COVER SHEET
for
AUDITED FINANCIAL STATEMENTS

SEC Registration Number

C	S	2	0	0	8	1	1	5	3	0

COMPANY NAME

NICKEL ASIA CORPORATION AND SUBSIDIARIES

PRINCIPAL OFFICE *(No. / Street / Barangay / City / Town / Province)*

28th Floor NAC Tower, 32nd Street, Bonifacio Global City, Taguig City

Form Type	Department requiring the report	Secondary License Type, If Applicable
AACFS	CRM	N/A

COMPANY INFORMATION

Company's Email Address	Company's Telephone Number	Mobile Number
info@nickelasia.com	(632) 798-7622	–

No. of Stockholders	Annual Meeting (Month / Day)	Fiscal Year (Month / Day)
86	First Friday of June	12/31

CONTACT PERSON INFORMATION

The designated contact person ***MUST*** be an Officer of the Corporation

Name of Contact Person	Email Address	Telephone Number/s	Mobile Number
Emmanuel L. Samson	manny.samson@nickelasia.com	(632) 798-7622	–

CONTACT PERSON's ADDRESS

28th Floor NAC Tower, 32nd Street, Bonifacio Global City, Taguig City

NOTE 1 : *In case of death, resignation or cessation of office of the officer designated as contact person, such incident shall be reported to the Commission within thirty (30) calendar days from the occurrence thereof with information and complete contact details of the new contact person designated.*

2 : *All Boxes must be properly and completely filled-up. Failure to do so shall cause the delay in updating the corporation's records with the Commission and/or non-receipt of Notice of Deficiencies. Further, non-receipt of Notice of Deficiencies shall not excuse the corporation from liability for its deficiencies.*

S.E.C. Number CS200811530
File Number______

NICKEL ASIA CORPORATION
(Company's Full Name)

28th Floor NAC Tower, 32nd Street,
Bonifacio Global City, Taguig City
(Company's Address)

+63 2 892 6669 / +63 2 798 7622
(Telephone Numbers)

December 31
(Fiscal Year Ending)
(month & day)

SEC FORM 17-A Annual Report
Form Type

____
Amendment Delegation (If applicable)

December 31, 2018
Period Ended Date

____
(Secondary License Type and File Number)

SECURITIES AND EXCHANGE COMMISSION

SEC FORM 17-A

ANNUAL REPORT PURSUANT TO SECTION 17 OF THE SECURITIES REGULATION CODE AND SECTION 141 OF THE CORPORATION CODE OF THE PHILIPPINES

1. For the fiscal year ended: **DECEMBER 31, 2018**
2. SEC Identification Number: **CS200811530**
3. BIR Tax Identification No.: **007-085-191-000**
4. Exact name of issuer as specified in its charter **NICKEL ASIA CORPORATION**
5. Province, Country or other jurisdiction of incorporation or organization: **PHILIPPINES**
6. Industry Classification Code: [ ] (SEC Use Only)
7. Address of principal office — Postal Code
   28th Floor NAC Tower, 32nd Street, — **1634**
   Bonifacio Global City, Taguig City
8. Issuer's telephone number, including area code: **+63 2 892 6669 / +63 2 798 7622**
9. Former name, former address, and former fiscal year, if changed since last report.
   N/A
10. Securities registered pursuant to Sections 8 and 12 of the SRC, or Sec. 4 and 8 of the RSA

Title of Each Class	Number of Shares of Common Stock Outstanding and Amount of Debt Outstanding
Common Stock	**13,674,975,117 shares**
Long-term Debts	**₱2,899.8 Million**

11. Are any or all of these securities listed on a Stock Exchange.
    Yes [**X**] No [ ]

    If yes, state the name of such stock exchange and the classes of securities listed therein:
    PHILIPPINE STOCK EXCHANGE — **Common Stock**

12. Check whether the issuer:
    (a) has filed all reports required to be filed by Section 17 of the SRC and SRC Rule 17.1 thereunder or Section 11 of the RSA and RSA Rule 11(a)-1 thereunder, and Sections 26 and 141 of The Corporation Code of the Philippines during the preceding twelve (12) months (or for such shorter period that the registrant was required to file such reports);

    Yes [**X**] No [ ]

    (b) has been subject to such filing requirements for the past ninety (90) days.

    Yes [**X**] No [ ]

13. State the aggregate market value of the voting stock held by non-affiliates of the registrant.

    As at December 31, 2018, 4,625,501,265 shares with a market price of ₱2.20 or an aggregate amount of ₱10,176,102,783 were held by non-affiliates.

NICKEL ASIA CORP.

April 10, 2019

Mr. Jose Valeriano B. Zuño III
OIC - Head, Disclosure Department
The Philippine Stock Exchange, Inc.
3/F Philippine Stock Exchange Plaza
Ayala Triangle, Ayala Avenue
Makati City

Mr. Vicente Graciano P. Felizmenio, Jr.
Director - Markets and Securities Regulation Department
Securities and Exchange Commission
Secretariat Building, PICC Complex
Roxas Boulevard, Pasay City

RE : 2018 SEC Form 17-A Annual Report
x == x

Gentlemen:

In accordance with the Securities Regulation Code, we are submitting herewith a copy of our Company's SEC Form 17-A Annual Report as at and for the year ended December 31, 2018.

We trust everything is in order.

Very truly yours,

Emmanuel L. Samson
SVP – Chief Financial Officer

NICKEL ASIA CORPORATION
17-A ANNUAL REPORT 2018

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PART I – BUSINESS AND GENERAL INFORMATION

Item 1. BUSINESS

A. OVERVIEW

Nickel Asia Corporation (the "Company", "Parent Company", the "Group" or "NAC") was incorporated on July 24, 2008 with the Philippine Securities and Exchange Commission (SEC) and was listed with the Philippine Stock Exchange on November 22, 2010.

NAC exports saprolite and limonite ore to customers in Japan, China and Australia. The Company's customers use its ore for the production of ferronickel and nickel pig iron (NPI), both used to produce stainless steel, and for the production of pig iron used for carbon steel. NAC is also the exclusive supplier of limonite ore from its Rio Tuba mine to the Coral Bay plant, the country's first hydrometallurgical nickel processing plant owned by Coral Bay Nickel Corporation (CBNC), where NAC has a 10% equity interest. CBNC became operational in 2005 and currently operates at a capacity of 24,000 tonnes of contained nickel and 2,000 tonnes of contained cobalt per year in the form of a mixed nickel-cobalt sulfide. It has proven to be the world's most efficient facility using the high-pressure acid leach (HPAL) process.

In 2010, the Parent Company made an investment of ₱4.4 billion for a 22.5% equity interest in the country's second hydrometallurgical nickel processing plant under Taganito HPAL Nickel Corporation (THNC). The plant started its commercial operation in October 2013, and currently operates at a capacity of 30,000 tonnes of contained nickel and 2,500 tonnes of contained cobalt per year in the form of a mixed nickel-cobalt sulfide. The Taganito mine of the Company's subsidiary, Taganito Mining Corporation (TMC) supplies all of the limonite ore for the plant. At a total project cost of US$1.7 billion, the plant represents the single largest investment in the Philippine minerals sector.

In 2016, the Parent Company made a strategic decision to reduce its ownership in the Taganito plant from 22.5% to 10.0%, the same equity level that it has in the Coral Bay plant. While the Taganito and Coral Bay plants are globally recognized to be of the highest quality and operating efficiency, as with most other nickel processing plants worldwide, profitable operation is difficult to achieve during periods of low nickel prices.

The reduction in the Parent Company's equity in THNC was achieved by a sale of shares to the majority owner of the plant and one of the Parent Company's major shareholders, Sumitomo Metal Mining Co., Ltd. (SMM). The sale, concluded on October 17, 2016, resulted in an inflow of ₱2,037.2 billion and a gain of ₱239.6 million.

Apart from NAC's four operating mines, it has other properties in various stages of exploration for nickel, while continuing to seek opportunities in copper and gold. In November 2010, the Parent Company concluded the purchase of Cordillera Exploration Co., Inc. (CExCI) from Anglo American Exploration (Philippines), Inc. ("Anglo American"), with four properties in the Central Cordillera of northern Luzon that are prospective for gold and copper. The purchase marks the Parent Company's first step in its vision to become a diversified mineral resource company. In November 2011, SMM acquired 25% equity in CExCI with an option to purchase additional shares to increase its total equity to 40%.

In 2015, CExCI identified a new property in the province of Zambales for exploration and development under Newminco Pacific Mining Corporation (Newminco), which is also prospective for gold and copper. In relation to this, SMM put in an additional investment of US$2.8 million to increase its ownership in CExCI from 25% to 40%. Newminco is the holder of an Exploration Permit (EP) application for areas located in Zambales.

In August 2015, the Parent Company also concluded the purchase of 100% equity interest in Dinapigue Mining Corporation (DMC), which is the claim owner of the Isabela Nickel Project in Dinapigue, Isabela.

NAC also moved into the area of renewable energy and power generation. In 2018, it completed the construction of a 10 megawatt (MW) diesel power plant at a cost close to ₱900.0 million. Power is currently being sold to the Surigao del Norte Electric Cooperative, Inc. (SURNECO) under a Power Supply Agreement. The diesel power plant, which commenced operations in 2018, is designed to alleviate the shortage of power particularly in Surigao City.

NAC's entry into the renewable power business was formalized in 2015 with the conversion of a
₱446.0 million loan to equity and an additional equity infusion of ₱474.0 million, which corresponds to an equity ownership in Emerging Power, Inc. (EPI) of 66%. In 2016, the Parent Company subscribed to additional common shares of EPI for ₱660.0 million and this increased the Parent Company's equity interest in EPI to 70.92%. As at December 31, 2017, the Parent Company's equity interest in EPI stood at 86.29% as a result of fresh equity infusion of ₱1.5 billion in September 2017.

EPI's mission is to engage in power generation exclusively from renewable sources. EPI has a number of Renewable Energy Service Contracts, principally a 100 MW solar and 50 MW wind service contract under Jobin-SQM, Inc. (Jobin), located in the Subic Bay Freeport Zone; two (2) geothermal service contracts under Biliran Geothermal, Inc. (BGI), in the province of Biliran, Leyte; and a geothermal service contract under Mindoro Geothermal Power Corp. (MGPC) in Naujan, Oriental Mindoro.

Jobin completed testing and commissioning of 32.337 MWp of solar power, comprising Phases I and II of the Sta. Rita Solar Power Project (Solar Project) in 2017. In 2018, the Energy Regulatory Commission (ERC) extended the effectivity of Jobin's Provisional Authority to Operate the 32.337 MWp solar plant until May 14, 2019. The extension was issued pending approval of Jobin's dedicated point to point limited facilities to connect to the transmission system. Jobin is expected to commence the construction of Phase III of the Solar Project, or an estimated additional 20 to 30 MWp in 2020. The additional capacity is expected to become operational by 2020.

On January 15, 2019, the ERC issued a Certificate of Compliance (COC No. 19-01-M-00168L) to Jobin which will be valid for a period of five (5) years from November 16, 2016 to
November 15, 2021.

With respect to Biliran geothermal project, where five (5) wells have been drilled by EPI's 40% partner, Biliran Geothermal Holdings, Inc., fluid management studies have been completed on one particular well, with positive results with respect to acid control.

In the Montelago project, the two (2) geothermal wells drilled in 2016 have not reached sufficiently high temperatures to warrant moving ahead to development. Various options are currently being considered in order to drill the northern portion of the geothermal field.

In 2017, the Group saw continued developments in the following areas:

Jobin has fine-tuned its operations and maintenance, keeping a lean team that is performing at and above solar energy industry standards. With its existing 32.337 MWp solar energy facility running smoothly for over a year, and its infrastructure (i.e. transmission, substations, roads, warehouse, site office, etc.) is in place. , JSI is immediately plug-and-play-scaleable up to 150 MW of capacity. With only minor works, such as laying down an additional transmission cable and construction of an additional transformer bay, JSI's entire 800-hectare facility can easily accommodate 300 MW of capacity that can be evacuated to the grid. Jobin has no interconnection congestion issues, as it is the only renewable energy facility that is connected to the main Philippine Grid via a 230 kV transmission line. Jobin has been selling its electricity output via the Wholesale Electricity Spot Market (WESM) since its commercial operations date, and the actual average for 2017 was higher than solar off-take agreements being closed at this same time period. Once higher than spot market off-take agreements are in place, Jobin is primed to continue solar/wind equipment installation and scale up fast.

MGPC's northern portion of its exclusive service contract area has undergone a more detailed assessment in 2017 by GeothermEx – a leading American geothermal advisory firm. They have also confirmed that the existing wells in the southern portion can net out at least 3.5 MW of power. EPI has been in discussions with a few rare groups familiar with geothermal investments to strategize how to further minimize drilling risk. Once firm, this wholly-owned EPI subsidiary is poised to deliver much needed power to the island grid of Mindoro.

On February 26, 2019, the Department of Energy (DOE) issued a Certificate of Confirmation of Commerciality of the 10 MW Montelago Geothermal Power Project owned by MGPC. This serves as proof that GRESC No. 2010-02-013 is converted from pre-development to development stage.

BGI successfully split its existing Geothermal Renewable Energy Service Contract (GRESC) into two (2) in 2017. Where said GRESC previously almost covered the entire island province of Biliran, the new setup delineates the southern portion as Biliran 1 and the northern portion as Biliran 2. Biliran 1 covers the existing developed infrastructure (i.e., four (4) well pads, eight (8) standard deep wells, roads, etc.) and has a Probability-90 Assessment that confirms a 100 MW capacity. Biliran 2 is the yet-to-be-developed area save for surface studies and a Probability-50 Assessment of some 170 MW capacity. This delineation allows BGI to focus on the more immediately executable Biliran 1 and gives BGI more time to develop Biliran 2. For the rest of 2017, Biliran 1 continued its facility maintenance and Biliran 2 has begun its Information Education and Communication Campaign with its local communities and the local government unit (LGU), reconnaissance surveys, and acquisition of permits.

With its foray into the area of renewable energy, NAC is slowly becoming a group more focused on harnessing the potential of its natural resources to benefit the communities where the Group operates and the country in general.

Fundamental to the way NAC does business as a responsible corporate citizen is its commitment to operate in a sustainable manner, protecting the environment, nurturing active communities and ensuring the safety and well-being of everyone involved in its operations. For this, the Group has been consistently recognized by the Government, the industry and by other award-giving bodies.

As an evolving natural resources company, NAC is committed to responsible mining and to the highest standards in everything that it does.

B. CORPORATE OBJECTIVE

NAC is focused on growth. At the same time, the Company takes its responsibilities toward safety, environmental protection, community relations and development seriously. The Company believes that sustainable development is the only way forward for any mining operation and it exerts great effort to live by its principles. NAC is committed to responsible mining and to running every facet of its operations in a world-class manner.

The Group is also committed to provide the present and future generations a better life with clean and renewable energy which is cost effective, reliable, sustainable, and environmentally friendly.

C. PRODUCT MIX

NAC produces two (2) types of nickel ore, namely saprolite and limonite. Saprolite ore is nickel ore with iron content of less than 20% and limonite ore is nickel ore with iron content of 20% or higher.

	Saprolite		Limonite	
Type of Ore:	Hi Grade ~1.7% Ni	Mid Grade 1.3-1.6% Ni	High Fe 0.6-0.9% Ni; 48-50% Fe	Low Grade 1.0-1.2% Ni; ≥30% Fe
Supplied By:	Rio Tuba Taganito Cagdianao Hinatuan	Rio Tuba Taganito Cagdianao Hinatuan	Rio Tuba Taganito Hinatuan	Rio Tuba Taganito
Sold To:	Japan FeNi Smelter / China NPI Smelter (RKEF)	Japan FeNi Smelter / China NPI Smelter (RKEF)	China NPI Smelter (Blast Furnace)	Philippines CBNC THPAL
Final Products:	Ferronickel	Ferronickel / High and Medium Grade NPI: 10-12% Ni	Low Grade NPI (1-3% Ni)	Ni-Co Sulfide 55% Ni

The Group ships out two (2) types of saprolite ore: high-grade and midgrade. High-grade saprolite has a nickel content of about 1.7% and above while mid-grade saprolite ore has a nickel content of between 1.3% to 1.6%.

Most of the Group's high-grade saprolite ore are sold to Pacific Metals Co., Ltd. (PAMCO), which uses the material as feed for its ferronickel smelters. The Company's mid-grade saprolite ore are sold to Japanese and Chinese clients. Its Chinese clients use the material as feed for electric furnaces for the production of high and medium-grade NPI.

NAC sells two (2) types of limonite ore: high-iron and low-grade. High iron limonite ore has a nickel content of less than 1.0% and an iron content of 48% to 50%. Low-grade limonite ore has a nickel content of 1.0% to 1.2% and an iron content of at least 30%.

The Company's high-iron limonite ore are sold to Chinese customers who use the material as feed for blast furnaces for the production of low-grade NPI. Finally, low-grade limonite ore from Taganito and Rio Tuba are utilized as feed for the Taganito and Coral Bay HPAL plants, respectively.

