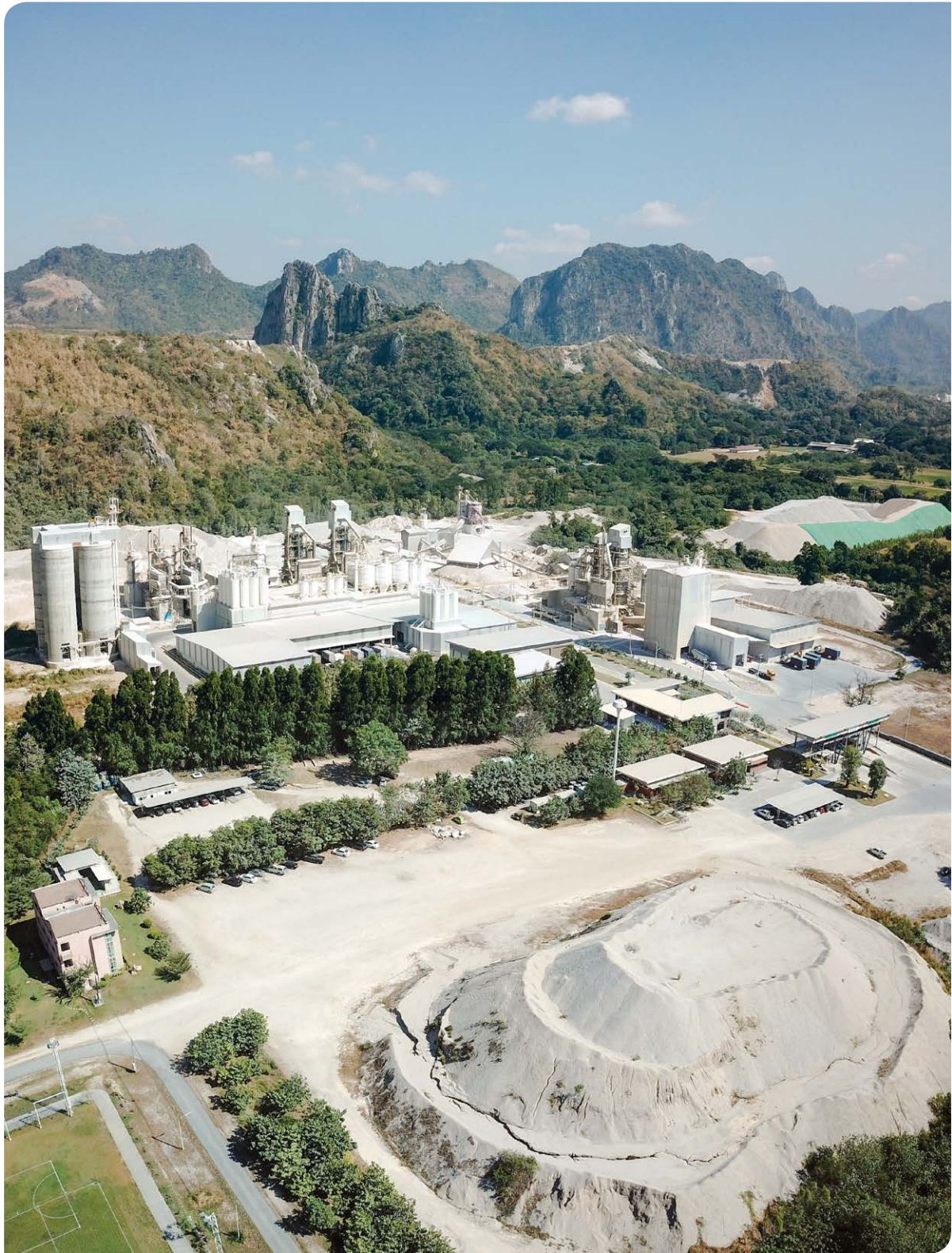
Tubkwang Crushing Plant
Saraburi Province



Prabuddhabaht Plant
Saraburi Province



Rayong Plant
Rayong Province



Kangkoi Plant
Saraburi Province

Operations - Vietnam



Hoanh Bo Quarry

Halong City, Quang Ninh Province



Ha Long QN Lime Plant

Quang Ninh Province

Operations - Australia and India



Henderson Distribution Center
Western Australia



Kalgoorlie Distribution Center
Western Australia



Easternbulk Lime Products Private Limited
Tuticorin, India

Table of Contents

Vision, Mission and Business Goals	010
Financial Highlights	012
Message from Chairman of the Board of Directors	014
Message from Chief Executive Officer	016
Board of Directors	018
Management Team	020
Profiles of the Directors and Management Team	022
Company Information	035
Business Overview	036
Business Scope	040
Risk Factors	053
Other Important Information	058
Dividend Policy	066
Shareholders	067
Management Structure	068
Corporate Governance	074
Corporate Social Responsibility	085
Internal Control and Risk Management	093
Connected Transactions	096
Report on the Board of Directors' Responsibilities for the Financial Statements	101
The Audit Committee's Report	102
Management's Discussion and Analysis	104
The Auditors' Report and Consolidated Financial Statements	110

Investors can find further information of Chememan Public Company Limited from the Annual Registration Statement (Form 56-1) which has been disclosed at www.sec.or.th or www.chememan.com



QUICKLIME
PRODUCT OF THAILAND

www.chememan.com





Vision

Chememan Public Company Limited aims at achieving lime capacity of more than 2,000,000 TPY by 2025 to become a world-class leader in lime industry by conducting business with good governance that provides sustainability for all concerned parties.



Mission



- Promote cost optimization in areas of production and logistics to enhance company's competitiveness



- Grow business using sustainability development principles with good governance



- Deploy advanced automation and technologies to increase work efficiency. Build a digital culture to achieve operational excellence in the organization



- Adopt agile ways of working. Be adaptive to changes, foster collaboration and professional skill sets for all employees



- Develop and innovate new products and services that match customers' needs. Continuously pursue vertical and horizontal expansion both domestically and internationally.

Business Goals



To become the world's leader
in the lime industry



To be continuously
profitable



To promote sustainable
growth and development



Our Core Values

C



Courage
กล้าหาญ

H



Harmony
สามัคคี

E



Energy
พลังกาย-ใจ

M



Mentality
สติปัญญา

E

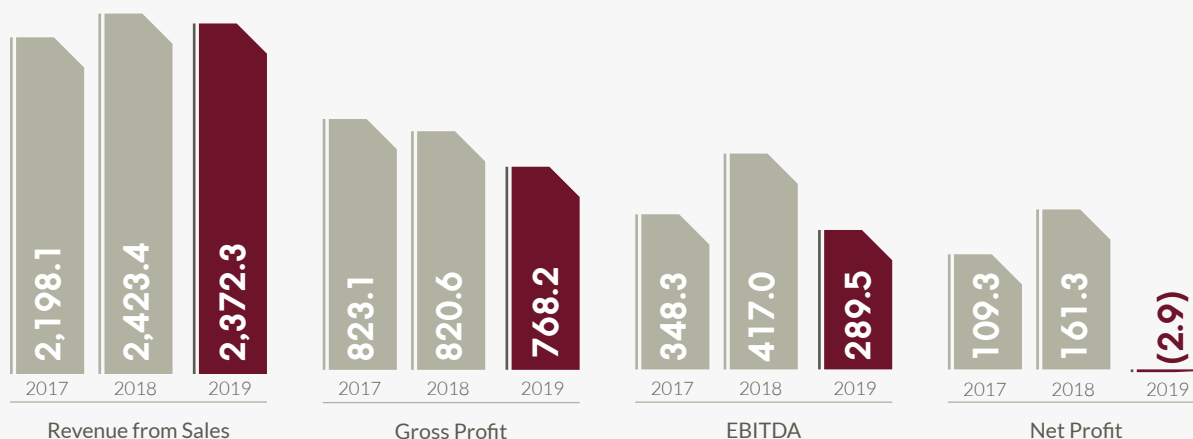


Equilibrium
สมดุล

Financial Highlights

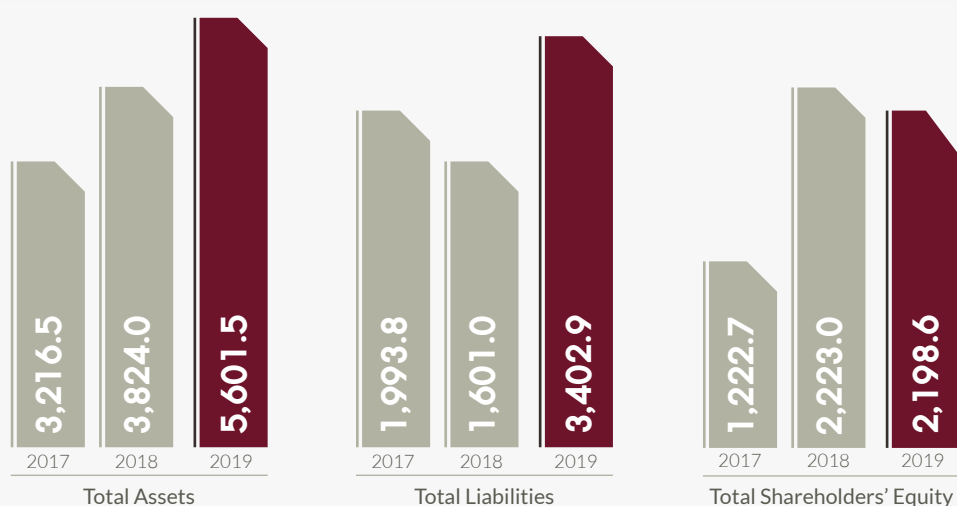
Statement of Comprehensive Income

Million Baht

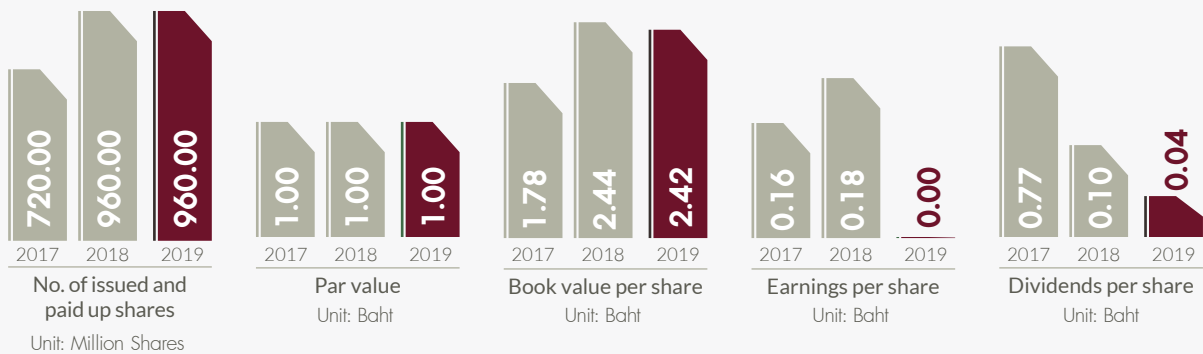


Statement of Financial Position

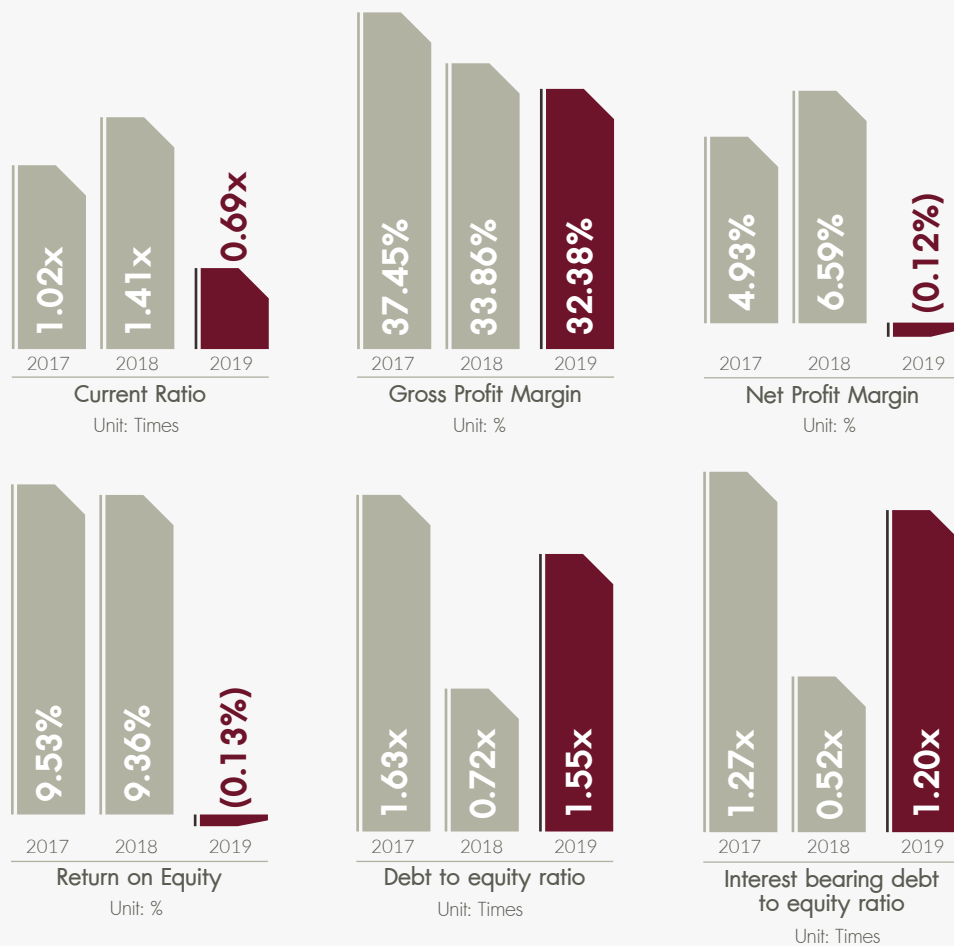
Million Baht



Information on Ordinary Shares



Financial Ratios





The lime business is
a long-term business,
so as significant investments
are being made,
proof of success will come a
few years down the road
after improvements and
greater economies of
scale are done in our
new businesses.

Message from Chairman of the Board of Directors

During 2019, businesses throughout the world faced numerous uncertainties and challenges, including the trade war between the United States of America and China, volatile crude oil prices, natural disasters, etc., which resulted in a global economic slowdown. Our Thai economy was seriously impacted and achieved lower than expected growth rates, as a result of investment slowdown and a stronger Thai Baht against other major currencies, which resulted in lower export values. As our Thai economy slowed down, consumer behaviour became more conservative, thereby lowering discretionary spending.

However, the Thai Government approved various measures to promote investments and increase domestic consumption to support the Thai economy, and relaxed exchange control rules to reverse the strength of the Thai Baht. Other measures included reducing the policy interest rate and increasing Government infrastructure investment.

It should be no surprise that 2019 was a challenging year for CMAN. Despite the fact that the majority of our production is exported, CMAN managed to remain a leader in the lime industry and operated our business in accordance with our long-term strategic plan. CMAN's hard fought strategy is to develop a strong and highly competitive regional platform across many countries, and everyone is working hard to achieve this objective. The lime business is a long-term business, so as significant investments are being made, proof of success will come a few years down the road after improvements and greater economies of scale are done in our new businesses.

Being a full-scale lime producer in Thailand and Vietnam and joint-venture partners in two lime production plants in India, CMAN now has total production capacity of more than 1 million tons a year. Customers can be assured that their required volumes can be met. Moreover, lime is a basic essential chemical used in various industries, thus lowering customer concentration risk both locally and internationally. CMAN is now selling its products to more companies and countries than ever before, which is driven by our reputation for high quality and service. Our business approach will ensure long-term growth and stability.

To ensure proper balance and sustainability, CMAN conducts our business using good corporate governance principles, is fair to all stakeholders, and focuses on efficient use of resources, while considering the overall impacts to society and the environment. The Company regularly organizes activities involving the surrounding communities to include them in our sustainable growth plans.

On behalf of the Board of Directors, I would like to express my sincere gratitude to all shareholders, stakeholders, management team and employees for your continued trust and support. I assure you that we will perform our duties to the best of our abilities, while considering benefits of all stakeholders, to drive our business towards greater prosperity and sustainability.



M.L. Chandchutha Chandratat
Chairman of the Board of Directors



CMAN still determines to improve the production ability to move further toward being the world's leading lime producer with installed production capacity of 2 million tons per year within 2025.

Message from Chief Executive Officer

2019 marked the year of significant progress for CMAN. With successful achievement in reaching the lime production capacity expansion goal of 1 million tons per year ahead of schedule, CMAN stepped up as a leading industry player among the top 10 lime producers globally. Notwithstanding the achievement, CMAN still determines to improve the production ability to move further toward being the world's leading lime producer with installed production capacity of 2 million tons per year within 2025.

Throughout the year 2019, CMAN continually expands horizontally and vertically, both in Thailand and overseas. At the end of 2019, CMAN has successfully acquired 80% stake in Ha Long QN Lime Co., Ltd ("HLL") located in Halong City, Quang Ninh province. HLL, who is a lime producer with the highest production capacity in Vietnam, has owned a limestone quarry located nearby. This acquisition helps strengthen and broaden our production network, enables CMAN to efficiently serve the needs of various customers and benefit the logistic management by reducing the cost of transportation to customers in neighboring areas. Moreover, Easternbulk Lime Products Private Limited, a joint venture located in Tuticorin, India, has commenced commercial operation in July 2019, while Siriman Chemicals India Private Limited, another joint venture located in Visakhapatnam, India, has nearly completed construction with commercial operation expected to commence in Q2 2020. Both joint ventures are located near deep water ports, an important factor that will facilitate CMAN in transporting the products to the customers, supporting the efficient expansion of customer bases in the future.

CMAN performance had also been affected by the volatile economic situation in 2019. Sales revenue for the year 2019 dropped by 2.1% from last year with a net loss of Baht 3 million attributed by the Thai Baht appreciation against foreign currencies and the expenses incurred by various investment projects according to the expansion plan. In the efforts to cope with the situation, CMAN has adapted our strategic plan by giving more emphasis to increase the production efficiency with the aim to create economies of scale and to speed up on gaining more customers in new different markets to increase channels for more profitability. Having taken into account of the unstable global situation, CMAN has adjusted the vision and mission statements to best fit the current environment, such as cost optimization in production and logistics, deploying advanced automation and technologies to increase work efficiency, develop and innovate new products and services to meet the needs of the customers instantaneously and to also raise employee potential by building agile workforce with ability to learn new knowledge and constantly working on self-improvement.

As CEO of CMAN, I would like to thank the management team, employees, business partners, customers and all shareholders for constant collaboration and support. I reassure that CMAN will be committed to delivering the society with useful chemicals while developing ourselves towards sustainability amid all changes.



Mr. Adisak Lowjun
Chief Executive Officer

Board of Directors



1.

1. Mr. Suwat Tunlayadechanont
Director and Deputy Chief Executive Officer

2.

2. Mr. Adisak Lowjun
Director and Chief Executive Officer

3.

3. M.L. Chandchutha Chandratat
Chairman of the Board and
Independent Director

4.

4. Mr. Chai Srivikorn
Director

5.

5. Mrs. Rajjaneepen Ungpakorn
Director



6. Mr. Yarnsak Manomaiphiboon
Audit Committee Member and
Independent Director

7. Mr. Suthep Uacherdkul
Director

8. Mr. Charoen Churekanont
Director

9. Ms. Amata Issarangura Na Ayudhaya
Audit Committee Member and
Independent Director

10. Mr. Pornprom Karnchanachari
Chairman of Audit Committee and
Independent Director

Management Team



Mr. Adisak
Lowjun

Director and Chief Executive Officer



Mr. Suwat
Tunlayadechanont

Director and Deputy Chief Executive Officer



Mr. Wutthichai
Tankuranand

Chief Financial Officer



Mr. Apichat
Laochinda

Vice President of
Engineering & Project



Mr. Komgrit
Panom-Upatam

Vice President of
Lime Operations



Mr. Krissanapong
Tatirungsunsook

Vice President of
Mining Operations



Mr. Wanus
Petchruarn

Vice President of
Maintenance



Mr. Boonlert
Thungkatikajonkit

Vice President of
Commercial Market 2



Mr. Panom
Praiyontip

Vice President of
Business Development



Mr. Kamol
Sowattanaskul

Vice President of
Business Development



Mr. Kosol
Pittayaprasertkul

Vice President of
Supply Chain



Mr. Pathomphob
Jainkiatfu

Vice President of
Technology



Ms. Pornphen
Wiwattanadecha

Vice President of
Finance & Accounting



Major General
Nattapond
Kongsompong
(Retired)

Vice President of
Corporate Affairs



Ms. Piengkamol
Kraidej

Vice President of
Human Resources

Profiles of the Directors and Management Team

M.L. Chandchutha Chandratat

Chairman of the Board and Independent Director (since 26 Aug 2016)

Age (years): 53

Education / Training:

1. MBA, University of California at Berkeley, USA
2. Bachelor of Science (Magna Cum Laude) in Economics, University of Minnesota, Twin Cities, USA
3. Director Certification Program (DCP) 70/2006, Thai Institute of Directors Association

Shareholding Percentage (%): 0.58

Family Relationship with other executives: None

Work Experience:

2017 - Present	Chairman and Independent Director	Chememan PLC
2016 - 2017	Chairman of Audit Committee	Chememan PLC
2018 - Present	Director	Singha Europe Co., Ltd.
2017 - Present	Director	Singha International Headquarter Co., Ltd.
2014 - Present	Managing Director	Boonrawd Brewery Co., Ltd.
2014 - Present	Managing Director	Boonrawd Trading International Co., Ltd.
2014 - Present	President and Director	Singha North America, Inc.
2014 - Present	Managing Director	Akin Land Co., Ltd.
2015 - 2017	Managing Director	Singha International Holdings Co., Ltd.
2005 - 2014	President and Chief Executive Officer	Thoresen Thai Agencies PLC
2009 - 2012	Chairman	Unique Mining Services PLC
2007 - 2012	Chairman	Mermaid Maritime PLC
2009 - 2014	Director	UMS Coal Briquette Co., Ltd.
2009 - 2014	Director	UMS Lighter Co., Ltd.
2009 - 2014	Director	UMS Transport Co., Ltd.
2009 - 2014	Director	UMS Port Services Co., Ltd.
2009 - 2014	Director	Baconco Co., Ltd.
2008 - 2014	Director	Soleado Holdings PTE LTD
2007 - 2014	Director	JSSI Holdings, LLC
2005 - 2014	Director	Thoresen & Co. (Bangkok) Ltd. and 46 Thai Shipping Companies
2005 - 2014	Director	Thoresen Shipping and Logistics Limited
2005 - 2014	Director	Chidlom Marine Services & Supplies Limited
2005 - 2014	Director	Fearnleys (Thailand) Limited
2005 - 2014	Director	Gulf Agency Company (Thailand) Limited
2005 - 2014	Director	Thoresen (Indochina) S.A.
2005 - 2014	Director	Thoresen Chartering (HK) Limited
2005 - 2014	Director	Thoresen Shipping Singapore Pte. Ltd.
2005 - 2014	Director	GAC Thoresen Logistics Co., Ltd.

Mr. Adisak Lowjun

Director and Chief Executive Officer

Director position (since 3 Mar 2003), Management position (since 1 Sep 2003)

Age (years): 58

Education / Training:

1. MBA (Finance), University of Texas at Arlington, USA
2. Bachelor of Engineering, Chulalongkorn University
3. Director Certification Program (DCP) 12/2001, Thai Institute of Directors Association
4. Role of the Chairman Program (RCP) 38/2016, Thai Institute of Directors Association

Shareholding Percentage (%): 7.54

Family Relationship with other executives:

Mrs. Rajjaneepen Ungpakorn (Spouse)

Work Experience:

2017 - Present	Director	Chememan PLC
2003 - Present	Chief Executive Officer	Chememan PLC
2003 - 2017	Chairman	Chememan PLC
2019 - Present	Director	CalMix Co., Ltd.
2017 - Present	Director	Easternbulk Lime Products Private Limited
2016 - Present	Director	Siriman Chemicals India Private Limited
2016 - Present	Director	Chememan India Private Ltd.
2015 - Present	Director	Chememan Lao Co., Ltd.
2010 - Present	Director	Northman Co., Ltd.
2008 - Present	Director	Chememan Australia Pty. Ltd.
2004 - Present	Chairman	Tubkwang Co., Ltd.
2003 - Present	Chairman	Buranachart Co., Ltd.
2003 - Present	Chairman	Buranalux Co., Ltd.
2010 - 2018	Director	Chememan International Pte. Ltd.

Mr. Suwat Tunlayadechanont

Director and Deputy Chief Executive Officer

Director position (since 9 Jan 2013), Management position (since 1 Jun 2005)

Age (years): 59

Education / Training:

1. Master of Engineering Administration, The George Washington University, USA
2. Bachelor of Engineering (Mechanical Engineering), Chulalongkorn University
3. Director Certification Program (DCP) 219/2016, Thai Institute of Directors Association

Shareholding Percentage (%): 3.31

Family Relationship with other executives: None

Work Experience:

2013 - Present	Director	Chememan PLC
2005 - Present	Deputy Chief Executive Officer	Chememan PLC
2019 - Present	Director	Ha Long QN Lime Co., Ltd.
2015 - Present	Director	Chememan Lao Co., Ltd.
2008 - Present	Director	Chememan Australia Pty. Ltd.
2004 - Present	Director	Tubkwang Co., Ltd.
2010 - 2018	Director	Chememan International Pte. Ltd.

Mr. Chai Srivikorn

Director (since 3 Sep 2003)

Age (years): 58

Education / Training:

1. MBA (Finance), Sasin Graduate Institute of Business Administration of Chulalongkorn University
2. Bachelor of Engineering (HON), Bradford University, London, England
3. Director Certification Program (DCP) 225/2016, Thai Institute of Directors Association

Shareholding Percentage (%): 31.33

Family Relationship with other executives: None

Work Experience:

2003 - Present	Director	Chememan PLC
2008 - Present	Director	Chememan Australia Pty. Ltd.
2004 - Present	Director	Tubkwang Co., Ltd.
2010 - 2018	Director	Chememan International Pte. Ltd.
2017 - Present	Director	CCM Spirits Co., Ltd.
2016 - Present	Director	CCM Group Co., Ltd.
1991 - Present	Director	Gaysorn Private Equity Co., Ltd.
1981 - Present	Director	Gaysorn Holding Co., Ltd.

Mr. Suthep Uacherdkul

Director (since 3 Sep 2003)

Age (years): 58

Education / Training:

1. MBA, University of Dallas, USA
2. Bachelor of Engineering Chulalongkorn University
3. Director Certification Program (DCP) 226/2016, Thai Institute of Directors Association

Shareholding Percentage (%): 3.92

Family Relationship with other executives: None

Work Experience:

2003 - Present	Director	Chememan PLC
2003 - Present	Director	Buranachart Co., Ltd.
2018 - Present	Managing Director	Hardware King Co., Ltd.
2013 - Present	Director	Subpana Property Co., Ltd.
2009 - Present	Director and Manager	J T Estate Co., Ltd.
2002 - Present	Director	Thanaphumnakorn Co., Ltd.
2002 - Present	Director and Manager	Mastermax Industry Co., Ltd.
1995 - Present	Managing Director	Rayong Mongkolchai Co., Ltd.

Mrs. Rajjaneepen Ungpakorn

Director (since 3 Sep 2003)

Age (years): 54

Education / Training:

1. MBA (Finance), Sasin Graduate Institute of Business Administration of Chulalongkorn University
2. Bachelor of Science in Business Administration and Accountancy, University of the Philippines
3. Director Certification Program (DCP) 224/2016, Thai Institute of Directors Association
4. Director Diploma Examination 2016

Shareholding Percentage (%): 7.54

Family Relationship with other executives:

Mr. Adisak Lowjun (Spouse)

Work Experience:

2003 - Present	Director	Chememan PLC
2008 - Present	Director	Buranalux Co., Ltd.

Mr. Charoen Churekanont

Director (since 3 Mar 2003)

Age (years): 58

Education / Training:

1. Bachelor of Engineering (Mining Engineering) Chulalongkorn University
2. Director Certification Program (DCP) 223/2016, Thai Institute of Directors Association

Shareholding Percentage (%): 4.39

Family Relationship with other executives: None

Work Experience:

2003 - Present	Director	Chememan PLC
2003 - Present	Director	Buranachart Co., Ltd.
2012 - Present	Managing Director	Siriphornjaroen Co., Ltd.
2010 - Present	Managing Director	Pacharapat Development Co., Ltd.
2009 - Present	Managing Director	Pornsirisub Co., Ltd.
2003 - Present	Managing Director	Thanaphumnakorn Co., Ltd.
2002 - Present	Managing Director	Issarapongcharoen Co., Ltd.
2002 - Present	Managing Director	Tiahongha Siripanich Co., Ltd.
1992 - Present	Managing Director	Juriganont Co., Ltd.

Mr. Pornprom Karnchanachari

Chairman of Audit Committee and Independent Director (since 20 Dec 2016)

Age (years): 56

Education / Training:

1. Master of Comparative Law, University of Illinois at Urbana - Champaign, USA
2. Bachelor of Law, Chulalongkorn University
3. Director Accreditation Program (DAP) 141/2017, Thai Institute of Directors Association

Shareholding Percentage (%): None

Family Relationship with other executives: None

Work Experience:

2017 - Present	Chairman of Audit Committee and Independent Director	Chememan PLC
2016 - 2017	Audit Committee and Independent Director	Chememan PLC
1994 - Present	Director	Legal Advisory Council Limited
1994 - 2015	Independent Director	Thonburi Healthcare Group PLC

Ms. Amata Issarangura Na Ayudhaya

Audit Committee Member and Independent Director (since 20 Dec 2016)

Age (years): 52

Education / Training:

1. MBA (Corporate Finance) Golden Gate University, USA
2. Bachelor of Arts (Political Science-Public Finance) Chulalongkorn University
3. Director Accreditation Program (DAP) 137/2017, Thai Institute of Directors Association

Shareholding Percentage (%): 0.02

Family Relationship with other executives: None

Work Experience:

2016 - Present	Audit Committee and Independent Director	Chememan PLC
2010 - 2014	Group Treasury	Thoresen Thai Agencies PLC

Mr. Yarnsak Manomaiphiboon

Audit Committee Member and Independent Director (since 29 Mar 2017)

Age (years): 56

Education / Training:

1. MBA (Finance), Indiana University at Bloomington, USA
2. Bachelor of Engineering, Chulalongkorn University
3. Director Accreditation Program (DAP) 23/2004, Thai Institute of Directors Association
4. Director Certification Program (DCP) 60/2005, Thai Institute of Directors Association

Shareholding Percentage (%): 0.02

Family Relationship with other executives: None

Work Experience:

2017 - Present	Audit Committee and Independent Director	Chememan PLC
2018 - Present	Director	ASCO Business Promotion Co., Ltd.
	Director	National Digital ID Co., Ltd.
2013 - Present	Chairman of Audit Committee and Independent Director	Principal Capital PLC
2012 - Present	Audit Committee, Good Corporate Governance Committee and Independent Director	Sahaviriya Steel Industries PLC
2012 - Present	Secretary General	Association of Thai Securities Companies
2010 - Present	Director and Advisor	Federation of Thai Capital Market Organizations
2014 - 2016	Director and Executive Director	The Krungthep Thanakom Co., Ltd.
2014 - 2016	Chairman of the Board of Directors	Thai Credit Guarantee Corporation (TCG)

Mr. Wutthichai Tankuranand

Chief Financial Officer (since 4 Jan 2017)*

Age (years): 53

Education / Training:

1. MBA, University of Michigan (Ann Arbor), USA
2. Bachelor of Engineering, (Electrical Engineering), Chulalongkorn University
3. Director Accreditation Program (DAP) 103/2013, Thai Institute of Directors Association

Shareholding Percentage (%): 0.06

Family Relationship with other executives: None

Work Experience:

2017 - Jan 2020	Chief Financial Officer	Chememan PLC
2017 - 2018	Director	Chememan International Pte. Ltd.
2018 - Present	Independent Director	Neo Corporate Co., Ltd.
2012 - 2016	Chief Financial Officer	Ratchburi Electricity Generating Holding PCL.
2014 - 2017	Director	Ratch O&M Co., Ltd.
	Director	RICI International Investment Co., Ltd.
2012 - 2017	Chairman of Board	Ratchaburi Alliances Co., Ltd.
2012 - 2017	Director	RH International Corporation Limited
2012 - 2017	Director	RH International (Mauritus) Corporation Limited
2013 - 2017	Director	RH International (Singapore) Corporation Pte. Limited
2013 - 2014	Director	Ban Bueng Power Co., Ltd.
		Eastern IPP Co., Ltd.
		Eastern Power Generation Co., Ltd.
2014	Director	Xe-Pian Xe-Namnoy Power Company Limited
2012 - 2013	Director	Ratch Udom Power Co., Ltd.

* Mr. Wutthichai Tankuranand has resigned from Chief Financial Officer position since 7 January 2020

Mr. Apichat Laochinda

Vice President of Engineering & Project (since 1 Jun 2007)

Age (years): 58

Education / Training:

1. Bachelor of Engineering, (Industrial Engineering), Chulalongkorn University
2. Director Accreditation Program (DAP) 37/2005, Thai Institute of Directors Association

Shareholding Percentage (%): 4.36

Family Relationship with other executives: None

Work Experience:

2007 - Present	Vice President of Engineering & Project	Chememan PLC
2013 - Present	Director	Buranachart Co., Ltd.

Mr. Komgrit Panom-Upatam

Vice President of Lime Operations (since 1 Jun 2006)

Age (years): 55

Education / Training:

1. Bachelor of Engineering (Mechanical Engineering), King Mongkut's University of Technology Thonburi

Shareholding Percentage (%): 0.13

Family Relationship with other executives: None

Work Experience:

2006 - Present	Vice President of Lime Operations	Chememan PLC
2019 - Present	Director	Ha Long QN Lime Co., Ltd.

Mr. Krissanapong Tatirungsunsook

Vice President of Mining Operations (since 10 May 2010)

Age (years): 58

Education / Training:

1. Bachelor of Engineering (Mining Engineering) Chulalongkorn University

Shareholding Percentage (%): 0.25

Family Relationship with other executives: None

Work Experience:

2010 - Present	Vice President of Mining Operations	Chememan PLC
----------------	-------------------------------------	--------------

Mr. Wanus Petchruarn

Vice President of Maintenance (since 1 Aug 2013)

Age (years): 52

Education / Training:

1. MBA (General Management), Ramkhamhaeng University
2. Bachelor of Industrial Technology (Mechanical Engineering), South-East Asia University

Shareholding Percentage (%): 0.13

Family Relationship with other executives: None

Work Experience:

2013 - Present	Vice President of Maintenance	Chememan PLC
1997 - 2013	Central Engineering Service Area Manager	G J Steel PLC

Mr. Boonlert Thungkatikajonkit

Vice President of Commercial Market 2 (since 4 Jan 2016)

Age (years): 59

Education / Training:

1. MBA, Thammasat University
2. Bachelor of Engineering, Chulalongkorn University
3. BBA, Ramkhamhaeng University

Shareholding Percentage (%): 0.05

Family Relationship with other executives: None

Work Experience:

2016 - Present	Vice President of Commercial Market 2	Chememan PLC
1991 - 2014	Country Customer Delivery Leader	Alcatel-Lucent (Thailand) Co., Ltd.

Mr. Panom Praiyontip

Vice President of Business Development (since 1 Feb 2014)

Age (years): 57

Education / Training:

1. MBA, Thammasat University
2. Bachelor of Engineering, Chulalongkorn University

Shareholding Percentage (%): 0.02

Family Relationship with other executives: None

Work Experience:

2014 - Present	Vice President of Business Development	Chememan PLC
2015 - Present	Managing Director	Chememan Lao Co., Ltd.
2007 - 2013	Senior Vice President	Italian-Thai Development PLC

Mr. Kamol Sowattanaskul

Vice President of Business Development (since 1 Jun 2004)

Age (years): 57

Education / Training:

1. MBA, Thammasat University
2. Bachelor of Engineering, Chulalongkorn University
3. Director Certification Program (DCP) 15/2002, Thai Institute of Directors Association

Shareholding Percentage (%): 0.80

Family Relationship with other executives: None

Work Experience:

2004 - Present	Vice President of Business Development	Chememan PLC
2011 - Present	Director	Chememan Australia Pty. Ltd.

Mr. Kosol Pittayaprasertkul

Vice President of Supply Chain (since 1 Sep 2003)

Age (years): 53

Education / Training:

1. MBA, Chulalongkorn University
2. Bachelor of Accounting, Thammasat University

Shareholding Percentage (%): 1.06

Family Relationship with other executives: None

Work Experience:

2003 - Present	Vice President of Supply Chain	Chememan PLC
2004 - Present	Director	Tubkwang Co., Ltd.
2012 - Present	Director	Chememan Australia Pty. Ltd.
2016 - Present	Director	Chememan India Private Ltd.