D. SUBSIDIARIES

The Parent Company and its subsidiaries were separately incorporated and registered with the SEC. Below are the Parent Company's ownership interests in its subsidiaries:

	Effective Ownership	
	2018	2017
Subsidiaries		
Hinatuan Mining Corporation (HMC)	**100.00%**	100.00%
Cagdianao Mining Corporation (CMC)	**100.00%**	100.00%
Samar Nickel Mining Resources Corporation (SNMRC)	**100.00%**	100.00%
La Costa Shipping and Lighterage Corporation (LCSLC) [a]	**100.00%**	100.00%
Dinapigue Mining Corporation (formerly Geogen Corporation)	**100.00%**	100.00%
Falck Exp Inc. (FEI) [b]	**88.00%**	88.00%

(Forward)

	Effective Ownership	
	2018	2017
Cordillera Exploration Co., Inc.	**71.25%**	71.25%
Newminco Pacific Mining Corporation [c]	**71.25%**	71.25%
Taganito Mining Corporation	**65.00%**	65.00%
Rio Tuba Nickel Mining Corporation (RTN)	**60.00%**	60.00%
Emerging Power Inc.	**86.29%**	86.29%
Mindoro Geothermal Power Corporation [d]	**86.29%**	86.29%
Manta Energy, Inc. (MEI) [d]	**86.29%**	86.29%
Biliran Holdings Inc. (BHI) [d]	**86.29%**	86.29%
Jobin-SQM, Inc. (Jobin) [d]	**86.29%**	86.29%
Biliran Geothermal Inc. (BGI) [d]	**51.77%**	51.77%
Mantex Services, Inc. (Mantex) [d]	**43.15%**	43.15%

(a) Indirect ownership through HMC
(b) Indirect ownership through HMC, CMC and TMC
(c) Indirect ownership through CExCI
(d) Indirect ownership through EPI

Hinatuan Mining Corporation
HMC was incorporated on October 9, 1979 and was granted rights over the Taganaan property in 1980. Development of the property commenced in 1981 and the first commercial shipment from the Taganaan mine was made in 1982. The size of the property was expanded in 1983 with the acquisition of additional claims on adjacent properties. HMC is also the claim owner of the Manicani property in Manicani Island, Eastern Samar.

Cagdianao Mining Corporation
CMC was incorporated on July 25, 1997 and acquired the right to operate the Cagdianao mine in 1998.

Samar Nickel Mining Resources Corporation
SNMRC was incorporated on March 11, 2010, and is primarily engaged in the exploration, mining and exporting of mineral ores. SNMRC has not yet started commercial operations.

La Costa Shipping and Lighterage Corporation
LCSLC was incorporated on October 23, 1992, and is primarily engaged in the chartering out of Landing Craft Transport (LCT) and providing complete marine services. LCSLC was acquired by HMC in April 2010. In May 2014, LCSLC sold all of its LCTs to HMC for a consideration.

Dinapigue Mining Corporation
DMC was incorporated on October 9, 1998, and is primarily engaged in the exploration, exploitation and mining of metallic and non-metallic minerals, including, but not limited to, nickel, iron, cobalt, chromite and other associated mineral deposits. DMC was acquired by the Parent Company in August 2015. DMC has not yet started commercial operations and is currently under development stage.

On March 5, 2018, the SEC approved the application to change its corporate name to Dinapigue Mining Corporation.

Falck Exp Inc.
FEI was incorporated on November 22, 2005, and is primarily engaged in the business of exploring, prospecting and operating mines and quarries of all kinds of ores and minerals, metallic and non-metallic. FEI is currently undergoing dissolution.

Cordillera Exploration Co., Inc.
CExCI was incorporated on October 19, 1994 primarily to engage in the business of large-scale exploration, development and utilization of mineral resources. CExCI has a number of mining properties at various stages of exploration. It is currently not engaged in any development or commercial production activities.

Newminco Pacific Mining Corporation
Newminco was incorporated on October 9, 2006 and is primarily engaged in the exploration, mining, development, utilization, extraction, beneficiation and marketing of minerals and mineral resources. Newminco was acquired by CExCI in December 2015.

Taganito Mining Corporation
TMC was incorporated on March 4, 1987, and is primarily engaged in the mining and exporting of nickel saprolite and limonite ore, and exploration activities. The first commercial shipment from the Taganito mine was made in 1989. TMC also provides services to THNC which involves the handling, hauling and transportation of materials required in the processing operations of THNC.

Rio Tuba Nickel Mining Corporation
RTN was incorporated on July 15, 1969 to develop the nickel ore deposits discovered at the Rio Tuba mine site in 1967. It was granted rights over the Rio Tuba property in 1970 and commenced mining in 1975. RTN made its first commercial shipment in 1977. RTN also provides services to CBNC which involves the handling, hauling and transportation of materials required in the processing operations of CBNC.

Emerging Power Inc.
EPI was incorporated on October 16, 2007, and is primarily engaged in the renewable energy business. EPI was acquired by the Parent Company by way of loan conversion into equity in July 2015. EPI is the holder of GRESC No. 2010-02-013. On February 16, 2016, the DOE approved EPI's application to assign its rights and obligations under the GRESC to MGPC under Certificate of Registration No. 2016-02-060.

Mindoro Geothermal Power Corporation
MGPC was incorporated on May 7, 2014, and is primarily engaged in the renewable energy business. MGPC project is estimated to supply 40 MW of power over twenty five (25) years.

Manta Energy Inc.
MEI was incorporated on May 21, 2007, and is primarily engaged in power business, including but not limited to power generation, power trading and supply to retail customers and end users. On July 5, 2016, the ERC approved MEI's registration as Registered Electric Supplier for a period of five (5) years, and renewable thereafter.

Biliran Holdings Inc. (BHI)
BHI was incorporated on July 31, 2015, and is primarily engaged in investing in and holding of assets of every kind and description, as and to the extent permitted by law. It is also registered, within the limits prescribed by law, to engage in the business of infrastructure, power generation, real estate, manufacturing, trading and agribusiness and to pay other evidences of indebtedness or securities of this or any other corporation.

Jobin-SQM, Inc.
Jobin was incorporated on January 6, 2010, and is primarily engaged in power business, including but not limited to power generation, power trading and supply to retail customers and end users. Jobin is the holder of Solar Energy Service Contract (SESC) No. 2013-10-039 and Wind Energy Service Contract (WESC) No. 2013-10-062 which both covers an area in the municipalities of Morong and Hermosa, Bataan. Jobin was acquired by EPI in July 2015.

Biliran Geothermal Inc.
BGI was incorporated on October 31, 2007. The principal activities of BGI are to explore, exploit, discover, develop, extract, dig and drill for, produce, utilize, refine, treat, process, transport, store, market, sell, use, supply, experiment with, distribute, manufacture, or otherwise deal in, any substance, minerals or otherwise, which by itself or in contribution with other substances generate or emanate heat or power and to enter into and perform service contracts including geothermal services. BGI's project, the Biliran Geothermal twenty-five (25) year concession, was estimated to supply 50 MW of power to the grid but according to research conducted by BGI, it can further produce up to 60 MW. BGI was acquired by BHI in December 2015. In 2014, BGI received the Confirmation of Commerciality for the Biliran Geothermal Project from the Philippine Government through the DOE.

Mantex Services Inc. (Mantex)
Mantex was incorporated on March 26, 2012. Mantex is established primarily to provide technical, financial and public relations advisory, management and investments services for infrastructure projects.

E. RECENT DEVELOPMENTS

The Company and SURNECO agreed to commence the commercial operations of the three (3) generating units starting on June 26, 2018 for the first generator set, December 26, 2018 for the second generator set and June 26, 2019 for the third generator set. Each generating unit has a contracted capacity of 3.33 MW. The plant started its commercial operations based on the agreed schedule and in consonance with the load nominations from SURNECO.

F. OUR STRATEGY

NAC'S strategy is designed to maximize the profitability of its existing base of operations while driving growth through its continuing involvement in downstream processing, exploration of its portfolio of properties, acquisition of new properties and growth of its renewable business. The key elements of its strategy are to:

1) *Pursue its brownfield and greenfield exploration programs to upgrade existing resources, and develop new reserves and resources* – The Company has an extensive exploration program involving both brownfield exploration, which consists of work at its existing operations to extend resources and to upgrade resources to reserves; and greenfield exploration, which involves exploring and delineating nickel lateritic deposits in its existing exploration properties. The Company owns approximately 100 man-portable drilling rigs that are suitable for drilling lateritic deposits in an economic manner.

2) *Acquire new properties or enter into operating agreements or joint ventures* – NAC believes that there is significant exploration potential in the Philippines for lateritic nickel deposits, and it intends to seek opportunities to increase its reserves of saprolite and limonite ore. Most prospective areas in the country are already subject to registered mineral claims; hence, the Company intends to access new exploration properties by acquiring rights from, or entering into joint ventures with, the applicable claim owners. In doing so, the Company will carefully evaluate such properties to ensure that the commitments that it will assume will commensurate to the potential of the properties it will acquire. In 2015, the Parent Company acquired the 100% equity interest of DMC, the claimowner of Isabela Nickel Project.

3) *Continue with gold and copper* prospects - The Philippines is well-endowed not only with lateritic nickel but also with gold and copper. World-class deposits have been discovered and substantial quantities of these metals have been mined in the past. The Company believes that the exploration potential nevertheless remains significant. In order to take advantage of this potential, the Company purchased CExCI from a subsidiary of Anglo American. CExCI has

four (4) groups of mineral claims in northern Luzon that are prospective for gold and copper mineralization. Two of these four claims are located at Mankayan and the remaining two (2) claims are located at Manmanok property and Kutop. CExCI remains active in evaluating properties for possible acquisition. The Company believes that its extensive local knowledge, the experience of a number of its managers and technical staff in these metals and the quality of these properties make this acquisition an important step in its strategy to evolve into a diversified mining group. In 2015, the Parent Company, through CExCI, acquired Newminco, which is also prospective for gold and copper. Newminco is the holder of an EP application in the municipalities of Cabangan, San Felipe, and San Marcelino, Zambales.

4) *Grow its renewable business* – NAC's goal is to develop, own, and manage a portfolio of renewable power assets in the Philippines that is diversified as to market, technology and location. The Company believes that its entry into the power business through EPI, which will concentrate exclusively on renewable energy sources, will provide significant opportunities to grow our revenues and sustain financial returns. At the same time, this activity will help alleviate the shortage of power in the country and contribute to economic growth in an environmentally friendly manner.

G. KEY STRENGTH

The Company believes in its key strength, which is*:*

Profitability underpinned by low cost production.
The foundation of the Company's business is its ability to operate profitably through the commodity price cycle because of its low costs. The Company ranks favorably in terms of mining costs when compared to other nickel mining companies. There are a number of factors that account for its low cost position:

- The Company benefits from favorable geologic conditions at all of its four (4) operating mines. Its lateritic nickel deposits are near-surface, blanket-like layered deposits with minimal overburden and generally five (5) to thirty (30) meters thick, enabling it to conduct simple contour mining using trucks and loaders without blasting, the use of chemicals or complex waste handling.

- Historically, there was generally no market for the Company's limonite ore, which needs to first be extracted in order to mine the more valuable saprolite ore. There was also no market for lower grades of saprolite ore. Limonite ore was then regarded as overburden and placed in stockpiles, while the Company undertook selective mining of high-grade saprolite ore, leading to relatively high mining costs. Since 2005, the Company has found customers for its limonite ore with the development of the China NPI market and the commissioning of the Coral Bay HPAL facility. In 2008, the Company experienced increasing demand from its customers for low-grade saprolite ore and in 2010, it saw an emerging demand for the use of low-nickel, high iron limonite ore for blending with iron ore in the production of carbon steel. The Company's ability to sell limonite ore rather than place it in stockpiles as waste, and its ability to sell lower grades of saprolite ore allows it to mine in a more efficient manner and reduces the unit cost per wet metric tonnes (WMT) of nickel ore that it mine, thus improving its profitability. The commencement of commercial operations of the Taganito HPAL facility in 2013 adds an additional outlet for the Company's limonite ore.

- On average, the nickel deposits at the Company's four (4) operating mines are located within three (3) to seven (7) kilometers from the applicable tidewater loading area, enabling easy hauling and transportation by barges and LCTs to customers' ships. The Company owns nine (9) LCTs and eleven (11) barges and leases additional barges and LCTs as needed. The short hauling distance from its mining operations to its loading facilities substantially contributes to the Company's favorable cost position.

- Because its lateritic nickel deposits are near surface and relatively shallow, the rehabilitation of its mining areas is a straightforward process. The process generally involves re-contouring of the mined areas, replacing the overburden and planting foliage. The Company undertakes progressive rehabilitation of its mined areas in order to spread costs, and the nature of its deposits results in a relatively manageable level of rehabilitation costs.

H. PERCENTAGES OF REVENUES FOR 3 YEARS

The following table summarizes percentages of NAC's revenues by year and region for the past three fiscal years:

	Japan			China			Philippines (CBNC and THNC)			Australia			Total		
Year	Sapro-lite	Limo-nite	Total	Sapro-lite	Limo-nite	Total	Sapro-lite	Limo-nite	Total	Sapro-lite	Limo-nite	Total	Sapro-lite	Limo-nite	Total
2018	13%	-	13%	59%	4%	63%	-	24%	24%	-	-	-	72%	28%	100%
2017	17%	-	17%	62%	3%	65%	-	18%	18%	-	-	-	79%	21%	100%
2016	18%	-	18%	50%	18%	68%	-	13%	13%	-	1%	1%	68%	32%	100%

I. SOURCES OF RAW MATERIALS AND SUPPLIES

The main supplies that the Company requires to operate its business include diesel fuel, tires and spare parts for its mining equipment. The Company buys diesel and aviation fuel and lubricants from Petron Corporation (Petron) and/or Phoenix Petroleum Philippines, Inc. (Phoenix) and heavy mining equipment, such as trucks and excavators, from four (4) manufacturers, namely, Volvo, Isuzu, Caterpillar and Komatsu, through their Philippine distributors. In addition, the Company leases LCTs for use at its mine sites during the shipping season. The Company believes that there are a number of alternative suppliers for all of its requirements.

The Company's existing supply contract with Petron and/or Phoenix provides that they will supply the entire actual requirement of the operating companies of the group for diesel and lubricants of highest quality and based on the typical properties agreed in the contract.

J. GOVERNMENT REGULATIONS AND APPROVALS

In the Group's mining operations, it is guided by clear and stringent parameters set forth by the country's national and local laws accordingly implemented by national, regional and local agencies, namely: the Department of Environment and Natural Resources (DENR), the Mines and Geosciences Bureau (MGB), the Environment Management Bureau (EMB), the Protected Areas and Wildlife Bureau, and the (LGUs. The more significant regulations affecting our operations include the following:

Republic Act (RA) No. 7942 (Philippine Mining Act of 1995)

- Section 57 - requires the mining contractor to assist in the development of its mining community, promote the general welfare of the community's inhabitants, and the development of science and mining technology; Section 136 of the Implementing Rules and Regulations of RA No. 7942 requires mining contractors to prepare and implement a five-year Social Development and Management Program (SDMP) in consultation and in partnership with the mining contractor's host and neighboring communities
- Section 63 - requires strict compliance with all mines safety rules and regulations that may be promulgated by the DENR Secretary concerning the safe and sanitary upkeep of mining operations and achievement of waste-free and efficient mine development
- Section 69 - requires an annual Environmental Protection and Enhancement Plan (EPEP) for the rehabilitation, regeneration, revegetation, and reforestation of mineralized areas, slope stabilization of mined-out areas, aquaculture, watershed development and water conservation, and socioeconomic development
- Section 71- requires mine rehabilitation for mined-out areas to the condition of environmental safety, and the creation of a Mine Rehabilitation Fund

Consolidated DENR Administrative Order (CDAO) 2010-21 (CDAO for Implementing Rules and Regulation of RA No. 7942)

- Section 171 - requires an Annual EPEP (based on the approved EPEP)
- Section 173 - requires the organization of a Mine Environmental Protection and Enhancement Officer to be incorporated into the organization structure
- Section 185 - deputizes the Multipartite Monitoring Team to serve as monitoring arm, with the team composed of representatives from DENR Regional Office, Department Regional Office, EMB Regional Office, Contractor/Permit Holder, affected community/ies, affected Indigenous Cultural Community/ies and environmental non-governmental organization (NGO)
- Section 187 - requires a Final Mine Rehabilitation/Decommissioning Plan, including financial requirements up to post-decommissioning

Executive Order (EO) No. 26 (National Greening Program) - mandatory reforestation activities outside of mining contract/permit/lease/tenement areas

RA 9003 (Ecological Solid Waste Management Program) - requires waste segregation, promotes recycling and sets guidelines for Materials Recovery Facility

RA 6969 and DAO 2013-22 - guidelines on proper handling and monitoring of toxic and hazardous waste material

RA 8749 (Philippine Clean Air Act of 1999) - framework for air quality management program

RA 9275 (Philippine Clean Water Act of 2004) - framework for comprehensive water quality management

RA 9371 (Indigenous Peoples' Rights Act) - recognition, protection and promotion of the rights of the Indigenous Cultural Communities/Indigenous Peoples

RA 9729 (Climate Change Act of 2009) - comprehensive framework for systematically integrating the concept of climate change, in synergy with disaster risk reduction, in various phases of policy formulation, development plans, poverty reduction strategies and other development tools and techniques

DAO 2004-52 - Tree cutting permit

DAO 2015-07 - mandating Mining Contractors to Secure ISO 14001 Certification
Pursuant to the Administrative Order, NAC's operating subsidiaries, TMC, RTN, CMC, and HMC, underwent a yearlong process to identify all environmental impacts, address such impacts, document an Environmental Management Systems (EMS) that complies with the standards, and cascade down the EMS to all employees for their full appreciation and compliance. Following two (2) audits conducted by the certifying body, TÜV Rheinland, the operating subsidiaries all received their ISO 14001 Certification in 2016.

DAO 2016-1 - prescribing for an audit of metallic mining companies by the DENR
All of the Group's mining companies also abide by commitments stipulated in their Environmental Compliance Certificate (ECC) and specified in their approved Contractor's Plan of Mining Operation.

DAO 2018-20 - prescribes Guidelines for Additional Environmental Measures for Operating Surface Metallic Mines, provides for the limits of maximum disturbed areas for nickel mines depending on the scale of their mining operations. For mines which produce nine (9) million WMT per year, the maximum disturbed area shall be 100 hectares. For nickel mining projects with a processing plant or with long-term supply agreements for a processing plant, the maximum disturbed area for extraction shall be 162 hectares or two (2) meridional blocks. This DAO requires that temporary revegetation be immediately implemented on the disturbed areas. The Group is compliant with the maximum limits prescribed in this DAO.

Electric Power Industry Reform Act (EPIRA)

This EPIRA of 2001 brought about the “Unbundling of the System”. Whereas previously, all aspects of the power industry were owned by the Philippine government under the National Power Corporation (NPC), the EPIRA brought about privatization of the generation, transmission, and distribution of electricity. NPC’s mandate was significantly reduced to providing electricity to more difficult to reach and off-grid areas of the country.