Mr. Pathomphob Jainkiatfu

Vice President of Technology (since 16 Oct 2003)

Age (years): 58

Education / Training:

1. Master of Engineering (Structural Engineering), Chulalongkorn University
2. Bachelor of Engineering (Civil Engineering), Chulalongkorn University

Shareholding Percentage (%): 0.74

Family Relationship with other executives: None

Work Experience:

2003 - Present	Vice President of Technology	Chememan PLC
2019 - Present	Vice President	CalMix Co., Ltd.

Ms. Pornphen Wiwattanadecha

Vice President of Finance & Accounting (since 1 Aug 2018)

Age (years): 51

Education / Training:

1. MBA, Thammasat University
2. Bachelor of Accounting, Thammasat University
3. Director Accreditation Program (DAP) 14/2004, Thai Institute of Directors Association

Shareholding Percentage (%): None

Family Relationship with other executives: None

Work Experience:

2018 - Present	Vice President of Finance & Accounting	Chememan PLC
2018	Financial Expert, Business Intelligence Center	True Corporation PLC
2003 - 2018	Assistant Director-Finance	True Corporation PLC

Major General Nattapond Kongsompong (Retired)

Vice President of Corporate Affairs (since 2 Oct 2017)

Age (years): 52

Education / Training:

1. MBA (Finance & Marketing), Sasin Graduate Institute of Business Administration of Chulalongkorn University
2. BBA (Information Systems Management), St. Mary's University

Shareholding Percentage (%): 0.02

Family Relationship with other executives: None

Work Experience:

2017 - Present	Vice President of Corporate Affairs	Chememan PLC
1989 - 2017	Government Officer	Ministry of Defence

Ms. Piengkamol Kraidej

Vice President of Human Resources (since 10 Oct 2003)

Age (years): 50

Education / Training:

1. MBA, Southern Illinois University at Carbondale, USA
2. Bachelor of Accounting, Thammasat University
3. Company Secretary Program (CSP) 69/2016, Thai Institute of Directors Association

Shareholding Percentage (%): 1.04

Family Relationship with other executives: None

Work Experience:

2003 - Present	Vice President of Human Resources	Chememan PLC
2018 - 2019	Company Secretary	Chememan PLC

Company Information

1. General Information

Company Name (Thai)	: บริษัท เคมีแมน จำกัด (มหาชน)
Company Name (English)	: Chememan Public Company Limited
Symbol for Trading	: CMAN
Business Characteristics	: Production and distribution of mineral lime and lime derivative chemical products
Company Registration Number	: 0107560000346
Bangkok Office	: 195/11-12 Lake Rajada Office Complex 2, 10th-11th Floor, Rajadapisek Road, Klongtoey Sub-district, Klongtoey District, Bangkok 10110 Phone: 0-2661-9734-8 Fax: 0-2260-9176 Website: www.chememan.com
Branch 1 Prabuddhabaht Plant	: 33/1 Moo 11, Nongkontee-Huaysanjao Road, Huaypawai Sub-district, Prabuddhabaht District, Saraburi 18120 Phone: 036-200-340-1 Fax: 036-200-342
Branch 2 TubKwang Quarry	: 71 Moo 10, Tubkwang Sub-district, Kangkoi District, Saraburi 18260
Branch 3 Kangkoi Plant	: 111 Moo 10 Tubkwang Sub-district, Kangkoi District, Saraburi 18260 Fax 036-670-710
Branch 4 Rayong Plant	: 7/371 Moo 6 map Yang Phon Sub-district, Pluak Daeng District, Rayong 21140 Phone 038-913-683 – 4 Fax 038-913-685
Registered Capital	: Baht 1,000,000,000 (Baht one billion), consisting of 1,000 million ordinary shares at Baht one per share
Issued and Paid-Up Capital	: Baht 960,000,000 (Baht nine hundred sixty million), consisting of 960 million ordinary shares at Baht one per share, as of 31 December 2019
Restriction on Transfer of Shares:	Ordinary shares of the Company can be transferred with no restriction unless it results in foreign ownership to exceed 49% of total paid-up ordinary shares.
2. Share Registrar	: Thailand Securities Depository Co., Ltd. 93 Ratchadaphisek Road, Dindaeng, Bangkok 10400 Phone 0-2009-9999 Fax 0-2009-9991
3. Auditor	: Ms. Sawinee Sawanont (Certified Public Accountant No. 7092) or Ms. Napaporn Sathitthammaporn (Certified Public Accountant No. 7494) PKF Audit (Thailand) Ltd. 98 Sathorn Square Office Tower, 28th Floor, Unit 2812, North Sathorn Road, Silom, Bangrak, Bangkok 10500 Phone 0-2108-1591-6 Fax 0-2108-1599
4. Legal Advisor	: Legal Advisory Council Limited 444 Olympia Thai Tower, Rajadapisek Road, Samsennork, Huaykwang, Bangkok 10310 Phone 0-2512-5938

Business Overview

Chememan Public Company Limited (“Company”) and its subsidiaries (collectively referred to as “Group of Companies”) engage in the production and distribution of Quicklime (Calcium Oxide), Hydrated Lime (Calcium Hydroxide) and Limestone and ground limestone (Calcium Carbonate). The Group of Companies’ total lime production capacity is currently over 1,000,000 tons per year, with customer bases in various industries in Asia, Australia and Africa.

The Company is the only quicklime and hydrated lime (“lime”) producer in Thailand with lime production plants and a concession for industrial mining of limestone (for the cement industry and lime production) at Tubkwang sub-district, Kangkoi district, Saraburi province. The concession is valid for 25 years and will be expired on 23 June 2040. With a mining concession, the Company has its own source of quality limestone for its lime production process. The Group of Companies has 3 lime production plants in Thailand: 1. Kangkoi Plant located at Kangkoi district, Saraburi, 2. Prabuddhabaht Plant located at Prabuddhabaht District, Saraburi and 3. Rayong Plant located at Pluak Daeng district, Rayong, 1 lime production plant in Vietnam: Ha Long Lime Plant located in Halong City, Quang Ninh Province and another 2 lime production plants in India: 1. Easternbulk Lime Plant located in Tuticorin has commenced commercial operation in July 2019 and 2. Siriman Chemicals Plant located in Visakhapatnam is under construction and expected to commence operation within Q2 2019.

The Group of Companies has grown into one of the leading producers of lime and lime derivative chemical products in Thailand and throughout Asia. This is through being able to deliver products and services to fulfill customers’ requirements, producing well-qualified products as a result of possessing raw materials with excellent quality, having efficient production and management system and employing experienced and expert personnel in the lime industry.



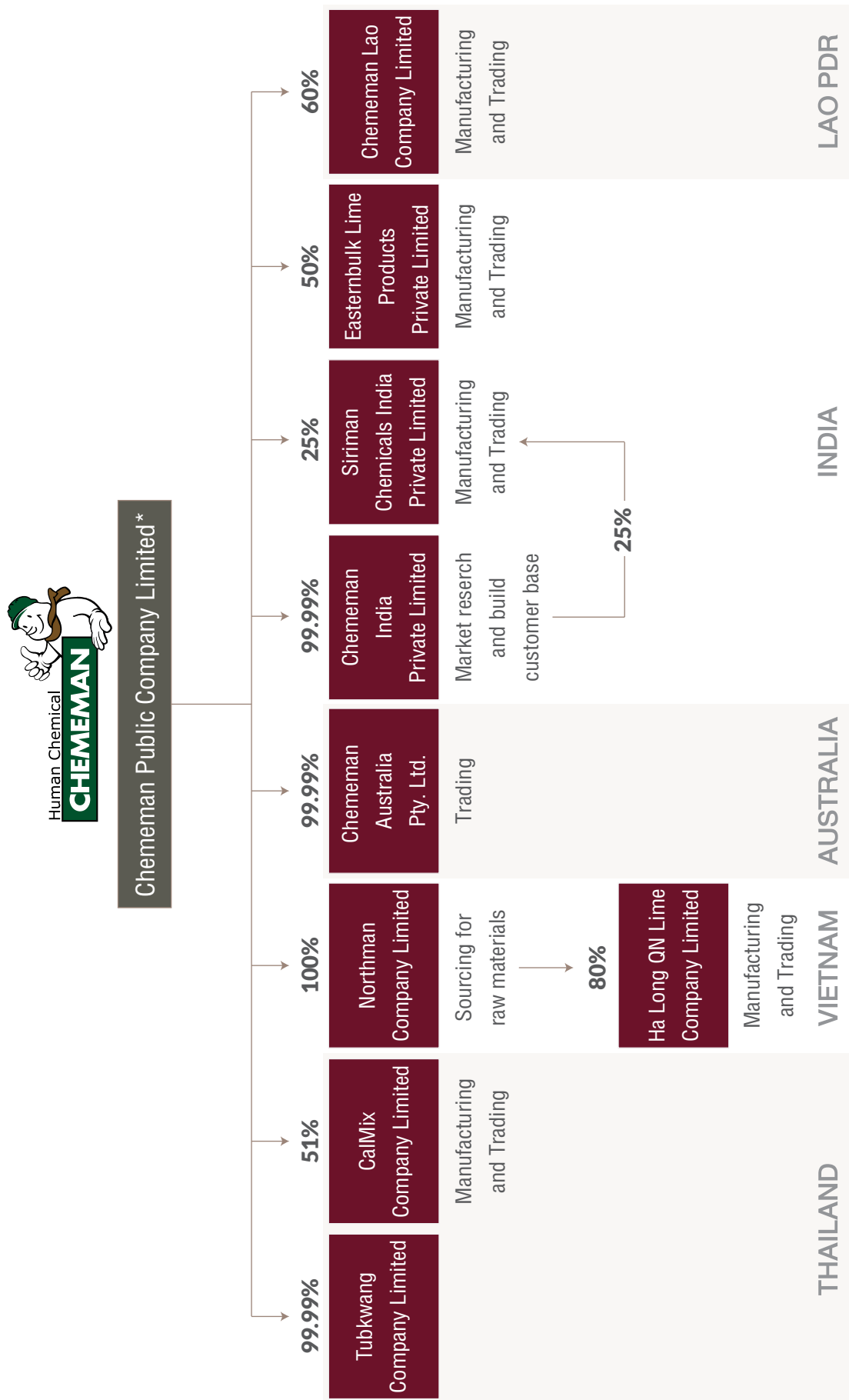
Significant Changes and Developments

Summary of significant changes and developments of the Group of Companies in the past 3 years are as follows:

Details	
2017	<ul style="list-style-type: none"> - Increased capital from Baht 650 million to Baht 720 million by raising Baht 70 million from existing shareholders. - Entered into a joint venture to establish Easternbulk Lime Products Private Limited, holding 50% stake in the company to construct a production plant and sell lime and limestone at Tuticorin, India. - Transformed to a public limited company on 10 August 2017
2018	<ul style="list-style-type: none"> - Quicklime kiln (KK6) with installed capacity of 109,500¹ tons per year commenced commercial operations in January 2018. - Granted approval from The Securities and Exchange Commission to issue an Initial Public Offering (IPO) of 240,000,000 shares. - Issued an IPO of 240,000,000 shares from 14 to 16 March 2018, raising the Company's paid-up capital from Baht 720 million to Baht 960 million, consisting of 960 million ordinary shares at Baht 1 per share. - The Company's ordinary shares were listed on the Stock Exchange of Thailand on 21 March 2018. - Financial restructuring with a financial institution in the third quarter of 2018, to replace existing loan and reduce financial costs.
2019	<ul style="list-style-type: none"> - Quicklime kiln (KK4) with installed capacity of 73,000 tons per year commenced commercial operations in January 2019. - Entered into a joint venture with 2 German partners namely BERGMANN KALK HOLDING GmbH and KALKWERKE H. OETELSHOFEN GmbH & Co. KG, to establish CalMix Co., Ltd. in Thailand to develop, manufacture and distribute construction materials in Thailand and to other countries in Southeast Asia. The Company is holding 51% stake in the joint venture. - Easternbulk Lime Products Private Limited, a joint venture in India, had completed the construction of its production plant and had commenced commercial operations in July 2019. - The Board of Directors Meeting No. 8/2019, held on 30 September 2019, had resolved to approve the dissolution of Tubkwang Company Limited, a non-active subsidiary. - Purchasing 80 percent portion of capital contribution in HA LONG QN LIME COMPANY LIMITED - a lime producer in Vietnam with limestone mining concession. The aim of such investment was to expand the production base to appropriate location to support the customer base expansion and to increase the distribution center, enabling effective logistics management.

Remark: ¹ Installed capacity of KK6 quicklime kiln has been increased to 113,150 tons per year in 2018

Shareholding Structure of the Group of Companies as of 31 December 2019



* Listed on Stock Exchange of Thailand

** Currently on liquidation process

Company	Country	Paid-up Capital ¹ (Million Baht)	Percentage Holding	Year Established	Business Characteristics
1 Tubkwang Company Limited	Thailand	1.88	99.99	2004	On liquidation process
2 CalMix Company Limited	Thailand	30.60	51.00	2019	Produce and distribute construction materials
3 Northman Company Limited	Vietnam	553.84	100.00	2010	Source raw materials, conduct market research and build customer base in Vietnam, including evaluate quality of products sourced in Vietnam
4 Ha Long QN Lime Company Limited	Vietnam	454.91	80.00	2019 ²	Produce and distribute lime and limestone
5 Chememan Australia Pty. Ltd.	Australia	95.67	99.99	2008	Distribute lime and limestone
6 Chememan India Private Limited	India	85.30	99.99	2016	Conduct market research and build customer base in India
7 Siriman Chemicals India Private Limited	India	61.30	50.00	2016 ²	Produce and distribute lime and limestone
8 Easternbulk Lime Products Private Limited	India	137.59	50.00	2017 ²	Produce and distribute lime and limestone
9 Chememan Lao Company Limited	Lao PDR	10.74	60.00	2015 ²	Produce and distribute lime and limestone

Remarks: ¹ Paid-up capital portion of Group of Companies

² Year that Group of Companies entered into Joint Venture Agreement

Business Scope

In 2019, the main business strategies of the Group of Companies were to (1) diversify market portfolio to various industries in order to lower risk of customer concentration; (2) work with customers to develop and deliver products according to customers' requirements which would enable them to increase their productivity, reduce costs and negative impacts on the environment; and (3) expand production bases both in Thailand and overseas to increase customer base and customer confidence, especially major customers, in the Company's continual production and delivery capability. The Company increased its production capacity of quicklime at Kangkoi Plant by constructing an additional quicklime kiln with installed capacity of 73,000 tons per year. The kiln has commenced commercial operations in January 2019, serving mainly the customers in Construction Materials Industry. The Company also invested in the construction of warehouse and super silos at Kangkoi Plant to support the increase in production capacity of quicklime.

For overseas operations, the Company invested in Easternbulk Lime Products Private Limited and Siriman Chemicals India Private Limited, with 50-percent stake in each. At present, Easternbulk Lime Products Private Limited has commenced commercial operations since July 2019, while Siriman Chemicals India Private Limited is still under construction and is expected to commence operations by second quarter of 2020. Both operation bases are located near Tuticorin and Visakhapatnam ports on the southern and eastern parts of India respectively. They are set up to distribute limestone and lime products to customers in India, where lime demand is increasing every year.

In addition, in November 2019, the Company has invested in limestone quarry and lime production plant by acquiring 80-percent portion of the capital contribution in Ha Long QN Lime Company Limited which is located in Halong City, Quang Ninh Province. The investment will support the expansion of customer bases in East Asia such as China, South Korea, Japan and Taiwan.

For operating performance of the year 2019, The Group of Companies generated sales revenue amounting to Baht 2,372 million, decreased by 2.1% when compared with 2018. The decline was caused mainly by lower international sales revenue following the impact of baht appreciation against foreign currencies, while the domestic sales revenue increased slightly. In 2019, the percentage of revenue from sales of quicklime, hydrated lime and limestone and ground limestone to total revenue were 75.4%, 11.0% and 12.5% respectively. Other income comprised of sales of by-products, such as crushed rocks and stone waste etc., which accounted for 1.1% of total revenue.

Breakdown of the Company's revenue by product type is as follows:

Revenue	2017		2018		2019	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
1) Quicklime	1,605.0	72.5	1,821.7	74.5	1,809.1	75.4
Domestic	642.1	29.0	646.9	26.5	573.6	23.9
International	962.9	43.5	1,174.8	48.0	1,235.5	51.5
2) Hydrated Lime	376.6	17.0	390.7	16.0	263.8	11.0
Domestic	78.9	3.6	113.0	4.6	115.7	4.8
International	297.7	13.4	277.7	11.4	148.1	6.2
3) Limestone and Ground Limestone	216.6	9.8	210.9	8.6	299.4	12.5
Domestic	185.1	8.4	199.1	8.1	272.1	11.3
International	31.5	1.4	11.8	0.5	27.3	1.1
4) Total Sale Revenue	2,198.1	99.2	2,423.4	99.1	2,372.3	98.9
5) Other Income	17.1	0.8	22.1	0.9	25.7	1.1
6) Total Revenue	2,215.2	100.0	2,445.5	100.0	2,398.0	100.0



Product Characteristics

The Group of Companies produces and sells Quicklime or Calcium Oxide (CaO), Hydrated Lime or Calcium Hydroxide (Ca(OH)_2) and Limestone and Ground Limestone or Calcium Carbonate (CaCO_3) under the trademark of “CHEMEMAN”



“CHEMEMAN” Trademark



Quicklime

Quicklime or Calcium Oxide (chemical formula CaO) is made through the thermal decomposition of limestone mined from the quarry. The Group of Companies' quicklime is of high quality with high calcium oxide content and low impurities. Its physical appearance is solid, white and in different sizes according to the customers' requirements from different industries.

Hydrated Lime

Hydrated Lime or Calcium Hydroxide (chemical formula Ca(OH)_2) is obtained by mixing quicklime and water in appropriate proportion through a hydrator. Its physical appearance is in fine powder form and white in color similar to flour.





Limestone and Ground Limestone

Limestone or Calcium Carbonate (chemical formula CaCO_3) is a product derived from open-cast mining at Tubkwang Quarry and Halong Lime Quarry – the sources of limestone with high calcium carbonate content. The ultra-high calcium limestone is of high demand in various industries which require products of high calcium carbonate content at different physical sizes.

The 3 products are essential basic chemical products used as raw materials or ingredients in production process of various industries as follows:

Industry	Products			Application
	Quicklime	Hydrated Lime	Limestone and Ground Limestone	
1. Ferrous and Non-ferrous Metal Mining Industry	✓	✓		<ul style="list-style-type: none"> Adjust the acidity of wastewater and used as chemical in mineral dressing process.
2. Pulp and Paper Industry	✓		✓	<ul style="list-style-type: none"> Separate chemicals in recovery process of pulp making Mineral dressing for paper production Raw material used in production of Precipitated Calcium Carbonate (PCC)
3. Sugar Industry	✓	✓		<ul style="list-style-type: none"> Remove impurities found in raw sugar and white sugar
4. Bioplastics Industry		✓		<ul style="list-style-type: none"> Component in the fermentation of sugar or tapioca which are the basic ingredients in making bioplastic
5. Iron and Steel Industry	✓		✓	<ul style="list-style-type: none"> Remove minerals and impurities during process of metal smelting and production of high quality steel that uses a furnace
6. Chemical and Petrochemical Industry	✓	✓	✓	<ul style="list-style-type: none"> Ingredient in production of basic chemicals such as soda ash and calcium carbide
7. Agricultural Industry	✓	✓	✓	<ul style="list-style-type: none"> Improve soil quality, adjust soil acidity Neutralize acidity of shrimp farms Added to increase calcium in animal feed

Industry	Products			Application
	Quicklime	Hydrated Lime	Limestone and Ground Limestone	
8. Flue Gas and Water Treatment Industry	✓	✓	✓	<ul style="list-style-type: none"> • Expel sulfur dioxide gas that arises from electric power and waste incineration plants • Aid in the flocculation of small particles of sediments and eliminate or lessen hard water to produce clear water
9. Construction and Construction Materials Industry	✓	✓	✓	<ul style="list-style-type: none"> • Used as raw materials in the manufacturing of cement, autoclaved aerated concrete and other construction materials • Used as ingredient to improve the qualification of plaster/mortar • Adjust soil condition before construction work
10. Glass and Bottle Industry			✓	<ul style="list-style-type: none"> • Remove minerals or impurities in the production of glass, bottle and mirror
11. Specialty Fiber Glass Industry	✓			<ul style="list-style-type: none"> • Ingredient in the production process

Marketing and Competition

Competition Strategies

Producing Products that Meet Customers' Requirements

It is the policy of the Group of Companies to deliver products and services according to customers' requirements through the use of technology from experts with internationally accepted production standards, work closely with customers to fully understand important characteristics of the products that are appropriate for customers in each industry while having a quality control system throughout the production process, from the quality of raw materials, quality inspection during production process to delivery of products. Along with the product distribution, the Company also provides technical solutions such as designing and constructing silos for lime storage on customer's premises, helping to reduce the customer's cost, increase transportation efficiency, rendering the company as an essential part of the customer's supply chain.

Efficient Production Cost Management

The Group of Companies emphasizes on production cost management. With our own limestone quarries, the Group of Companies has advantages in terms of cost and consistent quality control of the main raw materials. Furthermore, the Group of Companies has expanded production capacity to support growing demand of lime and set aside surplus land for further expansion of production plant. These enable the Group

of Companies to continually expand the production capacity, resulting in lower unit cost of production in long term through economies of scale.

Create Satisfaction and Positive New Experiences for Customers

The Group of Companies has a policy of building and maintaining good long-term relationship with customers and assure them in the capability to deliver the products to meet their requirements and timeline. This is through close coordination between the Group of Companies and customers in planning the delivery process and analyzing customers' ordering behaviors and requirements. The Company also emphasizes on sharing product knowledge to allow efficient usage of products by the customers.

Customer Characteristics and Target Customers

The Group of Companies' customers are manufacturers in various industries with main industries being ferrous and non-ferrous metal mining, sugar, and pulp and paper industries. The majority sales revenues are from major customers with long-term contracts, who require stable and reliable supply. For domestic market, the Company focuses on developing customer bases in various different major industries with growing potential or receiving government support. For international markets without supply of high quality limestone, the Company shall focus on exporting products from competitive sources or setting up subsidiary or joint venture to become a distribution center in that particular market. For international markets with supply of high quality limestone, the Company shall invest or form a joint venture with local partner to set up production base for production and distribution of lime products in such market.

Distribution and Distribution Channels

The Group of Companies distributes the products directly to domestic customers and international customers in the countries without presence of the Company's subsidiary or joint venture. The Company sells the products to its subsidiary and joint venture for further distribution to the customers in the countries where the subsidiary and joint venture are located.

For most domestic distribution, the Company delivers products to the customers who are responsible for the transportation cost. As for international distribution, the products are delivered both directly from Thailand and through the subsidiaries and joint ventures that act as overseas distribution centers. The Group of Companies shall wisely plan for the most appropriate transportation in terms of cost and delivery time.

Sales Proportion and Target Market

In 2019, domestic and international sales portion were 66.9% and 33.1% respectively. Sales volume of the products are as follows:

Unit : thousand tons	2017	2018	2019
Domestic - Quicklime	241.9	235.8	202.6
International - Quicklime	240.3	329.9	354.5
Total sales volume - Quicklime	482.2	565.7	557.1
Domestic - Hydrated Lime	24.6	35.9	37.4
International - Hydrated Lime	65.1	62.8	27.3
Total sales volume - Hydrated Lime	89.7	98.7	64.7
Domestic - Limestone and Ground Limestone	482.6	470.5	738.4
International - Limestone and Ground Limestone	84.1	20.6	103.2
Total sales volume - Limestone and Ground Limestone	566.7	491.1	841.6

In 2019, the Group of Companies' major export markets of quicklime were Australia, Papua New Guinea, India, and South Korea, with 88% of total quicklime export volume. While major export markets of hydrated lime were Australia, Philippines, Mozambique, India and Papua New Guinea, with 93% of total hydrated lime export volume. There was no sales transaction to any single customer accounting more than 30% of the annual sales revenue during the year 2017 - 2019.

Competition

Domestic Competition and Future Trends

In 2019, demand for high quality lime increased while overall demand of lime increased slightly, in line with the growth of major industries in the country that use lime, including pulp and paper, sugar, construction and construction materials as well as iron and steel industries. Lime is also an essential raw material for the s-curve industries such as bioplastic industry and power plant.

Competition in the domestic lime market is among local producers as cost of imported lime is higher since lime is heavy and bulky, making transportation cost an important factor and also a barrier to competition for foreign producers. Major domestic lime producers are Chememan Public Company Limited, Suthakan Public Company Limited, Lime Master Company Limited and a few others. Chememan Public Company Limited is the lime producer with largest production capacity in Thailand and Asia, with quicklime and hydrated lime production capacity of over 1,000,000 tons per year. While the Company has own limestone quarry the other domestic lime producers have to purchase limestone from their affiliates or other suppliers with mining concession. In 2019, the Company had the largest quicklime and hydrated lime market share of around 35%.

International Competition and Future Trends

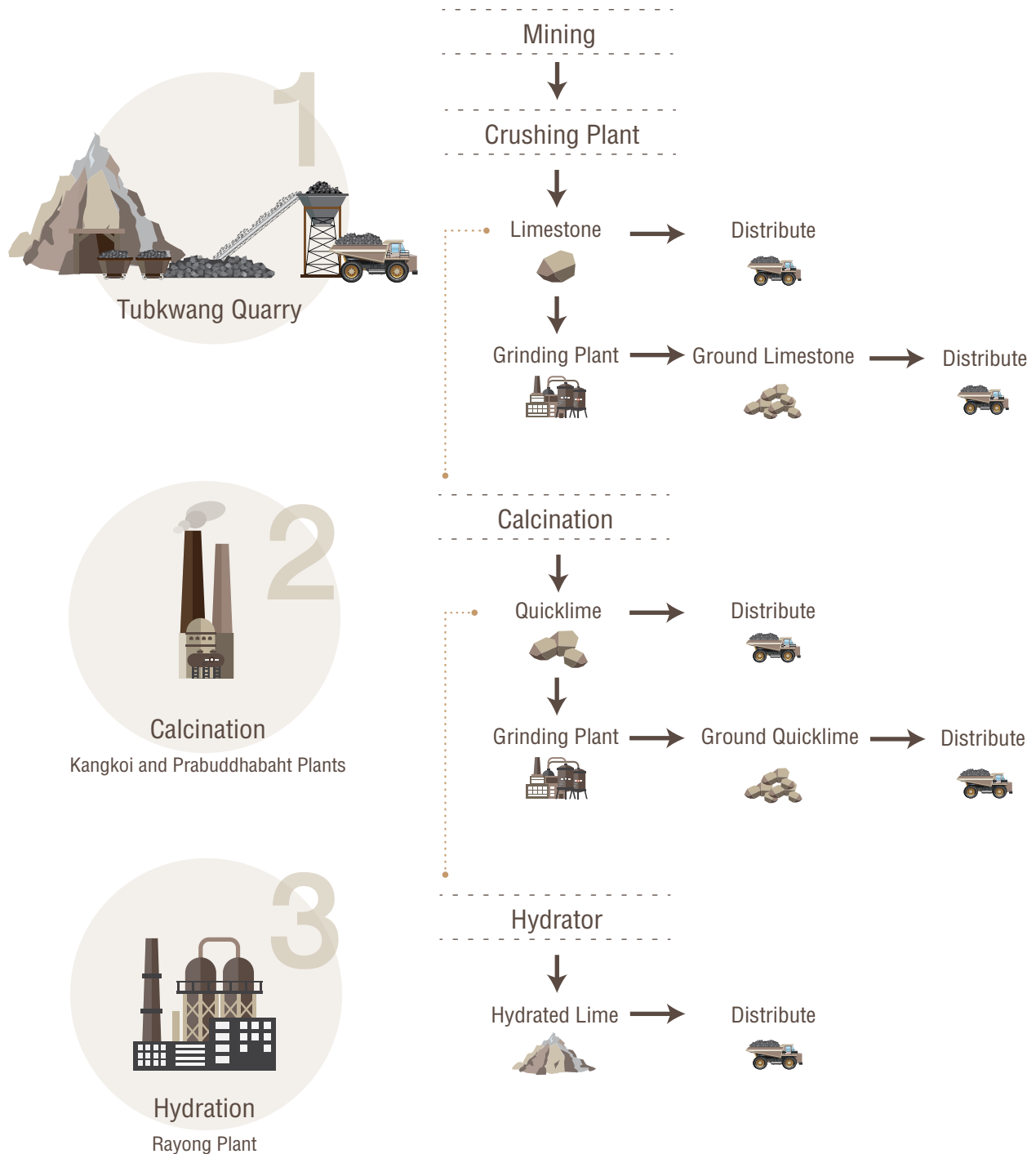
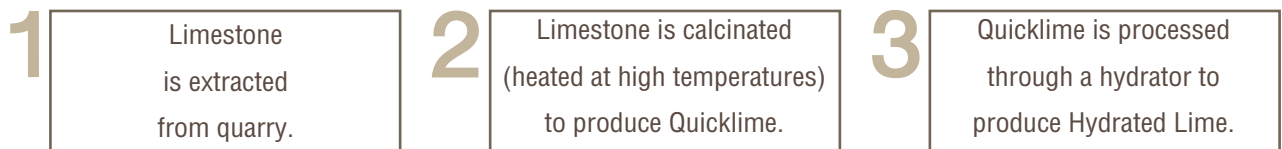
Competitors in international markets include producers from Lao, Vietnam, Malaysia, Indonesia, Australia and Oman. In 2019, there was strong competition in lime market at the target countries as a result of customers' demand for lower costs and increase in lime production by the leading lime producers or the local producers with production bases in the same region with the customers. Nonetheless, with the Company's strategies focusing on developing high quality products and services, providing customer satisfaction as well as assuring them of the capabilities in product delivery, notwithstanding the loss of some customers who turned to purchase from domestic producer, the Group of Companies was able to gain new customers from other regions such as Japan, South Korea and Taiwan for substitutions. Long-term trend of lime demand in the targeted foreign countries is expected to increase along with the growth in major industries that use lime.

Standing Potential and Competitiveness

The Group of Companies has strong competitive edge by possessing its own lime production plant and limestone quarry with high quality limestone as raw materials, enabling continuous production of various products with quality suitable to the requirements of the customers. With large production base, the Group of Companies benefits from economies of scale and building customer confidence in the capability to fulfill large orders. The Group of Companies also recognizes the importance of service and cooperation with customers to efficiently support their work which results in customer satisfaction and trust in doing business with the Group of Companies in the long term.

In 2019, the Group of Companies acquired a lime production plant and a high quality limestone quarry in Vietnam. This transaction helped to improve the competitiveness of the Group of Companies in North Asia market such as Japan, China, Korea and Taiwan, by reducing the overall transportation cost when compared to the lime producers located in South Asia countries such as Malaysia and Indonesia.

LIME PRODUCTION PROCESS



The following are the three steps in the Lime manufacturing process:



Mining to Produce Limestone and Ground Limestone

The mining process begins with drilling exploration to determine the quantity and quality of limestone for further planning of limestone mining and to ensure that the limestone has desired characteristics. Extracted limestone is then transported to the crushing plant to select appropriate sizes needed for quicklime production process. Any inappropriate sizes will be crushed, screened and sold. A portion of limestone from the Company's crushing plant is sold to customers and some portions are ground and sold as ground limestone. Summary of limestone produced from Tubkwang Quarry for the period of 2017 – 2019 was as follows:

		2017	2018	2019
Limestone produced from Tubkwang Quarry	(tons)	1,752,354	2,046,712	1,996,243
Limestone used for production of ground limestone and quicklime	(tons)	1,129,548	1,485,673	1,260,605
Limestone sold without passing through processes of ground limestone and quicklime production	(tons)	622,806	561,039	735,638

Production of Quicklime or Calcium Oxide (CaO)

Limestone that has been screened for proper size from the crushing plant will be transported to quicklime plant. Another size screening will be conducted to ensure appropriate size before sending the limestone into quicklime kiln for calcination until it decomposes to quicklime. The production rate is approximately 1 ton of quicklime per 1.8 tons of limestone used. A portion of quicklime produced will be transported to Rayong Plant for production of hydrated lime. The remaining portion will be stored in silos as inventory for sales. In case that customers require different sizes of quicklime, the quicklime will then be crushed and screened to meet required sales order. Quality control and inspection is done throughout the production process starting from the quicklime produced from the kiln, before storing in the silos and before distribution to customers.

The Company has 2 quicklime production plants in Thailand, as follows:

1) Prabuddhabaht Plant, located in Prabuddhabaht district, Saraburi

Prabuddhabaht Plant consists of 2 gas-fired quicklime kilns which use natural gas as fuel. The total installed production capacity of these 2 kilns are approximately 365,000 tons per year. Yearly capacity utilization of Prabuddhabaht Plant has been summarized as follows:

		Prabuddhabaht Plant		
		2017	2018	2019
PB 1 Quicklime Kiln				
Installed capacity	(tons)	182,500	182,500	182,500
Actual production	(tons)	84,599	134,843	104,169
Capacity utilization rate	(percentage)	46.4	73.9	57.1
PB 2 Quicklime Kiln				
Installed capacity	(tons)	182,500	182,500	182,500
Actual production	(tons)	135,763	26,322	-
Capacity utilization rate	(percentage)	74.4	14.4	-

2) Kangkoi Plant, located in Kangkoi district, Saraburi

Kangkoi Plant consists of 6 coal-fired quicklime kilns which use sub-bituminous coal with low sulphur as fuel. Total installed production capacities of the 6 kilns are approximately 532,900 tons per year. Yearly capacity utilization of Kangkoi Plant for the past 3 years has been summarized as follows:

		Kangkoi Plant		
		2017	2018	2019
KK 1 Quicklime Kiln				
Installed capacity	(tons)	54,750	54,750	54,750
Actual production	(tons)	53,275	40,814	43,146
Capacity utilization rate	(percentage)	97.3	74.6	78.8
KK 2 Quicklime Kiln				
Installed capacity	(tons)	109,500	109,500	109,500
Actual production	(tons)	86,296	104,189	104,554
Capacity utilization rate	(percentage)	78.8	95.2	95.5
KK 3 Quicklime Kiln				
Installed capacity	(tons)	73,000	73,000	73,000
Actual production	(tons)	63,828	63,722	54,437
Capacity utilization rate	(percentage)	87.4	87.3	74.6
KK 4 Quicklime Kiln¹				
Installed capacity	(tons)	-	-	67,200
Actual production	(tons)	-	-	58,427
Capacity utilization rate	(percentage)	-	-	86.9
KK 5 Quicklime Kiln				
Installed capacity	(tons)	109,500	109,500	109,500
Actual production	(tons)	106,945	111,466	110,853
Capacity utilization rate	(percentage)	97.7	101.8	101.2
KK 6 Quicklime Kiln²				
Installed capacity	(tons)	-	105,540 ³	113,150
Actual production	(tons)	-	108,104	109,480
Capacity utilization rate	(percentage)	-	102.4	96.8

Remarks

¹ KK4 Kiln commenced operations on 30 January 2019 with installed capacity of 73,000 tons per year.

² KK6 Kiln commenced operations on 20 January 2018.

³ Installed capacity of KK6 Kiln had been adjusted from 109,500 tons per year to 113,150 tons per year since 11 July 2018.

Production of Hydrated Lime or Calcium Hydroxide (Ca(OH)₂)

A portion of quicklime produced from Kangkoi Plant will be transported to Rayong Plant where it is stored in silos as raw materials. It shall later be processed in a hydrator by mixing with water in proper chemical proportion to produce hydrated lime with specifications according to customers' requirements. The production rate is approximately 1 ton of hydrated lime per 0.76 tons of quicklime used. Quality inspection is done after the hydrated lime is processed and before it is further distributed to customers.

In Thailand, the Company operates 1 hydrated lime plant, Rayong Plant, located in Amata City Industrial Estate, Rayong. Yearly capacity utilization of Rayong Plant for the past 3 years has been summarized as follows:

		Rayong Plant		
		2017	2018	2019
Installed capacity	(tons)	87,600	87,600	87,600
Actual production	(tons)	81,503	83,298	63,637
Capacity utilization rate	(percentage)	93.0	95.1	72.6

Raw Materials Sourcing

Limestone

Limestone, the base raw materials used for production of all lime products, is obtained from Tubkwang Quarry, with the current amount of mineable reserves in the quarry at approximately 100 million tons, which is expected to be sufficient for at least 50 years of lime production.

Fuel

The Company uses natural gas and coal as fuel for quicklime kiln firing at Prabuddhabaht Plant and Kangkoi Plant respectively.