- The EPIRA sought to bring about:
  - Competitive Generation
  - Regulated Transmission and Distribution
  - Competitive Retail Electricity Providers
- The EPIRA established the WESM, unbundled the electricity tariff for greater transparency, and seeks to provide open access to transmission and distribution lines for all industry players.
- The EPIRA created the ERC as a purely independent regulatory body performing the combined quasi-judicial, quasi-legislative and administrative functions in the power industry. ERC is tasked to promote competition, encourage market development, ensure customer choice and penalize abuse of market power in the power industry. In addition to its traditional rate and service regulation functions, ERC focuses on consumer education and protection, and promotion of the competitive operations in the power market.

Renewable Energy (RE) Law

The RE Act of 2008 encompass policies that relate to renewable energy and legislative instruments that further encourage its growth - i.e. economic incentives.

- Section 13 states the government share in all renewable energy revenues: 1.5% for geothermal energy and 1% for the rest.
- Section 15 outlines the general incentives: Income Tax Holiday (7 years), Duty-free importation, Special Realty Tax Rates (1.5%), Corporate Tax Rate (10%), Accelerated Depreciation, Zero Percent Value Added Tax (VAT) Rate, Additional Cash Incentive for Off-grid Generation Facilities, etc.

Pending Approval

TMC’s application for Mineral Production Sharing Agreements (MPSA) denominated as APSA No. 73-XIII for its La Salle Exploration project is pending reconsideration.

RTN’s application for an amendment of MPSA-114-98-IV to include AMA IVB-144A for its Bulanjao project is still pending approval before the DENR-MGB. RTN’s application for the ECC for its Bulanjao project is pending approval by Environmental Management Bureau upon completion of the technical review of its Environmental Impact Study.

HMC’s application for renewal of MPSA No. 012-92-VIII for its Manicani Nickel Project in Guiuan, Eastern Samar is pending approval before the DENR.

CEXCI’s application for renewal of EP No. 004-2006-CAR for the Manmanok property is pending approval by the DENR-MGB. Newminco’s application for renewal of EP No. 001-2015-III for its exploration activities in Zambales is also pending approval by the DENR-MGB.

K. COMPETITION

NAC competes with both domestic Philippine nickel ore suppliers and foreign nickel ore suppliers (primarily from Indonesia) in world nickel ore markets. Domestic competitors are CTP Construction & Mining, and Platinum Group Metals Corp (PGMC), while foreign competitors mainly include PT Aneka Tambang.

On the power business, the implementation of the EPIRA has paved the way for a more independent and market-driven Philippine power industry. This has allowed for competition, not limited by location, and driven by market forces. The sale of power and the dispatch of power plants depend on the ability to offer competitively priced power supply to the market. The Company's power projects which are still either in the exploration or development stage will face competition in the development of new power generation facilities as well as in the financing for these activities.

L. NICKEL ORE TRADE AND OUTLOOK

Nickel Ore Trade

Nickel ore in the country is mainly exported to China and Japan. Primary nickel consumption in China was estimated at 1.17 million tonnes in 2018, which accounted for 51% of global nickel consumption, while 8% of the global nickel consumption can be attributed to Japan.

Chinese nickel production in 2018 was estimated at 0.66 million tonnes, of which 0.47 million tonnes came from NPI. Based on the Company's research, nickel ore exported to China from Philippines is estimated at 39 million WMT in 2018 as compared to 41 million WMT in 2017.

Due to increase shipment from Indonesia, there was an oversupply in the market for nickel ore. The Company estimated that 18 million WMT was exported from Indonesia to China in 2018 as compared to 5 million WMT in 2017.

Indonesian mines shipped out 1.65% nickel grade, which is much higher compared to the Philippines. The increase shipment from Indonesia resulted from: 1) higher volume of NPI production; and 2) sluggish demand for the Philippine's middle grade nickel ore.

Outlook for Nickel

Global nickel supply in 2018 was estimated at 2.15 million tonnes, while consumption was at 2.30 million tonnes, resulting to 0.15 million tonnes of shortage. The shortage continued since 2016; however, it is hard to offset 0.53 million tonnes of oversupply from 2012 to 2015, resulting to low level of London Metal Exchange (LME) nickel price in 2018.

The global nickel consumption increased by 6.8% on a year-on-year basis driven by the strong growth in the global stainless steel industry.

Around 60% of nickel supply is used for stainless steel production. Therefore, the growth in stainless steel production is a key factor in the outlook for nickel. Global stainless steel production in 2018 was estimated at 51 million tonnes, increased by 6% from the previous year, of which, Chinese stainless steel production accounted for 26.6 million tonnes, which is 6% increase on a year-on-year basis.

The strong demand for nickel following the strong growth in the stainless steel production in 2018 contributed to the nickel supply shortage, thus the decrease in global nickel inventory. However, the increase in nickel ore shipment from Indonesia causes the uncertainty in the nickel market.

M. EXPLORATION AND DEVELOPMENT

Nickel Resources

NAC covers a wide area of exploration properties and an exploration program encompassing:

1. Brownfield exploration - consisting of work at its existing operations to extend resources and to upgrade resources to reserves; and
2. Greenfield exploration - which involves exploring and delineating nickel lateritic deposits in its existing properties.

The Company owns more than one hundred (100) drilling units that have been designed specifically for drilling near surface lateritic deposits in a quick and economical manner. It also has a pool of experienced geologists and laboratories at each mine site to assess samples as required.

Below is a summary of the Group's exploration and development properties:

Bulanjao: • Total area of 3,604.5 hectares • Conducted step-out drilling throughout the length of the Central Bulanjao deposit	Location: **Palawan Island** Ownership: **RTN**
Manicani: • MPSA covers 1,165 hectares and expires in 2017. Approval for the renewal of the MPSA is pending before the DENR.	Location: **Island of Manicani** Ownership: **HMC**
Kepha Mining Exploration Corp. (Kepha): • Operating Agreement covers 6,980.75 hectares and expires in 2032 • Rights to the property are governed by an Operating Agreement entered into in February 2007 with Kepha • On September 10, 2018, the MGB approved the renewal of the two (2) year EP for the Kepha Property • Follow-up exploration work and drilling was conducted in early 2013	Location: **Surigao del Norte** Operating Rights: **TMC**
La Salle Mining Exploration Company (La Salle): • Operating Agreement covers 6,824 hectares and expires in 2034. However, the MPSA area applied for has been reduced to 2,234.958 hectares • Rights to the property are governed by an Operating Agreement entered into with La Salle in December 2006 • Found a nickel lateritic deposit on the southwestern portion of the property and intend to conduct further exploration work on this deposit	Location: **Surigao del Norte** Operating Rights: **TMC**
Dinapigue: • Covered by MPSA No. 258-2007-II	Location: **Dinapigue, Isabela** Ownership: **DMC**

Description of Exploration and Development Projects

Bulanjao - The Bulanjao property is held by RTN. It has a total area of 3,604.5 hectares and is situated immediately west of RTN's mining operations. RTN's rights to the property are covered by a set of Mining Lease Contracts which are in the process of being amended into the current MPSA.

The Strategic Environmental Plan (SEP) clearance was issued by the Palawan Council for Sustainable Development (PCSD) on September 1, 2015. An Environmental Impact Assessment was already submitted to the EMB in order to secure the ECC. It is expected to undergo the second round of technical screening in the near future. Partial drilling conducted in the past has resulted in measured and indicated mineral resources of 24 million WMT of limonite ore and 11 million WMT of saprolite ore with average nickel grades of 1.16% and 1.76%, respectively.

Manicani - The Manicani property is held by HMC. It has a total area of 1,165 hectares and is situated in Eastern Samar. HMC's rights to the property are governed by a MPSA that was entered into by HMC in 1992 and which was subsequently assigned to SNMRC. The application for the Deed of Assignment from HMC to SNMRC was endorsed to the MGB Central Office for further evaluation and final approval. However, on June 1, 2014, a mutual rescission of the said Deed of Assignment was executed by and between HMC and SNMRC and a copy of the said rescission was received by the MGB on July 14, 2014.

HMC conducted mining at the Manicani site between 1992 and 1994 and extracted and sold a total of 63,176 WMT of saprolite ore with an average grade of 2.45% nickel from the site. Mining at the site was suspended in December 1994 because low prevailing nickel prices made mining the site uneconomical. HMC made shipments from stockpiles in 2001 and 2004. In 2004, a regional Panel of Arbitrators rendered a decision recommending the cancellation of the MPSA on the grounds that HMC had violated certain applicable environmental regulations. HMC disputed such allegations and its MPSA was upheld by the Mines Adjudication Board of the DENR in September 2009.

To date, there is work to be done before mining operations can be resumed. Currently, HMC has applied for the renewal of the MPSA. In support of its application, it has received the necessary endorsements from the host communities in the form of resolutions issued by the four (4) barangays comprising Manicani Island, the Municipality of Guiuan, and the Province of Eastern Samar. These endorsements, along with various presentations to be made to the MGB of Region VIII and to the community, forms part of HMC's compliance with the government regulations pertinent to the MPSA renewal.

Once the MPSA renewal is granted and the exploration period has been extended, HMC shall begin confirmatory drilling activities. HMC will commence mining once the suspension order is lifted. Incidentally, a Letter of Authority to Dispose Nickel Stockpile was issued by MGB on July 1, 2014. From May to August of 2016, five (5) shipments were realized for the disposal of said stockpiles, after which, shipments were suspended by MGB. This left behind almost 900,000 WMT of stockpiles which were already approved for disposal.

Kepha - The property has a total area of 6,980.75 hectares and is situated in the province of Surigao del Norte, immediately southwest of our Taganito mine's northern boundary. TMC's rights to the property are governed by an Operating Agreement that it entered into in February 2007 with Kepha. Kepha entered into a MPSA in June 2009, giving it the right to explore, develop and mine the property for an initial period of twenty-five (25) years.

Under the terms of the Operating Agreement between Kepha and TMC, TMC has the right to explore, develop and operate the property during the period of the MPSA in return for the payment to Kepha of a royalty of 5% of gross revenues from all metallic minerals sold from the property.

Exploration activities at the Kepha exploration project are still under negotiations with the Mamanwa indigenous people group. The claim owner of the Kepha mining claim is also helping in the negotiations with the Mamanwa indigenous people group. Exploration activities in the said area can only resume after the favorable outcome of the said negotiations.

Despite the problem with the indigenous people's community of barangay Camam-onan, TMC continued to bring development projects to the barangay, including the renovation of the barangay Camam-onan gymnasium to a suitable evacuation center. This move by TMC was warmly welcomed by the LGU and constituents of Camam-onan.

On February 13, 2017, the DENR issued a show cause order directing Kepha to explain why its MPSA should not be cancelled for being allegedly within a watershed, which is protected under the Philippine Mining Act of 1995 and other existing applicable laws, rules and regulations. On February 24, 2017, Kepha replied to the letter stating that based on the MGB Region XIII's downloadable tenement map, the MPSA area is outside of any existing legally proclaimed watershed.

On September 10, 2018, the MGB approved the extension of Kepha's EP for another two (2) years, corresponding to the fifth and sixth years of its MPSA.

La Salle - The La Salle property, situated in the province of Surigao Del Norte, is held by TMC. The property previously had a total area of 6,824 hectares but the application was previously reduced to 2,234 hectares and further reduced to 972 hectares. It shares a common boundary with the Kepha property on the southwest side of the property. TMC's rights to the property are governed by an Operating Agreement that we entered into with La Salle in December 2006. La Salle's application for a MPSA is pending and TMC is responsible for completing the requirements for approval of the MPSA.

Under the terms of the Operating Agreement between La Salle and TMC, TMC will have the right to explore, develop and operate the property once the MPSA is approved, in return for the payment to La Salle of a royalty of 5% on gross revenues from all metallic minerals sold from the property.

TMC has identified a nickel lateritic deposit on the southwestern portion of the property near the boundary with the Kepha property and intends to conduct further exploration work on this deposit.

Dinapigue - In 2015, the Parent Company acquired DMC which holds the mineral property within the area subject of MPSA No. 258-2007-II on August 4, 2015. The property is located in the northeastern portion of Luzon, at the eastern foothills of the Sierra Madre mountains near the coast in Brgy. Dimaluade, municipality of Dinapigue, province of Isabela. The project is known as the Isabela Nickel Project which covers an area of 2,392 hectares. It is approximately 425 kilometers from Manila and accessible through approximately 10 hours of land travel.

While the construction of a permanent causeway was deferred pending the necessary permits and additional engineering and design considerations, other development works within the tenement was undertaken. These include repair & maintenance of access roads, construction of offices and staff accommodation, topographic surveys of priority areas for development, and establishment of environmental control measures and nursery facilities.

<u>Gold and Copper Resources</u>

The Philippines is located in a very complex tectonic and geological terrain. It is bounded on the west by the east-dipping Manila Trench and on the east by the west-dipping Philippine Trench. Because of the interaction of both these geological features, a resulting northwest-trending Philippine fault, with its numerous major and associated branches, has rendered a distinct archipelagic character to the ground. On a more global scale, the Philippines lie within the "Pacific Rim of Fire", also known as the circum-Pacific belt, an area with a nearly continuous series of oceanic trenches, volcanic arcs and/or plate movements.

But while Philippine inhabitants have to suffer the devastating effects of earthquakes and volcanic eruptions, these same geological processes have provided the favorable geological settings for the deposition and/or emplacement of rich gold, copper, chromite, nickel and other mineral deposits. The Philippines has long been acknowledged as one of the most richly endowed in mineral resources. This claim is validated by the country's long mining history which can be traced back to the 15th century. In the 1950's to 1970's, particularly, the Philippines maintained its position as one of the world's top ten producers in gold, copper, chromite and nickel.

Given this potential, the Company's local knowledge, and the experience of a number of its engineers and managers previously employed in gold and copper mining firms, a strategic decision was made to diversify into these metals as the opportunities arise. Based on this strategy, the Parent Company entered into an agreement in August 2010 to purchase 100% of the outstanding shares of CExCI from Anglo American, a subsidiary of Anglo American Plc. The sale pushed through on November 15, 2010.

In May 2011, the Parent Company entered into a Participation and Shareholders' Agreement with SMM outlining the terms of SMM's equity participation in CExCI. In November 2011, based on the terms of the said Agreement, SMM invested $1.5 million in CExCI in return for a 25% equity interest. In 2015, SMM exercised its option to invest $2.8 million for an additional 15% equity, which, after the approval of the increase in the authorized capital stock of CExCI would bring SMM's total equity in CExCI to 40%.

Zambales

In December 2015, CExCI acquired the 100% equity interest of Newminco, which holds an EP for copper, gold, and related base and precious metals over an area located in Cabangan, San Felipe, and San Marcelino in the province of Zambales. The decision to acquire Newminco was made following the discovery of outcropping gold veins, the sampling of which in part returned good assays for gold.

Exploration activities being conducted in the properties area include geologic mapping, sampling and trenching. In 2016, Newminco proceeded to implement its exploration program in the tenement designated as EP-001-2015-III which is located in the Municipalities of Cabangan, San Felipe and San Marcelino in the Province of Zambales. Roughly twenty-five (25) kilometers of old farm to market and logging roads were rehabilitated and maintained to gain access to the property. Six hundred and sixty meters (660m) of exploratory trenches were dug, logged, sampled and rehabilitated. Diamond core drilling was conducted with a total meterage of 3,799.5 meters. A total of 401 samples were sent to the laboratory for multi-element geochemical analysis.

Results of the 2016 exploration campaign verified gold mineralization in a portion of the area drilled. However, the work so far conducted precludes Newminco from defining any commercial viability to the project. Rehabilitation works on disturbed areas were completed in early 2017.

In 2017, a tenement wide ridge and spur soil sampling program was implemented in order to define targets for more detailed work. However, due to the expiration of the EP in July 2017, the sampling was not completed. This program will resume once the first renewal of the EP is granted.

Mankayan

The original Mankayan property is designated as AFTA-008, and is located within two regions, the Cordillera Administrative Region (CAR) and Region I. The original area applied for within CAR is 57,559.5121 hectares while the original area applied for within Region 1 is 19,989.4879 hectares. In early 2013, following exclusions/excisions from the application because of conflicts with national park (Bessang Pass Buffer Zone) and a strong opposition from a municipality in Ilocos Sur, the total area cleared by the MGB is approximately 54,940 hectares.

In July 2013, a board decision was made to partially convert the AFTA to an application for EP. Since the area to be converted to EP straddles two regions and involves ancestral lands belonging to separate tribes, two applications for EP were filed, namely: ExPA 116-Mankayan, covering an area of approximately 5,157 hectares; and ExPA 116-Cervantes, covering an area of approximately 6,012 hectares.

Following the conversion, AFTA-008, now consists of approximately 43,320 hectares and covers portions of the provinces of Benguet and Mt. Province. The future plan for this remaining portion is to further convert other parts into EP, hence eventually dropping the remaining AFTA altogether.

All documents pertinent to the retained AFTA-008 have been submitted to the office of the Regional Director MGB-CAR as of July 11, 2016. The application (AFTA-008) is now favorably pending with the said office.

Mankayan/Cervantes

An application to convert a portion of AFTA-008 into an EP was filed with MGB-CAR in November 2013. Since the area to be converted straddles two regions and involves ancestral lands belonging to separate tribes, the original application was split in two applications, namely ExPA 116 Mankayan, covering an area of approximately 5,157 hectares, and ExPA 116 Cervantes, covering an area of approximately 6,012 hectares. The split has been necessary in order to facilitate and simplify the required “Free and Prior Informed Consent” (FPIC) process for each region covered. The process of the application for conversion took from November 2013 up to December 2015.

The FPIC over the Mankayan area was immediately started in December 2015, and had progressed to “Field-based Investigation” stage up to May 2016 when the process was suspended to give way to the general elections. The FPIC process over Mankayan remained suspended throughout the rest of 2016 and the whole year of 2017. This was done in order for CExCI to be able to concentrate in advancing the FPIC process over Cervantes.