1. The natural gas is supplied by PTT Public Company Limited (PTT) under 10-year supply contract which will be expired in 2029. Summary of natural gas consumption at Prabuddhabaht Plant for the past 3 years is as follows:

		Prabuddhabaht Plant		
		2017	2018	2019
Cost of natural gas	(Million Baht)	256.70	220.75	137.06
Natural gas consumed	(Million BTU)	0.98	0.73	0.48
Cost of natural gas per unit	(Baht per BTU)	262	302	286

2. The Company procures coal from 2 reliable suppliers by considering the best commercial terms and conditions to reduce risk in case one of the suppliers cannot deliver coal on the agreed terms and conditions. However, the price of coal in each transportation cycle may vary depending on the quality of coal such as calorific value, moisture and sulphur content. Summary of yearly coal consumption at Kangkoi Plant for the past 3 years is as follows:

		Kangkoi Plant		
		2017	2018	2019
Cost of coal	(Million Baht)	189.09	233.94	257.58
Coal consumed	(Million Tons)	0.05	0.07	0.07
Cost of coal per unit	(Baht per Ton)	3,677	3,172	3,597

Water for Hydrated Lime Production

Water is an important raw material in the production of hydrated lime at Rayong Plant. Rayong Plant is located in Amata City Industrial Estate on the land purchased from Amata City Company Limited ("Amata City Co., Ltd."). Under the land purchase agreement, Amata City Co., Ltd. or its affiliates shall supply tap water to the Company according to the standards of Provincial Waterworks Authority.

Environmental Impact

The mining and operations of production plants may have adverse impacts on the environment, such as dust that affects air quality and vibration from mining works at the quarry. The Company has to comply with all conditions relating to the environment set out in the addendum to the mining concession, including complying with all requirements under preventive and corrective measures on environmental impacts as well as environmental impact monitoring measures as stated in the Environmental Impact Assessment Report (EIA Report) and as required by the Office of Natural Resources and Environmental Policy, including any other related laws and regulations. The Company has installed the dust collecting system in the production plant which efficiently helps to lower the amount of dust, preventing air pollution or impacts on the health of the plant workers as well as the people in the surrounding communities.

Risk Factors

Risk management is a process that help the Company in pursuing its business objectives and goals. The Company has identified significant risks that may affect the business operation of the Company, and laid down measures to mitigate the risks to an appropriate level. Material risks of the Company are as follows:

1. Business Operation-related Risks

1.1 Risk from revocation of mining concession

The Company has been granted a mining concession No. 27328/16133 for limestone mining (for cement industry and lime production) at Tubkwang Quarry, Tubkwang sub-district, Kangkoi district, Saraburi province. The concession period is valid for 25 years, ending on 23 June 2040. The Company may be at risk of having the concession revoked upon its failure to comply with the conditions stated in the addendum to the concession, and may also be at risk of not being able to extend the concession. Such risks may cause the suspension of mining operation, thus leading to shortage of own raw materials. The Company may then have to source raw materials from other suppliers which is subject to cost fluctuation and inconsistent quality. Nonetheless, the Company managed to obtain the mining concession on the same plot of mining area that the Company used to operate mining. This indicates that the Company is capable of and qualified to operate mining business as well as had strictly complied with all the regulations pertaining to the conditions of the concession.

Moreover, The Company realizes that there may be risks arising from changes in governmental policies, laws and regulations, which may affect the operation of the Company. In this regard, the Company continually study and monitor the changes in governmental policies, laws and related regulations to ensure accurate and timely compliance.

1.2 Raw materials sourcing risk

Limestone is the main raw material for the production of lime products. The resource analysis carried out by GMT Corporation Company Limited as at October 2016 reported an estimation of 115 million tons of mineable limestone reserve at Tubkwang Quarry. This reserve amount is sufficient to support the Company's production plan which requires 45 million tons of limestone over the concession period of 25 years. In the case that the limestone output reaches 45 million tons before the concession expires, the Company is allowed to submit a new mining plan to revise the limestone production volume for the remaining concession period. In addition, the Company reserves the right to apply for a new concession on the same mining area before the expiration of the existing concession. While the Company still holds the concession rights, no other entity can apply for the concession rights on the same mining area indicated on the concession.

Notwithstanding the above, the Company may have a risk of not being able to obtain raw materials on time

or with desired quality resulting from the mining operation at Tubkwang Quarry due to certain risks such as the risk of not being able to obtain raw materials with required quality, risk on technical problems of mining machinery leading to operation interruption as well as risk on incorrect estimation of mineable limestone reserve at each extraction location, which may result in higher costs and affect the Company's performance. To prevent these risks, the Company has coordinated closely with the mining contractor to develop monthly limestone production plan and has detailed and precise quality inspection of limestone right at the quarry face. The Company also maintains a sufficient level of qualified limestone as raw materials inventories for approximately one month of production in case of mining operation interruption. In estimating the quantity of limestone and available mining reserve for mining operation plan, the Company regularly hires experts to conduct detailed geological study at the quarry to identify the precise location, type, quantity and quality of limestone. The Company has never encountered problems relating to the untimely delivery or inadequate sourcing of raw materials for production.

In November 2019, Northman Co., Ltd. – a wholly-owned subsidiary of the Company to invest in Ha Long QN Lime Company Limited in Vietnam, a lime producer and distributor with limestone mining concession at Son Duong Commune, Hoanh Bo District, Quang Ninh Province, Vietnam. The transaction brought the Company another source of high-quality limestone to be used as raw materials in lime production. This investment is in line with the main objective of the Company which is to be the leader in lime industry with the strategy of expanding production bases to appropriate locations both in Thailand and overseas.

1.3 Risk on procuring and price fluctuations of coal and natural gas which are the critical fuel for production

The Company has a yearly coal purchase contract that clearly specifies the agreed price, quality, conditions for price adjustment, delivery time and the delivery guarantee conditions. If the coal is not delivered according to the agreed terms and conditions causing the Company to procure coal from other source at a higher price than the agreed price, the coal supplier shall compensate the price difference to the Company. Moreover, the Company reserves a sufficient level of coal for 2-3 weeks of production to prevent interruption caused by delayed coal delivery or unqualified grade of coal received. The Company also procures coal from several reliable suppliers to mitigate the risk on coal sourcing when any of the suppliers unable to supply the coal to the Company on the agreed quantity, quality and conditions.

The Company has secured a 10-year natural gas supply contract with PTT Public Company Limited ("PTT"), from 2019 through 2029, with specified price, quantity, quality of natural gas and conditions for price adjustment. The contract price of natural gas shall rely on several factors affecting the price such as calorific value of fuel oil, exchange rates and Thailand's Producer Price Index for manufactured products. The Company can predict the magnitude of change in natural gas price by considering the above mentioned factors. The Company has gas pipelines connected from PTT to Prabuddhabaht Plant. In case that PTT could not deliver natural gas to the Company, production at Prabuddhabaht Plant may be interrupted or the Company may incur higher cost of production which adversely affects the performance of the Company. Despite so, the Company has never faced problem of non-delivery from PTT.

1.4 Risk from dependency on only one contractor at Tubkwang Quarry

The Company contracted only one external quarry work contractor with agreement on price and minimum limestone production volume. The contract is valid for 2 years and extendable on a 2-year basis upon mutual agreement. Therefore, the Company is at risk if the contractor could not perform according to the contract which may result in the interruption of operation at Tubkwang Quarry and affect the operating performance of the Company.

The Company realizes the importance of such risk, and has arranged a team of mining engineers and geologists to closely supervise, regulate and monitor the work of the contractor. The Company is also well prepared to look for alternative contractor if the existing contract could not perform their work as agreed. Given the fact that the process complexity of mining is low, replacement of contractor could be done effortlessly.

1.5 Risk from environmental impact and employee safety

The operation of the Company may have impact on the environment, surrounding communities and the safety of its employees. Therefore, the Company recognizes the importance of environmental management by conducting quality inspection of air, noise and industrial waste, adhering to the law and proactively controlling the production process in accordance to health & safety as well as environmental standards. The Company has never been prosecuted or has paid significant legal fines related to environmental pollution. Furthermore, the management and personnel of the Company realize the importance of environmental impact and always follow the environmental rules and regulations. Public relations activities with the surrounding communities are also given priority. The Company constantly organizes activities to provide support towards the development of the communities, as well as listening to and sharing of opinions with the surrounding communities regarding to the business operation, to prevent adverse impact on these communities. .

1.6 Risk relating to human resources management

The Company's business of production and distribution of lime and lime derivative chemical products relies on specialists such as mining exploration team, mining engineering team, geologists who supervise the operations at the quarry face, plant engineers who control the lime production process, marketing team with good relationship with customers as well as management and personnel with knowledge, skills and experience in lime industry. Therefore, the Company gives importance to human resources management and development by promoting a culture of team working, organizing a variety of personnel trainings to boost up their potentials and encouraging the middle level managers to get involved in managerial planning of the Company, emphasizing on employees' job satisfaction and enhancing employees' knowledge and work experiences to lower the risk of relying on any individual. The Company also promotes employees' sense of ownership to build up unity which is the key driver for the Company to achieve its goals.

2. Financial Risks

2.1 Foreign exchange risk

The Company is exposed to foreign exchange risk through revenue denominated in foreign currencies from product exporting, while the Company also has some expenditures denominated in foreign currencies such as fuel cost, purchase of machineries, imported materials and overseas investment. The Company managed the risk by creating natural hedge through using the revenue denominated in foreign currencies to settle the payment of expenditures denominated in the same foreign currencies.

Moreover, the Company closely monitors the exchange rate movements to assess the situations and continually studies the methods of managing foreign exchange risk by consulting with commercial banks for further decision.

2.2 Interest rate risk

The Company faces interest rate risk from long-term loan from financial institution for financing the Company's investment. The rate imposed is a floating rate based on Minimum Loan Rate (MLR) quoted for major prime customers, which will fluctuate according to the monetary policy rate set by the Bank of Thailand. As at 31 December 2019, the balance of interest bearing debt which is the loan from financial institution with floating interest rate was Baht 1,593 million. The Company closely monitors the interest rate trends to manage the volatility of the interest rate to an acceptable level.

2.3 Risk from overseas investment

The Company has operations in foreign countries through its subsidiary in Australia as a distribution center, a subsidiary in Vietnam as a producer and distributor of lime with limestone mining concession at Son Duong Commune, Hoanh Bo District, Quang Ninh Province, Vietnam valid until 11 May 2046, and through two 50%-owned joint ventures in India as producers and distributors of lime products. The operations of the subsidiaries and joint ventures may be affected by the external factors such as economic conditions, political situations, industrial competition, laws and regulations, business taxes and any other changes in the invested countries as well as the exchange rate fluctuation that may affect the structure and have an adverse impact on the Company's investment.

However, the Company has carefully studied and reviewed the risks and returns of each overseas investment project before making investment decision. The Company foresees the demand growth in the countries where the Company invested in, and the partners in such countries are knowledgeable, capable and experienced in operating the businesses.

Moreover, The Company realizes that there may be risks arising from changes in governmental policies, laws and regulations of the countries that the Company has investment, which may affect the operation of the Company. In this regard, the Company continually study and monitor the changes in governmental policies, laws and related regulations to ensure accurate and timely compliance.

3. Management Risk

3.1 Risk from having majority shareholders holding more than a 50-percent stake in the Company

As at 28 August 2019, the group of majority shareholders, being Buranachart Company Limited and its affiliated persons, totally held 59.96 percent of the total paid-up shares of the Company. In this regard, investors may be exposed to a risk from the circumstance in which majority shareholders hold more than 50-percent stake in the Company. This is because the group of majority shareholders may take control of the meeting's resolution which require majority votes, such as appointment of directors. Therefore, retail shareholders may not be able to accumulate sufficient votes to check and balance the agenda proposed by the majority shareholders. However, the Board of Directors focuses on operating the business under the principles of good corporate governance. The Company has provided the opportunity for the retail minority shareholders to propose the Annual General Meeting's agenda and nominate candidates to be selected as directors of the Board prior to the Annual General Meeting of Shareholders. Moreover, with regard to the matters related to major shareholders and transactions that may result in a conflict of interest with the Company, such matters are to be processed in accordance with procedures set forth in the "Connected Transaction Regulation" which strictly follows the legal framework.

3.2 Risk on recruiting and developing top management

As the Company is constantly expanding its business locally and internationally, if it cannot recruit or retain knowledgeable and high potential top management to support the business expansion, it will have a negative impact on the Company's business operation. On realizing such risk, the Company has set up guideline for recruiting and developing top management and personnel management as a principle in the Good Corporate Governance Policy. This is to ensure that the Company has adequate number of knowledgeable and high potential top management to drive it towards its goals.



Other Important Information

Important licenses and contracts related to operations at Tubkwang Quarry, Kangkoi Plant, Prabuddhabaht Plant and Rayong Plant are as follows:

Mining Concession

Document	: Concession No. 27328/16133 (mineral category 5)
Validity	: 24 June 2015 - 23 June 2040
Relevant Parties	: Grantor Ministry of Industry Grantee Chememan Public Company Limited
Details	: The Company has been granted mining rights for industrial mining of limestone (for cement industry and lime production), by open-cast mining method at Tubkwang sub-district, Kangkoi district, Saraburi province on the concession certificate area of 230 rai, 1 ngan, 41 square wah, for 25 years period starting from 24 June 2015 onwards.
Conditions	: 1. Industrial mining of limestone for cement industry and lime production, using open-cast mining method. 2. Start mining within one year from the date on which the concession was granted. 3. Follow the mining safety rules and promote the well-being of workers according to the measures set in the mining project. 4. Restore post-mining landscape in accordance to the measures stated in the mining project. 5. Restore land after mining and mineral dressing activities, simultaneously with mining operations in accordance with measures stated in the mining project. 6. Adhere to the preventive and corrective measures for the environmental impacts and other conditions as set forth by the Natural and Environmental Policy and Planning and the mining project measures. 7. Special contributions to the government as per contract dated 19 September 2016 8. Set a mining buffer zone of not less than 50 meters from public roads.
Preventive and Corrective Measures for Environmental Impact	: To comply with preventive and corrective measures on environmental impacts and measures on environmental quality assessment as approved by the Office of Natural Resources and Environmental Policy and Planning and the Department of Primary Industries and Mines. The mined area, subsequent to the closure of the mine, shall be rehabilitated to a natural state and to decrease the steepness of the landscape to ensure safety and reduce erosion. Fast-growing trees or groundcovers are to be planted on terrace landscape. The reclamation process must be completed at least one month before the expiration of the concession or cessation of operation.

License to Purchase, Possess and Utilize Explosives

Document	: License to purchase, possess and utilize explosives
Validity	: 18 April 2019 - 17 April 2020
Relevant Parties	: Licensor Kangkoi District Office Licensee Chememan Public Company Limited
Details	: Permits the Company to purchase, possess and utilize explosives for its mining operations
Storage Location	: Company's warehouse at Moo 10, Tubkwang sub-district, Kangkoi district, Saraburi province

Permit to Transport Explosives

Document	: Permit to transport explosives
Validity	: 18 April 2019 - 17 April 2020
Relevant Parties	: Licensor Kangkoi District Office Licensee Chememan Public Company Limited
Details	: Permits the Company to transport explosives used in its mining process
Storage Location	: Company's warehouse at Moo 10, Tubkwang sub-district, Kangkoi district, Saraburi province

Arms Possession Permit

Document	: 1) Arms Possession Permit for Ammonium Nitrate (Renewed Permit) 2) Arms Possession Permit for Emulsion Explosives (Renewed Permit) 3) Arms Possession Permit for Detonating Cords (Renewed Permit) 4) Arms Possession Permit for Electric Detonators (Renewed Permit) 5) Arms Possession Permit for Ammonium Nitrate 6) Arms Possession Permit for Emulsion Explosives 7) Arms Possession Permit for Detonating Cords 8) Arms Possession Permit for Electric Detonators
Validity	: 4 July 2019 - 14 May 2020 (Renewed Permit) 18 April 2019 - 17 April 2020
Relevant Parties	: Licensor Ministry of Defense Licensee Chememan Public Company Limited
Details	: Permits the Company to possess the aforesaid arms for use in mining process
Storage Location	: Company's warehouse at Moo 10, Tubkwang sub-district, Kangkoi district, Saraburi province

Forest Utilization Permit

Document	: Forest Utilization Permit
Validity	: 20 January 2017 - 19 January 2027
Relevant Parties	: Licensor Royal Forest Department, Ministry of Environment and Natural Resources Licensee Chememan Public Company Limited
Details	: Permits the Company to utilize a specific forest area for the mining operations as permitted under the mining concession

Contract for Limestone Blasting, Sorting, Breaking and Loading

Document	: Contract for Limestone Blasting, Sorting, Breaking and Loading
Contract Parties	: Contractor Boontanapat Co., Ltd. Employer Chememan Public Company Limited
Contract Period	: 1 December 2016 – 31 December 2020, where the contract parties may agree to extend the contract for successive 2-year period by a written agreement executed not less than 60 days prior to the expiration of the contract.
Details	: Hire the contractor to drill and blast limestone at Tubkwang Quarry, sort sizes of limestone obtained from blasting, break and load the limestone

Mineral Dressing License – Tubkwang Quarry

Document	: Mineral Dressing License
Validity	: 7 December 2019 – 6 December 2024
Relevant Parties	: Licensor Provincial Industry Office Licensee Chememan Public Company Limited
Details	: Permits the Company to engage in mineral dressing of limestone from industrial mining for chemical industry and for production of lime for tanning and sugar industries.

Mineral Dressing License – Kangkoi Plant

Document	: Mineral Dressing License
Validity	: 18 December 2019 – 17 December 2023
Relevant Parties	: Licensor Provincial Industry Office Licensee Chememan Public Company Limited
Details	: Permits the Company to engage in mineral dressing of limestone from industrial mining for chemical industry and for production of lime for tanning and sugar industries.

Letter of Permission for Business Operations in Industrial Estate - Rayong Plant

Document	: Letter of Permission for Business Operations in Industrial Estate
Validity	: 9 November 2015 – 31 December 2020
Relevant Parties	: Licensor Industrial Estate Authority of Thailand (IEAT) Licensee Chememan Public Company Limited
Details	: Permits the Company to engage in hydrated lime production business.

License for Business Operations that use Natural Gas - Prabuddhabaht Plant

Document	: License for Business Operations that use Natural Gas
Validity	: 8 November 2019 – 31 December 2020
Relevant Parties	: Licensor Department of Energy Business Licensee Chememan Public Company Limited
Details	: Permits the Company to engage in restricted business operation of category 3 under section 17(3) of the Fuel Control Act B.E. 2542

Natural Gas Supply Contract – Prabuddhabaht Plant

Document	: Natural Gas Supply Contract
Validity	: 12 March 2019 – 31 March 2029
Counter Parties	: Supplier PTT Public Company Limited Buyer Chememan Public Company Limited
Objectives	: The supplier agrees to sell natural gas to the buyer, and the buyer agrees to buy natural gas from the supplier, to be used in the lime production process at Prabuddhabaht Plant. The buyer is responsible for the arrangement of natural gas sub-pipeline to connect to the supplier's pipeline.

Investment Promotion Certificate from BOI

The Company was granted promotional privileges in accordance with the Investment Promotion Act B.E. 2520 (including amendments) from the Board of Investments (BOI) under conditions set out in the Investment Promotion Certificate for quicklime and hydrated lime production plant, with general privileges as follows:

- 1) Permission to bring into the Kingdom of Thailand, foreign nationals who are skilled workers or experts, as well as spouses and dependents of such foreign nationals, in such numbers and for such periods as the BOI may deem appropriate.
- 2) Permission for the foreign skilled workers or experts who have been granted permission to stay in the Kingdom as in 1) to receive work permits for specific positions approved by the BOI for the period of permitted stay in the Kingdom.
- 3) Import duties exemption on imported machinery approved by BOI
- 4) Corporate income tax exemption on net profit from the promoted operations, with aggregate exemption of not exceeding 100 percent of the investment cost, excluding cost of land and working capital.
- 5) In case of operation losses during the corporate income tax exemption period, the Company is allowed to carry forward such losses and deduct against the net profits for up to 5 successive years after the expiry of the corporate income tax exemption period, where deduction from net profit can be in any one year or many years.
- 6) Dividends paid out from profits made by the promoted business with corporate income tax exemption shall be excluded from calculation of income tax throughout the period that the business receives exemption from corporate income tax.

The Company received Investment Promotion Certificates for the lime production at Kangkoi Plant and Rayong Plant. Currently, there are 5 certificates that are still valid with full corporate income tax exemption as summarized below:

Plant / Product	Issue Date of Promotional Certificate	Date of First Revenue Generated from the Promoted Business	Period of Full Income Tax Exemption ¹	Period of 50% Income Tax Exemption ²	Conditions / Privileges for Specific Project
Kangkoi Plant (KK3 and KK5 Kilns) / Quicklime	10 April 2015	2 September 2016	6 years ³	5 years ³	- Production capacity of approximately 182,500 tons per year
Kangkoi Plant (KK4 Kiln) / Quicklime	19 August 2015	1 February 2019	3 years	None	- Production capacity of approximately 73,000 tons per year
Kangkoi Plant (KK6 Kiln) / Quicklime	19 August 2016	20 January 2018	3 years	None	- Production capacity of approximately 113,150 tons per year

Plant / Product	Issue Date of Promotional Certificate	Date of First Revenue Generated from the Promoted Business	Period of Full Income Tax Exemption ¹	Period of 50% Income Tax Exemption ²	Conditions / Privileges for Specific Project
Kangkoi Plant / Hydrated Lime (Future Project)	6 October 2016	No income yet	3 years	None	- Production capacity of approximately 87,600 tons per year
Rayong Plant / Hydrated Lime	23 December 2011	15 February 2013	8 years	5 years	<ul style="list-style-type: none"> - Production capacity of approximately 87,600 tons per year - Double deduction of cost of transportation, electricity and water supply as expenses for 10 years ¹ - 25% deduction of investment in construction of facilities as expenses, in addition to normal depreciation deduction - Exemption of import duty on imported raw materials used in the production of export products, for 5 years from date of first import - Exemption on import duty on imported goods for export, for a period of 5 years from date of first import

Remarks: ¹ Starting from the date of first revenue generated from the promoted business.

² Starting from the expiration date of full income tax exemption.

³ Received additional privileges according to the extra investment incentives (Board of Investment 's resolution passed on 23 March 2017)

Important licenses and contracts related to operations at Ha Long QN Lime Co., Ltd., Vietnam are as follows:

Mining Exploitation License

Document	: Mining Exploitation License
Validity	: Until 11 May 2046
Relevant Parties	: Grantor Ministry of Natural Resources and Environment - Vietnam Grantee Ha Long QN Lime Company Limited ("Halong Lime")
Details	: Halong Lime has been granted mining rights to exploit limestone as raw materials for industrial lime production at Son Duong Commune, Hoanh Bo District, Quang Ninh Province, on the exploitation area of 34.96 hectares.
Conditions	: 1. Industrial mining of limestone for lime production, using open-cast mining method. 2. Pay fees for granting mineral exploitation permits under related regulations. 3. Carry out limestone mining activities according to the area, depth and capacity specified in the license. 4. Responsible for environmental protection in mineral exploitation according to regulations. 5. Ensure technical safety and safety of mine works and properly reporting the mineral exploitation, processing and use of minerals to the competent State Agency. 6. Upon mine closure, rehabilitate and restore the environment and land after exploitation. 7. Coordinate with the concerned management agencies in inspecting, supervising and post-inspecting the exploitation of minerals, environmental protection works, treating wastes in the course of mineral exploitation.

Certificate of Land Use Rights - Limestone Quarry

Document	: Certificate of Land Use Rights
Validity	: Until December 2047
Relevant Parties	: Grantor People's Committee of Quang Ninh Province Grantee Ha Long QN Lime Company Limited
Details	: Receiving the land use rights recognized by the State Authority with annual payment of land fees for the purpose of limestone exploitation as raw materials for industrial lime production.

Certificate of Land Use Rights - Lime Production Plant

Document	: Certificate of Land Use Rights
Validity	: Until 9 July 2064
Relevant Parties	: Grantor People's Committee of Quang Ninh Province Grantee Ha Long QN Lime Company Limited
Details	: Receiving the land use rights recognized by the State Authority with annual payment of land fees for the purpose of building a lime production plant.

Shareholders' Agreement

Agreement Between Shareholders of Chememan Lao Company Limited ("Chememan Lao")

Agreement date : 8 September 2015		
Counter Parties	1. EXIM Company Limited ("EXIM")	
	EXIM was established in 2005 as a company in transportation business. It provides land, water and air transportation services both in Laos PDR and in foreign countries.	
Details	2. Chememan Public Company Limited	
	: The counter parties jointly established Chememan Lao in Lao People's Democratic Republic to operate business of production and distribution of limestone and lime.	
Shareholding Proportion	: EXIM	40.00%
	Chememan Public Company Limited	60.00%

Agreement Between Shareholders of Siriman Chemicals India Private Limited ("Siriman Chemicals")

Agreement Date : 6 September 2016 (including Supplementary Agreement dated 1 March 2019)		
Counter Parties	1. Sanvira Industries Limited	
	Sanvira Industries Limited was established in 2008 in India to produce and distribute petroleum coke derived from oil refinery. It also has an electricity generating plant.	
Details	2. Sanvira Industrial Services Private Limited	
	Sanvira Industrial Services Private Limited was established in 2011 in India to produce and distribute basic chemical products.	
Shareholding Proportion	Whereby, Parties 1. and 2. are collectively referred to as Sanvira Group ("Sanvira Group")	
	3. Chememan Public Company Limited	
Details	4. Chememan India Private Limited	
	Whereby, Parties 3. and 4. are collectively referred to as Chememan Group ("Chememan Group")	
Shareholding Proportion	: The counter parties jointly established a new company named Siriman Chemicals, in India to produce and distribute quicklime and hydrated lime. Siriman Chemicals's production plant is located in Andhra Pradesh, in which its products shall be distributed only within the State of Andhra Pradesh, Telangana, Orissa and Chhattisgarh in India.	
	: Sanvira Group	50.00%
Shareholding Proportion	Chememan Group	50.00%

Agreement Between Shareholders of Easternbulk Lime Products Private Limited ("Easternbulk Lime Products")

Agreement Date : 17 May 2017

Counter Parties : 1. Easternbulk Trading and Shipping Private Limited
("Easternbulk Trading and Shipping")
Easternbulk Trading and Shipping was established in 2007 to engage in mineral trading business and fully integrated water transportation business at eastern ports of India.
2. Chememan Public Company Limited
3. Easternbulk Lime Products

Details : Easternbulk Trading and Shipping sold its shares in Easternbulk Lime Products to Chememan Public Company Limited at the portion of 50% of Easternbulk Lime Products's paid-up capital. Easternbulk Lime Products shall construct a production plant in the industrial zone of Tuticorin, to produce and distribute quicklime and hydrated lime within the State of Tamilnadu, Karnataka and Kerala in India.

Shareholding	: Easternbulk Trading and Shipping	50.00%
Proportion	Chememan Public Company Limited	50.00%

Agreement Between Shareholders of CalMix Company Limited ("CalMix")

Agreement Date : 21 January 2019

Counter Parties : 1. Chememan Public Company Limited
2. Bergmann Kalk Holding GmbH ("Bergmann")
3. Kalkwerke H. Oetelshofen GmbH & Co. KG ("Oetelshofen")

Details : The counter parties jointly established CalMix in Thailand to produce and distribute lime mortar in Thailand and to other ASEAN countries, by using the Company's products such as limestone sands and hydrated lime as raw materials.

Shareholding	: Chememan Public Company Limited	51.00%
Proportion	Bergmann	24.50%
	Oetelshofen	24.50%

Agreement Between Shareholders of Ha Long QN Lime Company Limited ("Halong Lime")

Agreement Date : 15 November 2019

Counter Parties : 1. Mr. Bui Tuan Ngoc
2. Ms. Vu Thi Phuong
3. Northman Company Limited
4. Ha Long QN Lime Company Limited

Details : Mr. Bui Tuan Ngoc and Ms. Vu Thi Phuong sold 80% portions of their ownership of the capital contribution in Halong Lime to Northman Company Limited. Halong Lime is a company established to produce and distribute quicklime and hydrated lime with a lime manufacturing plant and a limestone quarry located in Quang Ninh province, Vietnam.

Shareholding	: Mr. Bui Tuan Ngoc	19.98%
Proportion	Ms. Vu Thi Phuong	0.02%
	Northman Company Limited	80.00%

Dividend Policy

Dividend Policy of the Company

The Company has a dividend policy to pay shareholders dividends of at least 40% of consolidated net profit after deduction of corporate income tax and all reserves required by law or rules and regulations of the Company, taking into consideration the Company's cashflow, operating results, financial structure, investment plans, conditions and obligations of the Company in different contracts, future requirements, and consistency of the dividend payments. Dividend payments must not exceed the Company's retained earnings based on its separate financial statements, and the dividend will not be paid if the Company has a deficit in its separate financial statements.

Dividend payments must be approved by the shareholders' meeting unless it is an interim dividend which the board of directors may approve occasionally when the Company has enough profits. Interim dividend payment must be reported in the next shareholders' meeting.

Dividend Policy of the Subsidiaries

Dividend payments of the subsidiaries are to be approved by the board of directors and shareholders' meeting of each subsidiary. The dividend payment is to be at least 40% of the subsidiary's net profits based on its separate financial statements or consolidated financial statements if the subsidiary has investments in other companies, after corporate income tax and reserves required by law or the rules and regulations of each subsidiary. Dividend payments must not exceed the subsidiary's retained earnings based on its separate financial statements, and the dividend will not be paid if the subsidiary has a deficit based on its separate financial statements. However, such dividend payment may vary according to the subsidiary's cash flow, operating results, financial structure, investment plans, conditions and obligations of the subsidiary in different contracts, and future requirements.

In order that dividend payments of the subsidiary are in accordance with corporate governance, transparent and verifiable, after dividend is paid by each subsidiary, the subsidiary's board of directors shall report such dividend payment in the Board of Directors' meeting of the Company.

Shareholders

Top 10 shareholders of the Company as of 28 August 2019 (latest share register book closing date for the rights to receive interim dividend) were as follows:

Shareholders	As of 28 August 2019	
	Number of Shares	Percentage Holding
1. Mr. Chai Srivikorn	267,805,900	27.90
2. Buranachart Company Limited ¹	252,116,700	26.26
3. B-Senior Citizen Mixed Fund	22,914,500	2.39
4. Bualuang Small-Mid Cap RMF	15,058,400	1.57
5. Mrs. Songsri Sengsakul	12,337,810	1.29
6. B-Senior Citizen Extra Mixed Fund	10,356,100	1.08
7. Mr. Norachet Sangruji	9,955,000	1.04
8. Mr. Apichat Laochinda	9,125,000	0.95
9. Ms. Korakot Srivikorn	9,040,800	0.94
10. Mr. Chartiwudh Tanchanpong	8,961,210	0.93
11. Others	342,328,580	35.66
Total	960,000,000	100.00

Remarks:

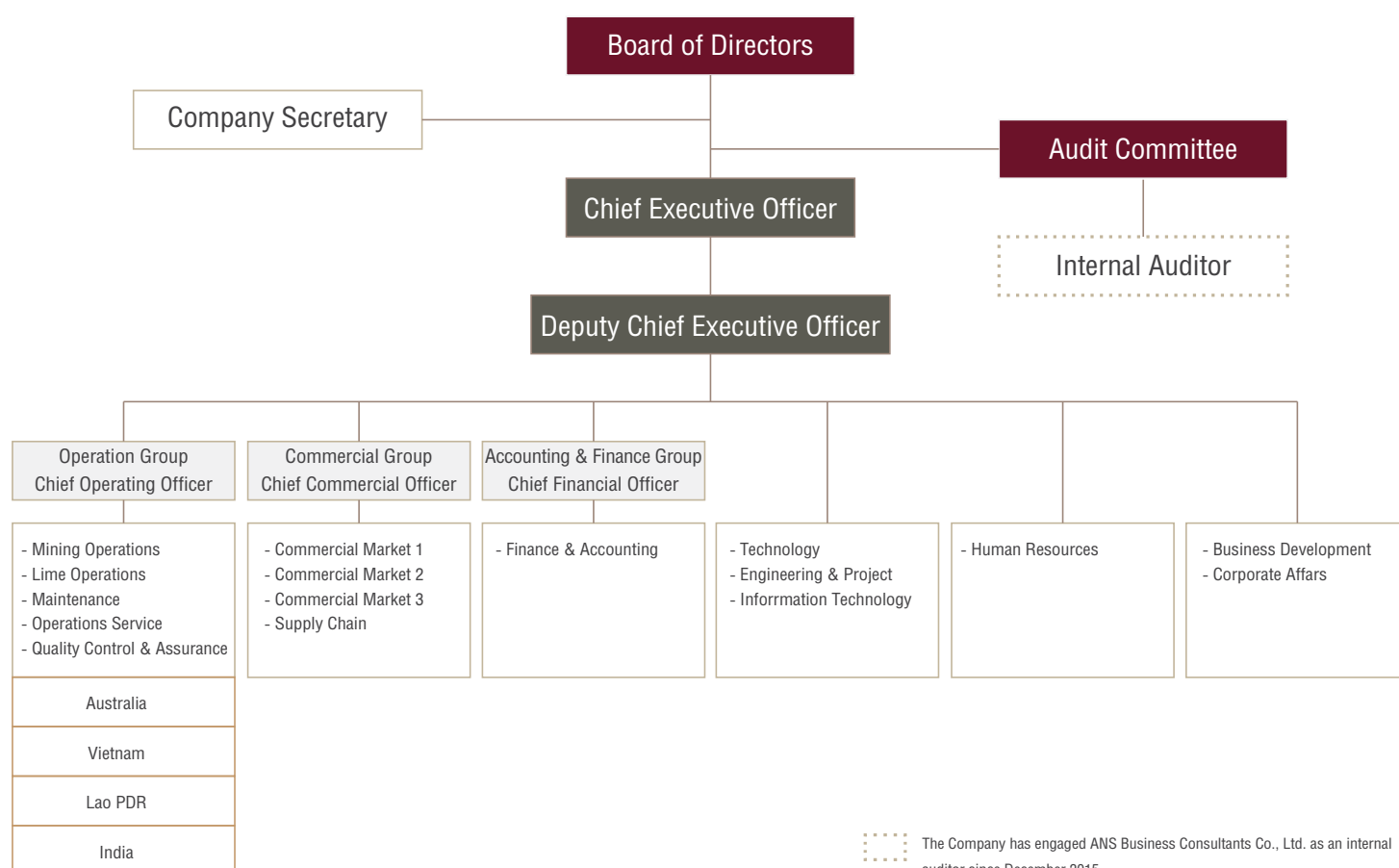
¹ Buranachart Company Limited was established on 5 March 2003. Its main business is to act as holding company with no investment in financial business.

Top 10 shareholders of Buranachart Company Limited as of 31 December 2019 were as follows:

Shareholders	Number of Shares	Percentage Holding
1. Lowjun Family	7,678,376	27.04
1.1 Mr. Adisak Lowjun	7,678,375	27.04
1.2 Mrs. Rajjaneepen Ungpakorn	1	0.00
2. Mr. Charoen Churekanont	4,000,000	14.08
3. Mr. Chai Srivikorn	3,709,160	13.06
4. Mr. Apichat Laochinda	3,691,825	13.00
5. Mr. Suthep Uacherdkul	3,501,686	12.33
6. Mr. Suwat Tunlayadechanont	2,658,953	9.36
7. Mr. Chaichana Pimlikitsak	800,000	2.82
8. Mr. Sukit Wongdech	640,000	2.25
9. Ms. Piengkamol Kraidej	500,000	1.76
10. Mr. Kamol Sowattanasakul	400,000	1.41
Total shares of top 10 shareholders	27,580,000	97.11
11. Other Shareholders	820,000	2.89
Total Shares	28,400,000	100.00

Management Structure

As of 31 December 2019, the Company's management structure comprised of a Board of Directors and an Audit Committee. The Board of Directors did not appoint Nomination and Remuneration Committees. However, the Board of Directors set up guidelines to determine the directors' remuneration in comparison to other companies with similar size (revenue and net profit) and industries. This is to reward work performed and motivate qualified persons with knowledge, abilities, skills and appropriate experience, beneficial to the success of the Company.