The 3rd General Assembly of the FPIC process is the final assembly to officially proclaim the acceptance of the exploration work of CExCI by the Indigenous Cultural Communities. This was conducted on March 13, 2017 and the results were 6 out of the 9 barangays voting for the approval of the exploration of CExCI within their ancestral domain. Following this, some protests and petitions to discredit the results of the general assembly were filed by some anti-mining group and locals.

A validation exercise to investigate the protests was called by the National Commission on Indigenous People (NCIP) Region 1 Director. The validation exercise was completed by end November 2017, with the results and consequent report being very favorable to CExCI. What remains to be done is for NCIP Regional Office to execute an order for the continuance of the FPIC process. When the process is resumed, CExCI will proceed with the discussion and negotiations for the Memorandum of Agreement (MOA) with the communities, plan out the Community Development Programs, hence signing of the MOA, and eventually issuance of the EP by the MGB.

The Mankayan-Cervantes area is underlain by the same lithological units, and subjected to the same tectonic regimes that have rendered the district highly faulted and fractured. Three mineralization types can be found in the Mankayan sector: a) gold-rich porphyry copper mineralization, with the Far South East and Guinaoang deposits as examples; b) high-sulphidation copper and gold mineralization, as typified by the Lepanto Consolidated enargite ore body; and c) intermediate-sulphidation gold and base metals mineralization, examples of which are the Victoria and Suyoc ore bodies of Lepanto. Because of the similarities in lithological and structural controls, it could reasonably be expected that the same controls and styles of mineralization in the Mankayan sector are also present in the Cervantes sector.

Manmanok
The Manmanok property is located within the Municipality of Conner, Apayao Province. The property is covered by EP-004-2006-CAR, which was first granted in October 2006 and subsequently renewed twice with the corresponding reduction in area coverage. The final area covered by the permit is approximately 4,996 hectares.

Following geophysical and geochemical work in an area that was deemed prospective for gold mineralization, drilling activities were conducted from June 2012 to March 2013, with poor results. Given this outcome and the difficulties experienced in operating in such a remote area, a decision was made to terminate all work and relinquish the EP.

Kutop
The Kutop property is located within the municipalities of Malibcong and Daguioman in the Province of Abra, and the municipality of Balbalan in the Province of Kalinga. The property, with a total area of 13,268 hectares, is covered by an application for EP designated as EXPA-014-CAR.

As the area is ancestral land, CExCI is required to obtain a FPIC from the tribal group prior to the grant of the EP. Considerable delays have been experienced with the NCIP in moving this process forward. In the meantime, a deadline imposed by the MGB to complete this process has not been met. A letter requesting for the extension of the deadline remains pending.

N. ENVIRONMENT AND REHABILITATION

Environmental Responsibility
NAC adheres to the principles and practices of sustainable development. The Company is committed to complying and following environmental regulations by implementing best practices in managing environmental impacts of its operations. Mining is a temporary land use and once mining operations in its sites have ended, the Company plans to restore these properties to at least as close as possible to their pre-mining condition or to develop alternative productive land uses for the benefit of the surrounding communities. It is also committed to investing in programs and technologies to mitigate the anticipated impacts of mining activities.

To manage environmental impacts, NAC's subsidiaries have an EPEP. This refers to the comprehensive and strategic environmental management plan for the life of mining projects to achieve the environmental management objectives, criteria and commitments including protection and rehabilitation of the affected environment.

It is the operational link between the environmental protection and enhancement commitments under CDAO 2010-21, consolidated implementing rules and regulations of RA No. 7942, as well as those stipulated in the ECC under Presidential Decree 1586 and the Contractor's plan of mining operation.

Activities undertaken through the Annual EPEP include, among others:
- Rehabilitation of mine disturbed areas
- Reforestation
- Construction and/or maintenance of environmental facilities
- Solid waste management
- Hazardous waste management
- Air quality monitoring and water quality monitoring
- Preservation of downstream water quality

NAC also complies with the ECC conditions and the performance of commitments through the Annual EPEP. This program is monitored and evaluated by the Multipartite Monitoring Team - a multi-sector group headed by a representative from the Regional MGB and representatives of LGUs, other government agencies, NGOs, people's organizations, the church sector and the Group. In 2018, the Group spent approximately ₱551.5 million on its EPEP.

Rehabilitation
In line with its commitment to maintain a sustainable environment in its areas of operation and to abide by the Philippine Mining Act of 1995, NAC regularly conducts onsite environmental assessments to ensure that all its subsidiaries are strictly implementing progressive rehabilitation within standards set by regulatory agencies.

The process begins with re-contouring, backfilling and leveling the land. After this, the area is covered with top soil and other soil amelioration strategies to provide fertile ground for planting. The Company follows the "Sequential Planting Method", wherein fast growing species are first planted, then provided with a vegetative cover within twelve (12) to eighteen (18) months to enable the planting of other species. Another successful method used is by utilizing large planting materials which resulted to more than 90% survival and high growth rate.

Creating a biodiversity area with varied species of vegetation including native fruit bearings trees will eventually be a source of food for a variety of wildlife species that will aid in rehabilitating mine affected areas by way of succession and regeneration. The rehabilitation effort is managed by the Group's expert foresters with the help from indigenous peoples from the locality, and the Company has successfully demonstrated that a totally mined out area can be significantly re-vegetated in just twelve (12) to eighteen (18) months.

The end result is a sustainably managed forest far better than the stunted vegetation before, because of the mineralized nature of the soil.

As a means of restoring the disturbed areas from mining operations, NAC requires each mine site to create a decommissioning/closure plan. The closure plan includes the process in which mined-out areas will be rehabilitated and monitored, until the rehabilitation criteria set by MGB are successfully satisfied. The program for final rehabilitation and decommissioning includes social package which include livelihood components for the host communities and the affected employees of our companies. The four (4) operating subsidiaries have already developed their respective plans for review and approval of the MGB.

Mine Rehabilitation a requirement under the Philippine Mining Act of 1995, as part of sustainable development. It forms part of the best practices of the Company's subsidiaries such as RTN. Following the "Sequential Planting Method" used by the Group, fast growing species or Pioneer Species such as Batino, Acacia mangium, Acacia auriculiformis and others - all grown and nurtured in the Company's nurseries--are planted first. These species provide vegetative cover within three (3) years to enable the planting of "Climax Species" like Apitong, Ipil, Narra, Almaciga, Agoho, Kamagong and others which need tree shade to grow. They form the core of the new forest stands. Native fruit-bearing trees are also planted to provide a source of food for wild animals that will eventually populate the forest. To ensure the survival of all these trees, the Company's subsidiaries manage the rehabilitation program through their forestry teams. Composed mostly of indigenous people from the surrounding areas, each forestry team conducts a maintenance program that includes watering the trees during summer, ringweeding cultivation around seedlings, application of compost and other related activities. The work of the forestry teams has resulted in a survival rate of 85%-95% for the trees.

As of December 31, 2018, the Group recognized a provision for mine rehabilitation and decommissioning of ₱274.2 million. Funds for mine rehabilitation and other environmental guarantee funds are established and deposited in trust funds, as required by the Philippine Mining Act. The Company has ₱476.7 million maintained in such trust funds as of December 31, 2018. This amount complies with the minimum requirement under the law.

In 2018 and 2017, the Group rehabilitated and reforested a total of 293 hectares and 217 hectares, respectively, with corresponding number of trees planted of about 632,837 and 429,360, respectively.

O. SOCIAL RESPONSIBILITY

Mining

NAC endeavors to be a valuable partner for economic and social progress. As a corporate citizen, it recognizes the great privilege of sharing the opportunities and the responsibilities afforded by doing business in the country. The principles of sustainable development clearly identify for the Company its obligation to make every effort and ensure that the benefits of development reach every stakeholder.

Social development programs are created and implemented in all the mines. The focus areas of these programs are designed to address needs of communities around the mine sites. These programs are carried out through the SDMPs and Corporate Social Responsibility (CSR) activities of the Group. The main difference between the two programs is that the SDMP is required by the government, while CSR is voluntary on the part of the Group.

NAC engages with residents, LGUs, government agencies, local NGOs, international agencies and other interested groups to understand concerns, identify needs and design projects that will facilitate long-term and beneficial resource development. Each of its operating mines manages their social expenditures through its respective SDMPs. These are five (5) year programs that contain a list of priority projects identified and approved for implementation, in consultation with the host communities. Each mine site has a community relations team that is in charge of identifying and implementing SDMPs, and maintaining strong relationships with communities. Annually, the Group sets aside a budget for SDMP projects that focus on health, education, livelihood, public utilities and socio-cultural preservation. The implementation of the programs are monitored, audited and evaluated by the MGB.

The Group also recognizes the rights of the indigenous peoples and Indigenous Cultural Communities and in compliance with the Indigenous Peoples Rights Act, its subsidiaries entered into agreements for royalty payments and other assistance for their socio-economic well-being.

NAC respects and values each of our employees and observes the fundamental tenets of human rights, occupational safety and non-discrimination in the work place. The Group implements a Safety and Health Program in all of its operating mines and provides the equipment, training and resources necessary to enable its employees to perform their work safely and without risk to their health. The Group has committees and labor management groups that monitor its health and safety programs. The Company believes that security goes hand in hand with safety in the workplace and has adopted security policies and systems founded on the protection of basic human rights and respect for people.

Beyond the mandatory SDMP programs, the Group carries out its own CSR programs. NAC's CSR Program is anchored on two central elements:

1. Community Partnership and Relationship Building
    a) Establishing and maintaining positive relationships with communities by having them as partners for community development and nation building
    b) Partnership building with communities (both social and environmental) - community as essential partners and not as mere beneficiaries
    c) Community serving as the primary protector of the Company through strong partnership and relationship

2. Leadership
    a) Top management strongly supports the Group's CSR initiatives
    b) Social Investment - going beyond compliance and considering CSR not as an additional cost but as an investment

Power

EPI and its subsidiaries are strongly committed to uplifting the lives of our host communities through programs and activities that build lasting relationships and long-term opportunities.

Each of its project companies' Community Relations team implements plans and strategies that are distinctive to the host community but ultimately support the overarching theme of sustainability. EPI engages the host communities through continuing dialogues to better understand and appreciate their collective concerns and apprehensions and creates programs based on this. As such, the campaigns are unique and dynamic and include stakeholder engagement, community services and environmental activities.

EPI's initiatives have led to the establishment of the 3M Women's Organization (3MWO) which has empowered the housewives from EPI's project company MGPC to start their own business to augment their respective household incomes. 3MWO has participated in trade fairs, the most recent of which was the Agri-Trade and Tourism Fair 2017. Likewise, Jobin, EPI's project company for the Subic solar farm facility, was recognized for its CSR undertakings for 2017 by the Subic Bay Metropolitan Authority in the prestigious annual Mabuhay Awards. This was primarily to acknowledge Jobin's enduring efforts with the Indigenous People from the Aeta community.

The Company takes pride in upholding exemplary safety practices and security management in the power industry with the use of leading global technologies and strict implementation and compliance to procedures in RE development. It emphasizes the safety and well-being of everyone onsite. It strives to maintain no lost time accidents in all of its active RE development locations. This commitment is manifested with the DOE and the Safety and Health Association of the Philippines Energy Sector, Inc.'s recognition of our project companies, BGI and Jobin, for the second consecutive year in 2017 for Corporate Safety and Health Excellence.

The Company believes in partnerships that provide opportunities for the Filipino. It creates value by keeping families together through jobs generation or entrepreneurial initiatives that it spearheads, always mindful of our commitment to improving and uplifting the lives of the people in the host communities.

P. EMPLOYEES

As at December 31, 2018, we had a total of 2,106 regular employees. Of these, 2,000 are employed in mining operations and projects and 106 are employed in power plant operations.

The tables below show the distribution of our workforce (full time regular employees only):

Head Office

	NAC	CMC	HMC	TMC	RTN	CEXCI	DMC	EPI	JSI	BGI	MGPC	MEI	Total
Senior Management	21	1	1	1	1	-	-	3	-	-	-	-	**28**
Managers	17	1	1	3	2	-	-	8	-	-	-	-	**32**
Supervisors	21	5	2	5	6	4	2	-	-	-	-	-	**45**
Rank & File	28	3	6	8	11	6	1	9	1	2	7	4	**86**
Total	**87**	**10**	**10**	**17**	**20**	**10**	**3**	**20**	**1**	**2**	**7**	**4**	**191**

Minesite/Project Field Office

	NAC	CMC	HMC	TMC	RTN	CEXCI	DMC	EPI	JSI	BGI	MGPC	MEI	Total
Senior Management	-	1	1	1	1	-	-	-	-	-	-	-	**4**
Managers	2	15	17	42	38	-	3	-	-	-	1	-	**118**
Supervisors	4	84	93	201	149	-	11	-	2	3	-	-	**547**
Rank & File	11	137	112	420	516	-	1	-	30	12	7	-	**1,246**
Total	**17**	**237**	**223**	**664**	**704**	-	**15**	-	**32**	**15**	**8**	-	**1,915**

Each mine site and project field office also provides work opportunities for the communities. The tables below show a breakdown of the workforce (full time, contractual, probationary and casual) hired from the local communities in each area of operation:

Minesite	Manpower from local community	Indigenous People
Regular	1,297	95
Probationary	87	-
Project-based/Seasonal	685	9
Total	**2,069**	**104**

Plantsite	Manpower from local community	Indigenous People
Regular	38	3
Probationary	5	-
Project-based	18	-
Total	**61**	**3**

NAC complies with all government standards on the wages and labor regulations in the Philippine mining and renewable energy industries. In the case of unions, employment conditions for rank and file employees are governed by Collective Bargaining Agreements (CBA) which are negotiated at the mine level. Generally, CBAs have terms of five (5) years (with a provision for wage renegotiation after three (3) years).

HMC's CBA has been successfully renegotiated for the next five (5) years. This year, RTN's CBA is undergoing renegotiation for the supplemental CBA that will take effect for the two (2) remaining years, 2019 and 2020. CMC's supplemental CBA on economic provision expired last December 31, 2018 and is now being renegotiated while TMC's CBA will expire in January 2020. The Group believes that its compensation is among the best in the Philippine mining industry and its relations with employees and unions are very good. The Company believes in forging and sustaining productive partnerships with our unions and their federations.

Pension Costs

The Company provides its regular employees with a retirement benefit as part of its employment benefits. The cost of providing benefits under the defined benefit plans is actuarially determined using the projected unit credit method. This method reflects service rendered by employees to the date of valuation and incorporates assumptions concerning the employees' projected salaries. The assumptions include among others, discount rates and future salary increase rates.

Defined benefit costs comprise the following:

- Service cost
- Net interest on the net defined benefit liability or asset
- Re-measurements of net defined benefit liability or asset

These amounts are calculated periodically by independent qualified actuaries.

Q. RISKS RELATED TO OUR BUSINESS AND INDUSTRY

Changes in, or more aggressive enforcement of, laws and regulations could adversely impact the Group's business - Mining operations and exploration activities are subject to extensive laws and regulations. These relate to production, development, exploration, exports, imports, taxes and royalties, labor standards, occupational health, waste disposal, protection and remediation of the environment, mine decommissioning and rehabilitation, mine safety, toxic substances, transportation safety and emergency response and other matters. In 2016, the Company saw a regulatory environment that decidedly turned hostile against the mining industry. During the second half of 2016, the Company's four (4) operating mines underwent an audit by personnel of the DENR. This was mandated by the DENR, although in early 2016 all four (4) mines received their ISO 14001 Certification for Environmental Management Systems, which process already involves audits by accredited third parties. The audit team included representatives of civil society organizations, some of who do not look favorably on the mining industry, and covered a review of permitting requirements and all aspects of the mining operations with emphasis on environmental compliance and social acceptability.

Of a total of about forty three (43) operating mines in the country, reportedly thirteen (13) passed the audit, including three (3) of the Company's mines - RTN, TMC and CMC. With respect to our Hinatuan mine, certain violations were noted, which HMC contested. A DENR Technical Committee tasked to review the audits recommended certain penalties. Regrettably, the Secretary ignored such recommendation and HMC received a closure order. HMC has appealed this to the Office of the President, and the Office of the President subsequently stayed the closure order.

It is HMC's position that there are no legal and technical grounds to support the cancellation of its MPSA. HMC will pursue all legal remedies to overturn the said order because of due process violations and the absence of any basis that would warrant a suspension of HMC's operations, much less the cancellation of its MPSA.

Continued moratorium and delay in getting permits - The issuance of EO No. 79 put a moratorium on the issuance of new permits pending legislation rationalizing the existing revenue sharing schemes and mechanism have taken effect. The Group relies on permits, licenses, including MPSA, operating agreements with third-party claim owners and land access agreements to conduct its mining operations. The MPSAs and Operating Agreement with respect to its operating mines expire at different times between 2017 and 2047 and require renewal upon expiration. The Group believes that its subsidiaries and affiliates currently hold or have applied for all necessary licenses, permits, operating agreements and land access agreements to carry on the activities that it is currently conducting under applicable laws and regulations, licenses, permits, operating agreements and land access agreements. The Group may be required to prepare and present to government authorities data pertaining to the impact that any proposed exploration or production of ore may have on the environment, as well as efficient resource utilization and other factors that its operations may influence. The process of obtaining environmental approvals, including the completion of any necessary environmental impact assessments, can be lengthy, subject to public input and expensive. Regulatory authorities can exercise considerable discretion in the terms and the timing of permit issuance or whether a permit may be issued at all. Accordingly, the approvals needed for the Group's mining operations may not be issued or renewed or, if issued or renewed, may not be issued in a timely fashion, or may involve requirements that may be changed or interpreted in a manner which restricts its ability to conduct its mining operations profitably.

Furthermore, new laws or regulations, or changes in the enforcement or interpretation of existing laws or regulations, may require substantial increases in equipment and operating costs in order to obtain approvals required by, or to otherwise comply with the conditions imposed by, such new or revised laws and regulations. The need to obtain such new or revised approvals or to comply with additional conditions may also cause material delays or interruptions of one or more of the Group's current or planned operations or developments or, to the extent such approvals or conditions cannot be obtained or met on an economical basis, the curtailment or termination of such operations or developments.

In addition, the local governments where the Group's mines or exploration properties are located may impose additional restrictions on its operations. For instance, the conversion of a mining lease to a MPSA for its Mt. Bulanjao exploration property has been pending for several years due to restrictions on mining above a certain elevation imposed by the PCSD. Recently, the Municipality of Bataraza where the property is located, reclassified the Bulanjao area as open to mineral development. A final endorsement from the PCSD is necessary before RTN can receive the MPSA on the property.

Mine security - The Group's operations are prone to terrorist attacks and other insurgent atrocities due to the location of mine sites. NAC ensures the safety of its communities and employees by working with the government and tapping all available resources that may help prevent, or at the very least, reduce terror-related incidents.

Each mining operation also employs a safety team under an accredited safety officer to promulgate safety measures and procedures and to ensure that these are followed. Training programs are also being conducted regularly.

On October 3, 2011, around 200 armed men occupied the TMC mine site and destroyed, among others, equipment, building structures, materials and supplies by setting them on fire. Accounting, personnel, laboratory and administrative records were destroyed. Approximately ₱239.5 million worth of damages were sustained. Fortunately, no life or limb was lost. In response to the incident, security was increased, not just in TMC, but in all of the Group's mine sites. This was done in close coordination with the Armed Forces of the Philippines tapping the services of the Special Citizen Armed Forces Geographical Unit Active Auxiliary Companies.

NAC expends significant financial and managerial resources to comply with a complex set of environmental, health and safety laws, regulations, guidelines and laws drawn from a number of different jurisdictions. The Group's facilities operate under various operating and environmental permits, licenses and approvals to satisfy these conditions. Failure to meet these conditions could result in interruption or closure of exploration, development or mining operations or material fines or penalties.

Aside from the above, the Group faces a number of risks and the occurrence of any of these risks could have an adverse impact on our business, results of operations and financial condition.

Volatility of LME nickel prices - NAC's revenue is largely dependent on the world market price of nickel. The sales price of nickel ore is correlated with the world market price of nickel. The nickel price is subject to volatile price movements over time and is affected by numerous factors that are beyond its control. These factors include global supply and demand; expectations for the future rate of inflation; the level of interest rates; the strength of, and confidence in, the U.S. dollar; market speculative activities; and global or regional political and economic events, including changes in the global economy. A growing world nickel market and increased demand for nickel worldwide have attracted new entrants to the nickel industry, spurred the development of new mines and expansion of existing mines in various regions, including Australia, Indonesia and New Caledonia, and resulted in added production capacity throughout the industry worldwide. An increasing trend in nickel prices since early 2003 have encouraged new or existing international nickel producers to expand their production capacity. An increased rate of expansion and an oversupply of nickel in world nickel markets in the future could reduce future nickel prices and the prices that the Group receives under its nickel ore supply agreements. If the sales price of its nickel ore falls below its production costs, the Group will sustain losses and, if those losses continue, it may curtail or suspend some or all of its mining and exploration activities. The Group would also have to assess the economic impact of any sustained lower nickel prices on recoverability and, therefore, the cut-off grade and level of its nickel reserves and resources.

Nickel mining is subject to a number of inherent risks that are beyond our control - The Group's mining operations are influenced by changing conditions that can affect production levels and costs for varying periods and as a result can diminish our revenues and profitability. Inclement or hazardous weather conditions, the inability to obtain equipment necessary to conduct its operations, increases in replacement or repair costs, prices for fuel and other supplies, unexpected geological conditions and prolonged disruption of production at its mines or transportation of its nickel ore to customers could have a significant impact on the productivity of its mines and its operating results.

Other factors affecting the production and sale of the Group's nickel ore that could result in increases in its costs and decreases in its revenues and profitability include:

- equipment failures and unexpected maintenance problems;
- interruption of critical supplies, including spare parts and fuel;
- earthquakes or landslides;
- environmental hazards;
- industrial accidents;
- increased or unexpected rehabilitation costs;
- work stoppages or other labor difficulties; and
- changes in laws or regulations, including permitting requirements, the imposition of additional taxes and fees and changes in the manner of enforcement of existing laws and regulations.

The realization of any of these risks could result in damage to NAC's mining properties, nickel ore production or transportation facilities, personal injury or death, environmental damage to its properties, the properties of others or the land or marine environments, delays in mining ore or in the transportation of ore, monetary losses and potential legal liability.

Changes in Chinese demand may negatively impact world nickel demand and prices - Approximately, 63% of NAC's revenue from sale of nickel ore in 2018 was derived from shipments to China. The Chinese market has become a significant source of global demand for commodities.

China's consumption of primary nickel has increased by more than 30% over the past years, according to CRU Strategies. While this increase represents a significant business opportunity, the Group's exposure to China's economy and economic policies has increased. NAC's exposure to the Chinese market and its short-term supply agreements with Chinese customers have resulted in increased volatility in its business. In addition, increased Chinese demand for commodities has led to high volatility in the freight rates for shipping the Group's nickel ore. High freight rates can discourage customers outside the Philippines from entering into long term supply agreements with the Group due to the unpredictability of future shipping costs and can also affect the price Chinese customers are willing to pay for its nickel ore.

China, in response to its increased demand for commodities, is increasingly seeking self-sufficiency in key commodities, including nickel, through investments in nickel mining operations in other countries. In addition, nickel ore is used in the production of stainless steel and a slowdown in the stainless steel industry in China, or China's economic growth in general, could result in lower Chinese demand for NAC's products and therefore reduce its revenue.

A prolonged decrease in production by the Coral Bay HPAL facility or the Taganito HPAL facility Approximately, 24% of the Company's revenue from sale of nickel ore in 2018 was derived from sale of limonite ore to the Coral Bay HPAL facility and Taganito HPAL facility. CBNC, the owner of the Coral Bay HPAL facility, is only required to pay for limonite ore that is actually delivered to the plant and there are no minimum take-or-pay provisions in the ore supply agreement governing NAC's sales of ore to the facility. The ore supply agreement with Taganito HPAL facility is also subject to similar terms. In the event that the Coral Bay HPAL facility or the Taganito HPAL facility decreases production or experiences an unexpected prolonged shutdown, the Group will reduce the volume of limonite ore that its delivers to the applicable facility or cease such deliveries altogether.

The Group's reserves may not be replaced, and failure to identify, acquire and develop additional reserves could have an adverse impact on its business, results of operations and financial condition - NAC's sources of nickel ore are currently limited to the Rio Tuba, Taganito, Cagdianao and Taganaan mines. The Group's profitability depends substantially on its ability to mine, in a cost-effective manner, nickel ore that possesses the quality characteristics desired by its customers. Because the Group's reserves decline as its mines its nickel ore, its future success and growth depend upon its ability to identify and acquire additional nickel ore resources that are economically recoverable. NAC currently has seven (7) mining exploration properties in the Philippines and if it fails to define additional reserves on any of its existing or future properties, its existing reserves will eventually be depleted. The acquisition of DMC in 2015 will increase the current sources of nickel ore of the Group.

The Group faces competition in selling nickel ore - NAC competes with both domestic Philippine nickel ore suppliers and foreign nickel ore suppliers in world nickel ore markets. It competes with other nickel ore suppliers primarily on the basis of ore quality, price, transportation cost and reliability of supply.

Continued compliance with safety, health and environmental laws and regulations - NAC expends significant financial and managerial resources to comply with a complex set of environmental, health and safety laws, regulations, guidelines and permitting requirements (for the purpose of this paragraph, collectively referred to as "laws") drawn from a number of different jurisdictions. The Group anticipates that it will be required to continue to do so in the future as the recent trend towards stricter environmental laws is likely to continue. The possibility of more stringent laws or more rigorous enforcement or new judicial interpretation of existing laws exists in the areas of worker health and safety, the disposition of waste, the decommissioning and rehabilitation of mining sites and other environmental matters, each of which could have a material adverse effect on the Group's exploration, operations or the cost or the viability of a particular project. NAC's facilities operate under various operating and environmental permits, licenses and approvals that contain conditions that must be met and its right to continue operating its facilities is, in a number of instances, dependent upon compliance with these conditions. Failure to meet certain of these conditions could result in interruption or closure of exploration, development or mining operations or material fines or penalties.

Exposure to exchange rate fluctuations - The Group's nickel ore sales are denominated in U.S. dollars while most of its costs are incurred in Philippine peso. The appreciation of the Philippine peso against the U.S. dollar reduces its revenue in peso terms. Accordingly, fluctuation in exchange rates can have an impact on the Group's financial results. Additionally, in the past NAC has invested in derivative instruments that increased in value as the Philippine peso appreciated relative to the U.S. dollar, and vice versa. While the Group's current policy is not to hedge its exposure to foreign currency exchange risk or invest in this type of derivative instrument, the Group does, and may continue to, invest in U.S. dollar-denominated portfolio investments. Appreciation of the Philippine peso relative to the U.S. dollar could result in a translation loss on our U.S. dollar-denominated assets.

Item 2. PROPERTIES

A. MINING PROPERTIES AND PERMITS

Below is a summary of the Group's mineral agreements and permits, mineral resources and reserves and processing facilities with respect to its mining operations.

RIO TUBA NICKEL MINING CORPORATION

A. Rio Tuba Mine

MPSA No. 114-98-IV covering beneficiated nickel mine - On June 4, 1998, RTN was issued a MPSA by the DENR covering an area of 990 hectares, situated at Barangay Rio Tuba, Bataraza, Palawan, valid for twenty-five (25) years, renewable for another twenty-five (25) years subject to mutually agreed upon terms and conditions. However, under the SEP for Palawan Act (RA No. 7611), operations are currently prohibited within an area of 144 hectares classified as "core zone" which are required to be fully and strictly protected and maintained free of human disruption. Included in the "core zone" are all types of natural forest, areas above 1,000 meters elevation, peaks of mountains or other areas with very steep gradients, and endangered habitats and habitats of endangered and rare species.

MPSA No. 213-2005-IVB for Rio Tuba Nickel's Limestone Quarry - On April 28, 2005, RTN was issued another MPSA for a total area of 84.5364 hectares in Bataraza, Palawan. This MPSA was also given a validity of twenty-five (25) years renewable for another twenty-five (25) years subject to mutually agreed upon terms and conditions. This MPSA covers the Sitio Gotok limestone pit, whereby limestones are being sold to CBNC and Unichamp Mineral Philippines, Inc. The terms and conditions of this MPSA mirror the terms of MPSA No. 114-98-IV granted to RTN, albeit covering mining of limestone rather than nickel products.

B. Bulanjao Exploration

MPSA Application for expiring mining lease contracts - On June 17, 2003, RTN filed an application to renew and to convert into MPSAs fourteen (14) existing mining lease contracts which were due to expire from June 2003 to August 2004. The application included six (6) small mining blocks of new areas located within the said existing mining lease contracts.

No operations are currently being conducted in these areas. The application remains pending.

HINATUAN MINING CORPORATION

A. Taganaan Mine

MPSA 246-2007-XIII - On July 25, 2007, HMC was granted a MPSA covering 773.77 hectares of mineral land in Talavera, Taganaan, Surigao del Norte within Parcel II of the Surigao Mineral Reservation for a period of twenty-five (25) years renewable for another twenty-five (25) years subject to mutually agreed upon terms and conditions.

As discussed in the preceding section, HMC is contesting the adverse findings and a closure order on the Taganaan mine as it believes there is no basis for such actions.

B. Manicani Mine

MPSA No. 012-92-VIII - The Manicani mine is subject to MPSA No. 012-92-VIII granted on August 13, 1992 for 1,165 hectares. It has a term of twenty-five (25) years and is renewable for another term not exceeding twenty-five (25) years subject to mutually agreed upon terms and conditions. An application for the renewal of MPSA No. 012-92-VIII is pending approval before the DENR.

On May 1, 2002, the DENR ordered the suspension of mining operations in Manicani pending a conduct of investigation in view of the complaints of the Roman Catholic Bishop. In a decision dated August 2, 2004, an arbitral panel of the Mines Adjudication Board, MGB, Region 8, the MPSA was ordered cancelled. The basis for the decision of the Board was the alleged violation of the ECC. As a result, mining operations in Manicani remain suspended. The mining operations were found by the Board to be causing pollution of the seawater of Manicani Island. A Memorandum of Appeal dated December 23, 2004 was filed by HMC and its MPSA was upheld by the Mines Adjudication Board on September 4, 2009. Incidentally, a Letter of Authority to Dispose Nickel Stockpile was issued by MGB on July 1, 2014. From May to August of 2016, five (5) shipments were realized for the disposal of said stockpiles, after which, shipments were suspended by MGB. This left behind almost 900,000 WMT of stockpiles which were already approved for disposal.

On May 23, 2016, HMC applied for the renewal of its MPSA in Manicani which expired on October 28, 2017. Said application is pending before the DENR.

TAGANITO MINING CORPORATION

A. Taganito Mine

MPSA No. 266-2008-XIII - TMC was granted a MPSA on June 18, 2009 for a period of twenty-five (25) years subject to renewal as may be mutually agreed upon. The MPSA covers an area of 4,862.7116 hectares located at the Barangays of Hayanggabon, Urbiztondo, Taganito and Cagdianao, Municipality of Claver, Province of Surigao del Norte.

B. Kepha Exploration

MPSA No. 284-2009-XIII - On June 19, 2009, Kepha was issued a MPSA covering 6,980.75 hectares of mineral land situated in the Municipality of Claver, Province of Surigao del Norte within Parcel I of the Surigao Mineral Reservation. The MPSA is for a period of twenty-five (25) years and renewable for another twenty-five (25) years as may be mutually agreed upon by the parties.

The terms and conditions of this MPSA mirror the terms of MPSA No. 266-2008-XIII granted to TMC.

An Operating Agreement dated February 14, 2007 was executed by and between TMC and Kepha for a term of twenty-five (25) years from February 14, 2007, whereby TMC shall maintain the mining rights covering the mineral property in good standing for and on behalf of Kepha.

C. La Salle Exploration

La Salle filed an application for MPSA denominated as APSA No. 000073-XIII covering 6,824 hectares of mineral land situated at Brgy. Sicosico, Municipality of Gigaquit, Surigao del Norte, Mindanao for the development of limestone deposits as mine.

On December 18, 2006, La Salle entered into an Operating Agreement with TMC for a term of twenty-five (25) years whereby TMC shall maintain the mining rights of La Salle covering the aforesaid properties and to keep the rights in current and good standing for and on behalf of La Salle. On August 12, 2010, La Salle submitted to the MGB an amended MPSA plan, reducing the area from 6,824 hectares to 2,234.96 hectares.

On January 11, 2016, TMC issued a Notice of Exclusion of the limestone deposit from the Operating Agreement to La Salle as TMC is no longer interested in the exploration and/or development of the limestone deposit inside the property.

CAGDIANAO MINING CORPORATION

Cagdianao Mine

MPSA No. 078- 97- XIII - On November 19, 1997, East Coast Mineral Resources Co., Inc. (East Coast) was granted a MPSA for a period of twenty-five (25) years and renewable upon such terms and conditions as may be mutually agreed upon. The MPSA covers an area of 697.0481 hectares situated at Barangay Valencia, Municipality of Cagdianao, Province of Dinagat Islands, Surigao del Norte.

On the same date, a MOA was executed between CMC, as Operator, and East Coast for a period of ten (10) years from the effectivity of the MOA whereby East Coast grants CMC the exclusive right to explore, develop and utilize the mineral property covered by the MPSA. On
November 19, 2007, the MOA was renewed for a period of fifteen (15) years, covering the remaining term of the MPSA. On December 18, 2015, a Supplemental Agreement was executed by CMC and East Coast, providing for, among others, an automatic renewal of the MOA for another twenty-five (25) years, or from 2022 to 2047.

DINAPIGUE MINING CORPORATION

On July 30, 2007, the PGMC and the Government entered into a MPSA, which allows PGMC to explore, develop and mine nickel ore within the contract area covering 2,392 hectares in the Municipality of Dinapigue, Province of Isabela.

On January 6, 2009, PGMC and DMC executed a Deed of Assignment transferring to DMC all the rights, title and interest in and into the MPSA over the contract area.

Under the MPSA, DMC shall pay the Government a 2% excise tax. The MPSA is valid for twenty-five (25) years from issuance and renewable at the option of DMC, with approval from the Government.

CORDILLERA EXPLORATION CO., INC.

CExCI has an EP over the Manmanok Property in Apayao Province, an application for EP over the Kutop Property in the province of Abra, and an application for Financial or Technical Assistance Agreement over the Mankayan Property, within the adjoining provinces of Benguet, Ilocos Sur and Mountain Province. A portion of the AFTA, covering the grounds in Mankayan, Benguet and Cervantes, Ilocos Sur, were converted to applications for EP.

NEWMINCO PACIFIC MINING CORPORATION

Newminco, which was acquired by CExCI in December 2015, holds an EP for copper, gold, and related base and precious metals over an area located in Cabangan, San Felipe, and San Marcelino in the province of Zambales. The decision to acquire Newminco was made following the discovery of outcropping quartz veins, the sampling of which in part returned good assays for gold. The EP 001-2015-III expired in July 2017 and is currently under the first renewal process.