Board of Directors

As of 31 December 2019, there were 10 directors as follows:

Director	Position
1. M.L. Chandchuttha Chandratat	Chairman of the Board / Independent Director
2. Mr. Adisak Lowjun	Director
3. Mr. Charoen Churekanont	Director
4. Mr. Suthep Uacherdkul	Director
5. Mrs. Rajjaneepen Ungpakorn	Director
6. Mr. Chai Srivikorn	Director
7. Mr. Suwat Tunlayadechanont	Director
8. Mr. Pornprom Karnchanachari	Independent Director / Chairman of Audit Committee
9. Ms. Amata Issarangura Na Ayudhaya	Independent Director / Member of Audit Committee
10. Mr. Yarnsak Manomaiphiboon	Independent Director / Member of the Audit Committee

Authorized Directors to Sign and Bind the Company

Directors authorized to sign and bind the Company comprises of Mr. Adisak Lowjun or Mr. Charoen Churekanont or Mrs. Rajjaneepen Ungpakorn jointly sign with Mr. Chai Srivikorn or Mr. Suwat Tunlayadechanont or Mr. Suthep Uacherdkul, together with Company's seal affixed.

Audit Committee

As of 31 December 2019, there were 3 members in the Audit Committee as follows:

Director	Position
1. Mr. Pornprom Karnchanachari	Chairman of the Audit Committee
2. Mr. Yarnsak Manomaiphiboon	Member of the Audit Committee
3. Ms. Amata Issarangura Na Ayudhaya	Member of the Audit Committee

Management Team¹

As of 31 December 2019, there were 15 executives in the management team as follows:

Management	Position
1. Mr. Adisak Lowjun	Chief Executive Officer Acting Chief Commercial Officer and Acting Vice President of Commercial Market 3
2. Mr. Suwat Tunlayadechanont	Deputy Chief Executive Officer Acting Chief Operating Officer and Acting Vice President of Information Technology
3. Mr. Wutthichai Tankuranand ²	Chief Financial Officer
4. Mr. Krissanapong Tatirungsunsook	Vice President of Mining Operations
5. Mr. Komgrit Panom-Upatam	Vice President of Lime Operations
6. Mr. Wanus Petchruarn	Vice President of Maintenance
7. Mr. Pathompob Jainkiatfu	Vice President of Technology
8. Mr. Boonlert Thungkatikajonkit	Vice President of Commercial Market 2
9. Mr. Kosol Pittayaprasertkul	Vice President of Supply Chain
10. Ms. Pornphen Wiwattanadecha	Vice President of Finance & Accounting
11. Mr. Apichat Laochinda	Vice President of Engineering & Project
12. Ms. Piengkamol Kraidej	Vice President of Human Resources
13. Mr. Panom Praiyontip	Vice President of Business Development and Acting Vice President of Commercial Market 1
14. Mr. Kamol Sowattanasakul	Vice President of Business Development
15. Major General Nattapond Kongsompong (retired)	Vice President of Corporate Affairs

Remarks:

¹ Management refers to manager (CEO), the first four executives succeeding the manager and every person holding the position equivalent to the fourth rank including person holding executive position in Accounting or Finance Department whose rank is not lower than division manager.

² Mr. Wutthichai Tankuranand has resigned from the position of Chief Financial Officer since 7 January 2020.

Board of Directors and Audit Committee Meetings

The Meeting attendance of the Board of Directors and Audit Committee for the year 2019 are as follows:

Directors	Attendance / Total Meetings	
	Board of Directors	Audit Committee
1. M.L. Chandchuttha Chandratat	9/10	-
2. Mr. Adisak Lowjun	9/10	-
3. Mr. Charoen Churekanont	10/10	-
4. Mr. Suthep Uacherdkul	9/10	-
5. Mrs. Rajjaneepen Ungpakorn	9/10	-
6. Mr. Chai Srivikorn	9/10	-
7. Mr. Paradorn Vilaikul ¹	3/6	-
8. Mr. Suwat Tunlayadechanont	10/10	-
9. Mr. Pornprom Karnchanachari	10/10	4/4
10. Ms. Amata Issarangura Na Ayudhaya	10/10	4/4
11. Mr. Yarnsak Manomaiphiboon	10/10	4/4

Remarks ¹ Mr. Paradorn Vilaikul has resigned from directorship since 13 August 2019.

Company Secretary

The Board of Directors' Meeting No. 6/2018 held on 18 September 2018 had resolved to appoint Ms. Piengkamol Kraidej as the Company Secretary effective on 18 September 2018.

The Board of Directors' Meeting No. 10/2019 held on 13 December 2019 had resolved to appoint Mrs. Sinaynidh Karitkiat as the Company Secretary effective on 1 January 2020.

Directors and Management Remuneration

Board of Directors Remuneration

The 2019 Annual General Meeting of Shareholders held on 26 April 2019 had set the 2019 remuneration for the directors, comprising of monthly compensation and meeting attendance fee, according to the criteria approved by the Extraordinary General Meeting of Shareholders No. 2/2017 held on 8 August 2017 which is still effective as follows:

Position	Monthly Remuneration (Baht)	Meeting Attendance Fee (Baht per Meeting)
Chairman of the Board of Directors	18,000	18,000
Director	15,000	15,000
Chairman of the Audit Committee	-	14,400
Member of the Audit Committee	-	12,000

In 2019, the Company paid a total of Baht 3,597,406 for the monthly remuneration and meeting attendance fees to the Board of Directors and the Audit Committee with details as follows:

Directors	Director Remuneration (Baht)	Audit Committee Remuneration (Baht)
1. M.L. Chandchuttha Chandratat	378,000	-
2. Mr. Adisak Lowjun	315,000	-
3. Mr. Charoen Churekanont	330,000	-
4. Mr. Suthep Uacherdkul	315,000	-
5. Mrs. Rajjaneepen Ungpakorn	315,000	-
6. Mr. Chai Srivikorn	315,000	-
7. Mr. Paradorn Vilaikul ¹	155,806	-
8. Mr. Suwat Tunlayadechanont	330,000	-
9. Mr. Pornprom Karnchanachari	330,000	57,600
10. Ms. Amata Issarangura Na Ayudhaya	330,000	48,000
11. Mr. Yarnsak Manomaiphiboon	330,000	48,000
Total monthly and meeting attendance fees	3,443,806	153,600

Remarks ¹Mr. Paradorn Vilaikul had resigned directorship since 13 August 2019.

Other Remuneration to the Directors

-None-

Management Remuneration

The remuneration for the 15 management executives for the year 2019 comprises of salary, bonus and position allowance, totalling Baht 80.25 million.

Other Management Remuneration

Other management remuneration for the year 2019 comprises of contribution to social security and provident fund totalling Baht 3.2 million.

Number of Employees

As of 31 December 2019, there were a total of 549 employees (excluding management) as follows:

Functional Group	Number of Employees
Operations	350
Commercial	77
Accounting and Finance	34
Technology	59
Human Resource	15
Business Development and Corporate Affairs	14
Total	549

Employee Remuneration

Employee (excluding management) remuneration for the year 2019 comprises of salary, bonus, living allowance, position allowance, shift payment, overtime wage, contribution to social security and provident fund, totalling Baht 267.39 million.

Labor Disputes

-None-

Personnel Development Policy

It is the Company's policy to support continual training and development for all employees, starting with new employees orientation to acquaint the new comers with the Company's background, important business policies, code of conduct and guidelines on health and safety issues. While working, the employees will receive coaching and on the job training from their supervisors, as well as attending the training and seminars to gain additional knowledge necessary for work performance.

In addition, the Company also lays appropriate foundation for the employees to learn about the business operation and management in relation with their duties and responsibilities to prepare them for further career advancement.



Corporate Governance

Corporate Governance Policy

The Company realizes the importance of overseeing that the Company's business conduct is in line with its objectives, main goals, strategies, policies, plans and specified budget, with appropriate performance monitoring, evaluation and reporting. This is performed through ethical business practices, respecting the rights and being responsible to the shareholders and stakeholders, with consideration to social benefits, environmental impacts and being adaptable to changing circumstances. To ensure competitiveness and good long-term business performance of the Company, the Board of Directors has laid down the corporate governance policy with following eight principles as guidelines for its employees to follow:

Principle 1 : Establish Clear Leadership Role and Responsibilities of the Board in Creating Sustainable Value to the Organization

The roles and responsibilities of the Board are clearly stated in the Charter of the Board of Directors. Major responsibilities of the Board are to set objectives, main business goals, financial policies, risk management and operational strategies, including as well to allocate resources necessary for the Company's personnel to achieve the laid down objectives. The Board shall monitor, evaluate and ensure the appropriate reporting of the Company's performance.

The Board shall oversee that the Company conducts business ethically, respects the rights and being responsible to the shareholders and all stakeholders; contributes to social benefit and concerns the environment; is adaptable to changing circumstances, while maintaining its competitiveness for long-term benefits of the shareholders.

The Board also determines the role and responsibilities of the Chief Executive Officer, and shall oversee that all directors and management are responsible, careful and honest in performing their duties; and that the Company's operations are in accordance with applicable laws, regulations and resolutions of the shareholders' meeting.

Principle 2 : Define Objectives that Promote Sustainable Value Creation

The main goal of the Company set by the Board is to be a leading lime producer. To achieve such goal, the Board determines Company's vision, corporate values, strategies, objectives and annual plans for the employees to perform their duties to drive the Company towards the goal within set timeframe.

Principle 3 : Strengthen Board Effectiveness

The Board is comprised of knowledgeable, capable and experienced directors who are reputable and capable to perform duties for the best interest of the Company. The Board plays an important role in setting the Company's policies. According to the Company's Articles of Association, the Board shall consist of not less than 5 but not more than 12 directors who are executive directors, non-executive directors and independent directors to ensure a proper balance of power. Details of the Board's composition, qualifications, term of office, roles and responsibilities are set out in the Charter of the Board of Directors.

The Company has appointed a company secretary to perform duties related to the Board of Directors' meetings, shareholders' meetings and to support duties of the Board as well as to ensure compliance to the Board's resolutions.

Principle 4 : Ensure Effective CEO and People Management

The Board has laid down the policy on nomination of directors and executives, and the succession plan as the guidelines for selecting qualified and experienced candidates to join the Company for its best interest. Details of which are stated in the policy on nomination of directors and executives, and the succession plan. The Board shall ensure that remuneration and performance evaluation are appropriate and commensurate with the roles and responsibilities of the Board. The executives shall receive compensation in form of salaries and annual bonuses based on performance of the Company and the individual's abilities.

For continual improvement and development, the Board encourages seminars and trainings on corporate governance to concerned personnel such as directors, members of Audit Committee, executives and company secretary. Such seminars and trainings may be in-house or outsourced.

In case of changes in directors or new directors joining, the management shall provide information and documentation useful for the new directors to perform duties. Orientation to introduce business overview, scopes and characteristics shall also be provided to the new directors.

The Board shall also arrange for job rotation according to the aptitude of the person, with main considerations to the appropriateness of the type and time of work. The Chief Executive Officer shall determine the time schedule and evaluate the work performance for personnel development and succession plan, in order to develop knowledge and skills of the management and employees, and enable job rotation.

Principle 5 : Nurture Innovation and Responsible Business

The Board places a great deal of emphasis on innovations for sustainable development. Innovation is nurtured from the use of modern technology in production process with consideration to sustainable usage of natural resources, investment in research laboratory to develop and inspect the product qualifications to meet different requirements of the customers from various industries and the constant production process improvement to increase efficiency.

Principle 6 : Strengthen Effective Risk Management and Internal Control

The Board has appointed an Audit Committee to support the Board's role in overseeing that the Company has effective governing system. The Audit Committee is to provide honest opinions on the financial statements and internal control system, and to allow discussions with the management and auditors on the mitigation of possible risks, as well as to ensure that the financial statements are credible, of good quality and with value added to the organization. The Audit Committee shall consist of at least three independent directors with qualifications as required by the Capital Market Supervisory Board and the Stock Exchange of Thailand, with at least one member possessing the knowledge or experience in accounting and finance, as well as understanding on the factors affecting the change in financial standing. Details of composition, qualifications, term of office and roles and responsibilities of the Audit Committee are stated in the Charter of the Audit Committee.

The Board has set policies as guidelines for appropriate risk management and internal control as follows:

1. Business Code of Conduct
2. Risk Management Policy
3. Insider Trading Policy
4. Policy on Avoidance of Conflict of Interest
5. Policy on Connected Transactions
6. Anti-Corruption Policy
7. Policy on Investment and Governing the Operations of Subsidiaries and Joint Ventures
8. Dividend Payment Policy of The Company and Subsidiaries

In case any stakeholder has any observations on the Company's business operation, the person can ask for details, submit a complaint or sources of illegal acts, mistakes in financial reports, deficiencies of internal control system or unethical conducts of the Company, through the Company's independent directors or the members of Audit Committee. The information on the complaint and sources shall be kept confidential. The independent director or the member of Audit Committee shall order an examination on the information and look for remedies (if any) and report such to the Board of Directors.

Principle 7 : Ensure Disclosure and Financial Integrity

1. The Board recognizes the importance of both financial and non-financial information disclosure which must be done in correct, complete, adequate, transparent and timely manner, including as well other information that will or may affect the price of Company's share. All such information affect the decisions of the investors and the Company's stakeholders. The Company shall disclose the information in compliance with the regulations of the Office of the Securities Exchange Commission, the Capital Market Supervisory Board and the Stock Exchange of Thailand.
2. The Company has assigned Investor Relations officer to communicate with investors or shareholders. Analyst meetings shall be organized regularly to discuss on the Company's operational results. The Company's general and financial information shall be disseminated to shareholders, analysts, credit rating agencies and related government authorities, via various channels such as reports to the

Office of Securities Exchange Commission, the Stock Exchange of Thailand and the Company's website. The Company also emphasizes on regular disclosure of information to the shareholders via Company's website, where the information are up to date. Such information include vision, mission, financial statements, news, annual report, Company's structure and executives, shareholding structure, major shareholders, shareholders meetings invitation, corporate documents and charters.

3. The Company emphasizes on the importance of financial statements and financial information presented in the annual report. The Audit Committee shall review the quality of the financial reports and the internal control system, as well as the adequate disclosure of significant information in the notes to the financial statements, and shall report the observations to the Board of Directors. The Report on the Board of Directors' Responsibilities on the Financial Statements shall be presented together with the Auditor's Report in the Company's annual report.
4. The Company shall disclose information of each director, roles and responsibilities of the Board of Directors and sub-committee, number of meetings and attendance in the previous year, opinion on the duty performed, professional trainings activities, remuneration policies, types and details of the remunerations to the directors and executives of the Company, in the annual report and the annual registration statement.
5. The Company shall disclose audit fees and other service fees paid to the auditor.
6. The Company shall arrange to have the report on corporate governance policy, business code of conduct, risk management policy and corporate social responsibilities policy, with results of such policies implementation accompanied by the reasons for non-compliance cases, which shall be reported through various channels such as annual report and website.

Principle 8 : Ensure Engagement and Communication with Shareholders

1. The Company shall submit the invitations to the shareholders' meetings, together with agenda attachments, to the shareholders at least 7 days prior to the meeting or any required period as prescribed by the relevant laws and regulations. Each agenda item shall include the Board's opinion and adequate supporting information to ensure the shareholders' sufficiency of time and information for studying all details prior to the meeting. The Company shall also disclose such information via the Company's website prior to the meeting.
2. The Company provides opportunities for the shareholders to propose comments, suggestions or questions in advance before the shareholders' meeting, under the criteria disclosed by the Company on the website.
3. For convenience of the shareholders, the shareholders' meeting shall be held at an easy to access location with map of the meeting venue attached to the invitation letter. Date and time of the meeting shall also be appropriately selected with allocation of sufficient meeting time slot.
4. In the event that any shareholders unable to attend the meeting in person, proxy assignment to the independent directors or any other persons are allowed using the proxy form enclosed in the meeting's invitation.
5. In the shareholders' meeting, all shareholders are entitled, with equal rights, to freely express opinions, suggestions or raise questions on the related agenda before voting upon. The directors and concerned executives of the Company shall attend the shareholders' meeting to answer such questions.

6. The Company encourages voting by ballot on every agenda for transparency and verification of the voting results.
7. The Company shall arrange to have an independent person to witness the counting of votes on each agenda.
8. After the meeting, the Company shall disclose the voting results of each agenda item to the shareholders via SET Portal system of the Stock Exchange of Thailand and on the Company's website.
9. The Company shall completely and accurately, in all material respect, record the minutes of meeting and shall include significant questions, comments and suggestions for shareholders' inspection.

Structure of Company Directors

Management structure of the Company comprises of a Board of Directors and an Audit Committee, whereby the roles and responsibilities of the Board of Directors, the Audit Committee and the Chief Executive Officer are shown as follows:

Roles and Responsibilities of the Board of Directors

1. Perform duties in compliance with the law, objectives and Articles of Association of the Company including the resolutions of the shareholders' meetings, with honesty, integrity and in due circumspection and caution for the best interest of the Company.
2. Appoint or change the name of authorized directors who can sign and bind the Company.
3. Appoint and assign roles and responsibilities to the sub-committee as appropriate and necessary to support the duties of the Board of Directors.
4. Set the vision, policies, strategies and business direction of the Company and oversee that the management perform duties accordingly with efficiency and effectiveness.
5. Set business plans, annual budget, monitor and supervise the management, review the quarterly performance compared to the plan and budget and consider future trend for the remaining period of the year.
6. Evaluate the performance of the Chief Executive Officer and provide opinions on the overall performance of the management.
7. Set guideline and policy for determining the salary, salary increase, bonus, compensations and rewards for the Company's employees.
8. Ensure that the management arranges for proper accounting system, financial reports, reliable audit system as well as appropriate and adequate risk management and internal control systems.
9. Consider and approve the acquisition or disposal of assets, investment in new businesses and any business matters in accordance with applicable laws, announcements, and related rules and regulations.
10. Provide opinions on connected transactions or consider the transactions (in the case that the size of transaction does not require approval from the shareholders' meeting) of the Company and its subsidiaries to ensure compliance with the laws, announcements and related rules and regulations.
11. Oversee and ensure avoidance of conflict of interest between the stakeholders and the Company.
12. Ethically govern the Company and conduct review on the corporate governance policy of the Company.
13. Prepare the Report on the Board of Directors' Responsibilities for the Financial Statements to be presented together with the Auditor's Report in the annual report. Such report shall cover important issues in accordance with the Stock Exchange of Thailand Code of Best Practices for Directors of Listed Companies.

14. Assign one or more directors or any other person(s) to perform any duties on behalf of the Board. Such assignment of authority shall not enable the assigned director or person assigned by the director to approve the transactions where he/she has interest in or has any forms of conflict of interest with the Company or subsidiaries.
15. Consider and approve the interim dividend payment to shareholders and report such dividend payment to the shareholders in the next shareholders' meeting.
16. Appoint a company secretary to support the Board and the Company in performing the duties in accordance with applicable laws, rules and regulations.

Roles and Responsibilities of the Audit Committee

1. Review the Company's financial reporting process to ensure accurate and adequate disclosure.
2. Ensure that the Company has suitable and effective internal control system and internal audit process. Determine the independence of the internal auditor, including approve the appointment, transfer and dismissal of head of internal audit or any other unit that is responsible for the internal audit as proposed by the management.
3. Review to ensure that the Company complies with the securities and exchange law, rules and regulations of the Stock Exchange of Thailand or any laws related to the Company's business.
4. Consider and nominate the independent person(s) to be the Company's external auditor, including to consider and recommend the audit fee.
5. Review connected transactions or any transactions with potential conflict of interest to ensure conformity with the laws and regulations of the Stock Exchange of Thailand, so as to be certain that such transactions are reasonable and serve the best interest of the Company.
6. Have authority to call meetings with the management or the Company's officers to obtain their explanations and opinions as necessary.
7. May consider hiring external consultants or professional specialist to provide advice, opinion or comment as deem appropriate by the Audit Committee.
8. Prepare Audit Committee Report to be disclosed in the annual report. Such report shall be signed by the Chairman of the Audit Committee and shall consist of at least the following information:
 - (1) Opinion on accuracy, completeness and credibility of the Company's financial reports.
 - (2) Opinion on the adequacy of the Company's internal control system.
 - (3) Opinion on the compliance with the securities and exchange law, regulations of the Stock Exchange of Thailand or laws relating to the business of the Company.
 - (4) Opinion on the suitability of the external auditor.
 - (5) Opinion on the transactions with potential conflict of interest.
 - (6) Number of Audit Committee Meetings and the attendance of each committee member.
 - (7) Opinion or observation of the Audit Committee obtained from performing their duties in accordance with the Audit Committee Charter.
 - (8) Other matters which the Audit Committee deem appropriate to be disclosed to the shareholders and investors under the roles and responsibilities assigned by the Board of Directors.
9. Perform other acts as assigned by the Board of Directors.

Roles and Responsibilities of Chief Executive Officer

The principal duty of the Chief Executive Officer is to oversee that the management operates the Company to achieve the objectives of the Company through policies, strategies and plans approved by the Board of Directors. For the Chief Executive Officer to perform such duty, the Board of Directors has set the roles and responsibilities of the Chief Executive Officer as follows:

1. Oversee, manage, operate and perform normal business transactions for the benefit of the Company, in accordance with the Company's policies, vision and mission, objectives, annual plan, related business strategies and annual budget set by the Board of Directors.
2. Oversee finance, marketing, human resources management and other functions in overall to ensure compliance with the policies and operation plans set by the Board of Directors.
3. Has the authority to hire, appoint, transfer, dismiss, fire and set the rate of wages and compensation for all employee levels up to the level of Deputy Chief Executive Officer, within the framework and policy laid down by the Board of Directors. whereby a substitute may be delegated to implement such authority.
4. Set rewards, salary increase, compensation and bonus for all employee levels up to the level of Deputy Chief Executive Officer, within the framework and policy set by the Board of Directors.
5. Enter into any agreements and/or transactions in relation to normal business of the Company, in accordance with the limit of approval specified in the signing authority approved by the Board of Directors.
6. Has the authority to assign other person, as Chief Executive Officer sees appropriate, to manage and act on his behalf any necessary and appropriate matters, at the discretion of the Chief Executive Officer, under the laws and rules and regulations of the Company.
7. Issue internal orders, instructions, announcements, manuals and memos to ensure the operations of the Company are in line with the policies and for the benefits of the Company, as well as to keep discipline in the organization.
8. Perform other duties as assigned by the Board of Directors with authorized power necessary to perform such duties.

The Chief Executive Officer is not allowed to approve any transactions that he or any person delegated by him may have stake in or have potential conflict of interest with the Company and/or its subsidiaries. Such transactions shall be proposed to the Board of Directors' meeting and/or the shareholders' meeting (as the case may be) for approval, except for the approval of normal business transactions with general terms and conditions, which has been approved in principle by the Board of Directors.

Regulations on Approval Authorization and Entering into Business Transactions

The Board of Directors are authorized to approve and revise annual budget which comprises of investment budget, expenditure budget and yearly sales plan, while the Chief Executive Officer is authorized to approve the investment, expenses, transfer of budget transactions within the budget approved by the Board of Directors.

Roles and Responsibilities of the Company Secretary

The Company Secretary has important responsibilities as stipulated in the Securities and Exchange Act. The Board of Directors set the roles and responsibilities of the Company Secretary as follows:

1. Prepare and safeguard the following documents:
 - (1) A register of directors
 - (2) Invitations and minutes of the Board of Directors' meetings and Company's annual reports
 - (3) Invitations and Minutes of the shareholders' meetings
2. Safeguard the report on conflicts of interest declared by the directors and executives.
3. Perform other acts as stipulated by the Capital Market Supervisory Board.

The Company Secretary shall perform duties responsibly with caution, honest and in good faith in accordance with applicable law, objectives and articles of association of the Company as well as the resolutions of the Board of Directors and shareholders' meetings.

Nomination and Appointment of Directors and Top Executives

Nomination of Directors

The Board of Directors is responsible for the nomination of qualified persons to be appointed by the Board of Directors and/or shareholders' meeting. The nomination process shall be emphasized on looking for candidates with strong leadership, broad vision, good morals and ethics, clear and unblemished career records and ability to express opinion independently. The qualifications of the required director shall be determined by competency, experience and expertise necessary and/or lack of by the Board of Directors in compliance to the Company's policies and strategies. The candidate should also possess the qualifications of a director or independent director as prescribed under the Public Limited Company Act, B.E. 2535 (including amendments), the Securities and Exchange Act, B.E. 2535 (including amendments), related announcements of the Capital Market Supervisory Board and announcement of the Board of Governors of the Stock Exchange of Thailand.

Nomination of Independent Directors

The qualifications of the Company's independent directors are as follows:

1. Holding less than one percent of the total voting rights in the Company, parent company, subsidiaries, joint ventures, major shareholders or controlling parties of the Company, including shareholding of persons related to the independent director.
2. Not currently be or never been the Company's executive director, employee, staff and salaried consultant or controlling person of the Company, parent company, subsidiaries, joint ventures, affiliated company, major shareholder or controlling parties of the Company, unless the foregoing relationship ended not less than two years prior to the appointment as independent director.
3. Not being a person related by blood or legal registration as father, mother, spouse, sibling, child and spouse of child of other director, executive, major shareholder, controlling person or person to be nominated as director, executive or controlling person of the Company and its subsidiaries.

4. Not having or having had a business relationship with the Company, parent company, subsidiaries, joint ventures, major shareholders or controlling parties of the Company, in a manner that may interfere with the person's independent judgement, as well as not being or having been a significant shareholder or a controlling person of any person having a business relationship with the Company, parent company, subsidiaries, joint ventures, major shareholders or controlling parties of the Company, unless the foregoing relationship ended not less than two years prior to the appointment as independent director.
5. Not being or having been an auditor of the Company, parent company, subsidiaries, joint ventures, major shareholders or controlling parties of the Company and not being a significant shareholder, controlling person or partner of the audit firm where the auditor of the Company, parent company, subsidiaries, joint ventures, major shareholders or controlling parties of the Company works for, unless the foregoing relationship ended not less than two years prior to the appointment as independent director.
6. Not being or having been a provider of any professional services including legal advisor or financial advisor who receives service fees exceeding two million baht per year from the Company, parent company, subsidiaries, joint ventures, major shareholders or controlling parties of the Company, and not being a significant shareholder, controlling person or partner of such professional service providers, unless the foregoing relationship ended not less than two years prior to the appointment as independent director.
7. Not being a director appointed as representative of the Company's director, major shareholder or shareholder who relates to major shareholder.
8. Not operating any business of the same nature and in significant competition to the business of the Company or its subsidiaries, or not being a significant partner in a partnership or an executive director, employee, staff and salaried consultant or holds shares exceeding one percent of the total voting rights of any other companies operating business of the same nature and in significant competition to the business of the Company and its subsidiaries.
9. Not having any other characteristics that may cause the inability to express independent opinions with regard to the business of the Company.

Nomination of Top Executives

The Company has a proper and transparent nomination process for recruiting top executives to ensure that all of them are professionals. The Board of Directors shall nominate persons with knowledge and competency suitable for duties and responsibilities required, and shall propose to the Board of Directors' meeting for appointment as per the Company's signing authority.

Oversight of Company's Subsidiaries and Joint Ventures

The Board of Directors has set forth the policy on overseeing and monitoring the operations of its subsidiaries and joint ventures, to be used as guideline in controlling the operations of its subsidiaries as if it is a business unit of the Company and/or to efficiently monitor the operations of its joint ventures.

The policy is as follows:

1. The Company shall assign representative(s) as director(s) of its subsidiaries or joint ventures in proportion to the shares held and/or in accordance to the shareholders agreement of the subsidiaries or joint ventures. Such representatives shall be approved by the Company's Board of Directors' meeting, taking into consideration the qualifications and experience suitable to the business of such company.
In case the representative receives any compensation as a director of the subsidiaries or joint ventures, such compensation shall be handed over to the Company.
2. The person appointed as director of the subsidiaries or joint ventures has the duty to operate for the best interest of the subsidiaries or joint ventures, with following important roles and responsibilities:
 - 2.1 Perform duties in accordance with the law, objectives, articles of association and resolutions of the Board of Directors' meeting and Shareholders' meeting, with honesty, integrity, in due circumspection, ethical and in compliance to the corporate governance policy of the Company.
 - 2.2 Prior to voting or making decision on any significant matters in the Board of Directors' meeting of the subsidiaries or joint ventures, approval from the Company's Board of Directors' meeting is required.
 - 2.3 Regularly arrange for reviews and improvement of policies and important business operation plans to ensure that they are up to date and appropriate to the business conditions.
 - 2.4 Continually monitor the business performance and provide recommendations on operations to make certain that the operations of the subsidiaries or joint ventures are in line with the goals, and any obstacles are dealt with promptly and appropriately.
 - 2.5 Monitor and give necessary advice on establishing efficient and effective internal control system, risk management system as well as operation procedures.
 - 2.6 In case the subsidiaries need to enter into connection transactions or transactions with potential conflict of interest, the representative assigned as director of the subsidiary has the responsibility to oversee that the subsidiary strictly complies with the criteria on conducting connected transactions and acquisition and disposal of assets, as prescribed by the related regulatory agencies.
 - 2.7 Oversee to ensure adequate and appropriate disclosure of information.

Internal Information Control

The Company places a great deal of emphasis on protection of insider trading. Directors, executives and employees of the Company are prohibited from disclosing confidential information and/or internal information which has not yet been disclosed to the public or making use of such information for the benefits of their own or for other's, regardless of directly or indirectly or whether they receive return for such action. Trading in the securities of the Company with the use of insider information is also prohibited. The measures to prevent misuse of internal information has been established by the Board of Directors as follows:

1. Provide knowledge to the directors and executives of the Company on the duty to report the holding of the Company's securities by themselves, spouses and minor children to the Office of the Securities and Exchange Commission in pursuant to section 59 and the concerned penalty under section 275 of the Securities and Exchange Act, B.E. 2535 (including amendments), and to report on the acquisition or disposal of such the securities by themselves, spouses and minor children to the Office of Securities and Exchange Commission in pursuant to section 246 and concerned penalty under section 298 of the Securities and Exchange Act, B.E. 2535 (including amendments).
2. Directors and executives, including their spouses and minor children, are required to prepare and disclose the report on securities holding in the Company and report on changes in securities holding in the Company to the Office of the Securities and Exchange Commission, in pursuant to section 59 and concerned penalty under section 275 of the Securities and Exchange Act, B.E. 2535 (including amendments), and submit a copy of the report to the Company on the same day of report submission to the Office of the Securities Exchange and Commission.
3. Directors, executives, staffs and employees of the Company, who have access to the material internal information which may cause the change in the price of the securities, are refrained from trading in the securities starting from the last day of the quarter or 30 days before the public disclosure of such information, until 24 hours after the disclosure of financial statements or such information to the public. The Company's personnel concerning the information must not disclose such information to other persons until such information has been disclosed to the Stock Exchange of Thailand. The violation of the aforesaid measures shall be regarded as disciplinary fault under the Company's work rules and shall be punished as appropriate starting with verbal warning, written warning, probation up to termination of the employment.

Audit Fee for the Year 2019

For the year ended 31 December 2019, the Company has paid audit fee to PKF Audit (Thailand) Limited, its auditor, at the total amount of Baht 1,820,000, comprising of audit fee of Baht 1,670,000 and non-audit fee of Baht 150,000 for reviewing the report for submission to the Board of Investment.

No person or business related to the auditors and the aforementioned audit firm is considered a related person or business of the Company.

The Implementation of Corporate Governance Code for Listed Companies 2017

The Company is determined to operate the business according to the good corporate governance principles. The Company's corporate governance policy had been established following the guidelines of Corporate Governance Code for Listed Companies 2017 (CG Code), issued by the Office of the Securities and Exchange Commission. The Board of Directors reviews the policy every year to ensure compliance to CG Code and to uses it as governance guidelines for Company's stable and sustainable growth.

Corporate Social Responsibilities

Overall Policy

The Company realizes the importance of conducting business towards sustainable growth with corporate social responsibilities. It focuses on morally and ethically operating the business while contributing to the wellbeing of the stakeholders, economy, society and environment. By conducting business with corporate social responsibilities, the Company hopes to create benefits to the society along with the Company's growth. Therefore, the Company has established the policy of corporate social responsibilities for all employees to adhere to, which can be grouped into seven sections as follows:

1. Fair Business Conduct

The Company strives to operate business with honesty, fairness, good business ethics and aims to compete commercially in accordance to business ethics, laws, fair trade competition principles, as well as against any behaviors that obstruct fair trade competition. With respect to the intellectual property rights of others, the Company requires all personnel to comply with the law or regulations on the rights to intellectual properties. The Company also has campaign projects to cultivate social responsibility among personnel of all levels.

2. Anti-Corruption

The Company manages the business on the basis of being transparent, ethical, adhering to good corporate governance and complying with laws relating to anti-corruption, giving and receiving unlawful bribes to the government or private officials. The Company's organization structure is constructed to clearly separate duties, responsibilities, work process and reporting line in each work function, in order to ensure checks and balances and appropriate cross examination. The Company has laid down an anti-corruption policy as guidance for the directors, executives and employees of the Company and its subsidiaries.

3. Respect for Human Rights

The Company supports and respects human rights by treating concerned parties including employees, community and society with humanity respect, equal rights and freedom, while against violation on basic human rights and discrimination on race, nationality, religion, language, skin color, gender, age, education, physical appearance or social status. The Company also sees to it that its business is not involved in violation of human rights. Moreover, the Company supports monitoring its compliance with human rights regulations by encouraging the stakeholders to express opinions and provide channels for complaints from the victims of human rights abuses caused by the operation of Company's business and offer reasonable remedies.

4. Fair Treatment of Labor

The Company sees importance in human resources development and fair treatment of labor, which is a factor that will help to increase value to the business, strengthen competitive potential and sustainable growth ability of the Company. Thus, the following guidelines has been established:

- 1) Respect the rights of employees by adhering to human rights principles and labor laws.
- 2) Set up fair process of recruitment, employment, terms of employment, remuneration and performance evaluation.
- 3) Promote personnel development by arranging for trainings, seminars and encourage personnel to join in professional trainings in various fields to increase their knowledge and potential, including instill good attitudes, morality, ethics and teamwork in all personnel.
- 4) Provide employee benefits as stipulated by laws such as social security and those not required by laws such as provident fund, health insurance, accident insurance, disability insurance, staff housing, emergency loan, housing loan and other monetary assistance such as death benefit.
- 5) Provide annual physical checkup for employees of all levels, with consideration to individual risk factors such as age, gender and work environment.
- 6) Provide a safe environment with proper hygiene in the workplace by setting measures to prevent accidents and promote safety consciousness, as well as provide trainings, promote employees hygiene and creating healthy and safety workplace.
- 7) Provide opportunities to employees to express opinions or complaints on unfair treatment or wrongdoing in the Company and provide protection to the whistleblower.

5. Customer Accountability

The Company is determined to develop its customer service to achieve customer satisfaction and be responsible and honest in dealing with customers. It oversees that the production process works efficiently to ensure delivery of products at agreed quantity and time. In case of changes in the production plan which may affect the delivery of products, the Company shall discuss with the customer to minimize the impact.

6. Environmental Preservation

The Company places a great emphasis on social responsibility by preserving the environment. The Company strictly adheres to the laws relating to environmental preservation, while supporting environmental activities by continually allocating human resources and funding for such activities and closely coordinates with the surrounding communities.

7. Community and Social Development

The Company realizes its responsibilities towards communities and society. It provides assistance and support community and society development through various channels such as supporting youth education by donating school supplies and awarding scholarships, donating funds to public organizations for public interest such as donations to police stations for improving public service equipment, donations to hospitals for medical equipment improvement and donations to support religious activities.

Corporate Social Responsibility Work and Reporting (CSR in Process)

The Company's Corporate Social Responsibility Policy is used as guideline in determining work process. This is to ensure that all levels of employees recognize and perform their duties efficiently in accordance to such policy, international standard and applicable laws and regulations.

The Company implemented quality management system based on ISO 9001, environmental management system based on ISO 14001 and occupational health and safety management system based on TIS/OHSAS 18001, which are used to determine work regulations for employees and all concerned stakeholders. Social responsibilities are considered starting from production process and work procedures to improvement of plant sites.

By continually conducting business with corporate social responsibilities, the Company has received many awards on environmental management, labor relations, safety, occupational health and working environment, educational support and energy savings from various regulatory agencies such as Ministry of Industry, Ministry of Labour, Ministry of Energy and Ministry of Education.

Social & Environmental Activities (After Process)

The Company regularly organizes activities to support social development in the areas of education, religion, culture and local traditions, environment and community activities as follows:

Education

The Company recognizes the important of youth education in the communities. Supports on educational activities were provided to raise the educational level in the communities to the same level of the large cities, by concurrently developing the education in 3 dimensions – educational facilities, personnel and students through the following projects:

Educational Facilities Improvement The Company donated funds to support the students' education, supported Children Day's activities, continually supports the Sufficient Agricultural Project, Health and Welfare Project for Tubkwang Songkrong 1 Community School, Book for Children Project, as well as suppling crushed rocks for landscape improvements of various schools in Tubkwang district.



Educational Personnel Development The Company provided funds to employ foreign teachers and mental arithmetic teachers for Tubkwang Songkrong 1 Community School, in order to help raise English and mathematics skills of the local teachers and students.