B. MINERAL RESOURCES AND RESERVES

As of December 31, 2018, the Company's Total Mineral Resources and Ore Reserves in accordance with Philippine Mineral Reporting Code (PMRC) are as follows:

Ore	Class	Tonnes (kWMT)	Tonnes (kDMT)	% Ni	% Fe	Contained Ni (kt)
*Ore Reserves**						
Saprolite	Proved and Probable	99,630	67,586	1.50	13.06	1,015
Limonite	Proved and Probable	231,527	155,105	1.13	40.68	1,754
*Mineral Resources***						
Saprolite	Measured & Indicated	162,114	107,439	1.45	12.24	1,557
Limonite	Measured & Indicated	255,440	170,601	1.12	41.80	1,913
Saprolite	Inferred	49,750	32,136	1.33	13.08	428
Limonite	Inferred	11,165	7,259	1.08	40.83	78

** This ore reserves estimate was prepared by Engr. Rolando R. Cruz. (BSEM), Vice President for Project Development and Research of NAC. Engr. Cruz is a Competent Person under the definition of the PMRC and has sufficient experience as to the type of deposit and mineralization. He is a licensed mining engineer with PRC registration number 1803. He has given his consent to the attachment of this statement to the 17-A 2018 Annual Report concerning Ore Reserve Estimation.*
*** This mineral resources estimate was prepared by Mr. Ramon Nieto Santos, Consultant of NAC. Mr. Santos is a Competent Person under the definition of the PMRC and has sufficient experience as to the type of deposit and mineralization. He is a licensed geologist with License number 0834. He has given his consent to the attachment of this statement to the 17-A 2018 Annual Report concerning Mineral Resources Estimation.*

C. PROCESSING FACILITIES

CBNC

Facility	Coral Bay HPAL nickel processing plant
Location	In a Special Economic Zone adjacent to Rio Tuba mine
Ownership	NAC (10%) Mitsui and Co., Ltd. (Mitsui; 18%) Sojitz Corporation (18%) SMM (54%)
Operations	Commissioned in 2005 with design capacity of 10,000 tonnes per year of contained nickel. Capacity doubled to 20,000 tonnes per year of contained nickel in June 2009 and attained annual capacity of 24,000 tonnes in 2010 due to facility expansion.
Technology	HPAL process
Source of ore	Rio Tuba mine
Product	Nickel-cobalt sulfide sold exclusively to SMM

The Company acquired its 10% equity interest in CBNC, the Philippine's first HPAL nickel processing plant, by way of property dividend distributed by RTN in March 2014. A consortium of Japanese companies led by SMM holds the remaining 90% equity interest. The plant was constructed adjacent to the Rio Tuba mine in an area designated as a Special Economic Zone by the Philippine Export Zone Authority (PEZA). As such, CBNC enjoys tax incentives, including a tax holiday. All of the limonite ore required for the plant is supplied by RTN from its extensive stockpile and from newly mined ore. RTN also supplies limestone and undertakes certain materials handling and transportation services. The plant produces a nickel sulfide precipitate containing approximately 57% nickel and 4% cobalt, which is sold exclusively to SMM for refining at its Nihama refinery. The facility uses proprietary SMM technology under a non-exclusive license.

THNC

Facility	Taganito HPAL nickel processing plant
Location	In a Special Economic Zone adjacent to the Taganito mine
Ownership	NAC (10.0%) SMM (75.0%) Mitsui (15.0%)
Operations	Commenced commercial operations at full capacity in October 2013 and expected to produce approximately 51,000 tonnes of mixed nickel-cobalt sulfide in 2014, the first full year of commercial operations at full capacity
Technology	HPAL process
Investment cost/financing	US$1,420 million, which further increased to US$1,590.0 million, to be majority debt-financed, with remaining balance to be equity-financed based on ownership
Source of ore	Taganito Mine
Product	Nickel-cobalt sulfide to be sold exclusively to SMM

Following the success of the Coral Bay HPAL facility and taking into account the stockpile and reserves of limonite ore owned by TMC, SMM conducted a feasibility study in September 2009 on a 30,000 tonnes-per-year HPAL plant to be located adjacent to the TMC mine site. The completion of the study led to the signing of a Memorandum of Understanding (MOU) in September 2009 between NAC, TMC, and SMM to proceed with the project. The Company expects that the plant will use technology similar to that used at the Coral Bay HPAL facility but will be triple the original size of the Coral Bay plant. TMC is expected to supply all the limonite ore required for the plant and the nickel-cobalt sulfide product will be sold exclusively to SMM for refining in Japan.

Pursuant to the Taganito HPAL Stockholders Agreement that NAC entered into on September 15, 2010, the project will be undertaken by THNC, a company that will be jointly owned by NAC (as to 22.5%), SMM (as to 62.5%) and Mitsui (as to 15.0%). The agreement contains a term sheet with principal terms of an offtake agreement to be entered into between THNC and TMC for the supply of limonite ore. Similar to the Coral Bay HPAL facility, the plant is located in a Special Economic Zone approved by the PEZA and enjoy tax incentives. The operation of the facility provides an additional dedicated customer for limonite ore from our Taganito mine which allows us to benefit from the higher percentage of payable nickel available further downstream in the nickel value chain.

The estimated total cost is US$1.7 billion, which includes capital expenditures of US$1.6 billion for the plant, working capital and US$100.0 million of interest accrued during the construction phase. An estimated of US$1.1 billion of the project costs will be financed with debt financing that will be incurred by THNC. Under the terms of the Stockholders Agreement, we will be required to guarantee a portion of such debt financing equal to our 22.5% equity interest in THNC. On September 15, 2010, we entered into an agreement with SMM whereby SMM will guarantee our pro-rata portion of THNC's loan obligation in exchange for the payment of an annual guarantee service fee to SMM of 1% of our pro-rata share of the outstanding loan obligation.

In 2016, we made a strategic decision to reduce our ownership in the Taganito plant from 22.5% to 10.0%, the same equity level that we have in the Coral Bay plant. The reduction in our equity was achieved by a sale of shares to the majority owner of the plant and one of our major shareholders, SMM.

In the absence of cost overruns or major expansion plan, THNC is expected to distribute all of its available cash as dividends to shareholders in any financial year, after payments have been made for operating expenses, applicable taxes, capital expenditure, working capital, scheduled loan principal and interest repayments, and after making provisions for upcoming installments of the loans and required working capital.

D. REAL PROPERTIES

TMC owns the following parcels of land located in Surigao City:

1) a parcel land with a total area of 43,237 square meters in Barangay Rizal and with Transfer Certificate of Title (TCT) No. 162-2011000392; and
2) a parcel of land with a total area of 88,640 square meters in Barangay Ipil and with TCT No. 162-2012000481, which is intended for leasing to THNC in the future

Likewise, HMC owns a parcel of land with a total area of 3,500 square meters located in Barangay Luna, Surigao del Norte under TCT No. 162-2013000096. HMC constructed a building on the said land which is currently being used as a liaison office of NAC's mining companies in Surigao.

NAC owns a parcel of land with a total area of more or less 20,000 square meters which is located in Barangay Quezon, Surigao del Norte. NAC constructed its diesel power plant on the said land.

MGPC has purchased some 48 hectares of its geothermal project site in Naujan, Oriental Mindoro.

E. SERVICE CONTRACTS

The Group's power companies hold the following service contracts:

Solar Energy Service Contract No. 2015-01-099
On January 20, 2015, EPI entered into a SESC No. 2015-01-099 with the DOE which grants EPI the right to explore, develop and utilize the solar energy resources within the contract area of 324 hectares in the province of Pili, Camarines Sur.

Under the SESC, EPI assumes all the technical and financial risks without any guarantee from the Philippine Government and shall not be entitled to reimbursement for any expense incurred in connection with the SESC.

The SESC carries a non-extendible two (2) year period of pre-development stage, which involves the preliminary assessment and feasibility study. The SESC shall remain in force for the remainder of twenty-five (25) years from date of effectivity if the solar energy resources are discovered to be in commercial quantities. If EPI has not been in default of any material obligations under the SESC, the DOE may grant EPI an extension of the SESC for another twenty-five (25) years. The full recovery of the project development costs incurred in connection with the SESC is dependent upon the discovery of solar energy resources in commercial quantities from the contract area and the success of future development thereof. EPI has not yet started the exploration and pre-development activities.

Solar Energy Service Contract No. 2013-10-039
On October 31, 2013, Jobin entered into a SESC with the DOE. The SESC covers an area of approximately 2,997 hectares in the municipalities of Morong and Hermosa, in the province of Bataan. The SESC is for a period of twenty-five (25) years, inclusive of a two (2) year pre-development stage, and renewable for another twenty-five (25) years. The government share under the SESC shall be 1% of the gross income from the sale of electricity generated from the solar energy operations.

On August 28, 2015, Jobin was granted a Certificate of Confirmation of Commerciality by the DOE for its 100.44 MW Sta. Rita Solar Power Project located in Mt. Sta Rita, Subic Bay Freeport Zone. The certificate converts the project's SESC from exploration/pre-development stage to the development/commercial stage.

On March 11, 2016, Jobin's Certificate of Confirmation of Commerciality originally rated for the 100.44 MW was amended by DOE to 7.14 MW and 92.86 MW Sta. Rita Solar Power Project Phase I and II, respectively.

Wind Energy Service Contract No. 2013-10-062
On October 31, 2013, Jobin entered into a WESC with the DOE. The WESC covers an area of approximately 2,997 hectares in the municipalities of Morong and Hermosa, in the province of Bataan. The WESC is for a period of twenty-five (25) years, inclusive of a three (3) year pre-development stage, and renewable for another twenty-five (25) years. The government share under the WESC shall be 1% of the gross income from the sale of electricity in the wind project.

Geothermal Renewable Energy Service Contract No. 2014-02-054
GRESC No. 2010-02-013, which covers an approximate area of 3,914 hectares in the three barangays of Montelago, Montemayor and Melgar-B in Oriental Mindoro, involves the development of geothermal well clusters and a power plant. The steam extracted from the geothermal wells will power a geothermal power station with an output capacity of at least 20 MW. Once completed, the addition of geothermal power into the present mix of Mindoro's electricity sources will have a stabilizing effect on the grid where the entire island is located.

The Project is in the exploration stage as at December 31, 2018.

As RE Developer, EPI undertakes to provide financial, technical, or other forms of assistance with the DOE, and agrees to furnish the necessary services, technology, and financing for the geothermal operations. EPI shall assume all financial risks such that if no geothermal resources in commercial quantity is discovered and produced, EPI shall not be entitled to reimbursement for any expenses incurred in connection with the GRESC.

Certificate of Registration No. 2014-02-054 shall remain in force for the remainder of twenty-five (25) years from date of effectivity if geothermal resources in commercial quantity are discovered during the pre-development stage, or any extension thereof. Moreover, if EPI has not been in default in its obligations under the GRESC, the DOE may grant an additional extension of twenty-five (25) years, provided that the total term is not to exceed fifty (50) years from the date of effectivity.

On November 24, 2014, EPI and MGPC entered into a Deed of Assignment for the assignment of EPI's rights and obligations under the GRESC to MGPC. On December 5, 2014, EPI applied with the DOE to transfer the GRESC to MGPC. The DOE approved EPI's application on February 16, 2016 under Certificate of Registration No. 2016-02-060.

Geothermal Renewable Energy Service Contract No. 2010-02-010
By virtue of RA 9513 known as the RE Act of 2008, on February 1, 2010, the DOE issued to BGI GRESC No. 2010-02-010, converting its Geothermal Services Contract (GSC-09) issued on July 10, 2008 for the exploration, development and exploitation of geothermal resources covering the geothermal field in Biliran Province (previously a municipality of Leyte). By virtue of such agreement, BGI is entitled to enjoy an income tax holiday for a period of seven (7) years from the start of its commercial operation, duty free importation of machinery for ten (10) years, and 0% VAT, among others.

Geothermal Renewable Energy Service Contract No. 2017-03-056
This GRESC is a spin-off of the above BGI GRESC, issued by the DOE, and delineates the northern area of the island province of Biliran as a separate BGI exclusive development zone with a greenfield status.

F. LIENS AND ENCUMBRANCES

a. SMM's mortgage over RTN's pier facilities
b. Chattel mortgage over Jobin's solar assets in favor of the Land Bank of the Philippines

Item 3. LEGAL PROCEEDINGS

In the ordinary course of NAC's business, its subsidiaries and affiliates are a party to various legal actions that are mainly labor cases that it believes are routine and incidental to the operation of its business. The Group does not believe that it is subject to any ongoing, pending or threatened legal proceeding that is likely to have a material effect on our business, financial condition or results of operations. However, there are a few cases that are now pending with the Courts.

Asiacrest Marketing Corporation (Asiacrest) - First Integrated Bonding and Insurance Co. (FIBIC) Case
On May 30, 2016, Jobin filed a complaint against Asiacrest and FIBIC before the Construction Industry Arbitration Commission (CIAC), docketed as CIAC Case No. 23-2016, for Asiacrest's breach of its EPC Contract for the 100 MW solar power plant in Subic. Jobin sought to hold Asiacrest liable for amounts not to exceed ₱1,458.0 million. Jobin sought to hold FIBIC, being the surety which secured Asiacrest's performance of its obligation, jointly and severally liable to the extent of the value of the performance bond of ₱727.5 million. On March 10, 2017, the Arbitral Tribunal rendered a final award in Jobin's favor. On March 29, 2017, Jobin moved for the issuance of a writ of execution with the CIAC.

On March 23, 2017, FIBIC filed a Petition for Review with application for the issuance of a Temporary Restraining Order (TRO) with the Court of Appeals (CA) which was granted on April 10, 2017 conditioned upon FIBIC posting a bond equivalent to the award adjudged against it in the Final Award of CIAC. On April 18, 2017 FIBIC moved to reduce the injunction bond to 1% of the amounts adjudged against it under the Final Award, which was opposed by Jobin on May 2, 2017.

In the meantime, the CIAC ordered the issuance of a writ of execution against Asiacrest on May 8, 2017 and against FIBIC on June 13, 2017. On July 10, 2017 the CA granted the Motion of FIBIC to reduce the bond and thereafter, August 10, 2017, issued a TRO to enjoin the execution of the Final Award. The TRO expired on October 9, 2017. On November 29, 2017, the CA denied FIBIC's application for a writ of preliminary injunction.

On December 29, 2017, Jobin received FIBIC's Petition for Certiorari with the Supreme Court (SC). FIBIC contests the resolution of the CA denying its application for a writ of preliminary injunction. This Petition for Certiorari was denied by the SC for failure of FIBIC to show any reversible error in the CA Resolution. On June 6, 2018, the SC's resolution became final and executory and recorded in the Book of Entries of Judgments. The CA, subsequently issued a Joint Decision on the merits of the Petition for Review of Asiacrest and FIBIC. The Joint Decision dismissing the said Petition for Review and affirmed the Final Award with some modifications (CA Decision). FIBIC filed a Petition for Certiorari in the SC assailing the CA Decision.

As of February 8, 2019, there is no court-issued TRO or writ of preliminary injunction which would serve to enjoin the execution of the Final Award, whether against Asiacrest or FIBIC. However, the Insurance Commission (IC) has placed FIBIC under conservatorship and on July 24, 2018 issued a Notice of Stay Order suspending all payment of claims against FIBIC effective August 3, 2018, except on prior approval by the IC or until further notice. Also, on January 21, 2019, CIAC issued an Order staying the execution of the CIAC Final Award against FIBIC during the effectivity of the Stay Order issued by the IC.

Item 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

There were no matters covered under this item submitted in 2018 to the security holders for a vote.

PART II – OPERATIONAL AND FINANCIAL INFORMATION

Item 5. MARKET FOR ISSUER'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

A. MARKET INFORMATION

The stock prices for the Parent Company's common equity for the last three (3) years, after the effect of stock dividends, are as follows:

	High	Low
2016		
1st Quarter	₱3.29	₱1.89
2nd Quarter	₱3.22	₱2.33
3rd Quarter	₱4.13	₱2.79
4th Quarter	₱4.86	₱3.76
2017		
1st Quarter	₱4.72	₱3.38
2nd Quarter	₱3.73	₱3.33
3rd Quarter	₱4.44	₱3.11
4th Quarter	₱4.11	₱3.32
2018		
1st Quarter	₱3.83	₱3.27
2nd Quarter	₱3.44	₱2.53
3rd Quarter	₱3.06	₱2.33
4th Quarter	₱2.80	₱1.94
2019		
1st Quarter	₱2.88	₱2.22

The share price of the Parent Company's stocks was at ₱2.57 per share as of April 8, 2019.

B. HOLDERS

The Company has 86 shareholders as of the end of 2018, with 13,675,915,117 common shares issued and outstanding. The top 20 stockholders of the Company as at December 31, 2018 are as follows:

Name	Citizenship	Shares	% of Ownership
PCD Nominee Corporation (Filipino)	Filipino	8,405,279,170	61.42%
Sumitomo Metal Mining Philippine Holdings Corporation (SMMPH)	Filipino	2,600,384,267	19.00%
Nonillion Holding Corp.	Filipino	1,296,000,000	09.47%
PCD Nominee Corporation (Non-Filipino)	Foreign	944,872,089	06.90%
Pacific Metals Co., Ltd.	Japanese	366,022,233	02.67%
Gerard H. Brimo	Filipino	26,641,344	00.19%
William T. Enrile &/or William R. Enrile II &/or Nelly R. Enrile	Filipino	20,880,000	00.15%
Ricardo Sy Po or Angelita Tan Po or Leonardo Arthur Tan Po	Filipino	8,508,377	00.06%
Philip T. Ang	Filipino	2,910,103	00.02%
Ronaldo B. Zamora	Filipino	2,340,403	00.02%
Megastar Real Estate Corporation	Filipino	2,340,000	00.02%
Koh Teng Ong Chong	Filipino	1,967,040	00.01%
Rolando R. Cruz	Filipino	1,106,914	00.01%
Eva Policar-Bautista	Filipino	658,123	00.00%
Jose B. Anievas	Filipino	573,750	00.00%
Berck Y. Cheng	Filipino	540,000	00.00%

Name	Citizenship	Shares	% of Ownership
Steven Ivan Lim Yu	Filipino	523,530	00.00%
Josephine Chua Lim	Filipino	457,200	00.00%
RMJ Development Corporation	Filipino	405,000	00.00%
Alvin S. Ison &/or Maria Lea S. Ison	Filipino	310,158	00.00%

C. DIVIDENDS

The following tables show the dividends declared and paid to common shareholders for the years ended December 31, 2018, 2017 and 2016:

Cash Dividends

Year	Date			Per Share		
	Declared	Record	Payable	Before the Stock Dividends	After the Stock Dividends	Total Declared (in millions)
2018	August 28, 2018	September 11, 2018	September 27, 2018	₱0.30	₱0.17	₱2,280.9
2018	March 14, 2018	March 28, 2018	April 10, 2018	0.12	0.07	912.4
2017	March 15, 2017	March 29, 2017	April 11, 2017	0.08	0.04	608.2
2016	March 15, 2016	March 31, 2016	April 12, 2016	0.08	0.04	607.8

Stock Dividends

Year	Date			%	No. of Shares (in millions)	Total Declared (in millions)
	Approved	Record	Issued			
2018	October 9, 2018	October 23, 2018	November 20, 2018	80	7,602.9	₱3,041.2

NAC declares dividends to shareholders of record, which are paid from its unrestricted retained earnings. The Company's dividend policy entitles holders of shares to receive annual cash dividends of up to 30% of the prior year's recurring attributable net income based on the recommendation of its Board of Directors (BOD or Board). Such recommendation will take into consideration factors such as dividend income from subsidiaries, debt service requirements, the implementation of business plans, operating expenses, budgets, funding for new investments and acquisitions, appropriate reserves and working capital, among others. Although the cash dividend policy may be changed by the BOD at any time, the Company's current intention is to pay holders of its shares annual cash dividends at this ratio. Additionally, in the event that new investments, acquisitions or other capital expenditure plans do not materialize, the BOD plans to review the dividend policy and consider increasing the dividend ratio above 30% of the prior year's recurring net income.

NAC's subsidiaries pay dividends subject to the requirements of applicable laws and regulations and availability of unrestricted retained earnings, without any restriction imposed by the terms of contractual agreements. Notwithstanding the foregoing, the declaration and payment of such dividends depends upon the respective subsidiary's results of operations and future projects, earnings, cash flow and financial condition, capital investment requirements and other factors.

Cash dividends are paid to all shareholders at the same time and within thirty (30) calendar days from declaration date. Stock dividends are also issued to all shareholders at the same time but subject to shareholder's approval.

D. RECENT SALES OF UNREGISTERED OR EXEMPT SECURITIES

No unregistered securities were sold in 2018.

Item 6. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL POSITION AND RESULTS OF OPERATIONS

The following discussion and analysis is based on the audited consolidated financial statements as at December 31, 2018 and 2017 and for the years ended December 31, 2018, 2017 and 2016, prepared in conformity with Philippine Financial Reporting Standards (PFRS) and accompanying Notes to the Consolidated Financial Statements and should be read in conjunction with the audited consolidated financial statements.

The Group has not, in the past five (5) years and since its incorporation, revised its financial statements for reasons other than changes in accounting policies.

Summary Financial Information

The Consolidated Financial Statements as at December 31, 2018 and 2017 and for the years ended December 31, 2018, 2017 and 2016 are hereto attached.

The following tables set forth the summary financial information for the three (3) years ended December 31, 2018, 2017 and 2016 and as at December 31, 2018, 2017 and 2016:

The following tables set forth the summary financial information for the three (3) years ended December 31, 2018, 2017 and 2016 and as at December 31, 2018, 2017 and 2016:

Summary Consolidated Statements of Income

	For the Years Ended Dec 31			Horizontal Analysis			
				Increase (Decrease)		Increase (Decrease)	
	2018	2017	2016	2018 vs. 2017	%	2017 vs. 2016	%
	(In thousand pesos)						
Revenues	18,647,672	15,739,296	14,122,667	2,908,376	18%	1,616,629	11%
Costs	(7,501,466)	(6,641,856)	(6,274,001)	859,610	13%	367,855	6%
Operating expenses	(5,106,769)	(3,832,413)	(3,883,352)	1,274,356	33%	(50,939)	-1%
Finance income	354,803	301,967	228,430	52,836	17%	73,537	32%
Finance expenses	(193,992)	(246,615)	(208,218)	(52,623)	-21%	38,397	18%
Equity in net income (losses) of associates	348,168	197,972	(413,702)	150,196	76%	611,674	148%
Other income (charges) - net	(217,001)	72,649	588,796	(289,650)	-399%	(516,147)	-88%
Provision for income tax	(2,108,475)	(1,736,856)	(1,449,478)	371,619	21%	287,378	20%
Net income	4,222,940	3,854,144	2,711,142	368,796	10%	1,143,002	42%
Net income attributable to:							
Equity holders of the parent	3,008,057	2,770,768	1,966,107	237,289	9%	804,661	41%
Non-controlling interests	1,214,883	1,083,376	745,035	131,507	12%	338,341	45%
	4,222,940	3,854,144	2,711,142	368,796	10%	1,143,002	42%

Summary Consolidated Statements of Financial Position

				Horizontal Analysis			
	2018	2017	2016	Increase (Decrease)		Increase (Decrease)	
	(In Thousand Pesos)			2018 vs. 2017	%	2017 vs. 2016	%
Current assets	20,980,750	20,898,438	20,522,768	82,312	0%	375,670	2%
Noncurrent assets	25,051,757	24,838,661	24,828,748	213,096	1%	9,913	0%
Total assets	46,032,507	45,737,099	45,351,516	295,408	1%	385,583	1%
Current liabilities	9,866,090	9,614,431	7,945,838	251,659	3%	1,668,593	21%
Noncurrent liabilities	2,715,587	2,904,480	6,206,025	(188,893)	-7%	(3,301,545)	-53%
Non-controlling interests	3,786,123	3,761,207	4,179,162	24,916	1%	(417,955)	-10%
Equity attributable to equity holders of the Parent	29,664,707	29,456,981	27,020,491	207,726	1%	2,436,490	9%
Total liabilities and equity	46,032,507	45,737,099	45,351,516	295,408	1%	385,583	1%

Summary Consolidated Statements of Cash Flows

	For the Years Ended December 31		
	2018	2017	2016
	(In Thousand Pesos)		
Net cash flows from (used in):			
Operating activities	4,849,894	5,285,838	4,513,391
Investing activities	860,394	(1,468,106)	(1,840,227)
Financing activities	(4,710,750)	(3,807,731)	(346,594)
Net increase in cash and cash equivalents	999,538	10,001	2,326,570
Cash and cash equivalents, beginning	9,635,514	9,647,943	7,073,171
Effect of exchange rate changes in cash and cash equivalents	149,317	(22,430)	248,202
Cash and cash equivalents, end	10,784,369	9,635,514	9,647,943

RESULTS OF OPERATIONS

Calendar year ended December 31, 2018 compared with calendar year ended December 31, 2017

Revenues

NAC's total revenues in 2018 was ₱18,647.7 million, higher by ₱2,908.4 million or 18% compared to ₱15,739.3 million in 2017.

Sale of ore

The increase in shipment volume was mainly the result of higher ore export sales which, combined with an improvement in average realized ore prices and a more favorable Peso to U.S. dollar exchange rate, resulted to an increase in the Group's value of shipments by 20% to ₱17,294.3 million from ₱14,434.8 million.

Of the total volume of ore shipped, direct export of ore, which accounted for 60% of total shipments, rose to 11.54 million WMT from 9.64 million WMT in 2017. On the other hand, ore deliveries to both the Coral Bay and Taganito processing plants, which accounted for the balance, decreased to 7.81 million WMT as compared to 8.06 million WMT in 2017.

In terms of price, the Group realized an average of $5.95 per pound of payable nickel on its shipments of ore to the two (2) HPAL plants in 2018, the pricing of which is linked to the LME. This compares to an average price of $4.67 per pound of payable nickel sold in 2017. With respect to export sales, the Group achieved an average price of $21.53 per WMT compared to $24.42 realized in the prior year. On a combined basis, the average price received for sales of both ore exports and ore deliveries to the two (2) plants in 2018 was $16.86 per WMT, higher than the $16.17 achieved in 2017.

On a per mine basis, the Group's Taganito mine accounted for 46% of total shipments during the year. The mine shipped 4.01 million WMT of saprolite ore and 4.80 million WMT of limonite ore, of which 4.25 million WMT were delivered to the Taganito HPAL plant, or a total combined shipment of 8.81 million WMT. The comparable figures for last year were 3.05 million WMT of saprolite ore and 4.59 million WMT of limonite ore delivered to the Taganito HPAL plant, or a combined shipment of 7.64 million WMT.

The Rio Tuba mine accounted for 30% of total shipments, which consisted of 2.20 million WMT of saprolite ore and 3.55 million WMT of limonite ore delivered to the Coral Bay HPAL plant or a total of 5.75 million WMT. The comparable figures for last year were 2.12 million WMT of saprolite ore, 3.47 million WMT of limonite ore to the Coral Bay HPAL plant and 0.17 million WMT of limonite ore to Chinese customers or a total of 5.76 million WMT.

Shipments from the Group's Hinatuan mine amounted to 2.15 million WMT in 2018 compared to 2.45 million WMT in 2017. On the other hand, the Cagdianao mine shipped 2.64 million WMT in 2018 versus 1.85 million WMT in 2017.

The realized Peso/U.S. dollar exchange rate for ore sales was ₱53.00 in 2018 compared to ₱50.42 in 2017.

Rio Tuba's revenue from sale of limestone slightly went down to ₱447.3 million in 2018 compared to ₱462.3 million in 2017.

Services and Others
The Group's revenue from services and others improved by 3% to ₱650.1 million from ₱630.1 million. Services revenue largely consists of payments made to the Company in consideration for hauling, manpower and other ancillary services that RTN and TMC provide to CBNC and THNC, respectively, and usage fee charged by TMC to THNC for the use of its pier facility.

Sale of Power
Sale of power jumped by 21% to ₱256.0 million from ₱212.2 million since Jobin, a subsidiary of EPI, generated 42,986 megawatt hours (MWh) of energy in 2018 compared to 39,161 MWh in 2017. The increase in its production was mainly due to the completion of the 32.34 MW capacity in March 2017. Moreover, the diesel power plant of NAC in Surigao started to operate the first of the three (3) generator sets in June 2018 and the second one in December 2018; thus, additional revenue from power generation activities were recognized.

Costs
The Group's costs went up by 13% or ₱859.6 million, from ₱6,641.9 million to ₱7,501.5 million.

Cost of Sale of Ore
The Group's cost from sale of ore increased by 12% to ₱6,771.0 million in 2018 compared to ₱6,033.2 million in 2017 due to a hike in diesel prices, which rose by an average of ₱10.00/liter, plus higher consumption during the year, increase in cost of outsourced labor for non-core services and contractor's fee, higher operating and maintenance cost of the conveyors, more equipment rental and increase in materials moved in CMC.

Cost of Services
Cost of services grew by 5% to ₱369.9 million from ₱351.3 million. Costs of services largely consist of the cost of hauling, providing manpower and other ancillary services to CBNC and THNC, plus the costs of maintaining the pier facility used by THNC. The increase in cost of services was attributable mainly to the absorption of manpower from the contractors; increase in share in fixed cost, from 3% to 6%; and hike in fuel prices, which rose by an average of ₱10.00/liter.

Cost of Power Generation
Cost of power generation climbed by 40% to ₱360.6 million from ₱257.3 million mainly on account of Jobin's higher lease on land and building. In addition, the diesel power plant in Surigao started to operate its two (2) generator sets in 2018; thus, fuel consumption of the plant increased during the year.

Operating Expenses
The Group's operating expenses amounted to ₱5,106.8 million in 2018 compared to ₱3,832.4 million in 2017, an increase of ₱1,274.4 million, or 33%.

Shipping and Loading Costs
Shipping and loading costs grew by 10% due to the combined effects of more LCTs chartered earlier during the year, increase in the number of shipments from 203 vessels in 2017 to 236 vessels in 2018 and higher stevedoring and wharfage charges as a result of increase in shipment volume.

Excise Taxes and Royalties
NAC's excise taxes and royalties jumped 63% to ₱1,804.0 million from ₱1,103.7 million. Aside from the impact of the Tax Reform for Acceleration and Inclusion (TRAIN) law which increased the excise tax rate from 2% to 4% effective January 1, 2018, the higher volume and value of shipments triggered the significant jumped in the account.

General and Administrative
General and administrative expenses rose by 41% from ₱863.2 million to ₱1,213.0 million in 2018 and this was driven by higher business taxes paid as a result of a higher income base in 2017 than 2016, payment of ₱8.0 million real property tax for the diesel power plant, higher documentary stamp tax (DST) on shipment remittances and other collections caused by the implementation of the TRAIN law, payment of DST on 80% stock dividends issued by the Parent Company and on other issuances of capital stock of the Group and payment of SEC filing fees for the extension of RTN's corporate life and for the increase in CMC's authorized capital stock. Personnel cost also rose by 51% due to the hiring of new employees (particularly officers/managers), annual increase in employee rates and/or benefits and accrual of the new stock option plan.

Marketing
Marketing costs went up by 45% from ₱96.5 million to ₱140.2 million in 2018 which was driven by the increase in the Group's sales revenue in 2018 compared with 2017. Also, the commission paid by CMC to its claimowner and the marketing fees paid to Mitsubishi Corporation are computed based on a certain percentage of sales revenue.

Finance Income
The Group's finance income went up by 17% to ₱354.8 million from ₱302.0 million which arose mainly from higher interest income from short-term cash placements.

Finance Expenses
NAC's finance expenses dropped by 21% to ₱194.0 million from ₱246.6 million due to the 50% prepayment by EPI of its bank loans in September 2017.

Equity in Net Income of Associates
The Group's equity in net income of THNC and CBNC rose from ₱198.0 million to ₱348.2 million. Profitable operations of its associates were achieved as a result of higher nickel and cobalt LME prices. Cobalt is a by-product of the processing plants of THNC and CBNC. The favorable peso to U.S. dollar exchange rate also contributed to the significant increase in its equity from associates.

Other Income (Charges) - Net
NAC's other income - net went down by 399% to ₱217.0 million charges from ₱72.6 million income. In 2018, the Group prudently set aside ₱514.9 million provision for impairment losses for the uncollected advances made by Jobin to the contractor for the construction of its solar power facility in Subic Bay Freeport Zone. However, this was partially offset by the depreciation of the Philippine peso against the U.S. dollar which led to the increase in foreign exchange gains by ₱282.5 million.

Provision for Income Tax - Net
The Group's net provision for income tax was higher by 21% due to higher taxable income base.

Net Income
As a result of the foregoing, NAC's consolidated net income was ₱4,222.9 million in 2018 compared to ₱3,854.1 million in 2017. Net of non-controlling interests, its net income was ₱3,008.1 million in 2018, which was higher by 9% compared to ₱2,770.8 million in 2017.

Calendar year ended December 31, 2017 compared with calendar year ended December 31, 2016

Revenues
NAC's total revenues were ₱15,739.3 million in 2017 compared to ₱14,122.7 million in 2016, an increase of ₱1,616.6 million, or 11%.

Sale of ore
The Group's value of shipments in 2017 rose by 9% to ₱14,434.8 million from ₱13,233.5 million in 2016. Although shipment volumes were lower compared to 2016, the increase in revenues was due to higher average prices, in part the result of a change in the ore mix to higher value ore, and a more favorable Peso to U.S. dollar exchange rate.

The realized price on 9.64 million WMT of ore sales to Japanese and Chinese customers in 2017 averaged $24.46 per WMT compared to an average of $20.77 per WMT on 11.69 million WMT of ore sales realized in 2016.

With respect to low-grade limonite ore sold to both the Coral Bay and Taganito processing plants, which are linked to LME prices, the Company realized an average of $4.67 per pound of payable nickel on 8.06 million WMT sold in 2017. This compares to an average price of $4.39 per pound of payable nickel on 7.56 million WMT sold in 2016.

On a per mine basis, the Group's Taganito mine accounted for 43% of total shipments in 2017. The mine shipped 3.05 million WMT of saprolite ore and delivered 4.59 million WMT of limonite ore to the Taganito HPAL plant, or a total combined shipment of 7.64 million WMT. The comparable figures for 2016 were 2.34 million WMT of saprolite ore and 5.66 million WMT of limonite ore, including 4.11 million WMT delivered to the Taganito HPAL plant, or a combined shipment of 8.00 million WMT.

The Rio Tuba mine accounted for 33% of total shipments, which consisted of 2.11 million WMT of saprolite ore and 3.65 million WMT of limonite ore, including 3.47 million WMT of ore delivered to the Coral Bay HPAL plant or a total of 5.76 million WMT. The comparable figures for 2016 were 2.27 million WMT, 3.89 million WMT and 3.45 million WMT, respectively, or a total of 6.16 million WMT.

Shipments from the Group's Hinatuan and Cagdianao mines were likewise lower in 2017 due to a late start of shipments as a result of prolonged heavy rains. Total shipments from Hinatuan consist of 2.45 million WMT compared to 3.03 million WMT in 2016, while the Cagdianao mine shipped 1.85 million WMT versus 2.07 million WMT in 2016.

On an aggregate basis, the Group sold 17.70 million WMT of nickel ore from its four (4) operating mines in 2017 at an average price of $16.19 per WMT compared to 19.25 million WMT at an average price of $14.51 per WMT in 2016.

The realized Peso / U.S. dollar exchange rate for ore sales was ₱50.42 in 2017 compared to ₱47.38 in 2016.

RTN's revenue from sale of limestone was ₱462.3 million in 2017 compared to ₱340.9 million in 2016, an increase of ₱121.4 million or 36%. The increase was attributable to the 0.05 million WMT or 10% increase in limestone sales in 2017 compared to 2016.

Services and Others
NAC's revenue from services and others was ₱630.1 million in 2017 compared to ₱530.3 million in 2016, an increase of ₱99.8 million, or 19%. Services revenue largely consists of payments made to the Company in consideration for hauling, manpower and other ancillary services that RTN and TMC provides to CBNC and THNC, respectively, and usage fee charged by TMC to THNC for the use of its pier facility. The increase in revenue from services and others was mainly attributable to the 18% increase in volume handled by TMC.

Sale of Power
In 2017, the Group generated revenue from its power generation activities, primarily from solar power, amounting to ₽212.2 million whereas there was only ₽18.0 million in 2016. The power operations started only in May 2016.