Student Development The Company regularly awards scholarships to students and supports public health activities such as Students Obesity Reduction Project and Kids Nok Tumra Project.



Health and Welfare

The Company realizes the importance of health and wellbeing of the people in the communities. Therefore, it provides financial assistance and directly and indirectly supports programs to promote health of the people in the communities, together with improving way of life through various activities such as financing research of the elderly in Tubkwang City District, funding the meeting for the village health volunteers and sponsoring the chest x-ray project for the communities.



The Company also cooperates with various organizations to help the underprivileged and those affected by natural disasters living in the communities, by joining the Saraburi's Red Cross in donating food and joining with the District Office of Prabuddhabaht, Saraburi Province in building and renovating houses for people in need in Tubkwang District.



Moreover, the Company also supports sports activities to promote good health for the youth by sponsoring sports clothing and equipment to schools in local communities such as Wat Sri Jomthong School in Prabuddhabaht District and Nikhom Tubkwang Songkrong 2 School in Kangkoi District. The Company also sponsors sport events on various occasions such as the 5th Prabuddhabaht Hero Run Super Half Marathon to raise funds for the electricity installation and necessary furnishings at the Orthopedics Rehabilitation Center, Prabuddhabaht Hospital, and the Pun Srang Suk cycling activities at Tubkwang City District.



Religion, Culture and Local Traditions

It is the Company's policy to carry on religious, cultural and local customs of the communities by supporting religious activities on various occasions such as the group ordination of monks at Nong Pakboong Temple, the Annual Pit Tong(placing of gold leaf) at Pa Pai Temple, the Yok Chor Fah (mounting of highest part of temple) at Baan Pong Temple, the Kathin Samakkee (offerings to monks after lent) at Tham Praboddisat Temple and Sri Jomthong Temple, as well as donating funds to purchase equipment and appliances for Baan Romyen Ingdoi Christian Church.

As for cultural and local customs activities, the Company has policy to regularly support those activities such as Songkran festival, Loy Kratong festival, Kratin and Pah Pa activities, by donating funds to various organizations such as Tubkwang Municipality, Huay Pa Hwai Municipality, Tubkwang Health Volunteers and the other community groups surrounding the Company's operation in Tubkwang District, Kangkoi District, Huay PaHwai District and Prabuddhabaht District.





Promote Career in Local Communities

As majority of the local people are wage earners, the Company has a policy to promote community careers to increase household income to have enough to cover expenses and savings for each household. The Company organized projects and provided financial support in activities that promote skills or methods to increase personal income, such as proving financial assistance to Thai Yangyuen Project (Thai Sustainability) of the government, supported field study for the community committee, supported OTOP Project (One Tumbon One Product) of Village No. 10, Tubkwang sub-district, Kangkoi district, Saraburi province, and also support the products by the Tubkwang Shelter for Homeless.



Environment and Infrastructure of the Local Communities

The Company supports environmental protection for the communities through many projects that promote cooperation between management, employees and the local people such as Reforestation on various occasions, joining with the communities in improving the landscape, building weir to slow down water, joining activities on World Environmental Day and Car Free day.

The Company also supports the community infrastructure protection by providing dust collecting vehicles to clean the public roads and regularly supplies crush rocks to repair road shoulders and areas of common infrastructures.





Employee Volunteering Culture

In 2018, the Company started a project named Roi Kwam Dee, 15 Pee Chememan (Let's Do Good, 15 years of Chememan), to celebrate the 15 years operation anniversary of the Company with the objective to promote volunteer culture in the organization, as well as to promote social responsibilities in employees of all levels.

The Company had carried out four activities under the project as follows:

1. Provided meals for the disadvantaged
2. Reforestation
3. Landscape Improvement at Prabuddhabaht Plant
4. Handed out food activity at Annual Kathin of Tham Praboddisat Temple

In addition, the Company also has a policy to expand volunteer activities to other groups in the future, to develop volunteer network and foster volunteering culture on the local communities.



Annual Fun Run Activity

With cooperation between the Company and Nikhom Tubkwang Songkrong 1 Community School, Student Health and Welfare Promotion Fund has been set up with following objectives:

1. To promote age-appropriate health and wellbeing of the students
2. To support activities relating to public health for the students

The Annual Fun Run for charity is an activity set up based on the Company's management intention to involve all sectors being the government, private and community in supporting the Student Health and Welfare Promotion Fund of Nikhom Tubkwang Songkrong 1 Community School ("Fund"). In the Fun Run activity, the Company shall donate to such Fund the amount of Baht 300 for every runner crossing the finish line.

Chememan's Fun Run Activity was first held in 2017, in which there were 800 runners participated, raising Baht 500,000 to the Fund. In 2018, around 1,500 runners participated, raising Baht 550,000 to the Fund. In 2019, the third Fun Run Activity was named "Im Im Tubkwang Fun Run 2020", with approximately 2,500 runners joining, and helped raised Baht 900,000 to the Fund.



Until present, the donation raised for the Fund has been used for the followings:

1. Prepare breakfast for the students
2. Purchase toothbrushes and toothpaste for the students, in order to encourage them to brush their teeth after meal to prevent tooth decay and promote oral health
3. Purchase gymnastics mats for the students to exercise



Anti-Corruption Policy

The Company is determined to conduct business honestly, transparently and fair, under good corporate governance principles and be accountable to society. The Company is firm in its value of being against corruption and all forms of bribery, whether directly or indirectly. Therefore, the anti-corruption policy has been set up as guidance for all employees of the Company to adhere to as follows:

- 1) Not be corrupt or be part of any form of corruption, whether directly or indirectly.
- 2) Be cautious when dealing with receiving and giving gifts, entertainment or any other benefits. To ensure that such acts are for business purposes, with appropriate value and shall not influence any business decisions.
- 3) Put in place efficient and appropriate internal control systems and risk assessment on a regular basis to prevent corruption. Review and assess risk arising from operations that may instigate corruption.
- 4) Manage to ensure that financial reporting is transparent, accurate and in accordance with international accounting standards.
- 5) Set up human resources management system , from recruitment to taking care of employees, to reflect the intention of anti-corruption.
- 6) Set up communication channels for employees to provide evidence, suggestions and complaints on corruption issues, whereby the whistleblower shall be fairly protected.
- 7) Operate business in consistence to the laws relating to anti-corruption in all the countries that the Company operates businesses.
- 8) Any employee who violates or does not comply with this anti-corruption policy, whether directly or indirectly, shall be subjected to disciplinary actions according to the Company's regulations or legal penalties.

It is every employee's responsibility to understand and comply with the Company's anti-corruption policy in all work processes. The employee must inform his/her superior immediately if any such act of corruption occurs.

Internal Control and Risk Management

Internal Control

The Company has an Audit Committee whose responsibilities are to ensure that the Company has an efficient governing system, oversee the internal control and internal audit's works and provide recommendations on risk management to make certain that the system is adequate, appropriate and efficient. The Audit Committee had resolved to approve the engagement of ANS Business Consultants Limited ("ANS") as the internal auditor of the Company for the year 2019. During the year, the internal auditor had audited 4 processes being sales, fixed asset and equipment management, inventory management and accounting and financial management, in accordance to the audit plan approved by the Audit Committee.

Audit Process

The Company and the internal auditor has laid down working procedures by considering the risk assessment of the business operation processes which comprise of the following main processes:

1. Sales Process
2. Accounting and Financial Management Process
3. Fixed Assets and Equipment Management Process
4. Procurement Process
5. Inventory and Distribution Management Process
6. Product Development Process
7. Human Resources Management Process
8. Production Process
9. Information Technology Management Process

Internal Audit Plan

1. Prepare audit topics on different processes, including the audit of the follow-up on compliance to the previous auditor's recommendations (if any).
2. Discuss with top management on issues that require more emphasis.
3. Prepare annual internal audit plan which has been reviewed by the Company's management.
4. Propose for an approval on the annual internal audit plan from the Audit Committee, and inform the relevant departments about the schedule of the internal audit visit.

Analyze Business Processes and Prepare Audit Guidelines

1. Study and analyze the business processes to be audited.
2. Prepare the audit guidelines for the business processes to be audited.

Auditing and Reporting the Audit Results

1. Evaluate the effectiveness of the internal audit using various appropriate methods such as conducting interviews, observing work procedures and random check on critical issues.
2. Summarize the results of internal audit with the management and the relevant operators.
3. Prepare audit report for the Audit Committee on quarterly basis.

Evaluation of the Adequateness of Internal Audit Process

Opinion of the Board of Directors

In the Board of Directors' Meeting No. 9/2019 held on 11 November 2019, where all three members of the Audit Committee were present, the Board of Directors was informed of the result of the internal control sufficiency assessment done by the management in accordance with the internal control framework of the Securities and Exchange Commission (SEC), which had been reviewed by the Audit Committee. The assessment results were shown with descriptions for five areas as follows:

- 1) Internal Control
- 2) Risk Assessment
- 3) Operational Control
- 4) Information Technology and Data Communication System
- 5) Monitoring System

The Board of Directors' opinion was that the Company's internal control system is adequate and appropriate. The Company provided enough personnel to operate in accordance to the system with efficiency, as well as having internal control system to oversee and monitor the operation of the subsidiaries in order to prevent inappropriate or unauthorized use of Company's assets by the directors or management, including adequacy in monitoring the transactions between the Company and persons that may have conflict of interest. The Board of Directors was also of opinion that the Company had sufficient internal control in other areas.

Opinion of the Audit Committee which is Different from the Opinion of the Board of Directors

-None-

Opinion of the Internal Auditor

The Company operates the business and manages various work processes with secure and effective internal control, and able to manage the risks at appropriate and acceptable levels. There are proper separation of duties, precise operation manuals which can be used as work guidelines, and centralized management policy with systematic supervision process.

Moreover, the relevant management has set up improvement plans and follow-up on such improvement to ensure successful implementation as scheduled. After receiving reviewed results of the internal audit with observations and recommendations for improvements of the internal audit process, it can be concluded that the control processes of the management team are effective and appropriate.

Head of Internal Auditor of the Company

In the Meeting of the Audit Committee No. 1/2019, held on 27 February 2019, the Audit Committee approved the engagement of ANS Business Consultants Limited (“ANS”) which had been engaged since 17 December 2015. Mr. Amornpong Nualwiwat, Director of ANS, was the main responsible person in charge of the internal audit of the Company. The Audit Committee considered the qualifications of ANS and Mr. Amornpong Nualwiwat, together with the past work results and of opinion that both were sufficiently independent and qualified for internal auditing of the Company. Mr. Amornpong has over 20 years of experience in internal auditing, undergone training and awarded Certificate of Professional Internal Auditor of Thailand. His qualifications as head of internal audit is shown in attachment 3 of Annual Registration Statements for the year 2019 (Form 56-1) - Details of Head of Internal Audit.



Connected Transactions

Connected Transactions between the Company and parties that may have conflicts of interest

Connected transactions between the Company and parties that may have conflict of interest, for the year ended 31 December 2018 and 2019 were as follows:

(1) **Rayong Mongkolchai Company Limited (“Rayong Mongkolchai”)**

Mr. Suthep Uacherdkul who is a director and shareholder of the Company with direct and indirect shareholding percentage of 3.92% of the Company’s paid-up capital (as at 31 December 2019), is also a director and a major shareholder of Rayong Mongkolchai, with a percentage of 50.00% shareholding in Rayong Mongkolchai’s paid-up capital (as at 31 December 2019).

Transaction	Transaction Amount (Million Baht)		Necessity and Reasonableness
	For year ended 31 December 2018	For year ended 31 December 2019	
Payment for the purchase of construction materials	0.20	0.09	The Company purchased construction materials, equipment and tools from Rayong Mongkolchai for use in its hydrated lime plant in Rayong. The price and payment terms given by Rayong Mongkolchai were similar to what the Company received from other suppliers. Therefore, the transaction was considered as reasonable and for the interest of the Company.
Trade and other payables	0.02	0.01	
Revenue from sales of hydrated lime	-	0.007	The Company sold hydrated lime to Rayong Mongkolchai for its business operations. The selling price and payment conditions given by the Company were similar to the Company’s sales to other customers. Therefore, this transaction was considered as reasonable and for the interest of the Company.

(2) Legal Advisory Council Limited (“Legal Advisory Council”)

Mr. Pornprom Karnchanachari who is a director of the Company, is also a director and a shareholder of Legal Advisory Council, with a shareholding percentage of 25.00% of the paid-up capital of Legal Advisory Council (as at 31 December 2019).

Transaction	Transaction Amount (Million Baht)		Necessity and Reasonableness
	For year ended 31 December 2018	For year ended 31 December 2019	
Legal advisory service fee	0.39	1.15	As the Company does not have personnel in the legal field, legal advisor is required for the operations under the stated scope. Furthermore, Legal Advisory Council is a knowledgeable and experience legal service provider who has been the Company's legal advisor for many years, thus able to understand the nature of the Company very well and can provide the service effectively. Moreover, the fees charged were normal market rates, similar to those charged to other clients. The transaction was a normal business transaction, thus was considered as reasonable.
The Company engaged Legal Advisory Council as its legal advisor with following scope of work: <ul style="list-style-type: none">• Prepare Company's corporate documents• Due diligence service• Prepare contracts / agreements• Litigation lawyer			

(3) Hardware King Company Limited (“Hardware King”)

Mr. Suthep Uacherdkul, who is a director and a shareholder of the Company with direct and indirect shareholding percentage of 3.92% of the Company's paid-up capital (as at 31 December 2019), is also a director and a shareholder of Hardware King with shareholding percentage of 40.00% of Hardware King's paid-up capital (as at 31 December 2019).

Transaction	Transaction Amount (Million Baht)		Necessity and Reasonableness
	For year ended 31 December 2018	For year ended 31 December 2019	
Payment for the purchase of hardware and mechanical tools	-	0.004	The Company purchased hardware and mechanical tools from Hardware King for use in its hydrated lime plant in Rayong. The selling price and payment conditions given by Hardware King were similar to what the Company received from other suppliers. Therefore, the transaction is a normal business supporting transaction and is considered as reasonable.

(4) CalMix Company Limited (“CalMix”)

The Company held 51.00% of CalMix’s paid-up capital. The Company and CalMix have one common director being Mr. Adisak Lowjun (as at 31 December 2019).

Transaction	Transaction Amount (Million Baht)		Necessity and Reasonableness
	For year ended 31 December 2018	For year ended 31 December 2019	
Revenue from sales of assets	-	20.27	The Company sold machineries such as Mixing Unit, packing Unit and Laboratory Equipment to CalMix, to be used in its production. The selling prices imposed by the Company were based on the book value plus 5%. The transactions were normal supporting business transactions which helped facilitate the operations, thus were considered as reasonable.
Other payables	-	0.70	

(5) Easternbulk Lime Products Private Limited (“Easternbulk Lime”)

The Company held 50.00% of Easternbulk Lime’s paid-up capital. The Company and Easternbulk Lime have one common director being Mr. Adisak Lowjun (as at 31 December 2019).

Transaction	Transaction Amount (Million Baht)		Necessity and Reasonableness
	For year ended 31 December 2018	For year ended 31 December 2019	
Investment in joint venture	0.16	-	Due to difference in exchange translation of the investment transferred to Easternbulk lime, whereby the Company transferred the fund in USD currency to be translated to IND rupee currency in accordance with the capital registration certificate. The excess from the stated amount shall be returned to the Company as per the regulations of Reserve bank of India. Such transaction was to support the Company’s business operation and was considered as reasonable.

Connected Transaction between the subsidiaries and parties that may have conflicts of interest

(6) Chememan India Private Limited (“Chememan India”) and Easternbulk Lime Products Private Limited (“Easternbulk Lime”)

Chememan India is a subsidiary of the Company, in which the Company held 99.99% of its paid-up capital and Easternbulk Lime is a joint venture, in which the Company held 50.00% of its paid-up capital. Chememan India and Easternbulk Lime have two common directors being Mr. Adisak Lowjun and Mr. Srikanth Palakurthi (as at 31 December 2019).

Transaction	Transaction Amount (Million Baht)		Necessity and Reasonableness
	For year ended 31 December 2018	For year ended 31 December 2019	
Service Fee	2.80	2.66	Easternbulk Lime hired Chememan India to manage the construction project as well as accounting and human resources management. The service fees were charged on monthly basis at IND 500,000 rupees per month. Chememan India charged the fees based on its estimation of actual cost incurred. The transaction was to support the business operations of Easternbulk Lime with fee based on estimation of actual cost incurred, thus considered as reasonable and for the interest of the Company.

Measures and Procedures for Approving Connected Transactions

Connected transactions between the Company and the parties that may have conflicts of interest shall be reviewed and provided opinion on the appropriateness of the transaction by the Audit Committee, considering the benefit of the Company at its utmost. In case that the Audit Committee has no expertise to review the connected transaction, the Company will obtain opinion from independent expert or the Company's auditor on such transaction as information for consideration and decision of the Audit Committee and/or the Board of Directors and/or the Shareholders, as the case may be. Person that may have conflict of interest shall have no right to vote for the approval of such connected transaction.

Policy on Connected Transaction

As a guideline for executing any connected transactions of the Company and its subsidiaries transparently with no conflict of interest, and for the best interest of the Company and its shareholders, the Company set the following as guidelines for connected transactions of the Company:

1. Directors and management of the Company must prepare a written report on one's own or one's related party's conflict of interest, and inform the Company so that it could obtain information needed for further proceedings in relation to connected transactions in accordance with applicable laws and regulations.

2. Avoid connected transactions that may result in conflict of interest.
3. If it is necessary for the Company or its subsidiaries to enter into connected transaction, all such transactions must be approved by the Audit Committee, the Board of Directors, or the shareholders' meeting (whichever is applicable), except for transactions under trade agreement with general terms and conditions that the received prior approval from the Board of Directors in principle.
4. Comply with the securities and exchange laws, rules and regulations, announcements, and orders of the Capital Market Supervisory Board, and the Stock Exchange of Thailand.
5. Set the pricing and conditions of connected transaction on an arm's length basis which must be fair, reasonable and for the best interest to the Company. If there is no such price, the Company will make comparison of product price or service fee of the connected transaction with third parties under the same or similar conditions.
6. Party of the connected transaction that has conflict of interest cannot approve or vote on such transaction.
7. In consideration of the connected transactions, the Company or its subsidiaries may appoint an independent appraiser to assess and compare prices of major connected transaction to ensure that such connected transaction is reasonable and for the best interest of the Company.

Connected Transactions in the Future

The Company foresees that connected transactions with directors, major shareholders and persons that may have conflict of interest will still occur in the future. Those transactions are normal business supporting transactions which may be done based on the business needs, such as:

1. Hiring of consultants from Legal Advisor Council Limited – This transaction is necessary to support the Company's business. The service fees and payment conditions are at standard rate charged to other clients. The Company sees that this type of transaction will regularly occur as necessary.
2. Purchasing of construction materials from Hardware King Company Limited and Rayong Mongkolchai Company Limited – This transaction is necessary to support the Company's business. The prices and payment conditions received were similar to those the Company received from other suppliers. The Company sees that this type of transaction will still occur as necessary.

In entering into the above connected transactions, the Company will follow the Securities and Exchange Act B.E. 2535 (including amendments), regulations, announcements, orders or the measures of the Capital Market Supervisory Board, the Securities and Exchange Commission and the Stock Exchange of Thailand, including policies and related announcements of the Company, which include code of conduct, connected transaction policy and guidelines on entering into connected transactions between the Company and directors, management or related parties, which are business transactions with general terms and conditions.

Report on the Board of Directors' Responsibilities for the Financial Statements

The Board of Directors of the Company is responsible for the financial statements of Chememan Public Company Limited and its subsidiaries, which have been prepared in accordance with Thai Financial Reporting Standards under the Accounting Act B.E. 2547. The Board of Directors considers the accounting policies adopted are appropriate with the business, and have been applied consistently, with adequate disclosure of important information in the notes to the financial statements. The Company's external auditor has reviewed and audited the financial statements of the Company and expressed an unqualified opinion in the auditor's report.

The Board of Directors oversees and reviews the corporate governance as well as establishes and maintains an adequate and appropriate risk management system and internal control system to ensure that accounting records are accurate, complete and timely, and that the Company's assets are properly safeguarded against fraud and material operational irregularities. The Board of Directors has appointed an Audit Committee, consisting of independent directors, to review that the financial reports, internal control system and internal audit are appropriate and effective. The Audit Committee's opinions are reported in the Audit Committee Report included in this annual report.

The Board of Directors is in the opinion that the internal control system and internal audit of the Company provide credibility and reliability to the financial statements of Chememan Public Company Limited and its subsidiaries that the financial position, financial performance and cash flows are presented fairly, in all material respects, in accordance with Thai Financial Reporting Standards.

On behalf of the Board of Directors



M.L. Chandchutha Chandratat
Chairman of the Board of Directors

Audit Committee Report

Year 2019

The Audit Committee of Chememan Public Company Limited is comprised of three qualified independent directors, namely Mr. Pornprom Karnchanachari, Miss Amata Issarangura Na Ayudhaya and Mr. Yarnsak Manomaiphiboon. The Audit Committee was appointed by the Meeting of the Board of Directors to perform duties and responsibilities as stipulated in the Audit Committee Charter. In 2019, the Audit Committee performed duties within the specified scope with summary of work performed as follows:

1. Held four meetings in 2019 to confer with management, internal auditors and external auditors, and proposed quarterly reports to the Board of Directors.

Name	Position	Attendance In 2019*
1. Mr. Pornprom Karnchanachari	Chairman of Audit Committee	4/4
2. Miss Amata Issarangura Na Ayudhaya	Member of Audit Committee	4/4
3. Mr. Yarnsak Manomaiphiboon	Member of Audit Committee	4/4

Remarks * In 2019, the Audit Committee held one private meeting with the external auditor without the management participation.

2. Reviewed the quarterly and annual financial statements of the Company and its subsidiaries which had been reviewed and audited by the external auditor. The related management and the external auditor were invited to join the meeting to clarify and answer questions before providing opinion on the financial reports, accounting adjustment entries which materially affected the financial statements and the adequacy of the information disclosure. The Audit Committee was of the opinion that the financial statements of the Company present the financial position and the financial performance fairly, in all material respects, in accordance with Thai Financial Reporting Standard, and the material information has been sufficiently, completely and reliably disclosed in the notes to the financial statements, as well as the accounting policy used is reasonable.
In addition, the Audit Committee held a private meeting with the external auditor without the presence of the management to discuss on the audit plan, independence in performing duties and expressing auditor's opinion as well as providing comments on various issues.
3. Reviewed the connected transactions of the Company and its subsidiaries with parties that may have conflict of interest to ensure compliance with the Rules of Entering into Connected Transactions of the Company which is in line with the law and regulation of the Stock Exchange of Thailand. The Audit Committee deemed that the entering into connected transactions of the Company and its subsidiaries had complied the law and the regulation of the Stock Exchange of Thailand and were fair, reasonable with general terms and conditions, and did not facilitate a transfer of interest. The disclosure of such transactions were complete and sufficient.

4. Reviewed the internal control process to evaluate the adequacy and effectiveness to reasonably assure the Company's performance in achieving its goals. The Audit Committee has reviewed the quarterly internal audit reports which had been directly reported to the Audit Committee by the internal auditor in accordance with the approved audit plan, and of the opinion that the internal control of the operation process and significant work process were adequate and appropriate.

Oversaw internal audit work by approving annual internal audit plan based on risk assessments, acknowledging the quarterly internal audit reports, providing comments to the internal auditor and submitting corrective measures to be taken by the management including continual follow-up on their progress. In this regard, the Audit Committee reviewed the independence and performance of the consultant firm who act as internal auditor, and also reviewed the Internal Audit Charter and deemed that the internal audit function of the Company was performed independently, adequately and effectively. Moreover, the head of the internal audit and his team were knowledgeable, proficient and experienced in internal audit work which commensurate with the professional standards, to assist and support the operations of the Company in achieving its goals.

5. Reviewed operations and oversaw that the Company was strictly in compliance with the Securities and Exchange Act, regulations of the Securities and Exchange Commission, the Stock Exchange of Thailand and other laws related to the Company's business. The Audit Committee was of the opinion that the Company operated business correctly and appropriately in relation to normal business conditions. In 2019, there were no cases of violation of relevant laws and regulations by the Company.
6. The Audit Committee has reviewed the Audit Committee Charter to ensure conformity with the objectives of setting up the Audit Committee.
7. Selected and proposed the appointment of external auditor as well as the approval of audit fee for the year 2019. The Audit Committee considered based on independency, reliability, service rendering, advisory on accounting standards, audit work as well as the appropriateness of the audit fee, and had provided opinion to the Board of Directors for further approval by the shareholders to appoint the auditors from PKF Audit (Thailand) Limited as the external auditor for the year 2019. The auditors to be appointed were Miss Sawinee Sawanont (Certified Public Accountant No. 7092) or Miss Napaporn Sathitthammaporn (Certified Public Accountant No. 7494). The annual audit fee for the year 2019 was 1,820,000 Baht.

In summary, in 2019, the Audit Committee fulfilled its duties and responsibilities as stipulated in the Audit Committee Charter with proficiency, carefulness, prudence and with sufficient independency. The Audit Committee is of opinion that the financial statements of the Company present information, in all material aspects, in accordance with general financial reporting standards with adequate disclosure of connected transactions or transactions that may lead to conflict of interest; and that the Company has good corporate governance, appropriate risk management system, suitable and effective internal control and internal audit systems and fully complies with all law, rules and regulations related to the operation of the Company.



Mr. Pornprom Karnchanachari
Chairman of the Audit Committee

Management's Discussion and Analysis

Business Overview

Lime¹ and limestone have been used as part of the production process of various consumer products used in daily life. With installed lime production capacity of over 1,000,000 tons per year, the Company has customer bases in various industries located both in Thailand and overseas.

Significant Events in 2019

1. Commercial Operation of KK4 Quicklime Kiln at Kangkoi Plant, Saraburi

The Company increased production capacity by investing in the construction of KK4 quicklime kiln at Kangkoi Plant, Saraburi, with installed capacity of 73,000 tons per year. The construction was completed and commercial operation commenced in the beginning of the year 2019.

2. Establishing CalMix Co., Ltd. – a Joint Venture in Thailand

The Company entered into a joint venture with 2 German partners namely BERGMANN KALK HOLDING GmbH and KALKWERKE H. OETELSHOFEN GmbH & Co. KG, to establish CalMix Co., Ltd. in Thailand in February 2019, to develop, manufacture and distribute construction materials in Thailand and to other countries in Southeast Asia. The Company is holding 51 percent stake in the joint venture.

3. Commercial Operation of a Joint Venture in India

The Company has invested in Easternbulk Lime Products Private Limited, a joint venture which the Company has a 50 percent stake. Located in the industrial zone of Tuticorin, India, the joint venture has been established to manufacture and distribute lime with quicklime production capacity of 47,450 tons per year and ground limestone production capacity of 73,000 tons per year. The construction has been completed and commercial operation has commenced since July 2019.

4. Dissolution of a Subsidiary in Thailand

Tubkwang Company Limited, a non-active subsidiary in which the Company holds 99.99 percent of the registered capital, has been dissolved since October 2019 and is currently on liquidation process.

5. Investment in Ha Long QN Lime Company Limited, Vietnam

The Company purchased 80 percent portion of capital contribution in Ha Long QN Lime Company Limited ("HLL"), a lime producer in Vietnam with limestone mining concession. The aim of the investment was to expand the production base to appropriate location to support the customer base expansion and to increase the distribution center, enabling effective logistics management.

¹ Lime refers to quicklime and hydrated lime.

Summary of Operational Results

Unit : Million Baht	For year ended	
	31 December 2019	31 December 2018
Sales revenue ⁽¹⁾	2,372	2,423
Domestic	961	959
International	1,411	1,464
Cost of sales (not include depreciation & amortization)	(1,408)	(1,429)
Transportation cost	(475)	(425)
Gross Profit (net transportation cost and depreciation & amortization)	490	569
Gross Profit Margin (net transportation cost and depreciation & amortization) ⁽²⁾ (%)	25.8%	28.5%
Other income	21	19
Selling expenses	(45)	(33)
Administrative expenses	(184)	(159)
Gain (Loss) on exchange rate	(24)	2
Non-cash expenses	31	19
EBITDA	290	417
Adjust : (a) Gain (Loss) on exchange rate	24	(2)
Adjust : (b) Cost incurred by temporary shutdown of kiln for maintenance	16	10
Normalized EBITDA ⁽³⁾	329	425
Normalized EBITDA Margin (%)	13.9%	17.5%
Depreciation & amortization	(211)	(187)
Depreciation & amortization - Cost of sales	(196)	(173)
Depreciation & amortization - Administrative expenses	(15)	(14)
Finance costs	(52)	(57)
Interest received	4	3
Adjust : (c) Loan prepayment fee	0	11
Share of loss from investment in joint ventures	(10)	(4)
Gain (Loss) on tax	8	9
(Profit) Loss attributable to non-controlling interests of the subsidiary	4	1
Normalized Net Profit attributable to equity holders of the company ⁽³⁾	72	200
Normalized Net Profit Margin attributable to equity holders of the company (%)	3.0%	8.3%
(a) Gain (Loss) on exchange rate	(24)	2
(b) Cost incurred by temporary shutdown of kiln for maintenance	(16)	(10)
(c) Loan prepayment fee	0	(11)
(d) Non-cash expenses	(31)	(19)
Profit (Loss) attributable to equity holders of the company	0.8	162.6
Profit (Loss) attributable to non-controlling interests of the subsidiary	(4)	(1)
Net Profit (Loss)	(3)	161
Net Profit (Loss) Margin ⁽⁴⁾ (%)	-0.2%	8.1%
Earnings (Loss) per share (Baht)	0.00	0.18

⁽¹⁾ Sales revenue = Revenue from sales of products and transportation cost

⁽²⁾ Gross Profit Margin (net transportation and depreciation & amortization) = Gross Profit (net transportation and depreciation & amortization) / (Sales revenue - Transportation cost)

⁽³⁾ After adjustment of unusual transactions

⁽⁴⁾ Net Profit Margin = Net Profit / (Sales revenue - Transportation cost)

Analysis of Operational Results

Results of operations for the year 2019 compared to year 2018

In 2019, the Company generated Baht 2,372 million sales revenue, decreasing 2.1% when compared with the year 2018, primarily due to the drop in international sales revenue affected by baht appreciation against foreign currencies, while the domestic sales revenue increased slightly.

Gross profit margin (net transportation cost and depreciation & amortization) for the year 2019 equivalent to 25.8%, decreased when compared with last year at 28.5%, accounted by higher transportation cost and cost of kiln shut down for maintenance.

Selling and administrative expenses for the year 2019 at Baht 229 million, increased by 19% from last year mainly due to (1) expenses in relation to investment project in Vietnam such as advisory fee and project research expenses (2) higher employees related expenses (3) lower warehouse rental cost from using own constructed warehouse in Kangkoi Plant instead of outside warehouse.

EBITDA for the year 2019 stepped down by 30% from last year to stand at Baht 290 million.

Depreciation & amortization expenses for the year 2019 shoot up 13% from last year to Baht 211 million, as a result of assets increase following the production capacity expansion projects such as KK4 quicklime kiln and Tubkwang crushing plant.

Finance costs for the year 2019 amount Baht 52 million, reduced 9% from last year, attributed by the financial restructuring in 2018 and the lower interest rate.

Gain on tax for the year 2019 at Baht 8 million were mainly deferred income tax arose from profit of the operations receiving investment promotional privileges from the Board of Investment.

As a result of the above transactions, the Company's consolidated financial statements recorded net loss of Baht 3 million, in which there was a profit attributable to equity holders of the company at the amount of Baht 0.8 million compared with Baht 162.6 million in the previous year.

Remarks: Figures shown in the Management's Discussion and Analysis have been rounded off to whole numbers, resulting in inexact value of some calculations presented.

Financial Position

Unit : Million Baht	As at		% Change
	31 December 2019	31 December 2018	
Cash & cash equivalents	215	126	+71.0%
Trade and other receivables	523	417	+25.3%
Inventories	389	312	+24.5%
Investment in joint ventures	196	108	+82.1%
Property, plant and equipment	3,590	2,550	+40.7%
Ore reserve	223	101	+121.6%
Other assets	465	209	+122.1%
Total Assets	5,602	3,824	+46.5%
Trade and other payables	545	324	+68.5%
Interest-bearing debt	2,628	1,162	+126.1%
Other liabilities	229	115	+99.0%
Total Liabilities	3,403	1,601	+112.5%
Equity attributable to owners of the Company	2,127	2,219	-4.2%
Non-controlling interests of the subsidiary	72	4	+1,752.9%
Total Shareholders' Equity	2,199	2,223	-1.1%

Total Assets as at 31 December 2019 were reported at Baht 5,602 million, increased by Baht 1,778 million from the end of year 2018, due to the investment transaction in HLL with net assets equivalent to Baht 1,268 million and the recording of Baht 250 million goodwill. Without such transactions, total assets rose up by Baht 273 million from the investment in a joint venture in Thailand and 2 joint ventures in India, as well as additional investment in property, plant and equipment, in accordance with the Company's investment plan.

Total Liabilities as at 31 December 2019, equivalent to Baht 3,403 million, increased by baht 1,802 million from the end of year 2018, with interest-bearing debt (both short-term and long-term borrowings excluding financial leases) of HLL amounting to Baht 427 million. Without the transaction, the increase in interest-bearing debt to the amount of Baht 1,039 million was used to support investment expansion and working capital.

Total Shareholders' Equity as at 31 December 2019 stood at Baht 2,199 million, declined by Baht 24 million from loss in other comprehensive income transaction and payment of dividend amount Baht 67 million during the year 2019.

Liquidity and Cash Flow

Unit : Million Baht	For year ended		Change
	31 December 2019	31 December 2018	
Cash flows from operating activities	87	320	(233)
Cash flows from investing activities	(902)	(678)	(224)
Cash flows from financing activities	898	443	455
Increase (Decrease) in translation adjustments	6	(5)	11
Net increase in cash and cash equivalents	89	80	9
Cash and cash equivalents at beginning of period	126	46	80
Cash and cash equivalents at end of period	215	126	89

For the year 2019, the Company generated an increase in cash flow by Baht 89 million, resulting in cash and cash equivalents at the end of period equivalent to Baht 215 million.

Cash flows from operating activities The Company's net cash inflows from operating activities, after deduction of cash paid for interest expenses and income tax, was Baht 87 million, reduced by Baht 233 million from the same period last year, mainly from the lower in EBITDA.

Cash flows from investing activities The Company's net cash outflows from investing activities in the amount of Baht 902 million, increased by Baht 224 million from the same period last year, accounted mainly by the investment in HA LONG QN LIME COMPANY LIMITED. Without such transaction, the investing activities in 2019 had been reduced by 34% when compared with previous year.

Cash flows from financing activities The Company's net cash inflows from financing activities of Baht 898 million, increased by Baht 455 million from the same period last year due to cash inflows in 2019 from short-term and long-term borrowings to support the Company's working capital, production capacity expansion projects and overseas business expansion projects, while in 2018, the Company reported net cash outflows from financial restructuring.

During the year 2019, there were 2 dividend payment – in Q2 at Baht 0.05 per share, in the total amount of Baht 48 million and in Q3 at Baht 0.02 per share, in the total amount of Baht 19 million.

The Company has the dividend payment policy of not less than 40% of consolidated net profit after deduction of income tax and all reserves as required by the law and the company's articles of association. The dividend payment must not exceed the company's retained earnings based on its separated financial statements, taking into consideration the company's cashflow, operating results, financial structure, investment plans, conditions and obligations of the company in various contracts, future requirements and consistency of the dividend payments.

Key Financial Ratios

Financial Ratios	Unit	For 12-month period ended		
		31 December 2019	31 December 2018	31 December 2017
Current Ratio	Times	0.69	1.41	1.02
Return on Equity	%	(0.13)	9.36	9.53
Return on Equity (Normalized)	%	1.67	10.45	10.51
Debt / Equity Ratio	Times	1.55	0.72	1.63
Interest-Bearing Debt / Equity Ratio	Times	1.20	0.52	1.27

Remarks : The calculation of financial ratios is based on formulas in the SET's manual guide.

Chememan Public Company Limited
and its subsidiaries

Financial statements for the year ended 31 December 2019 and
Independent Auditor's Report

Independent Auditor's Report

To the Shareholders of Chememan Public Company Limited

Qualified Opinion

I have audited the consolidated and separate financial statements of Chememan Public Company Limited and its subsidiaries (the "Group") and of Chememan Public Company Limited (the "Company"), respectively, which comprise the consolidated and separate statements of financial position as at 31 December 2019, the consolidated and separate 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, except for the possible effects to the consolidated and separate financial statements of the matter described in the Basis for Qualified Opinion section of my report, the accompanying consolidated and separate financial statements present fairly, in all material respects, the financial position of the Group and the Company, respectively, as at 31 December 2019 and their financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards (TFRSs).

Basis for Qualified Opinion

During the year, the Group acquired the capital contribution of Ha Long QN Lime Company Limited ("HLL") which is the indirect subsidiary in Vietnam as mention in Note No. 5. Assets and liabilities of HLL are presented in the consolidated statements of financial position representing 16% portion of the Group's net assets as at 31 December 2019. The financial statements of HLL for the year ended 31 December 2019 includes write-off of account receivable amounting to VND 597 billion or equivalent to Baht 799 million that HLL was transferred the right to collect and then write-off this account receivable prior to the date of acquisition by the Group. The auditor of HLL has been unable to obtain sufficient appropriate audit evidence about necessary legal documents or other documentations to support the transfer of receivable, the written-off amount or related taxation implications and is unable to express an audit opinion on the financial position of HLL at either the acquisition date by the Group or as at 31 December 2019. This potentially affects the value of assets and liabilities of HLL that are presented in the consolidated statements of financial position as at 31 December 2019, and the financial performance for the period of HLL. Moreover, the value of investment in subsidiary, Northman Company Limited, which invested in HLL and which are presented in the separate financial statements amounting to Baht 554 million is unable to be assessed due to the position of HLL as its subsidiary. Consequently, I was unable to determine whether any adjustments were necessary.

I conducted my audit in accordance with Thai Standards on Auditing (TSAs). My responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements section of my report. I am independent of the Group and the Company in accordance with the Code of Ethics for Professional Accountants issued by the Federation of Accounting Professions that is relevant to my audit of the consolidated and separate financial statements, and I have fulfilled my other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for qualified opinion.

PKF Audit (Thailand) Ltd. • 98 Sathorn Square Office Tower • 28th Fl. Unit 2812 • North Sathorn Road • Silom • Bangrak • Bangkok • 10500 • Tel +66 2 108 1591-6 • Fax +66 2 108 1599 • Email: info@pkfthailand.asia • Website: www.pkfthailand.asia

PKF Audit (Thailand) Ltd. is a member firm of the PKF International Limited family of legally independent firms and does not accept any responsibility or liability for the actions or inactions of any individual member or correspondent firm or firms.

Key Audit Matters

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

The key audit matter	How the matter was addressed in the audit
<p>Significant business acquisition</p> <p>During the year ended December 31, 2019, the Group has acquired Ha Long QN Lime Company limited at the amount of Baht 537 million. Key audit matter is whether the acquisition assets and liabilities of Ha Long QN Lime Company limited at the acquisition date has been recognized in accordance with TFRSs including related disclosures. At the reporting date, the Group is still in the process of appraising the fair value of the identifiable assets acquired and liabilities assumed and the fair value allocation at the business acquisition date.</p> <p>The accounting method for business combinations is a complex and judgmental exercise, requiring the Group to determine the fair value of assets acquired and liabilities assumed and consideration transferred with any resulting differences recognised as goodwill or a gain on bargain purchase.</p> <p>Due to the materiality of the transactions and the significant judgment and complexities involved in determining the fair value of assets acquired and liabilities assumed, I considered accounting for business combination as the key audit matter.</p>	<p>Key audit procedures included:</p> <ul style="list-style-type: none"> • Understanding the business acquisition process and related internal control procedures. • Performing substantive testing as follows: <ul style="list-style-type: none"> - Examining the terms and conditions of Contributed Capital Transfer Agreement for the acquisition of Ha Long QN Lime Company limited, payment documents, share transferred documents and related supporting documents - Examining details of assets and liabilities of Ha Long QN Lime Company limited at the acquisition date which consists of the examination of existence, rights, obligations, valuation of assets and liabilities - Agreeing the carrying amounts in the accounting records of the acquiree as at the date of acquisition and examine the consideration transferred - Considered the completeness of assets and liabilities transferred - Determine the accuracy of goodwill recognition based on the differences of the provisional values of net assets acquired and consideration transferred - Considered the adequacy of disclosure in accordance with TFRS's
<p>Revenue recognition</p> <p>Revenue from sales of chemical products for industrial use is a significant amount. As at 31 December 2019, sales amounted to Baht 2,372 million and directly affected the Group's profit and loss. In addition, the Group has a large number of customers and a variety of terms and conditions of sales. There are therefore risks with respect to the amount and timing of revenue recognition from sales, especially near the end of the year.</p>	<p>Key audit procedures included:</p> <ul style="list-style-type: none"> • Understanding the revenue recognition process and related internal control procedures. • Assessing and testing the effectiveness of the IT system and internal controls with respect to the revenue cycle of the Group, especially tests related to the accuracy and timing of revenue recognition in the financial statements of the Group. • Performing substantive testing as follows: <ul style="list-style-type: none"> - Examining the supporting documents for the revenue from sales of goods occurring during the year and focus on revenue transactions that occur near the end of accounting period.

The key audit matter	How the matter was addressed in the audit
	<ul style="list-style-type: none"> - Requesting for the confirmation of accounts receivable balances at the year-end. - Reviewing credit notes issued after year-end especially the credit notes of revenue in period. - Performed analytical procedures on disaggregated data to detect possible irregularities in sales transactions throughout the period, particularly for accounting entries made through journal vouchers.
<p>Impairment of investment in subsidiaries and joint ventures, and goodwill</p> <p>The consideration of impairment of investment in subsidiaries and joint ventures and goodwill is depended on the management judgements and assumptions. Therefore, the key audit matter is whether the valuation of investment in subsidiaries and joint ventures, and goodwill and the allowance for impairment in subsidiaries and joint ventures and goodwill have been recognized in accordance with TFRSs.</p> <p>Accounting policies of investments, goodwill and impairment and detail of investments in subsidiaries and joint ventures, and goodwill were disclosed in the Notes 4.5, 4.9, 4.13, 11 and 12 to the financial statements, respectively.</p>	<p>Key audit procedures were included:</p> <ul style="list-style-type: none"> • Understanding the impairment consideration process and related internal control procedures. • Performing substantive testing as follows: <ul style="list-style-type: none"> - Examining the supporting documents in relation to the management consideration of impairment indicators for investment in subsidiaries and joint ventures, and goodwill. - Assessing the appropriateness of valuation model and key assumptions the management used in the estimation of the impairment provision for investment in subsidiaries and joint ventures, and goodwill.

Emphasis of Matter

We draw attention to Note 5 to the financial statements that the Group completed the acquisition of 80% equity interest in Ha Long QN Lime Company limited resulting in the recording of goodwill of Baht 253 million. The fair value of identifiable net assets and the allocation of purchase price have been provisionally determined and are subject to potential amendment. My opinion is not modified in respect of this matter.

Other matter

The consolidated and separate financial statements of the Group and the Company for the year ended 31 December 2018, which are included as comparative information, were audited by another auditor whose report dated 27 February 2019 expressed an unqualified opinion on those statements.

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 consolidated and separate financial statements and my auditor's report thereon. The annual report is expected to be made available to me after the date of this auditor's report.

My opinion on the consolidated and separate financial statements does not cover the other information and I will not express any form of assurance conclusion thereon.

In connection with my audit of the consolidated and separate financial statements, my responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated and separate financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

When I read the annual report, if I conclude that there is a material misstatement therein, I am required to communicate the matter to those charged with governance and request that the correction be made.

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

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

In preparing the consolidated and separate financial statements, management is responsible for assessing the Group's and the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group and the Company or to cease operations, or has no realistic alternative but to do so.

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

Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements

My objectives are to obtain reasonable assurance about whether the consolidated and separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with TSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated and separate financial statements.

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

- Identify and assess the risks of material misstatement of the consolidated and separate financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's and 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 Group's and the Company's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the consolidated and separate financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Group and the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated and separate financial statements, including the disclosures, and whether the consolidated and separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with 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 consolidated and separate financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.



(Sawinee Sawanont)
 Certified Public Accountant
 Registration No. 7092

PKF Audit (Thailand) Ltd.
 Bangkok
 29 February 2020

Chememan Public Company Limited and its subsidiaries

Statements of financial position

As at 31 December 2019

	Note	Consolidated financial statements		Separate financial statements	
		2019	2018	2019	2018
Assets					
<i>(in Baht)</i>					
Current assets					
Cash and cash equivalents	7	215,459,708	125,991,606	73,338,755	84,375,571
Trade and other receivables	8	517,697,415	412,294,209	392,670,484	418,942,067
Current portion of accounts receivable					
under installment sales	9	4,959,111	4,878,222	4,959,111	4,878,222
Short-term loan to related party	6	-	-	209,198,500	-
Current portion of long-term loan to					
related party	6	-	-	2,390,840	-
Inventories	10	389,021,712	312,466,851	279,393,251	265,194,242
Other current assets		21,399,888	19,130,658	16,770,385	18,574,975
Total current assets		1,148,537,834	874,761,546	978,721,326	791,965,077
Non-current assets					
Restricted bank deposits		42,200,000	501,651	-	-
Accounts receivable under installment sales					
- net of current portion	9	39,874,509	44,614,863	39,874,509	44,614,863
Long-term loan to related party					
- net of current portion	6	-	-	1,494,275	4,185,012
Investments in subsidiaries	11	-	-	737,750,350	120,836,746
Investments in joint ventures	12	196,381,696	107,829,858	199,048,429	116,579,990
Property, plant and equipment	13	3,589,614,091	2,550,402,942	2,649,221,586	2,526,692,639
Ore reserve	14	223,422,851	100,817,992	94,299,936	100,817,992
Advance payments for construction of					
plant and machinery		10,441,897	95,956,271	10,441,897	95,956,271
Intangible assets		27,699,012	5,076,243	25,583,690	-
Goodwill	5	249,828,470	-	-	-
Deferred tax assets	23	57,493,952	36,929,581	37,445,696	27,932,402
Other non-current assets		16,027,155	7,102,443	5,256,059	5,256,059
Total non-current assets		4,452,983,633	2,949,231,844	3,800,416,427	3,042,871,974
Total assets		5,601,521,467	3,823,993,390	4,779,137,753	3,834,837,051

Chememan Public Company Limited and its subsidiaries

Statements of financial position (continued)

As at 31 December 2019

	Note	Consolidated financial statements		Separate financial statements	
		2019	2018	2019	2018
Liabilities and shareholders' equity					
<i>(in Baht)</i>					
Current liabilities					
Short-term loans from financial institutions	15	648,042,996	154,516,555	550,000,000	154,516,555
Trade and other payables	16	545,288,205	324,410,874	243,252,582	299,651,412
Current portion of liabilities under					
finance lease agreements	17	20,300,972	22,131,137	19,953,124	22,043,163
Current portion of long-term loans	18	427,397,594	80,242,908	236,398,960	80,242,908
Other current liabilities		30,986,659	37,859,054	26,066,422	30,132,562
Total current liabilities		1,672,016,426	619,160,528	1,075,671,088	586,586,600
Non-current liabilities					
Liabilities under finance lease agreements					
- net of current portion	17	37,195,981	42,453,582	36,023,103	42,226,160
Long-term loans - net of current portion	18	1,495,414,640	862,934,908	1,357,157,205	862,934,908
Provision for long-term employee benefits	19	84,846,156	61,921,960	84,632,028	61,694,547
Other non-current liabilities		113,408,401	14,531,098	12,342,768	14,490,048
Total non-current liabilities		1,730,865,178	981,841,548	1,490,155,104	981,345,663
Total liabilities		3,402,881,604	1,601,002,076	2,565,826,192	1,567,932,263

Chememan Public Company Limited and its subsidiaries

Statements of financial position (continued)

As at 31 December 2019

	Note	Consolidated financial statements		Separate financial statements	
		2019	2018	2019	2018
<i>(in Baht)</i>					
Shareholders' equity					
Share capital					
Registered					
1,000 million ordinary shares of Baht 1 each		1,000,000,000	1,000,000,000	1,000,000,000	1,000,000,000
Issued and fully paid up					
960 million ordinary shares of Baht 1 each	20	960,000,000	960,000,000	960,000,000	960,000,000
Share premium	20	736,842,515	736,842,515	736,842,515	736,842,515
Capital surplus on share-based payment		28,996,825	28,996,825	28,996,825	28,996,825
Retained earnings					
Appropriated - statutory reserve	21	65,140,000	64,300,000	65,140,000	64,300,000
Unappropriated		379,897,498	447,128,488	425,411,081	476,765,448
Other components of shareholders' equity		(43,991,462)	(18,149,099)	(3,078,860)	-
Equity attributable to owners of the Company		2,126,885,376	2,219,118,729	2,213,311,561	2,266,904,788
Non-controlling interests of the subsidiary		71,754,487	3,872,585	-	-
Total shareholders' equity		2,198,639,863	2,222,991,314	2,213,311,561	2,266,904,788
Total liabilities and shareholders' equity		5,601,521,467	3,823,993,390	4,779,137,753	3,834,837,051

Chememan Public Company Limited and its subsidiaries

Statement of comprehensive income

For the year ended 31 December 2019

	Note	Consolidated financial statements		Separate financial statements	
		2019	2018	2019	2018
Profit or loss		<i>(in Baht)</i>			
Revenues					
Sales		2,372,330,673	2,423,359,917	1,999,057,607	2,180,741,447
Other income		25,690,014	22,146,738	22,393,659	15,446,605
Net gain on exchange rate		-	1,897,107	-	1,799,512
Total revenues		2,398,020,687	2,447,403,762	2,021,451,266	2,197,987,564
Expenses					
Cost of sales		1,604,110,491	1,602,712,500	1,350,211,258	1,484,410,782
Selling and distribution expenses		519,879,255	458,245,155	433,103,594	380,009,664
Administrative expenses		199,067,060	172,831,248	158,040,315	129,558,700
Net loss on exchange rate		23,939,526	-	22,674,436	-
Total expenses		2,346,996,332	2,233,788,903	1,964,029,603	1,993,979,146
Profit before share of loss from investments in joint ventures, finance cost and income tax		51,024,355	213,614,859	57,421,663	204,008,418
Share of loss from investments in joint ventures	12	(9,720,792)	(3,792,403)	-	-
Profit before finance cost and income tax		41,303,563	209,822,456	57,421,663	204,008,418
Finance cost		(52,043,790)	(57,365,919)	(49,479,609)	(57,340,329)
Profit (loss) before income tax		(10,740,227)	152,456,537	7,942,054	146,668,089
Income tax benefits	23	7,820,051	8,813,049	8,743,579	12,367,400
Profit (loss) for the year		(2,920,176)	161,269,586	16,685,633	159,035,489
Other comprehensive income					
<i>Items that will be reclassified subsequently to profit or loss</i>					
Exchange differences on translation of financial statements in foreign currency - net of income tax		(23,052,987)	(12,820,645)	-	-
<i>Items that will not be reclassified subsequently to profit or loss</i>					
Losses on remeasurements of defined benefit plans - net of income tax		(3,078,860)	-	(3,078,860)	-
Other comprehensive income (expense) for the year		(26,131,847)	(12,820,645)	(3,078,860)	-
Total comprehensive income (expense) for the year		(29,052,023)	148,448,941	13,606,773	159,035,489

Chememan Public Company Limited and its subsidiaries

Statement of comprehensive income (continued)

For the year ended 31 December 2019

	Note	Consolidated financial statements		Separate financial statements	
		2019	2018	2019	2018
		<i>(in Baht)</i>			
Profit (loss) attributable to					
Equity holders of the Company		809,010	162,628,252	16,685,633	159,035,489
Non-controlling interests of the subsidiary		(3,729,186)	(1,358,666)		
		<u>(2,920,176)</u>	<u>161,269,586</u>		
Total comprehensive income (expense) attributable to:					
Equity holders of the Company		(25,033,353)	149,945,271	13,606,773	159,035,489
Non-controlling interests of the subsidiary		(4,018,670)	(1,496,330)		
		<u>(29,052,023)</u>	<u>148,448,941</u>		
Earnings per share	25				
Basic earnings per share					
Profit attributable to equity holders of the Company		<u>0.0008</u>	<u>0.1788</u>	<u>0.0174</u>	<u>0.1749</u>

Chememan Public Company Limited and its subsidiaries
Statement of changes in shareholders' equity
For the year ended 31 December 2019

Consolidated financial statements										
Equity attributable to owners of the Company										
Note	Issued and paid-up share capital	Share premium	Capital surplus on share-based payment	Retained earnings		Other components of equity			Total equity attributable to owners of the Company	Equity attributable to non-controlling interests of the subsidiary
				Appropriated - statutory reserve	Unappropriated	Exchange differences on translation of financial statements in foreign currency	Losses on remeasurements of defined benefit plans			
(In Baht)										
	720,000,000	77,000,000	28,996,825	56,300,000	340,500,236	(5,466,118)	-	1,217,330,943	5,368,915	1,222,699,858
	-	-	-	-	162,628,252	-	-	162,628,252	(1,358,666)	161,269,586
	-	-	-	-	-	(12,682,981)	-	(12,682,981)	(137,664)	(12,820,645)
	-	-	-	-	162,628,252	(12,682,981)	-	149,945,271	(1,496,330)	148,448,941
20	240,000,000	659,842,515	-	-	-	-	-	899,842,515	-	899,842,515
26	-	-	-	-	(48,000,000)	-	-	(48,000,000)	-	(48,000,000)
Transferred unappropriated retained earnings to statutory reserve										
	-	-	-	8,000,000	(8,000,000)	-	-	-	-	-
	960,000,000	736,842,515	28,996,825	64,300,000	447,128,488	(18,149,099)	-	2,219,118,729	3,872,585	2,222,991,314
	960,000,000	736,842,515	28,996,825	64,300,000	447,128,488	(18,149,099)	-	2,219,118,729	3,872,585	2,222,991,314
	-	-	-	-	809,010	-	-	809,010	(3,729,186)	(2,920,176)
	-	-	-	-	-	(22,763,503)	(3,078,860)	(25,842,363)	(289,484)	(26,131,847)
	-	-	-	-	809,010	(22,763,503)	(3,078,860)	(25,033,353)	(4,018,670)	(29,052,023)
5	-	-	-	-	-	-	-	-	71,900,572	71,900,572
26	-	-	-	-	(67,200,000)	-	-	(67,200,000)	-	(67,200,000)
Transferred unappropriated retained earnings to statutory reserve										
	-	-	-	840,000	(840,000)	-	-	-	-	-
	960,000,000	736,842,515	28,996,825	65,140,000	379,897,498	(40,912,602)	(3,078,860)	2,126,885,376	71,754,487	2,198,639,863

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

Chememan Public Company Limited and its subsidiaries
Statement of changes in shareholders' equity (Continued)
For the year ended 31 December 2019

Separate financial statements							
Note	Issued and paid-up share capital	Share premium	Capital surplus on share-based payment	Retained earnings		Losses on remeasurements of defined benefit plans	Total
				Appropriated - statutory reserve	Unappropriated		
				(in Baht)			
	720,000,000	77,000,000	28,996,825	56,300,000	373,729,959	-	1,256,026,784
	-	-	-	-	159,035,489	-	159,035,489
20	240,000,000	659,842,515	-	-	-	-	899,842,515
26	-	-	-	-	(48,000,000)	-	(48,000,000)
Transferred unappropriated retained earnings							
	-	-	-	8,000,000	(8,000,000)	-	-
	960,000,000	736,842,515	28,996,825	64,300,000	476,765,448	-	2,266,904,788
	960,000,000	736,842,515	28,996,825	64,300,000	476,765,448	-	2,266,904,788
	-	-	-	-	16,685,633	-	16,685,633
	-	-	-	-	-	(3,078,860)	(3,078,860)
26	-	-	-	-	(67,200,000)	-	(67,200,000)
Transferred unappropriated retained earnings							
	-	-	-	840,000	(840,000)	-	-
	960,000,000	736,842,515	28,996,825	65,140,000	425,411,081	(3,078,860)	2,213,311,561

*The accompanying notes are an integral part of the financial statements.

Chememan Public Company Limited and its subsidiaries

Cash flow statement

For the year ended 31 December 2019

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	(in Baht)			
Cash flows from operating activities				
Profit (loss) before tax	(10,740,227)	152,456,537	7,942,054	146,668,089
Adjustments to reconcile profit (loss) before tax to net cash provided by (paid from) operating activities				
Depreciation and amortisation	211,264,400	187,287,653	198,233,905	179,038,310
Doubtful account	538,542	6,497,337	-	-
Losses on inventories devaluation	427,445	-	-	-
(Gain) loss on sales of building, machinery, equipment and motor vehicle	(911,913)	2,772,922	(911,913)	2,762,011
Write-off land, building, machinery, equipment and motor vehicle	9,658,024	291,119	9,592,302	291,119
Write-off withholding tax	125	171,922	-	168,566
Employee benefits expenses	19,386,360	7,402,850	19,383,226	7,090,831
Unrealised (gain) loss on exchange	1,919,317	1,865,857	(1,480,416)	4,741,324
Unrealised loss on forward contract	402,544	9,881	402,544	9,881
Loss on impairment in value of investments in subsidiary	-	-	9,700,000	-
Share of loss from investments in joint ventures	9,720,792	3,792,403	-	-
Interest income	(4,205,089)	(2,730,529)	(4,499,540)	(2,930,848)
Finance cost	52,043,790	57,365,919	49,479,609	57,340,329
Profit from operating activities before changes in operating assets and liabilities	289,504,110	417,183,871	287,841,771	395,179,612
Operating assets (increase) decrease				
Trade and other receivables	(21,138,704)	(31,735,574)	34,718,583	(41,752,644)
Inventories	(44,258,482)	(32,553,695)	(14,199,009)	(21,908,580)
Accounts receivable under installment sales	1,206,804	2,163,626	1,206,804	2,163,626
Other current assets	(1,694,911)	4,040,272	2,452,787	4,367,902
Other non-current assets	619,719	224,393	-	15,099
Operating liabilities increase (decrease)				
Trade and other payables	(76,543,296)	16,458,765	(11,114,640)	27,336,766
Other current liabilities	(6,869,645)	4,242,463	(4,501,388)	(1,370,572)
Cash paid for long-term employee benefits	(294,320)	(1,722,140)	(294,320)	(1,722,140)
Other non-current liabilities	(1,588,208)	(2,897,188)	(1,743,824)	(2,801,676)
Cash flows from operating activities	138,943,067	375,404,793	294,366,764	359,507,393
Cash paid for interest expenses	(50,950,635)	(54,679,203)	(48,385,724)	(54,655,627)
Cash paid for income tax	(641,087)	(630,330)	(641,008)	(630,247)
Net cash flows from operating activities	87,351,345	320,095,260	245,340,032	304,221,519

Chememan Public Company Limited and its subsidiaries

Cash flow statement (continued)

For the year ended 31 December 2019

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	(in Baht)			
<i>Cash flows from investing activities</i>				
Increase in restricted bank deposits	(44,505,380)	-	-	-
Increase in short-term loan to related party	-	-	(209,569,400)	-
Cash paid for investments in subsidiary company	(451,569,764)	-	(626,613,603)	-
Cash paid for investments in joint ventures	(112,911,081)	(101,496,974)	(82,468,439)	(101,496,974)
Payment for acquisition of property, plant and equipment	(294,738,756)	(485,113,113)	(292,168,579)	(484,436,102)
Proceeds from sale of building, equipment and motor vehicle	19,643,948	1,935,936	19,643,948	1,934,069
Cash paid for advance payments for construction of plant and machinery	(10,441,897)	(95,956,271)	(10,441,897)	(95,956,271)
Payment for acquisition of intangible assets	(9,410,000)	-	(9,410,000)	-
Interest received	1,936,041	2,688,900	2,193,149	2,930,479
Net cash flows used in investing activities	(901,996,889)	(677,941,522)	(1,208,834,821)	(677,024,799)
<i>Cash flows from financing activities</i>				
Increase (decrease) in short-term loans from financial institutions	379,578,999	(109,355,104)	395,483,445	(109,355,104)
Payment of liabilities under finance lease agreements	(25,663,083)	(25,993,103)	(25,493,687)	(25,963,653)
Proceeds from long-term loans from financial institution	788,560,000	959,440,000	788,560,000	959,440,000
Repayment of long-term loans from financial institution	(176,033,500)	(1,227,189,000)	(137,536,000)	(1,227,189,000)
Payment of front-end fee	(1,355,785)	(3,250,000)	(1,355,785)	(3,250,000)
Proceeds from increase in share capital	-	921,600,000	-	921,600,000
Payment of direct costs related to share offering	-	(24,260,080)	-	(24,260,080)
Dividend paid	(67,200,000)	(48,000,000)	(67,200,000)	(48,000,000)
Net cash flows from financing activities	897,886,631	442,992,713	952,457,973	443,022,163
Exchange differences on translation foreign operations	6,227,015	(4,888,515)	-	-
Net increase (decrease) in cash and cash equivalents	89,468,102	80,257,936	(11,036,816)	70,218,883
Cash and cash equivalents at beginning of year	125,991,606	45,733,670	84,375,571	14,156,688
Cash and cash equivalents at end of year	215,459,708	125,991,606	73,338,755	84,375,571
<i>Supplemental cash flow information</i>				
Non-cash transactions				
Transfer advance payments for construction of plant and machinery to property, plant and equipment	95,956,271	6,655,354	95,956,271	6,655,354
Increased in accounts payable for purchase fixed asset	-	22,462,937	-	22,462,937
Assets acquired under finance lease agreements	18,571,580	7,241,108	17,141,972	6,896,262
Transfer Interest expense to assets	535,166	3,422,307	535,166	2,141,293
Consideration payable	83,219,135	-	-	-

Chememan Public Company Limited and its subsidiaries
Notes to the financial statements
For the year ended 31 December 2019

Note	Contents
1	General Information
2	Basis of preparation of the financial statements
3	New financial reporting standards
4	Significant accounting policies
5	Acquisitions of businesses
6	Related party transactions
7	Cash and cash equivalents
8	Trade and other receivables
9	Accounts receivable under installment sales
10	Inventories
11	Investments in subsidiaries
12	Investments in joint ventures
13	Property, plant and equipment
14	Ore reserve
15	Short-term loans from financial institutions
16	Trade and other payables
17	Liabilities under finance lease agreements
18	Long-term loans
19	Provisions for employee benefits
20	Share capital
21	Statutory reserves
22	Expenses by nature
23	Income tax
24	Promotional privileges
25	Earnings per share
26	Dividends
27	Segment Information
28	Provident fund
29	Commitments and contingent liabilities
30	Financial instruments
31	Capital management
32	Events after the reporting period
33	Approval of financial statements

1 General information

Chememan Public Company Limited (“the Company”) is a public company incorporated and domiciled in Thailand. The Company is principally engaged in the manufacture and distribution of mineral lime products. The registered address of the Company is at 195/11-12 Lake Rajada Office Complex 2, 10th-11st Floor, Rajadapisek Road, Klongtoey, Bangkok and the Company has four factories located in Saraburi and Rayong.

The Company’s major shareholders during the financial period were Mr. Chai Srivikorn and Buranachart Company Limited.

2 Basis of preparation of the financial statements

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

The financial statements in Thai language are the official statutory financial statements of the Company. The financial statements in English language have been translated from the Thai language financial statements.

The financial statements have been prepared on a historical cost basis except where otherwise disclosed in the accounting policies.

- 2.2 As at 31 December 2019, the Group and the Company have the current liabilities in excess of the current assets amounting to Baht 523 million and Baht 97 million respectively. The current liabilities mainly include short-term loans in the term of promissory note for working capital. However, the Group has remaining of credit facilities from long-term loan amounting to Baht 334 million and from short-term loans amounting to Baht 650 million which are available to support the needs of additional fund (if any). The management has defined business and financial strategy to have adequate liquidity in the Group and the Company, and the ability to meet liabilities. Therefore, the management believes that the Group will continue its operations at least for the forthcoming 12 months. Accordingly, the Group and the Company financial information has been prepared on a going concern basis.

2.3 Basis of consolidation

The consolidated financial statements include the financial statements of Chememan Public Company Limited (“the Company”) and the following subsidiary companies (“the subsidiaries”) (together referred to as the “Group”) and the Group’s interests in joint ventures

Company’s name	Nature of business	Country of incorporation	Percentage of shareholding	
			2019	2018
			Percent	Percent
Subsidiaries				
Tubkwang Co., Ltd.	in liquidation process	Thailand	99.99	99.99
Chememan Australia Pty. Ltd.	Distribution of lime products	Australia	99.99	99.99
Northman Company Limited	Providing sources of lime, market study in Vietnam and lime quality assurance	Vietnam	100.00	100.00
Chememan Lao Company Limited	Manufacturing and distribution of lime products	Laos	60.00	60.00
Chememan India Private Limited	Market study and strengthen customer base in India	India	99.99	99.99
Indirect subsidiaries				
Ha Long QN Lime Company Limited	Manufacturing and distribution of lime products	Vietnam	80.00	-
Joint Ventures				
Siriman Chemicals India Private Limited	Manufacturing and distribution of lime products	India	50.00	50.00
Easternbulk Lime Products Private Limited	Manufacturing and distribution of lime products	India	50.00	50.00
CalMix Company Limited	Manufacturing and distribution of construction materials	Thailand	51.00	-

The Company is deemed to have control over an investee or subsidiaries if it has rights, or is exposed, to variable returns from its involvement with the investee, and it has the ability to direct the activities that affect the amount of its returns.

Subsidiaries are fully consolidated, from the date on which the Company obtains control, and continue to be consolidated until the date when such control ceases.

The financial statements of the subsidiaries are prepared using the same significant accounting policies as the Company.

The assets and liabilities in the financial statements of overseas subsidiary companies are translated to Baht using the exchange rate prevailing on the end of reporting period, and revenues and expenses translated using monthly average exchange rates. The resulting differences are shown under the caption of “Exchange differences on translation of financial statements in foreign currency” in the statements of changes in shareholders’ equity.

Non-controlling interests represent the portion of profit or loss and net assets of the subsidiaries that are not held by the Company and are presented separately in the consolidated profit or loss and within equity in the consolidated statement of financial position.

Business combinations

The Group applies the acquisition method for all business combinations when control is transferred to the Group, other than those with entities under common control.

The acquisition date is the date on which control is transferred to the acquirer. Judgment is applied in determining the acquisition date and determining whether control is transferred from one party to another.

Goodwill is measured at the acquisition date as the fair value of the consideration transferred including the recognised amount of any non-controlling interest in the acquiree, less the net recognised amount (generally fair value) of the identifiable assets acquired and liabilities assumed, all measured as of the acquisition date. Any gain on bargain purchase is recognised in profit or loss immediately.

Consideration transferred includes the fair values of assets transferred, liabilities incurred by the Group to the previous owners of the acquiree, and equity interests issued by the Group. Consideration transferred also includes the fair value of any contingent consideration

A contingent liability of the acquiree is assumed in a business combination only if such a liability represents a present obligation and arises from a past event, and its fair value can be measured reliably.

Transaction costs that the Group incurs in connection with a business combination, such as legal fees, and other professional and consulting fees are expensed as incurred.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period, or additional assets or liabilities are recognized, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognized at that date.

Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date on which control ceases.

Non-controlling interests

At the acquisition date, the Group measures any non-controlling interest at its proportionate interest in the identifiable net assets of the acquiree.

Changes in the Group's interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions.

Loss of control

When the Group loses control over a subsidiary, it derecognises the assets and liabilities of the subsidiary, and any related non-controlling interests and other components of equity. Any resulting gain or loss is recognised in profit or loss. Any interest retained in the former subsidiary is measured at fair value when control is lost.

Investments in joint ventures

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

Under the equity method, an investment in a joint venture is initially recognized in the consolidated statement of financial position at cost and adjusted thereafter to recognize the Group's share of the profit or loss and other comprehensive income of joint venture. When the Group's share of losses of a joint venture equals or exceeds the Group's interest in that joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the joint venture), the Group discontinues recognizing its share of further losses. Additional losses are recognized only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture.

An investment in a joint venture is accounted for using the equity method from the date on which the investee becomes a joint venture. On acquisition of the investment in a joint venture, any excess of the cost of the investment over the Group's share of the net fair value of the identifiable assets and liabilities of the investee is recognized as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of the investment is recognized immediately as profit or loss in the statement of profit or loss and other comprehensive income in the period in which the investment is acquired.

The Group discontinues the use of the equity method from the date when the investment ceases to be an associate or a joint venture, or when the investment is classified as held for sale.

When the Group reduces its ownership interest in a joint venture but the Group continues to use the equity method, the Group reclassifies to profit or loss the proportion of the gain or loss that had previously been recognized in other comprehensive income relating to that reduction in ownership interest if that gain or loss would be reclassified to profit or loss in the statement of profit or loss and other comprehensive income on the disposal of the related assets or liabilities.

When a group entity transacts with a joint venture of the Group, profits and losses resulting from such transactions are recognized in the Group's consolidated financial statements only to the extent of interests in joint venture that are not related to the Group.

Disposal of investments

On disposal of an investment, the difference between net disposal proceeds and the carrying amount together with the associated cumulative gain or loss that was reported in equity is recognized in profit or loss.

If the Group disposes partially of its holding investment, the deemed cost of the sold investment is determined using the weighted average method applied to the carrying value of the total holding of the investment.

Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealised income or expenses arising from intra-group transactions, are eliminated. Unrealised gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

- 2.4 The separate financial statements present investments in subsidiaries and joint ventures under the cost method.

3 New financial reporting standards

(a) Financial reporting standards that became effective in the current year

During the period, the Group have adopted all the revised financial reporting standards and interpretations that are effective for annual periods beginning on or after 1 January 2019.

The primary change is that the Company has initially adopted TFRS 15 Revenue from Contracts with Customers ("TFRS 15"), which replaced TAS 18 Revenue ("TAS 18") and related interpretations.

Under TFRS 15, the Group recognise revenue when a customer obtains control of the goods or services in an amount that reflects the consideration to which the Group expects to be entitled to. In addition, judgement is required in determining the timing of the transfer of control for revenue recognition - at a point in time or over time. Whereas, under TAS 18, the Group recognise revenue from sale of goods when the significant risks and rewards of ownership of the goods have been transferred to the buyer, and recognises revenue from rendering of services by reference to the stage of completion of the transaction at the end of the reporting period. No revenue is recognised if there is continuing management involvement with the goods or there are significant uncertainties regarding recovery of the consideration due. Such change in accounting policy has no material impacts on the financial statements.

(b) Financial reporting standards that will become effective in the future

The Federation of Accounting Professions issued a number of revised and new financial reporting standard and interpretations (revised 2019), which are effective for fiscal years beginning on or after 1 January 2020. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The Group has not early adopted a number of new and revised TFRS, which are not yet effective for the current period in preparing these financial statements.

A number of new TFRS which are relevant to the Group operations are expected to have impact on the consolidated and separate financial statements on the date of initial application. Those TFRS which become effective for annual financial reporting periods beginning on or after 1 January 2020 are as follows:

TFRS	Topic
TFRS 7*	Financial Instruments: Disclosures
TFRS 9*	Financial Instruments
TFRS 16	Leases
TAS 32*	Financial Instruments: Presentation
TFRIC 16*	Hedges of a Net Investment in a Foreign Operation
TFRIC 19*	Extinguishing Financial Liabilities with Equity Instruments

* TFRS - financial instruments standards

TFRS - financial instruments standards

These TFRS - Financial instruments standards establish requirements related to definition, recognition, measurement, impairment and derecognition of financial assets and financial liabilities, including accounting for derivatives and hedge accounting. When these TFRS are effective, some accounting standards, interpretations and guidance which are currently effective will be cancelled.

TFRS 16 Leases

TFRS 16 introduces a single lessee accounting model for lessees. A lessee recognises a right-of-use asset and a lease liability, with recognition exemptions for short-term leases and leases of low-value items. As a result, the Group will recognise new assets and liabilities for its operating leases. As at 31 December 2019, the Group's future minimum lease payments under non-cancellable operating leases amounted to Baht 28.45 million, on an undiscounted basis. Lease accounting for lessor remains similar to the current standard, i.e. lessors continue to classify leases as finance or operating leases. When this TFRS is effective, some accounting standards and interpretations which are currently effective will be cancelled.

Management is presently considering the potential impact of adopting and initially applying these standards on the consolidated and separate financial statements.

4 Significant accounting policies

4.1 Revenue

Accounting policies for revenue recognition in 2019

Revenue is recognised when a customer obtains control of the goods or services in an amount that reflects the consideration to which the Group expects to be entitled, excluding those amounts collected on behalf of third parties, value added tax and is after deduction of any trade discounts and volume rebates.

Sale of goods

Revenue from sales of goods is recognised when a customer obtains control of the goods, generally on delivery of the goods to the customers. For contracts that permit the customers to return the goods, revenue is recognised to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur. Therefore, the amount of revenue recognised is adjusted for estimated returns, which are estimated based on the historical data.

For bundled packages, the Group accounts for individual products and services separately if they are distinct (i.e. if a product or service is separately identifiable from other items and a customer can benefit from it) or the multiple services are rendered in different reporting periods. The consideration received is allocated based on their relative stand-alone selling prices which are determined based on the price list at which the Group sells the products and services in separate transactions.

Installment sales

Installment sales are recognised at the date of sales. The sale price, exclusive of interest, is the present value of the consideration, determined by discounting the installment receivable at the imputed rate of interest. The interest element is recognised as revenue as it is earned, using the effective interest method.

Interest income

Interest income is recognised on an accrual basis based on the effective interest rate.

Accounting policies for revenue recognition in 2018

Sales of goods

Sales of goods are recognised when the significant risks and rewards of ownership of the goods have passed to the buyer. Sales are the invoiced value, excluding value added tax, of goods supplied after deducting discounts and allowances.

Installment sales

Installment sales are recognised at the date of sales. The sale price, exclusive of interest, is the present value of the consideration, determined by discounting the installment receivable at the imputed rate of interest. The interest element is recognised as revenue as it is earned, using the effective interest method.

Interest income

Interest income is recognised on an accrual basis based on the effective interest rate.

4.2 Cash and cash equivalents

Cash and cash equivalents consist of cash in hand and at banks, and all highly liquid investments with an original maturity of three months or less and not subject to withdrawal restrictions.

4.3 Trade accounts receivable

Trade accounts receivable are stated at the net realisable value. Allowance for doubtful accounts is provided for the estimated losses that may be incurred in collection of receivables. The allowance is generally based on collection experiences and analysis of debt aging.

4.4 Inventories

Finished goods and work in process are valued at the lower of cost (under the weighted average method) and net realisable value. The cost of inventories is measured using standard cost method, which approximates actual cost and includes all production costs and attributable factory overheads.

Raw materials, spare parts and factory supplies are valued at the lower of average cost and net realisable value and are charged to production costs whenever consumed.

4.5 Investments

Investments in subsidiaries and joint ventures

- Investments in subsidiaries and joint ventures in the separate financial statements are accounted for using the cost method.
- Investments in joint ventures in the consolidated financial statements are accounted for using the equity method.

4.6 Property, plant and equipment/Depreciation

Land is stated at cost. Building and equipment are stated at cost less accumulated depreciation and allowance for loss on impairment of assets (if any).

Depreciation of plant and equipment is calculated by reference to their costs on the straight-line basis over the following estimated useful lives:

Land improvement	3 to 20 years
Buildings and building improvement	5 to 30 years
Machinery and equipment	5 to 30 years
Furniture, fixtures and office equipment	3 to 10 years
Motor vehicles	3 to 10 years

However, depreciation of lime kilns and coal grinder mill is calculated using the Productive Output Method, which estimated units of production at a total of 0.6 to 3.2 million tons.

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

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on disposal of an asset is included in profit or loss when the asset is derecognised.

4.7 Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of the respective assets. All other borrowing costs are expensed in the period they are incurred. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

4.8 Ore reserve and depletion

“Ore reserve” consists of cost of the concession and related development costs which are presented at cost less accumulated depletion. Depletion of the ore is calculated from the percentage of units of limestone produced to the estimated total limestone reserves assessed by an independent geologist.

4.9 Intangible assets

Goodwill

Goodwill that arises upon the acquisition of subsidiaries is included in intangible assets. The measurement of goodwill at initial recognition is described in note 2.2. Subsequent to initial recognition, goodwill is measured at cost less accumulated impairment losses. In respect of equity-accounted investee, the carrying amount of goodwill is included in the carrying amount of the investment, and an impairment loss on such an investment is not allocated to any asset, including goodwill, that forms part of the carrying amount of the equity-accounted investee.

Ore

Intangible assets which are expenses of exploration and evaluation of mineral resources, are recognised at cost. Following the initial recognition, the intangible assets are carried at cost less impairment losses (if any).

4.10 Related party transactions

Related parties comprise individuals or enterprises that control, or are controlled by, the Group, whether directly or indirectly, or which are under common control with the Group.

They also include associated companies, and individuals or enterprises which directly or indirectly own a voting interest in the Group that gives them significant influence over the Group, key management personnel, directors, and officers with authority in the planning and direction of the Group operations.

4.11 Long-term leases

Leases of equipment which transfer substantially all the risks and rewards of ownership are classified as finance leases. Finance leases are capitalised at the lower of the fair value of the leased assets and the present value of the minimum lease payments. The outstanding rental obligations, net of finance charges, are included in long-term payables, while the interest element is charged to profit or loss over the lease period. The assets acquired under finance leases are depreciated over the useful life of the asset.

Leases of building and equipment which do not transfer substantially all the risks and rewards of ownership are classified as operating leases. Operating lease payments are recognised as an expense in the income statement on a straight-line basis over the lease term.

4.12 Foreign currencies

The consolidated and separate financial statements are presented in Baht, which is also the Company's functional currency. Items of each entity included in the consolidated financial statements are measured using the functional currency of that entity.

Transactions in foreign currencies are translated into Baht at the exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated into Baht at the exchange rate ruling at the end of reporting period.

Gains and losses on exchange are included in determining income.

4.13 Impairment of assets

At the end of each reporting period, the Group perform impairment reviews in respect of the property, plant and equipment and other intangible assets whenever events or changes in circumstances indicate that an asset may be impaired. An impairment loss is recognised when the recoverable amount of an asset, which is the higher of the asset's fair value less costs to sell and its value in use, is less than the carrying amount.

An impairment loss is recognised in profit or loss.

4.14 Employee benefits

Short-term employee benefits

Salaries, wages, bonuses and contributions to the social security fund are recognised as expenses when incurred.

Post-employment benefits

Defined contribution plans

The Company and its employees have jointly established a provident fund. The fund is contributed to monthly by employees and by the Company. The fund's assets are held in a separate trust fund and the Company's contributions are recognised as expenses when incurred.

Defined benefit plans

The Company has obligations in respect of the severance payments it must make to employees upon retirement under labor law. The Company treats these severance payment obligations as a defined benefit plan.

The obligation under the defined benefit plan is determined by a professionally qualified independent actuary based on actuarial techniques, using the projected unit credit method.

Actuarial gains and losses arising from defined benefits plans are recognised immediately in other comprehensive income.

4.15 Share-based payment

Transfers of the Company's equity instruments by its shareholders to parties (including employees) that have supplied goods or services to the Company are treated as share-based payment transactions, unless the transfer is clearly for a purpose other than payment for goods or services supplied to the Company. The Company records the excess of the fair value at transfer date over the transfer price as an expense in profit or loss, and as the capital surplus on share-based payment in the shareholders' equity.

4.16 Provisions

Provisions are recognised when the Group have present obligation as a result of a past event, and it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

4.17 Income tax

Income tax expense represents the sum of corporate income tax currently payable and deferred tax.

Current tax

Current income tax is provided in the accounts at the amount expected to be paid to the taxation authorities, based on taxable profits determined in accordance with tax legislation.

Deferred tax

Deferred income tax is provided on temporary differences between the tax bases of assets and liabilities and their carrying amounts at the end of each reporting period, using the tax rates enacted at the end of the reporting period.

The Group recognise deferred tax liabilities for all taxable temporary differences while they recognise deferred tax assets for all deductible temporary differences and tax losses carried forward to the extent that it is probable that future taxable profit will be available against which such deductible temporary differences and tax losses carried forward can be utilised.

At each reporting date, the Group review and reduce the carrying amount of deferred tax assets to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised.

The Group record deferred tax directly to shareholders' equity if the tax relates to items that are recorded directly to shareholders' equity.

4.18 Fair value measurement

Fair value is the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between buyer and seller (market participants) at the measurement date. The Group apply a quoted market price in an active market to measure their assets and liabilities that are required to be measured at fair value by relevant financial reporting standards, except in case of no active market of an identical asset or liability or when a quoted market price is not available. The Group measure fair value using valuation techniques that are appropriate in the circumstances and maximise the use of relevant observable inputs related to assets and liabilities that are required to be measured at fair value.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy into three levels based on categories of input to be used in fair value measurement as follows:

Level 1 - Use of quoted market prices in an observable active market for such assets or liabilities

Level 2 - Use of other observable inputs for such assets or liabilities, whether directly or indirectly

Level 3 - Use of unobservable inputs such as estimates of future cash flows

At the end of each reporting period, the Group determine whether transfers have occurred between levels within the fair value hierarchy for assets and liabilities held at the end of the reporting period that are measured at fair value on a recurring basis.

4.19 Significant accounting judgements and estimates

The preparation of financial statements in conformity with financial reporting standards at times requires management to make subjective judgements and estimates regarding matters that are inherently uncertain. These judgements and estimates affect reported amounts and disclosures; and actual results could differ from these estimates. Significant judgements and estimates are as follows:

Property, plant and equipment/Depreciation

In determining depreciation of plant and equipment, the management is required to make estimates of the useful lives and residual values of the plant and equipment and to review estimated useful lives and residual values when there are any changes.

In addition, the management is required to review property, plant and equipment for impairment on a periodical basis and record impairment losses when it is determined that their recoverable amount is lower than the carrying amount. This requires judgements regarding forecast of future revenues and expenses relating to the assets subject to the review.

Deferred tax assets

Deferred tax assets are recognised for deductible temporary differences and unused tax losses to the extent that it is probable that taxable profit will be available against which the temporary differences and losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and level of estimate future taxable profits.

5 Acquisitions of businesses

On 20 November 2019, Northman Company Limited, a subsidiary, acquired 80 percent portion of the capital contribution of Ha Long QN Lime Company Limited, a manufacturer and distributor of lime products, from its former shareholder as per the contributed Capital Transfer Agreement dated 28 July 2019 for a preliminary cash consideration of VND 349,125 million, or equivalent to Baht 454.21 million, and subsequent cash consideration payable of VND 63,965.51 million or equivalent to Baht 83.22 million (this amount will be due when the sellers fulfill all pending conditions as agreed in the Amendment to the Contributed Capital Transfer Agreement dated 12 December 2019). Total purchase price is VND 413,090.51 million or equivalent to Baht 537.43 million.

Taking control of Ha Long QN Lime Company Limited (“HLL”), will enable the Group to have the limestone mining concession in Vietnam which is in accordance to the Group’s main objective to expand the customer base into new markets, and to increase the distribution centers for more efficient logistics management and transportation cost saving.

Business acquisition as shown below during the year ended 31 December 2019 resulted in a significant change of the Group’s consolidated financial position and consolidated financial performance. Other significant changes have been disclosed in other notes to the financial statements.

The net identifiable assets acquired on the date of acquisition were as follows:

	Carrying amounts	Acquired Date Fair value adjustment (in thousand Baht)	Recognised value
Cash and cash equivalents	2,642	-	2,642
Trade and other receivables	88,644	-	88,644
Inventories	36,681	-	36,681
Property, plant and equipment	923,927	-	923,927
Ore reserve	129,431	-	129,431
Deferred tax assets – net	12,477	-	12,477
Other non-current assets	9,720	-	9,720
Trade and other payables	(261,590)	-	(261,590)
Short-term loans from financial institutions	(113,823)	-	(113,823)
Current portion of long-term borrowings	(212,658)	-	(212,658)
Long-term borrowing from financial institutions	(155,153)	-	(155,153)
Other non-current liabilities	(100,795)	-	(100,795)
Total identifiable net assets	359,503	-	359,503
Less Non-controlling interests 20% (using proportionate method)			(71,901)
Total identifiable net assets received			287,602
Goodwill arising from the acquisition			249,829
Total consideration (fair value)			537,431
- Consideration transferred			454,212
- Consideration payable			83,219

An independent appraiser has been appointed to determine the fair value of the business, but the report of the appraiser is not yet completed as at the date of approval of these consolidated financial statements. Accordingly, the fair value of assets acquired, and liabilities assumed have been provisionally determined at the acquisition date

In accordance with TFRS 3, management is required to make a preliminary assessment of the fair values of businesses acquired as at the acquisition date. During the measurement period, which must not exceed one year from the acquisition date, the acquirer shall retrospectively adjust the provisional amounts recognised at the acquisition date to reflect new information obtained about facts and circumstances that existed as of the acquisition date. Finalisation of the fair values for acquisition of HLL is dependent on determination of the completion of the purchase price allocation exercise.

During the period from acquisition date to 31 December 2019, Ha Long QN Lime Company Limited contributed revenue of Baht 22.84 million and loss of Baht 11.71 million to the Group's results. If the acquisition had occurred on 1 January 2019, management estimates that consolidated revenue would have increased by Baht 227.21 million and consolidated loss for the year would have increased by Baht 168.34 million. In determining these amounts, management has assumed that the fair value adjustments, determined provisionally, that arose on the date of acquisition would have been the same if the acquisition had occurred on 1 January 2019.

For the preparation of the consolidated financial statements for the year ended 31 December 2019, the Group used net assets value from financial information of Ha Long QN Lime Company Limited and other relevant factors which may affect such information as the consideration received from this business acquisition and recorded the difference amount between the identifiable net assets received and the value of consideration transferred and payable in the goodwill account amounting to Baht 249.83 million.

Goodwill

The goodwill is attributable mainly due to the fact that the Company wanted to expand its production capacity and double growth within 5 years according to business plan. Investing in Ha Long Lime QN Company Limited, which is specializing in manufacturing quicklime, powdered lime, and hydrated lime in Vietnam, and also has the Lime mining patent and the Lime factory Quang Ninh Province in Vietnam, means that the Group has the best Lime sources to produce Lime which corresponds to the Group's aims to be the leader in Lime business with the strategy of capacity expansion to appropriate locations both in Thailand and overseas. This enables the group to expand the customer base into new markets, bringing along continuous revenue growth. In addition, the production capacity expansion to Vietnam shall help to increase the distribution centers for more efficient logistics management, with target customers located in East Asia, and ASEAN countries, leading to transportation cost savings.

Acquisition related costs

The Group incurred acquisition-related costs of Baht 12.74 million related to external legal fees and due diligence costs. The legal fees and due diligence costs have been included in administrative expenses in the Group's consolidated statement of comprehensive income.

6 Related party transactions

Relationships with subsidiaries and joint ventures are disclosed in Notes 11 and 12.

Relationship with key management and other related parties are as follows:

Name of entities	Country of incorporation/ nationality	Nature of relationships
Key management personnel	Thailand	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
Rayong Mongkolchai Company Limited	Thailand	Related by common director
Legal Advisory Council Company Limited	Thailand	Related by common director
Hardware King Company Limited	Thailand	Related by common director
Buranachart Company Limited	Thailand	Major shareholders
Minority shareholders of Ha Long QN Lime Company Limited	Vietnam	Minority shareholder of consolidated subsidiary

During the year, the Group had significant business transactions with related parties. Such transactions, which are summarised below, arose in the ordinary course of business and were concluded on commercial terms and bases agreed upon between the Group and those related parties.

	Consolidated financial statements		Separate financial statements		Pricing Policy
	2019	2018	2019	2018	
	<i>(in million Baht)</i>				
Transactions with subsidiaries					
(eliminated from the consolidated financial statements)					
Sales of goods	-	-	285	338	<i>Mutual agreed prices</i>
Services income	-	-	1	-	<i>Contract price</i>
Interest income	-	-	2	-	<i>Contract price</i>
Other income	-	-	2	-	<i>Mutual agreed prices</i>
Services expenses	-	-	5	10	<i>Contract price</i>

	Consolidated financial statements		Separate financial statements		Pricing Policy
	2019	2018	2019	2018	
	(in million Baht)				
<u>Transactions with joint venture</u>					
Services income	3	1	-	-	Contract price
Sale of fixed assets	20	-	20	-	Mutual agreed prices
<u>Transactions with related company</u>					
(related by common director)					
Services expenses	-	1	-	1	Contract price

As at 31 December 2019 and 2018, the balances of the accounts between the Company and those related parties are as follows:

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	(in thousand Baht)			
<u>Trade receivables - related party (Note 8)</u>				
Subsidiary	-	-	98,155	95,816
<u>Other receivables - related parties (Note 8)</u>				
Subsidiaries	-	-	3,881	66
Joint venture	2,090	408	702	159
Related companies (related by common director)	51	-	51	-
Directors	-	296	-	296
Total other receivables - related parties	2,141	704	4,634	521
<u>Other payables - related parties (Note 16)</u>				
Subsidiaries	-	-	895	1,489
Related companies (related by common director)	5	23	5	23
Key management personnel	66	-	66	-
Directors	56	-	56	-
Total other payable - related parties	127	23	1,022	1,512
<u>Consideration payable – related parties (Note 5, 16)</u>				
Minority shareholders	83,219	-	-	-

Short-term loan to related party

As at 31 December 2019 and 2018, the balance of loan to related party and the movement of such loan to are as follows:

	Separate financial statements					31 December 2019
Short-term loan to related party	Relationship	31 December 2018	Increase during the period	Decrease during the period	Unrealised loss from translation of foreign currency	
(in thousand Baht)						
Northman Company Limited	Subsidiary	-	20,692	(20,692)	-	-
Chememan Australia Pty. Ltd.	Subsidiary	-	16,149	(16,149)	-	-
Ha Long QN Lime Company Limited	Indirect subsidiaries	-	209,569	-	(371)	209,198
Total		-	246,410	(36,841)	(371)	209,198

On 22 May 2019, the Company provides the short-term loan to Northman Company Limited of USD 0.22 million bearing interest at the rate LIBOR 3 months plus 4% per annum. The loan is due on 21 May 2020, but it is early repaid on 2 December 2019.

On 22 August 2019, the Company provides the short-term loan to Northman Company Limited of USD 0.45 million bearing interest at the rate LIBOR 3 months plus 4% per annum. The loan is due on 21 August 2020, but it is early repaid on 2 December 2019.

On 22 November 2019, the Company provides the short-term loan to Ha Long QN Lime Company Limited. Of USD 2 million bearing interest at the rate LIBOR plus 4.5% per annum, the loan is due on 21 November 2020.

On 17 December 2019, the Company provides the short-term loan to Ha Long QN Lime Company Limited. Of USD 5 million bearing interest at the rate LIBOR plus 4.5% per annum, the loan is due on 16 December 2020.

Long-term loans to related party

As at 31 December 2019 and 2018, the balance of loans to related party and the movement of such loans to are as follows.

		Separate financial statements				31 December 2019
Long-term loans to related party	Relationship	31 December 2018	Increase during the period	Decrease during the period	Unrealised loss from translation of foreign currency	
(in thousand Baht)						
Northman Company Limited	Subsidiary	4,185	-	-	(300)	3,885
Total		4,185	-	-	(300)	
Less portion due within one year						(2,391)
Long term loans to related party - net of current portion						1,494

The long-term loans to Northman Company Limited of USD 0.13 million (31 December 2018: outstanding balance of USD 0.13 million) bearing interest at the rate MLR per annum. The loans are repaid in 2020 and 2024.

Directors and management's benefits

During the year ended 31 December 2019 and 2018, the Group had employee benefit expenses payable to their directors and management as below.

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
<i>(in thousand Baht)</i>				
Short-term employee benefits	96,978	93,980	87,042	84,070
Post-employment benefits	6,651	6,121	6,181	6,014
Total	103,629	100,101	93,223	90,084

7 Cash and cash equivalents

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	<i>(in thousand Baht)</i>			
Cash	354	248	205	230
Bank deposits	215,106	125,744	73,134	84,146
Total	215,460	125,992	73,339	84,376

As at 31 December 2019, bank deposits in saving accounts and fixed deposits carried interests between 0.04 and 0.50 percent per annum (2018: between 0.04 and 6.75 percent per annum).

8 Trade and other receivables

		Consolidated financial statements		Separate financial statements	
	Note	2019	2018	2019	2018
		<i>(in thousand Baht)</i>			
<u>Trade receivables - related party</u>	6				
Aged on the basis of due dates					
Not yet due		-	-	97,939	95,816
Past due					
Up to 3 months		-	-	-	-
3 - 6 months		-	-	216	-
Total trade receivable - related parties		-	-	98,155	95,816

		Consolidated		Separate	
		financial statements		financial statements	
	Note	2019	2018	2019	2018
		(in thousand Baht)			
<u>Trade receivables - unrelated parties</u>					
Aged on the basis of due dates					
Not yet due		373,656	333,854	220,514	262,272
Past due					
Up to 3 months		57,981	18,559	11,492	7,622
3 - 6 months		2,097	5,233	1,762	-
6 - 12 months		799	2,145	784	-
More than 12 months		4,960	-	-	-
Total trade receivables - unrelated parties		439,493	359,791	234,552	269,894
Less Allowance for doubtful debt expense		(6,544)	(6,497)	-	-
Total trade receivables		432,949	353,294	332,707	365,710
<u>Other receivables</u>					
Prepaid expenses		10,685	5,838	9,446	4,627
Advance and other receivables - related parties	6	2,141	704	4,634	521
Advance and other receivables - unrelated parties		71,923	52,458	45,883	48,084
Total other receivables		84,749	59,000	59,963	53,232
Total trade receivable and other receivable		517,698	412,294	392,670	418,942

As at 31 December 2019, the Company has advance payments for goods to a company in Vietnam amounting to Baht 39 million (31 December 2018: Baht 40 million) that is included in the advance and other receivables - unrelated parties. This company is the account receivable under installment sales machine agreement as described in note 9 to the financial statements. This company uses such machine to manufacture goods to sell to the Company.

9 Accounts receivable under installment sales

As at 31 December 2019, net receivables of the Company under installment sales machine agreements amounted to Baht 45 million (31 December 2018: Baht 49 million). The terms of the agreements are generally 10 years, started in 2016, and interest is charged at 4.65% and 4.38% per annum (31 December 2018: 4.65% per annum). The details are as follows.

Consolidated and Separate financial statements								
2019				2018				
Less		More		Less		More		
than 1	1 - 5	than		than 1	1 - 5	than		
year	years	5 years	Total	year	years	5 years	Total	
(in thousand Baht)								
Accounts receivable								
under installment								
sales	8,368	38,851	5,464	52,683	7,091	35,467	15,963	58,521
Unearned interest								
income	(3,409)	(4,351)	(89)	(7,849)	(2,213)	(6,183)	(632)	(9,028)
Accounts receivable								
under installment								
sales - net	4,959	34,500	5,375	44,834	4,878	29,284	15,331	49,493

10 Inventories

Consolidated financial statements

	Cost		Reduce cost to net realisable value		Inventories - net	
	2019	2018	2019	2018	2019	2018
	<i>(in thousand Baht)</i>					
Finished goods	163,657	120,401	(2,249)	-	161,408	120,401
Work in process	6,625	1,284	-	-	6,625	1,284
Raw materials	140,685	121,063	-	-	140,685	121,063
Packing materials	15,305	13,734	-	-	15,305	13,734
Spare parts and factory supplies	44,292	40,643	-	-	44,292	40,643
Goods in transit	20,707	15,342	-	-	20,707	15,342
Total	391,271	312,467	(2,249)	-	389,022	312,467

Separate financial statements

	Cost		Reduce cost to net realisable value		Inventories - net	
	2019	2018	2019	2018	2019	2018
	<i>(in thousand Baht)</i>					
Finished goods	129,601	88,470	-	-	129,601	88,470
Work in process	-	1,284	-	-	-	1,284
Raw materials	98,902	121,063	-	-	98,902	121,063
Packing materials	15,305	13,734	-	-	15,305	13,734
Spare parts and factory supplies	35,585	40,643	-	-	35,585	40,643
Total	279,393	265,194	-	-	279,393	265,194

During year 2018, the Company reversed the write-down of cost of inventories by Baht 0.6 million, this was included in cost of sales and reduced the amount of inventories recognised as expenses.

11 Investments in subsidiaries

Company's name	Currency	Paid-up capital		Shareholding percentage		Cost		Impairment		At cost - net	
		2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
				(%)				<i>(in thousand Baht)</i>			
Tubkwang Co., Ltd. (in liquidation process)	Thousand Baht	1,875	1,875	99.99	99.99	1,875	1,875	-	-	1,875	1,875
Chememan Australia Pty. Ltd.	Thousand AUD	3,220	3,220	99.99	99.99	95,674	95,674	-	-	95,674	95,674
Northman Company Limited	Million VND	423,423	2,336	100.00	100.00	553,858	3,721	-	-	553,858	3,721
Chememan Lao Company Limited	Thousand USD	500	500	60.00	60.00	10,742	10,742	(9,700)	-	1,042	10,742
Chememan India Private Limited	Thousand INR	113,723	16,897	99.99	99.99	85,302	8,825	-	-	85,302	8,825
Total						747,451	120,837	(9,700)	-	737,751	120,837

No dividend was received from the above subsidiary companies during the year ended 31 December 2019 and 2018.

Northman Company Limited

On November 2019, the company made an additional investment in ordinary shares from an increase in share capital of such company, totaling VND 370,240 million or equivalent to Baht 483.63 million.

On December 2019, the company made an additional investment in ordinary shares from an increase in share capital of such company, totaling VND 50,846 million or equivalent to Baht 66.51 million.

Chememan India Private Limited

During the year 2019, the company made an additional investment in 10,312,500 ordinary shares from an increase in share capital of such company, at a price of INR 16 per share, totaling INR 165 million or equivalent to Baht 76 million. The Company still had a 99.99% interest in such company.

Tubkwang Co., Ltd.

On 30 September 2019, at the Board of Directors' Meeting no. 8/2019 has resolved to approve the dissolution of Tubkwang Company Limited, a non-active subsidiary in which the Company holds 99.99% of the registered capital. Tubkwang Company Limited shall proceed with the dissolution and liquidation in accordance to the procedures prescribed by the law.

12 Investments in joint ventures

12.1 Detail of investments in joint ventures

Investments in joint ventures represent investments in entities which are jointly controlled by the Company and other companies. Details of these investments are as follows:

Company's name	Nature of business	Country of incorporation	Consolidated financial statements					
			Shareholding percentage		Cost		Carrying amounts based on equity method	
			2019	2018	2019	2018	2019	2018
			(%)		(in thousand Baht)			
Siriman Chemicals India Private Limited	Manufacture and distribute lime products	India	50	50	61,303	30,861	61,470	30,941
Easternbulk Lime Products Private Limited	Manufacture and distribute lime products	India	50	50	137,588	85,719	123,173	80,953
CalMix Company Limited	Manufacture and distribute construction materials	Thailand	51	-	30,600	-	30,441	-
Less Exchange differences on translation adjustments					-	-	(18,702)	(4,064)
Total					229,491	116,580	196,382	107,830

Company's name	Nature of business	Country of incorporation	Separate financial statements			
			Shareholding percentage		Cost	
			2019	2018	2019	2018
			(%)		(in thousand Baht)	
Siriman Chemicals India Private Limited	Manufacture and distribute of lime products	India	50 (25% held direct and 25% held through subsidiary)	50	30,861	30,861
Easternbulk Lime Products Private Limited	Manufacture and distribute of lime products	India	50	50	137,587	85,719
CalMix Company Limited	Manufacture and distribute of construction materials	Thailand	51	-	30,600	-
Total					199,048	116,580

Siriman Chemicals India Private Limited

On 4 April 2019, Chememan India Private Limited, a wholly owned subsidiary incorporated in India and held by the Company 99.99%, made an additional investment in Siriman Chemicals India Private Limited, a joint venture in India, totaling 6.5 million ordinary shares from an increase in share capital of such company, at a price of INR 10 per share, totaling INR 65 million or equivalent to Baht 30 million.

Easternbulk Lime Products Private Limited

During 2019, the Company made an additional investment in 574,229 ordinary shares from an increase in share capital of Easternbulk Lime Products Private Limited, at a price of INR 200 per share, totaling INR 115 million or equivalent to Baht 51 million. The Company still had a 50% interest in such company.

CalMix Company Limited

On 21 January 2019, the Company entered into a joint agreement with two German companies, namely Bergman Kalk Holding GmbH and Kalkwerke H. Oetelshofen GmbH & Co. KG, to establish a joint venture company in Thailand to develop, manufacture and sell construction materials. The registered capital of the joint venture is Baht 60 million, with the Company having 51% shareholdings and the two partnerships from Germany have equal shareholdings of 24.5% each. As the Company has the jointly control as specified in the agreement; therefore, this investment is classified as the investment in joint venture.

On 23 January 2019, the Company incorporated such joint venture company namely CalMix Company Limited. On 13 February 2019, the Company had invested in 306,000 ordinary shares of this company, at par of THB 100 per share, totaling Baht 30.60 million.

12.2 Share of gain (loss)

During the year ended 31 December 2019 and 2018, the Company recognised its share of gain (loss) from investments in the joint ventures in the consolidated financial statements as follows:

Company's name	Consolidated financial statements	
	2019	2018
	<i>(in thousand Baht)</i>	
Siriman Chemicals India Private Limited	87	108
Easternbulk Lime Products Private Limited	(9,649)	(3,900)
CalMix Company Limited	(159)	-
Total	(9,721)	(3,792)

12.3 Summarised financial information about joint ventures

Summarised information about financial position as at 31 December 2019 and 2018.

	Siriman Chemicals India Private Limited		Easternbulk Lime Products Private Limited		CalMix Co., Ltd.	
	2019	2018	2019	2018	2019	2018
	<i>(in thousand Baht)</i>					
Cash and cash equivalents	13,636	2,939	7,063	5,408	20,963	-
Other current assets	33,392	29,237	62,701	35,147	3,428	-
Other non-current assets	158,204	32,242	165,905	115,385	36,290	-
Trade and other payable	(15,446)	(4,353)	(18,229)	(4,620)	(841)	-
Other current liabilities	(43)	(92)	(130)	(128)	(152)	-
Other non-current liabilities	(79,666)	-	-	-	-	-
Net assets	110,077	59,973	217,310	151,192	59,688	-
Group's share of net asset	50%	50%	50%	50%	51%	-
Net assets of joint ventures based on equity method	55,039	29,987	108,655	75,596	30,441	-
Elimination of unrealized profit on downstream sales	-	-	1,400	1,400	-	-
Goodwill	-	-	847	847	-	-
Carrying amounts of joint ventures based on equity method	55,039	29,987	110,902	77,843	30,441	-

Summarised information about profit and loss for the year ended 31 December 2019 and 2018.

	Siriman Chemicals India Private Limited		Easternbulk Lime Products Private Limited		CalMix Co., Ltd.	
	2019	2018	2019	2018	2019	2018
	<i>(in thousand Baht)</i>					
Sale	-	-	47,506	-	-	-
Other income	231	331	-	-	258	-
Cost of sale	(39)	-	(35,309)	-	-	-
Selling and administrative expenses	-	-	(31,495)	(10,600)	(569)	-
Tax expense	(18)	(74)	-	-	-	-
Total comprehensive income (100%)	174	257	(19,298)	(10,600)	(311)	-
Total comprehensive income of the Group's interest	87	128.5	(9,649)	(5,300)	(159)	-
Elimination of unrealized profit on downstream sales	-	-	-	1,400	-	-
Group's share of total comprehensive income	87	128.5	(9,649)	(3,900)	(159)	-

Consolidated financial statements

Note	Land	Land improvement	Buildings and building improvement	Machinery and equipment	Furniture, fixtures and office equipment	Motor vehicles	Assets under installation and under construction	Total
Cost:								
(in thousand Baht)								
At 1 January 2018	178,777	101,579	536,553	1,741,254	47,088	249,976	316,823	3,172,050
Additions	-	-	43	13,624	1,998	10,503	450,317	476,485
Capitalised interest	-	-	-	-	-	-	3,422	3,422
Transfers	-	4,212	90,603	358,133	12,657	350	(465,955)	-
Disposals/ write-off	-	(78)	(366)	(23,569)	(3,197)	(6,723)	-	(33,933)
Translation adjustment	-	(311)	-	(5,700)	(63)	(661)	(15)	(6,750)
At 31 December 2018	178,777	105,402	626,833	2,083,742	58,483	253,445	304,592	3,611,274
Additions	-	-	90	25,370	914	21,530	324,171	372,075
Acquisition through business combination	-	-	815,585	65,004	35,006	95,379	87,484	1,098,458
Capitalised interest	-	-	-	-	-	-	535	535
Transfers	-	14,574	128,796	409,705	1,931	755	(555,761)	-
Transfers to intangible assets	-	-	-	-	(5,335)	-	(25,353)	(30,688)
Disposals/ write-off	-	-	(173)	(28,640)	(335)	(4,116)	(65)	(33,329)
Translation adjustment	-	(206)	627	(3,856)	(22)	(446)	64	(3,839)
At 31 December 2019	178,777	119,770	1,571,758	2,551,325	90,642	366,547	135,667	5,014,486

Consolidated financial statements

Note	Land	Land improvement	Buildings and building improvement	Machinery and equipment	Furniture, fixtures and office equipment	Motor vehicles	Assets under installation and under construction	Total
	(in thousand Baht)							
Depreciation:								
At 1 January 2018	-	55,167	92,522	605,377	32,630	130,041	-	915,737
Depreciation for the year	-	7,154	28,191	111,591	6,894	24,052	-	177,882
Depreciation on disposals	-	(78)	(178)	(19,267)	(3,121)	(6,289)	-	(28,933)
Translation adjustment	-	(217)	-	(3,248)	(48)	(302)	-	(3,815)
At 31 December 2018	-	62,026	120,535	694,453	36,355	147,502	-	1,060,871
Depreciation for the year	-	7,232	37,805	122,799	7,447	26,176	-	201,459
Accumulated depreciation through business combination	5	-	137,673	12,626	5,822	18,410	-	174,531
Depreciation on disposals	-	-	(71)	(2,332)	(322)	(1,593)	-	(4,318)
Accumulated depreciation transferred to intangible assets	-	-	-	-	(4,909)	-	-	(4,909)
Translation adjustment	-	(177)	97	(2,408)	(37)	(237)	-	(2,762)
At 31 December 2019	-	69,081	296,039	825,138	44,356	190,258	-	1,424,872

Consolidated financial statements

	Note	Land	Land improvement	Buildings and building improvement	Machinery and equipment	Furniture, fixtures and office equipment	Motor vehicles	Assets under installation and under construction	Total
Net book value:									
31 December 2018		178,777	43,376	506,298	1,389,289	22,128	105,943	304,592	2,550,403
31 December 2019		178,777	50,689	1,275,719	1,726,187	46,286	176,289	135,667	3,589,614
Depreciation for the year									
2018 (Baht 164 million included in cost of sales, and balance in selling and administrative expenses)									177,882
2019 (Baht 173 million included in cost of sales, and balance in selling and administrative expenses)									201,459

Separate financial statements

	Land	Land improvement	Buildings and building improvement	Machinery and equipment	Furniture, fixtures and office equipment	Motor vehicles	Assets under installation and under construction	Total
	(in thousand Baht)							
Cost:								
At 1 January 2018	178,777	98,577	536,553	1,686,442	46,445	243,388	316,673	3,106,855
Additions	-	-	43	13,014	1,930	10,159	450,317	475,463
Capitalised interest	-	-	-	-	-	-	3,422	3,422
Transfers	-	4,212	90,603	358,066	12,657	350	(465,888)	-
Disposals/write-off	-	(78)	(366)	(23,569)	(3,175)	(6,723)	-	(33,911)
At 31 December 2018	178,777	102,711	626,833	2,033,953	57,857	247,174	304,524	3,551,829
Additions	-	-	90	23,527	892	20,242	323,325	368,076
Capitalised interest	-	-	-	-	-	-	535	535
Transfers	-	14,574	128,796	409,705	1,931	755	(555,761)	-
Transfers to intangible asset	-	-	-	-	(5,335)	-	(25,353)	(30,688)
Disposals/write-off	-	-	(173)	(28,640)	(335)	(4,116)	-	(33,264)
At 31 December 2019	178,777	117,285	755,546	2,438,545	55,010	264,055	47,270	3,856,488

Separate financial statements

	Land	Land improvement	Buildings and building improvement	Machinery and equipment	Furniture, fixtures and office equipment	Motor vehicles	Assets under installation and under construction	Total
					(in thousand Baht)			
Depreciation:								
At 1 January 2018	-	53,344	92,522	576,272	32,181	127,401	-	881,720
Depreciation for the year	-	6,629	28,191	107,323	6,810	23,387	-	172,340
Depreciation on disposals	-	(78)	(178)	(19,267)	(3,112)	(6,289)	-	(28,924)
At 31 December 2018	-	59,895	120,535	664,328	35,879	144,499	-	1,025,136
Depreciation for the year	-	6,866	33,916	118,444	7,207	24,925	-	191,358
Accumulated depreciation	-	-	-	-	(4,909)	-	-	(4,909)
transfers to intangible assets	-	-	(71)	(2,332)	(322)	(1,593)	-	(4,318)
Depreciation on disposals	-	-	-	-	-	-	-	-
31 December 2019	-	66,761	154,380	780,440	37,855	167,831	-	1,207,267
Net book value:								
31 December 2018	178,777	42,816	506,298	1,369,625	21,978	102,675	304,524	2,526,693
31 December 2019	178,777	50,524	601,166	1,658,105	17,155	96,224	47,270	2,649,221
Depreciation for the year								
2018 (Baht 164 million included in cost of sales, and balance in selling and administrative expenses)								172,340
2019 (Baht 168 million included in cost of sales, and balance in selling and administrative expenses)								191,358

During the year ended 31 December 2019, the Company capitalised interest amounting to Baht 0.53 million to the costs of plant, machinery and equipment construction (2018: Baht 3.42 million). These borrowing costs arose on loans obtained for general purpose and used in these projects and were determined based on the weighted average interest rates of these loans, at 2.90% to 2.96% per annum. (31 December 2018: 2.80% to 4.20% per annum)

As at 31 December 2019, the Group had motor vehicles under finance lease agreements with net book value amounting to Baht 85 million (2018: Baht 84 million) and the Company only: Baht 84 million (2018: Baht 84 million).

As at 31 December 2019, certain items of plant and equipment were fully depreciated but are still in use. The gross carrying amount before deducting accumulated depreciation of those assets amounted to approximately Baht 358 million (2018: Baht 297 million) and the Company only: Baht 353 million (2018: Baht 293 million).

As at 31 December 2019, the Company has mortgaged its land and structures thereon and machinery with net book value of approximately Baht 1,232 million (2018: Baht 1,308 million) as collateral against credit facilities received from financial institution.

As at 31 December 2019, Ha Long QN Lime Company Limited, an indirect subsidiary in Vietnam has mortgaged its machinery, equipment and buildings with net book value of approximately VND 598.43 million or Baht 779 million as collateral against credit facilities received from financial institution.

14. Ore reserve

The balance represents the acquisition cost of the concession to operate business related to the industrial mining of limestone and related development costs. The balance is summarised below:

		Consolidated		Separate financial	
		financial statements		statements	
	Note	2019	2018	2019	2018
		(in thousand Baht)			
Total costs		165,032	165,032	165,032	165,032
Acquisition through business combinations	5	129,838	-	-	-
Less Accumulated depletion		(71,549)	(64,214)	(70,732)	(64,214)
Translation adjustment		102	-	-	-
Net		223,423	100,818	94,300	100,818
Depletion for the year		6,926	6,698	6,518	6,698

Under the conditions of the Company's concession, the mining operations must comply with the approved mining plans, and Thailand environmental protection and rehabilitation regulations, and with the regulations and conditions stipulated in the concession. On 6 August 2014, the Company entered into an agreement to pay special benefits to the Thai government for the concession issuance. The concession period is 25 years, which will expire in 2040.

Under the conditions of Ha Long QN Lime Company Limited's concession which acquired from business combination during the year amounting to Baht 130 million required to comply with Vietnam environmental protection and rehabilitation regulations, and with the regulations and conditions stipulated in the concession. On 28 October 2019, the Company entered into the license of mineral exploitation. The License period is 30 years, which will expire in 11 May 2046.

15. Short-term loans from financial institutions

	Interest rate		Consolidated financial statements	
	2019	2018	2019	2018
	<i>(percent per annum)</i>		<i>(in thousand Baht)</i>	
Short-term loans from financial institutions	2.00 - 8.00	2.80 - 2.95	648,043	154,517
Total			648,043	154,517

	Interest rate		Separate financial statements	
	2019	2018	2019	2018
	<i>(percent per annum)</i>		<i>(in thousand Baht)</i>	
Short-term loans from financial institutions	2.00 - 2.10	2.80 - 2.95	550,000	154,517
Total			550,000	154,517

16. Trade and other payables

	Note	Consolidated financial statements		Separate financial statements	
		2019	2018	2019	2018
		<i>(in thousand Baht)</i>			
Trade payables - unrelated parties		182,234	138,572	109,165	121,019
Other payables - related parties	6	127	23	1,022	1,512
Consideration payable					
– related parties	5	83,219	-	-	-
Other payables - unrelated parties		208,952	114,333	76,468	113,901
Accrued expenses - unrelated parties		68,838	70,623	54,724	62,582
Advance receipt from customers		1,918	859	1,874	637
Total trade and other payables		545,288	324,410	243,253	299,651

17. Liabilities under finance lease agreements

	Consolidated financial statement		Separate financial statement	
	2019	2018	2019	2018
	<i>(in thousand Baht)</i>			
Liabilities under finance lease agreements	61,339	69,216	59,660	68,853
Less Deferred interest expenses	(3,842)	(4,631)	(3,684)	(4,584)
Total	57,497	64,585	55,976	64,269
Less Portion due within one year	(20,301)	(22,131)	(19,953)	(22,043)
Liabilities under finance lease agreements - net of current portion	37,196	42,454	36,023	42,226

The Group have entered into the finance lease agreements with leasing companies for rental of motor vehicles for use in its operation, whereby it is committed to pay rental on a monthly basis. The terms of the agreements are generally 5 years.

Future minimum lease payments required under the finance lease agreements are as follows:

Consolidated financial statements						
2019			2018			
Less than 1 year	1-5 years	Total	Less than 1 year	1-5 years	Total	
<i>(in thousand Baht)</i>						
Future minimum lease payments	22,258	39,081	61,339	24,411	44,805	69,216
Deferred interest expenses	(1,957)	(1,885)	(3,842)	(2,280)	(2,351)	(4,631)
Present value of future minimum lease payments	20,301	37,196	57,497	22,131	42,454	64,585
Separate financial statements						
2019			2018			
Less than 1 year	1-5 years	Total	Less than 1 year	1-5 years	Total	
<i>(in thousand Baht)</i>						
Future minimum lease payments	21,845	37,815	59,660	24,300	44,553	68,853
Deferred interest expenses	(1,892)	(1,792)	(3,684)	(2,257)	(2,327)	(4,584)
Present value of future minimum lease payments	19,953	36,023	55,976	22,043	42,226	64,269

18. Long-term loans

Credit facilities	Interest rate per annum	Consolidated financial statements	
		2019	2018
		(in thousand Baht)	
1) Baht 1,300 million	MLR - Fixed percentage	1,159,608	946,251
2) Baht 248 million	MLR - Fixed percentage	237,667	-
3) Baht 400 million	MLR - Fixed percentage	200,000	-
4) VND 284.5 billion	10 percent per annum	104,556	-
5) USD 6.4 million	7 percent per annum	194,637	-
6) VND 40 billion	10 percent per annum	30,063	-
Less Deferred loan front-end fee		(3,719)	(3,073)
Total		1,922,812	943,178
Less Portion due within one year		(427,398)	(80,243)
Long-term loans - net of current portion		1,495,414	862,935

Credit facilities	Interest rate per annum	Separate financial statements	
		2019	2018
		(in thousand Baht)	
1) Baht 1,300 million	MLR - Fixed percentage	1,159,608	946,251
2) Baht 248 million	MLR - Fixed percentage	237,667	-
3) Baht 400 million	MLR - Fixed percentage	200,000	-
Less Deferred loan front-end fee		(3,719)	(3,073)
Total		1,593,556	943,178
Less Portion due within one year		(236,399)	(80,243)
Long-term loans - net of current portion		1,357,157	862,935

Movements of the long-term loans account during the year ended 31 December 2019 and 2018 are summarised below.

		Consolidated financial statement		Separate financial statement	
	Note	2019	2018	2019	2018
		(in thousand Baht)			
Balance as at 1 January		943,178	1,208,521	943,178	1,208,521
Add Loan during period		788,560	959,440	788,560	959,440
Acquisition through business combinations	5	367,811	-	-	-
Less Repayment of loan as due date		(176,034)	(37,469)	(137,536)	(37,469)
Less Repayment of loan before due date		-	(1,189,720)	-	(1,189,720)
Less Deferred loans front-end fee		(1,356)	(3,250)	(1,356)	(3,250)
Add Amortisation loans front-end fee		710	5,656	710	5,656
Unrealized loss from translation of foreign currency		(429)	-	-	-
Effect of movements in exchange rates		372	-	-	-
Balance as at 31 December		1,922,812	943,178	1,593,556	943,178
Less Portion due within one year		(427,398)	(80,243)	(236,399)	(80,243)
Long-term loans - net of current portion		1,495,414	862,935	1,357,157	862,935

Under the long-term loan agreement with the first tranche of Baht 1,300 million requires the loan principal to be repaid in quarterly installments and carries interest at MLR minus fixed rate per annum. The loan is secured by the mortgage of the Company's land and structures thereon and most of its machinery. The Company is required to maintain debt to equity and debt service coverage ratios in accordance with the agreement.

On 21 March 2019, the Company draw down the second borrowings under the above loan agreement in the amount of Baht 160.56 million which is fully second credit limit. And on 20 June 2019, the Company draw down the third borrowings under such loan agreement in the amount of Baht 180 million which is fully borrowings of the long-term agreement. The loan principal to be repaid the first borrowings within the third quarter 2026, the second borrowings within the fourth quarter 2026 and the third borrowings within the first quarter 2027. On 29 October 2019, the Company was approved to receive higher tranche of Baht 248 million (“Additional credit limit”) under the above loan agreement. The additional credit limit is based on the value of the company's collateral. The loan principal to be repaid within the third quarter 2025.

Under the long-term loan agreement with the tranche of Baht 400 million requires the loan principal to be repaid in quarterly installments and carries interest at MLR minus fixed rate per annum which has no guaranteed. The Company is required to comply with some financial conditions as those specified in the Company’s loan agreement and to maintain a certain debt to equity ratio.

On 18 November 2019, the Company draw down the first borrowings under the above loan agreement in the amount of Baht 200 million. The loan principal to be repaid within the fourth quarter 2023.

Under the long-term loan agreement with the tranche of VND 284.5 billion and USD 6.4 million of Ha Long QN Lime Company Limited, indirect subsidiaries in Vietnam requires the loan principal to be repaid in quarterly installments. The loan principal to be repaid within 26 August 2021 and carries interest at 10% and 7% respectively. The loan is secured by the mortgage of machinery, equipment and buildings.

Under the long-term loan agreement with the tranche of VND 40 billion of Ha Long QN Lime Company Limited, indirect subsidiaries in Vietnam requires the loan principal to be repaid in quarterly installments. The loan principal to be repaid within 11 October 2021 and carries interest at 10%. The loan is secured by the mortgage of machinery, equipment and buildings.

19. Provisions for employee benefits

Provision for long-term employee benefits, which represents compensation payable to employees after they retire, was as follows:

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	<i>(in thousand Baht)</i>			
1 January	61,922	56,345	61,695	56,326
Include in profit or loss:				
Current service cost	9,965	5,999	9,962	5,687
Past service cost	7,656	-	7,656	-
Interest on obligation	1,765	1,404	1,765	1,404
Included in other comprehensive income:				
Actuarial loss	3,849	-	3,849	-
Effect of movements in exchange rates	(16)	(104)	-	-
Other				
Benefits paid during the year	(295)	(1,722)	(295)	(1,722)
31 December	84,846	61,922	84,632	61,695

Line items in profit or loss under which long-term employee benefit expenses are recognised are as follows:

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	<i>(in thousand Baht)</i>			
Cost of sales	13,985	3,872	13,985	3,872
Selling and administrative expenses	5,401	3,531	5,398	3,219
Total expenses recognised in profit or loss	19,386	7,403	19,383	7,091

The Company expect to pay Baht 9.58 million of long-term employee benefits during the next year (2018: Baht 5.7 million).

As at 31 December 2019, the weighted average duration of the long-term employee benefit liabilities is 13.2 years (2018: 14 years).

Actuarial losses recognised in other comprehensive income arising from:

	Consolidated and Separate financial statements	
	2019	2018
	<i>(in thousand Baht)</i>	
Demographic assumptions	578	-
Financial assumptions	942	-
Experience adjustment	2,329	-
Total	3,849	-

Key actuarial assumptions used for the valuation are as follows:

	Consolidated and Separate financial statements	
	2019	2018
	(% per annum)	(% per annum)
Discount rate	2.8	3
Salary increase rate	5 - 10	5 - 10

The result of sensitivity analysis for significant assumptions that affect the present value of the long-term employee benefit obligation as at 31 December 2019 and 2018 is summarised below:

	Consolidated and Separate financial statements			
	2019		2018	
	Increase 1%	Decrease 1%	Increase 1%	Decrease 1%
	<i>(in thousand Baht)</i>			
Discount rate	(5,884)	6,800	(3,644)	4,204
Salary increase rate	7,336	(6,480)	5,656	(4,969)

On 5 April 2019, the Labor Protection Act was amended to include a requirement that an employee, who is terminated which includes retirement at due date 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 Group has therefore amended its retirement plan in accordance with the changes in the Labor Protection Act in 2019. As a result of this change, the provision for retirement benefits as at 31 December 2019 as well as past service cost recognised during the year then ended in the consolidated and separate financial statements increased by an amount of Baht 7.66 million and Baht 7.66 million, respectively.

20. Share capital

During 14 to 16 March 2018, the Company made an Initial Public Offering of 240 million additional ordinary shares at a price of Baht 3.84 per share and received full settlement of the additional share capital on 19 March 2018. Direct costs attributable to the share offering net of income tax, amounting to Baht 22 million, are presented as a deduction from the premium on ordinary shares in the statement of financial position. The Company registered the increase in its paid-up capital with the Ministry of Commerce on 19 March 2018.

The Stock Exchange of Thailand (SET) has approved the listing of the ordinary shares of the Company as securities on the Stock Exchange of Thailand (SET), to be traded from 21 March 2018.

21. Statutory reserve

Pursuant to Section 116 of the Public Limited Companies Act B.E. 2535, the Company is required to set aside a statutory reserve of at least 5 percent of its net profit after deducting accumulated deficit brought forward (if any), until the reserve reaches 10 percent of the registered capital. The statutory reserve is not available for dividend distribution.

22. Expenses by nature

Significant expenses classified by nature are as follows:

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	<i>(in thousand Baht)</i>			
Changes in inventories of finished goods and work in progress	(36,489)	18,831	(39,846)	24,686
Raw materials and consumables used	163,393	331,286	163,393	331,286
Salaries and wages and other employee benefits	384,571	369,046	359,543	349,082
Depreciation and amortization	211,264	187,288	198,234	179,038
Transportation expenses	457,021	468,720	371,700	394,617
Fuel charge	682,101	485,258	682,101	485,258
Electric expenses	170,910	152,212	170,649	151,947
Other	290,286	221,147	35,581	78,065
Total	2,323,057	2,233,788	1,941,355	1,993,979

23. Income tax

Income tax benefits for the years ended 31 December 2019 and 2018 are made up as follows:

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	<i>(in thousand Baht)</i>			
Current income tax:				
Current income tax charge	-	2,503	-	2,503
Deferred tax:				
Relating to origination and reversal of temporary differences	(7,820)	(11,316)	(8,743)	(14,870)
Expense (Income) tax benefits reported in the statement of comprehensive income	(7,820)	(8,813)	(8,743)	(12,367)

Income tax recognised in other comprehensive income

Consolidated financial statements					
	<u>2019</u>			<u>2018</u>	
	Before tax	Tax benefits	Net of tax	Before tax	Net of Tax
	<i>(in thousand Baht)</i>				
Defined benefit plan actuarial losses	(3,849)	770	(3,079)	-	-
Total	(3,849)	770	(3,079)	-	-
Separate financial statements					
	<u>2019</u>			<u>2018</u>	
	Before Tax	Tax benefits	Net of tax	Before tax	Net of tax
	<i>(in thousand Baht)</i>				
Defined benefit plan actuarial losses	(3,849)	770	(3,079)	-	-
Total	(3,849)	770	(3,079)	-	-

The reconciliation between accounting profit and income tax expense is shown below.

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	<i>(in thousand Baht)</i>			
Accounting profit before tax	(10,740)	152,457	7,942	146,668
Applicable tax rate	20 - 30%	17 - 30%	20%	20%
Accounting profit before tax multiplied by income tax rate	(2,484)	31,455	1,588	29,334
Adjustment in respect of income tax of previous year	-	-	-	-
Share of loss from investments in joint ventures	1,944	758	-	-
Deferred tax assets which were not recognised during the year	1,858	668	-	-
Effects of:				
Promotional privileges (Note 24)	(12,028)	(45,585)	(12,028)	(45,585)
Non-deductible expenses	3,261	1,082	2,580	1,060
Additional expense deductions allowed	(163)	(83)	-	(83)
Previous tax	222	-	222	-
Others	(430)	2,892	(1,105)	2,907
Total	(9,138)	(41,694)	(10,331)	(41,701)
Income tax benefits reported in the statement of comprehensive income	(7,820)	(8,813)	(8,743)	(12,367)

The components of deferred tax assets and deferred tax liabilities are as follows:

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
	<i>(in thousand Baht)</i>			
Deferred tax assets				
Provision for long-term employee benefits	17,488	12,893	16,926	12,339
Loss carry forward	36,108	22,378	18,940	15,897
Others	4,258	1,962	1,940	-
Total	57,854	37,233	37,806	28,236
Deferred tax liabilities				
Deferred loan front-end fee	360	303	360	303
Total	360	303	360	303
Net	57,494	36,930	37,446	27,933

Movements in deferred tax balances are as follows:

	Consolidated financial statements					
		<u>(Charged) / Credited to</u>				
	At 1 January 2019	Acquired in business combination (note 5)	Profit or loss	Other comprehen sive income	Exchange differences	At 31 December 2019
			<i>(in thousand Baht)</i>			
Deferred tax assets						
Provision for long-term employee benefits	12,893	-	3,868	770	(43)	17,488
Loss carry forward	22,378	12,477	1,627	-	(374)	36,108
Others	1,962	-	2,382	-	(86)	4,258
Total	37,233	12,477	7,877	770	(503)	57,854
Deferred tax liabilities						
Deferred loan front-end fee	(303)	-	(57)	-	-	(360)
Total	(303)	-	(57)	-	-	(360)
Net	36,930	12,477	7,820	770	(503)	57,494

Consolidated financial statements

(Charged) / Credited to

	At 1 January 2018	Profit or loss	Other comprehensive income	Exchange differences	At 31 December 2018
<i>(in thousand Baht)</i>					
Deferred tax assets					
Provision for long-term employee benefits	11,721	1,226	-	(54)	12,893
Loss carry forward	14,152	9,165	-	(939)	22,378
Others	1,572	564	-	(174)	1,962
Total	27,445	10,955	-	(1,167)	37,233
Deferred tax liabilities					
Deferred loan borrowing fees	(651)	348	-	-	(303)
Others	(14)	13	-	1	-
Total	(665)	361	-	1	(303)
Net	26,780	11,316	-	(1,166)	36,930

	Separate financial statements		
	(Charged) / Credited to		
	At 1 January 2019	Profit or loss Other comprehensive income	At 31 December 2019
		<i>(in thousand Baht)</i>	
Deferred tax assets			
Provision for long-term employee benefits	12,339	3,817 770	16,926
Loss carry forward	15,897	3,043 -	18,940
Others	-	1,940 -	1,940
Total	28,236	8,800 770	37,806
Deferred tax liabilities			
Deferred loan borrowing fees	(303)	(57) -	(360)
Total	(303)	(57) -	(360)
Net	27,933	8,743 770	37,446

	Separate financial statements		
	(Charged) / Credited to		
	At 1 January 2018	Profit or loss Other comprehensive income	At 31 December 2018
		<i>(in thousand Baht)</i>	
Deferred tax assets			
Provision for long-term employee benefit	11,265	1,074 -	12,339
Loss carry forward	2,055	13,842 -	15,897
Others	394	(394) -	-
Total	13,714	14,522 -	28,236
Deferred tax liabilities			
Deferred loan borrowing fees	(651)	348 -	(303)
Total	(651)	348 -	(303)
Net	13,063	14,870 -	27,933

The tax losses expire from 2019. The deductible temporary differences do not expire under current tax legislation. The Group has not recognised these items as deferred tax assets because it is not probable that the Group will have sufficient future taxable profit to utilise the benefits therefrom.

As at 31 December 2019, the subsidiaries have deductible unused tax losses totaling Baht 12 million (2018: Baht 11 million), on which future deferred tax assets have not been recognised as the subsidiaries believe future taxable profits may not be sufficient to allow utilisation of the unused tax losses.

The unused tax losses in separate financial statements and consolidated financial statements is Baht 96 million and Baht 192 million respectively which expired by from 2020 to 2024.

24. Promotional privileges

The Company has received investment promotional privileges from the Board of Investment (BOI) for the manufacture of chemical for industrial use. Subject to certain conditions, the significant tax privileges received are as follows:

Details of promotion privileges					
1. Certificate No.	2484(2)/ 2554	1498(2)/ 2558	59-1064- 1-00-1-0	59-1065- 1-00-1-0	59-1278- 1-00-1-0
2. The significant privileges are					
2.1 Exemption of corporate income tax for net profit from promoted operation and exemption of income tax on dividends paid from the profit of the promoted operations. In case that there are losses incurred during the corporate income tax exemption period, the Company is allowed to utilise the losses as a deduction against the net earnings of future years after the expiry of the tax exemption period, but with a time limit of five years after that period.	8 years	6 years	3 years	3 years	3 years

Details of promotion privileges					
2.2 A fifty percent reduction of the normal rate of corporate income tax on net profit from promoted operations for a period of five years after the expiration of the above corporate income tax exemption period.	Granted	Granted	Non-granted	Non-granted	Non-granted
3. Date of first earning operating income	15 February 2013	2 September 2016	20 January 2018	1 February 2019	Not yet operate

The Company's operating revenues for the years divided according to promoted and non-promoted operations are shown below.

	Promoted operations		Non-promoted operations		Total	
	2019	2018	2019	2018	2019	2018
	<i>(in thousand Baht)</i>					
Sales						
Domestic sales	612,492	623,387	348,935	335,564	961,427	958,951
Export sales	484,059	423,370	553,572	798,420	1,037,631	1,221,790
Total sales	<u>1,096,551</u>	<u>1,046,757</u>	<u>902,507</u>	<u>1,133,984</u>	<u>1,999,058</u>	<u>2,180,741</u>

25. Earnings per share

Basic earnings per share is calculated by dividing profit for the year attributable to equity holders of the Company (excluding other comprehensive income) by the weighted average number of ordinary shares issued during the year.

The following table sets forth the computation of basic earnings per share:

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Earnings per share				
Profit for the year (Thousand Baht)	809	162,628	16,686	159,035
Weighted average number of ordinary shares (Thousand shares)	960,000	909,370	960,000	909,370
Profit attributable to equity holders of the Company (Baht per share)	0.0008	0.1788	0.0174	0.1749

26. Dividends

Dividends	Approved by	Dividends paid (Million Baht)	Dividend per share (Baht)
Interim dividends for the earning of the promoted operation from 1 January 2018 to 30 June 2018	Board of Directors' meeting on 7 August 2018	48.0	0.05
Total dividend for 2018		48.0	
Dividends for the earning of the promoted operation from 1 July 2018 to 31 December 2018	Annual general meeting on 26 April 2019	48.0	0.05
Interim dividends for the earning of the promoted operation from 1 January 2019 to 30 June 2019	Board of Directors' meeting on 13 August 2019	19.2	0.02
Total dividend for 2019		67.2	

27. Segment information

Operating segment information is reported in a manner consistent with the internal reports that are regularly reviewed by the chief operating decision maker in order to make decisions about the allocation of resources to the segment and assess its performance.

The chief operating decision maker monitors the operating results of the business units separately for the purpose of making decisions about resource allocation and assessing performance. Segment performance is measured based on operating profit or loss and total assets and on a basis consistent with that used to measure operating profit or loss and total assets in the financial statements.

The basis of accounting for any transactions between reportable segments is consistent with that for third party transactions.

The Group are principally engaged in one operating segment which is the manufacture and distribution of mineral and chemicals.

Major customers information

For the year 2019, the Group have revenue from one major customer in amount of Baht 334 million, arising from the company which is incorporated in Thailand. (2018: the Group have revenue from one major customer with revenue in the amount of Baht 348 million which are from domestic sale).

Geographic information

The Group's business operations involve 2 geographic segments: (1) the Company which is incorporated in Thailand, manufacture and distribution of mineral and chemicals. (2) the subsidiaries which is incorporated in overseas, manufacture and distributes of mineral and chemicals. The major revenue of overseas subsidiaries is from Australia. Therefore financial information by segment of the Group has been presented by geographic area, as follows:

	Geographic segment located in Thailand		Geographic segment located in overseas		Eliminated transactions	Consolidated financial statements	
	2019	2018	2019	2018	2019	2019	2018
	<i>(in million Baht)</i>						
Revenue from external customers	1,714	1,843	658	580	-	2,372	2,423
Intersegment revenue	285	338	17	-	(302)	-	-
Total revenue	1,999	2,181	675	580	(302)	2,372	2,423
Segment operating profit / (loss)	649	696	122	126	(3)	768	821
Unallocated income and expenses:							
Other income						26	22
Selling and distribution expenses						(520)	(458)
Administrative expenses						(199)	(173)
Gain (Loss) from exchange rate						(24)	2
Loss from investments in joint ventures						(10)	(4)
Finance cost						(52)	(58)
Income tax benefits						8	9
Profit (Loss) for the period						(3)	161

	Geographic segment located in Thailand		Geographic segment located in overseas		Eliminated transactions		Consolidated financial statements	
	2019	2018	2019	2018	2019	2018	2019	2018
	<i>(in million Baht)</i>							
Property, plant and equipment	2,649	2,526	941	24	-	-	3,590	2,550
Unallocated assets							2,012	1,274
Total assets							5,602	3,824

28. Provident fund

The Company and its employees have jointly established a provident fund in accordance with the Provident Fund Act B.E. 2530. Both employees and the Company contribute to the fund monthly at the rate of 5, 10 and 15 percent of basic salary. The fund, which is managed by Kasikorn Asset Management Company Limited, will be paid to employees upon termination in accordance with the fund rules. The contributions for the year 2019 amounting to Baht 10.2 million (2018: Baht 9.7 million) were recognised as expenses.

29. Commitments and contingent liabilities

29.1 Capital commitments

- 1) The Group had capital commitments relating to the construction of plant and acquisition of machinery and equipment are as follow:

Currency	Consolidated and Separate financial statements	
	2019	2018
Million Baht	86.4	106.0
Million EUR	-	0.3

29.2 Operating lease and service commitments

- 1) The Group have entered into lease agreements in respect of the lease of office building space and other service agreements. Future minimum rentals and service fees payable under these agreements are as follows:

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
<i>(in million Baht)</i>				
Payable:				
In up to 1 year	37.1	30.8	32.6	26.5
In over 1 and up to 5 years	15.7	20.0	11.2	19.8

- 2) The Company has entered into marketing service agreements with Chememan India Private Limited whereby the Company is committed to pay service fee amounting USD 25,000 per quarter in the year 2020. The term of the agreements can be extended with the manual agreements of the parties.
- 3) The subsidiary entered into agreements with an overseas government agency which granted the subsidiary rights to explore for mineral resources. The subsidiary is committed to pay expenses and contributions to various funds on the bases and at the rates stipulated in the agreements. In addition, the subsidiary must comply with the rules and conditions stipulated in such agreements.
- 4) The Company entered into agreements with the third party to do those mining activities as explosion, sorting, crushing and scooping the stones, the Company has the obligation to pay the yearly service fee amounting Baht 55 million in the year 2020. The term of the agreements can be extended with the manual agreements of the parties.
- 5) The indirect subsidiary, entered into agreements with a non related local company to do those mining activities as explosion, sorting, crushing and scooping the stones, the Company has the obligation to pay the yearly service fee amounting Baht 36 million per year as specified in the agreement. The agreements will be expired in 2028.

29.3 Guarantees

- (1) As at 31 December 2019 and 2018, the Group have outstanding bank guarantees in respect of certain performance as required in the normal course of business as follows.

	Currency	Consolidated financial statements		Separate financial statements	
		2019	2018	2019	2018
Guarantee tax refund	Million Baht	1.0	1.0	1.0	1.0
Guarantee electricity use	Million Baht	14.9	15.7	13.4	15.7
Guarantee performance and others	Million Baht	21.2	10.3	20.3	10.3
Guarantee land lease agreement	Thousand AUD	-	22	-	-

As at 31 December 2019, Chememan India Private Limited, a wholly owned subsidiary incorporated in India and held by the Company 99.99%, holds restricted bank deposits to Guarantee loan agreement for Siriman Chemicals India Private Limited, a joint venture in India amounting to INR 100 million or equivalent to Baht 42.20 million.

29.4 Other commitments

- 1) As at 31 December 2019, the Company had commitment amounting to INR 5.46 million (31 December 2018: INR 6.4 million) in respect of the uncalled portion of investments in subsidiary and joint venture in India.
- 2) The Company has entered into a long-term agreement with a local company for purchase of gas at prices and in quantity stipulated in the agreement. The agreement will expire in 2029.
- 3) The Company and the indirect subsidiary are committed to make contributions to the funds on the bases and at the rates stipulated in an appendix to the concession agreements. In addition, the Company and the indirect subsidiary must comply with the rules and conditions stipulated in the concession agreements.

30. Financial instruments

30.1 Financial risk management

The Group' financial instruments, as defined under Thai Accounting Standard No.107 "Financial Instruments: Disclosure and Presentations", principally comprise cash and cash equivalents, trade and other receivables, accounts receivable under installment sales, loans to related parties, short-term loans from financial institutions, trade and other payables, liabilities under finance lease agreements and long-term loans. The financial risks associated with these financial instruments and how they are managed is described below.

Credit risk

The Group are exposed to credit risk primarily with respect to trade and other receivables, accounts receivable under installment sales and loans to related parties. The Group manage the risk by adopting appropriate credit control policies and procedures and therefore do not expect to incur material financial losses. In addition, the Group do not have high concentrations of credit risk since they have large customers base. The maximum exposure to credit risk is limited to the carrying amounts of trade and other receivables, accounts receivable under installment sales and loans to related parties as stated in the statement of financial position.

Interest rate risk

The Group' exposure to interest rate risk relates primarily to its cash at banks, accounts receivable under installment sales, loans to related parties, short-term loan from financial institutions, liabilities under finance lease agreements and long-term borrowings. Most of the Group' financial assets and liabilities bear floating interest rates or fixed interest rates which are close to the market rate.

As at 31 December 2019 and 2018, significant financial assets and liabilities classified by type of interest rate are summarised in the table below, with those financial assets and liabilities that carry fixed interest rates further classified based on the maturity date, or the repricing date if this occurs before the maturity date.

Consolidated financial statements							
As at 31 December 2019							
	Fixed interest rates			Floating interest rate	Non-interest bearing	Total	Effective interest rate (% per annum)
	Within 1 year	1-5 years	Over 5 years <i>(in million Baht)</i>				
Financial assets							
Cash and cash equivalent	-	-	-	215	-	215	0.04 - 0.50
Trade and other receivables	-	-	-	-	518	518	-
Accounts receivable under installment sales	5	35	5	-	-	45	4.38
Total	5	35	5	215	518	778	
Financial liabilities							
Short-term loans from financial institutions	648	-	-	-	-	648	2.00 - 8.00
Trade and other payables	-	-	-	-	545	545	-
Liabilities under financial lease agreement	20	37	-	-	-	57	2.54 - 8.50
Long-term loans	191	138	-	1,593	-	1,922	3.00 - 10.0
Total	859	175	-	1,593	545	3,172	

Consolidated financial statements

As at 31 December 2018

	Fixed interest rates					Total	Effective interest rate (% per annum)
	Within 1 year	1-5 years	Over 5 years	Floating interest rate	Non-interest bearing		
	<i>(in million Baht)</i>						
Financial assets							
Cash and cash equivalent	-	-	-	126	-	126	0.04 - 6.75
Trade and other receivables	-	-	-	-	412	412	-
Accounts receivable under installment sales	5	29	15	-	-	49	4.65
Total	5	29	15	126	412	587	
Financial liabilities							
Short-term loans from financial institutions	155	-	-	-	-	155	2.80 - 2.95
Trade and other payables	-	-	-	-	324	324	-
Liabilities under financial lease agreement	22	43	-	-	-	65	2.54 - 8.50
Long-term loans	-	-	-	943	-	943	3.25
Total	177	43	-	943	324	1,487	

Separate financial statements

As at 31 December 2019

	Fixed interest rates					Total	Effective interest rate (% per annum)
	Within 1 year	1-5 years	Over 5 years	Floating interest rate	Non- interest bearing		
	<i>(in million Baht)</i>						
Financial assets							
Cash and cash equivalent	-	-	-	73	-	73	0.04 - 0.50
Trade and other receivables	-	-	-	-	393	393	-
Accounts receivable under installment sales	5	35	5	-	-	45	4.38
Loans to related parties	-	-	-	213	-	213	6.25 - 6.40
Total	5	35	5	286	393	724	
Financial liabilities							
Short-term loans from financial institutions	550	-	-	-	-	550	2.00 - 2.10
Trade and other payables	-	-	-	-	243	243	-
Liabilities under financial lease agreement	20	36	-	-	-	56	2.54 – 5.00
Long-term loans	-	-	-	1,593	-	1,593	3.00 - 3.06
Total	570	36	-	1,593	243	2,442	

Separate financial statements

As at 31 December 2018

	Fixed interest rates					Total	Effective interest rate (% per annum)
	Within 1 year	1-5 years	Over 5 years	Floating interest rate	Non- interest bearing		
				(in million Baht)			
Financial assets							
Cash and cash equivalent	-	-	-	84	-	84	0.04 - 0.50
Trade and other receivables	-	-	-	-	419	419	-
Accounts receivable under installment sales	5	29	15	-	-	49	4.65
Loans to related parties	-	-	-	4	-	4	6.25
Total	5	29	15	88	419	556	
Financial liabilities							
Short-term loans from financial institutions	155	-	-	-	-	155	2.80 - 2.95
Trade and other payables	-	-	-	-	300	300	-
Liabilities under financial lease agreement	22	42	-	-	-	64	2.54 - 5.00
Long-term loans	-	-	-	943	-	943	3.25
Total	177	42	-	943	300	1,462	

Foreign currency risk

The Group's exposure to foreign currency risk arises mainly from trading transactions and borrowings that are denominated in foreign currencies.

As at 31 December 2019 and 2018, the balances of financial assets and liabilities denominated in foreign currencies are summarised below.

Consolidated financial statements						
Foreign currency	Financial assets		Financial liabilities		Average exchange rate	
	2019	2018	2019	2018	2019	2018
	(in million)				(in Baht per 1 foreign currency unit)	
USD	8.5	6.2	6.5	-	30.1540	32.4036
AUD	-	-	-	-	21.0492	22.8023
JPY	5.9	2.9	-	-	0.2759	0.2926
INR	-	0.1	-	-	0.4220	0.4597

Separate financial statements						
Foreign currency	Financial assets		Financial liabilities		Average exchange rate	
	2019	2018	2019	2018	2019	2018
	(in million)				(in Baht per 1 foreign currency unit)	
USD	13.0	6.1	0.1	0.1	30.1540	32.4036
AUD	4.8	4.3	-	-	21.0492	22.8023
JPY	5.9	2.9	-	-	0.2759	0.2926
INR	-	0.1	-	-	0.4220	0.4597

As at 31 December 2018, foreign exchange contract outstanding are summarised below.

Consolidated and Separate financial statements					
Foreign currency	Bought amount	Sold amount	<u>Contractual exchange rate</u>		Contractual maturity date
			Bought	Sold	
			(Baht per 1 foreign currency unit)		
(in Million)					
Euro	0.2	-	37.3050		30 January 2019

30.2 Fair values of financial instruments

Since the majority of the Group's financial instruments are short-term in nature or carrying interest at rates close to the market interest rates, their fair value is not expected to be materially different from the amounts presented in the statement of financial position.

31. Capital management

The primary objective of the Company's capital management is to ensure that it has appropriate capital structure in order to support its business and maximise shareholder value. As at 31 December 2019, the Group's debt-to-equity ratio was 1.55:1 (2018: 0.72:1) and the Company's was 1.16:1 (2018: 0.69:1).

32. Events after the reporting period

On 21 January 2020, Company made an additional investment in 75,000 ordinary shares from an increase in share capital of Easternbulk Lime Products Private Limited, at a price of INR 200 per share, totaling INR 15 million or equivalent to Baht 6.38 million. The company still had 50% interest in such company

On 19 February 2020, The judgement is to acquit the company ("1st Defendant") for the judgement that the Company is a co-defendant ("1st Defendant") in a case of the Civil Court, together with the unrelated company ("2nd Defendant") to pay for rental of semi-trailer to plaintiff amounting to Baht 5.6 million.

33. Approval of financial statements

These financial statements were authorised for issue by the Company's authorised directors on 29 February 2020.



Chememan Public Company Limited

195/11-12 Lake Rajada Office Complex 2, 10th - 11th floor,
Rajadapisek Road, Klongtoey, Bangkok 10110
+ 66 2 661-9734-8, + 66 2 260-9176