<u>*Costs*</u>
The Group's costs amounted to ₽6,641.9 million in 2017 compared to ₽6,274.0 million in 2016, an increase of ₽367.9 million, or 6%.

Cost of Sale of Ore
The Group's cost of sale of ore was ₽6,033.2 million in 2017 compared to ₽5,907.2 million in 2016, an increase of ₽126.0 million, or 2%. Personnel cost was higher by ₽143.5 million due to annual salary adjustment and new regularized employees; production overhead was higher by ₽330.2 million due to increase in fuel cost and equipment rental; and outside services was higher by ₽81.4 million due to higher materials handled by the contractors. However, the increase was partially offset by the decrease in depreciation, amortization and depletion and long-term stockpile inventory sold by ₽159.5 million and ₽38.2 million, respectively.

Cost of Services
Cost of services was ₽351.3 million in 2017 compared to ₽328.5 million in 2016, an increase of ₽22.8 million, or 7%. Costs of services largely consist of the cost of hauling, providing manpower and other ancillary services to CBNC and THNC, plus the costs of maintaining the pier facility used by THNC. The increase in cost of services was attributable mainly to the 18% increase in volume handled by TMC. Moreover, the fuel cost per liter was higher in 2017 by around 27%.

Cost of Power Generation
Cost of power generation amounted to ₽257.3 million in 2017 versus ₽38.3 million in 2016 since the power generation activities of the Group started only in May 2016.

<u>*Operating Expenses*</u>
The Group's operating expenses amounted to ₽3,832.4 million in 2017 compared to ₽3,883.4 million in 2016, a decrease of ₽51.0 million, or 1%.

Shipping and Loading
Shipping and loading costs were ₱1,769.1 million for the year 2017 compared to ₱1,930.5 million for the year 2016, a decrease of ₱161.4 million due to the 18% decline in the volume of direct ore export. There was also a decrease in contract fees by ₱254.5 million since most of the shipments were handled in-house and long-term LCT charter contracts expired at the end of the first quarter of 2016. The Group has since entered into short-term LCT charters on a per need basis.

Excise Taxes and Royalties
NAC's excise taxes and royalties were ₱1,103.7 million in 2017 compared to ₱1,006.7 million in 2016, an increase of ₱97.0 million, or 10%. The increase in excise taxes and royalties was attributable to higher revenue from sale of nickel ore and limestone in 2017.

General and Administrative
General and administrative expenses were ₱863.2 million for the year 2017 compared to ₱850.3 million for the year 2016, an increase of ₱12.9 million, or 2%. The increase in personnel costs by ₱45.8 million, depreciation by ₱5.1 million, publicity and promotions by ₱5.0 and other general and administrative expenses, which are composed of numerous transactions with minimal amounts, by ₱19.4 million are the main factors for the increase in the account. However, this was partially offset by the decrease in taxes and licenses by ₱25.3 million, rentals, which is mostly equipment rental, by ₱24.9 million and donations by ₱15.7 million.

Marketing
Marketing costs were ₱96.5 million and ₱95.9 million in 2017 and 2016, respectively. The slight increase in marketing cost was also brought by the increase in the Group's sales revenue in 2017 compared with 2016. Also, the commission paid by CMC to its claimowner and the marketing fees paid to Mitsubishi Corporation are based on a certain percentage of sales revenue.

Finance Income
The Group's finance income was ₱302.0 million in 2017 compared to ₱228.4 million in 2016, an increase of ₱73.6 million, or 32%. The increase in finance income was attributable mainly to the increase in interest income from cash and cash equivalents by ₱60.4 million or 82%; and from AFS debt instruments by ₱13.7 million or 11%.

Finance Expenses
NAC's finance expense was ₱246.6 million in 2017 compared with ₱208.2 million in 2016, an increase of ₱38.4 million, or 18%. The movement in its finance expense arose from interest on bank loans of EPI and Jobin, which increased by ₱58.3 million mainly because in 2016 a part of the interest expense incurred by EPI and Jobin were capitalized as borrowing cost. Accretion of interest on provision for mine rehabilitation and decommissioning also increased by ₱7.2 million due to the ₱263.6 million adjustment in the capitalized cost of mine rehabilitation and decommissioning in 2016. The increase was partially offset by ₱33.4 million decrease in guarantee service fee due to reduction in the Group's share in THNC's results of operations from 22.5% to 10% effective July 1, 2016.

Equity in Net Income (Losses) of Associates
The Group's equity in net income (losses) of THNC and CBNC was ₱198.0 million income and ₱413.7 million loss in 2017 and 2016, respectively. The results of operations of THNC and CBNC was net income of US$19.0 million and US$20.3 million, respectively, in 2017 compared to a net loss of US$21.4 million and US$21.8 million, respectively, in 2016. The increase in the associates' results of operations was due to lower operating costs and higher cobalt prices, a by-product of THNC and CBNC plants.

Other Income - net
The Group's other income - net in 2017 were ₱72.6 million compared to ₱588.8 million in 2016, a decrease of P516.2 million or 88%. The movement in the account was attributable to the following: 1) the favorable impact of changes in foreign exchange rate in 2017 was lower by ₱282.9 million compared to 2016; 2) a gain of ₱239.6 million on the sale of the Parent Company's 12.5% interest in THNC to SMM was recognized in 2016; 3) impairment losses on AFS financial assets in 2017 was higher by ₱14.1 million compared to 2016; and 4) decrease in special projects by ₱18.9 million.

Provision for Income Tax - Net
The net provision for income tax was ₱1,736.9 million in 2017 compared to ₱1,449.5 million in 2016, an increase of ₱287.4 million, or 20%. The Group's current provision for income tax in 2017 was ₱1,865.3 million compared to ₱1,441.5 million in 2016, an increase of ₱423.8 million, or 29%, primarily due to the increase in its taxable income in 2017 resulting from higher sales revenue. Its provision for (benefit from) deferred income tax in 2017 was ₱128.5 million benefit compared to ₱8.0 million provision in 2016, a decrease in provision by ₱136.5 million. Movement in provision for (benefit from) deferred income tax arises mainly from the tax impact of lower net unrealized foreign exchange gains in 2017, which resulted to lower provision for deferred income tax by ₱81.5 million as compared in 2016, and the tax impact of the amortization of long-term stockpile inventory sold, which resulted to ₱49.0 million benefit from deferred income tax.

Net Income
As a result of the foregoing, the Group's consolidated net income was ₱3,854.1 million in 2017 compared to ₱2,711.1 million in 2016. Net of non-controlling interests, its net income was ₱2,770.8 million in 2017 compared to ₱1,966.1 million in 2016, an increase of ₱804.7 million, or 41%.

Calendar year ended December 31, 2016 compared with calendar year ended December 31, 2015

Revenues
The Group's total revenues were ₱14,122.7 million in 2016 compared to ₱15,431.6 million in 2015, a decrease of ₱1,308.9 million, or 8%.

Sale of ore
NAC sold an aggregate 19.25 million WMT of nickel ore in 2016, marginally lower compared to 19.67 million WMT of nickel ore in 2015. Its sales in 2016 included 7.34 million WMT of saprolite ore sold to customers in Japan, China and Australia, 4.35 million WMT of limonite ore to customers in China and Australia, and 7.56 million WMT of limonite ore to CBNC and THNC compared to sales of 7.06 million WMT, 4.81 million WMT and 7.80 million WMT, respectively, in 2015.

Lower shipment volume coupled with the overall weakness in nickel ore prices led to a drop in the Group's value of shipments from ₱14,381.5 million in 2015 to ₱13,233.5 million in 2016.

The realized nickel price on 11.69 million WMT of ore sales mainly to Japanese and Chinese customers in 2016 averaged $20.77 per WMT compared to an average of $22.64 per WMT realized on 11.87 million WMT in 2015.

With respect to low-grade limonite ore sold to both the Coral Bay and Taganito processing plants, which are linked to LME prices, the Group realized an average of $4.39 per pound of payable nickel on 7.56 million WMT sold in 2016. This compares to an average price of $5.36 per pound of payable nickel on 7.80 million WMT sold in 2015. The lower volume compared to the prior year was due to remedial work conducted over a one (1) month period at the Taganito HPAL plant, which reduced ore delivery from the Group's Taganito mine. The work was completed in May 2016 and the plant has since resumed operations at full capacity.

On a per mine basis, the Group's Taganito operation accounted for 42% of total shipments. The mine shipped a total of 2.34 million WMT of saprolite ore and 5.66 million WMT of limonite ore, including 4.11 million WMT to the Taganito HPAL plant in 2016. The comparable figures for 2015 were 2.50 million WMT, 5.24 million WMT and 4.43 million WMT, respectively.

The Rio Tuba mine accounted for 32% of total shipments, which consists of 2.27 million WMT of saprolite ore and 3.89 million WMT of limonite ore, including 3.45 million WMT of ore delivered to the Coral Bay HPAL plant in 2016. For 2015, Rio Tuba sold 3.18 million WMT of saprolite ore and 3.37 million WMT of limonite ore to the Coral Bay plant.

The drop in ore shipments was mainly due to a change in the ore grade mix brought about by the impact of lower ore prices.

The prolonged rainy season and resulting sea swells during the first half of 2016 resulted to delays in the start of shipments from the Group's Hinatuan and Cagdianao mines, thereby translating to slightly lower shipment volumes in 2016. Shipments from the Hinatuan mine in 2016 was 3.03 million WMT compared to 3.21 million WMT in 2015, while the Cagdianao mine shipped 2.07 million WMT in 2016 versus 2.17 million WMT in 2015.

RTN's revenue from sale of limestone was ₱340.9 million in 2016 compared to ₱414.1 million in 2015, a decrease of ₱73.2 million or 18%. The decrease was attributable to the 0.11 million WMT or 19% decline in limestone sales in 2016 compared to 2015.

Services and Others
NAC's revenue from services and others was ₱530.3 million in 2016 compared to ₱636.0 million in 2015, a decrease of ₱105.7 million, or 17%. The decline in revenue from services and others was attributable to the 12% and 7% drop in volume handled by TMC and RTN, respectively. In addition,

the 2015 revenue from services of RTN included price adjustments for 2013 and 2014 materials handling deliveries.

Costs

The Group's costs amounted to ₱6,274.0 million in 2016 compared to ₱6,637.2 million in 2015, a decrease of ₱363.2 million, or 5%.

Cost of Sale of Ore

The Group's cost of sale of ore was ₱5,907.2 million in 2016 compared to ₱6,279.2 million in 2015, a decrease of ₱372.0 million, or 6%. Decrease in cost of sale of ore was attributable to the 2% decline in shipment volume caused by unfavorable weather conditions, effects of sea swells during the first half of 2016 and due to a change in the ore grade mix brought about by the impact of lower ore prices. In addition, there was a reduction in cost of fuel due to the significant drop in fuel price. Contractor's fee and materials and supplies withdrawal also decreased because of lesser volume moved and the two (2) conveyors of TMC were already operational, thus contract hauling of ore by truck had been substantially reduced.

Cost of Services

Cost of services was ₱328.5 million in 2016 compared to ₱357.9 million in 2015, a decrease of ₱29.4 million, or 8%. The decline in cost of services was attributable mainly to the 12% and 7% drop in volume handled by TMC and RTN, respectively. Moreover, the fuel cost per liter was 24% lower than last year.

Operating Expenses

Operating expenses amounted to ₱3,883.4 million in 2016 compared to ₱3,851.6 million in 2015, an increase of ₱31.8 million, or 1%.

Shipping and Loading

Shipping and loading costs were ₱1,930.5 million for the year 2016 compared to ₱1,718.9 million for the year 2015, an increase of ₱211.6 million, or 12%. The increase in contract fees by ₱67.3 million, depreciation and amortization by ₱24.8 million and demurrage by ₱146.0 million which were partially offset by the decrease in fuel, oil and lubricants by ₱31.1 million, were the main factors for the movements in the account.

Excise Taxes and Royalties

Excise taxes and royalties were ₱1,006.7 million in 2016 compared to ₱1,089.6 million in 2015, a decrease of ₱82.9 million, or 8%. The decrease in excise taxes and royalties was attributable to the 8% decline in our sale of ore in 2016 compared to 2015.

General and Administrative

General and administrative expenses were ₱850.3 million for the year 2016 compared to ₱912.9 million for the year 2015, a decrease of ₱62.6 million, or 7%. The decrease in taxes and licenses by ₱67.9 million mainly caused the decrease in the account. Lower taxes and licenses in 2016 were attributable to lower fringe benefit tax paid on stock option exercised during the year by ₱3.6 million. Also in 2015, SEC filing fees of ₱15.1 million was paid by the Parent Company for the increase in its authorized capital stock. DST were also paid in 2015 for the acquisition of DMC shares amounting to ₱0.9 million and for the stock dividends issued by the Parent Company in August 2015 and TMC in July 2015 amounting to a total of ₱14.5 million. Deficiency tax assessments were also accrued/paid in 2015 amounting to a total of ₱59.5 million. Local business taxes paid in 2015 were also higher than 2016 since the basis used in 2015 was revenue of 2014, which was significantly higher as compared to previous and current years. Depreciation and amortization also decreased due to full depreciation of Learjet in third quarter of 2015. Donations and contributions were lower by ₱19.0 million due to absence of housing constructions in 2016. The decrease was partially offset by the increase in personnel cost due to salary increases during the year. Also, full year general and administrative expenses of DMC and EPI group were accounted in 2016 compared to around half year expenses last year since these companies were acquired only in third quarter of 2015.

Marketing

Marketing costs were ₱95.9 million and ₱130.2 million in 2016 and 2015, respectively. The decrease in marketing cost was also brought by the decline in our sales revenue in 2016 compared with 2015 and the commission paid by CMC to its claimowner and the marketing fees paid to Mitsubishi Corporation which are based on a certain percentage of sales revenue.

Finance Income

Finance income was ₱228.4 million in 2016 compared to ₱218.9 million in 2015, an increase of ₱9.5 million, or 4%. The increase in finance income was attributable mainly to the increase in interest income from loans and from AFS debt instruments.

Finance Expenses

Finance expense was ₱208.2 million in 2016 compared to ₱179.1 million in 2015, an increase of ₱29.1 million, or 16%. The movement in the Group's finance expense arose from interest on bank loans of EPI, which increased by ₱56.4 million, due to additional loans drawn during the year amounting to ₱1,190.0 million. The increase was partially offset by ₱24.2 million decrease in guarantee service fee as a result of the change in the Parent Company's equity interest in THNC from 22.5% to 10% effective July 1, 2016.

Equity in Net Losses of Associates

NAC's equity in net losses of THNC and CBNC was ₱413.7 million and ₱811.4 million in 2016 and 2015, respectively. The result of THNC's operations in 2016 and 2015 was a net loss of US$21.4 million and US$61.7 million, respectively. On the other hand, the results of CBNC 's operations in 2016 and 2015 was also a net loss of US$21.8 million and US$34.4 million, respectively.

Other Income - net

Other income - net were ₱588.8 million in 2016 and ₱540.8 million in 2015. The movements in the account were attributable to the following: 1) favorable impact of changes in foreign exchange rate since the Group is in net financial asset position, net effect was ₱40.3 million; 2) recognized gain of ₱239.6 million on the sale of the Parent Company's 12.5% interest in THNC to SMM; 3) decrease in impairment losses on input VAT by ₱33.0 million; and 4) increase in special projects by ₱29.2 million. However, the said increases were partially offset by: 1) no business acquisitions happened in 2016, thus no gain on bargain purchase was recognized; 2) decrease in reversal of allowance for impairment losses on inventories by ₱29.1 million; 3) impairment losses on property and equipment amounting to ₱12.8 million was recognized in 2016; and 4) impairment losses on AFS financial assets of ₱119.2 million and trade and other receivables of ₱25.0 million were also recognized in 2016.

Provision for Income Tax - Net

The net provision for income tax was ₱1,449.5 million in 2016 compared to ₱1,667.3 million in 2015, a decrease of ₱217.8 million, or 13%. The Group's current provision for income tax in 2016 was ₱1,441.5 million compared to ₱1,605.7 million in 2015, a decrease of ₱164.2 million, or 10% primarily due to the decrease in its taxable income in 2016 resulting from lower sales revenue. Its provision for deferred income tax in 2016 was ₱8.0 million compared to ₱61.5 million in 2015, a decrease of ₱53.5 million, or 87%. In 2015, the tax impact of movements in net operating loss carry-over amounted to ₱75.0 million provision for deferred income tax as compared in 2016 wherein a benefit of ₱27.5 million was recognized. Provision for deferred income tax on allowance for impairment losses was higher in 2015 due to reversals of allowance for inventory losses and impairment losses on property and equipment amounting to around ₱44.3 million as compared to 2016 wherein the total movement in allowance resulted to a benefit of ₱9.9 million. Benefit from deferred income tax on Executive Stock Option Plan accrual was lower by ₱10.5 million in 2016 compared to 2015. Moreover, the Group recognized a benefit in movement of excess of minimum corporate income tax over regular corporate income tax in 2015 amounting to ₱13.5 million compared to a provision of ₱27.5 million in 2016. The tax impact of unrealized foreign exchange gains in 2016 was higher by ₱37.0 million as compared in 2015.

Net Income
As a result of the foregoing, the Group's consolidated net income was ₱2,711.1 million in 2016 compared to ₱3,044.8 million in 2015. Net of non-controlling interests, its net income was ₱1,966.1 million in 2016 compared to ₱2,035.1 million in 2015, a decrease of ₱69.0 million, or 3%.

FINANCIAL POSITION

Calendar year as at December 31, 2018 and 2017

As at December 31, 2018, NAC's total assets slightly climbed to ₱46,032.5 million from ₱45,737.1 million as of the end of 2017.

Current assets slightly went up to ₱20,980.7 million from ₱20,898.4 million following the increase in its receivables from customers by ₱98.6 million, current portion of loan receivable by ₱52.0 million, inventories by ₱241.9 million, and prepayments and other current assets by ₱235.0 million. However, the increase was partially offset by the disposal of one of its portfolio investments managed by an offshore bank.

Noncurrent assets improved by 1% from ₱24,838.7 million to ₱25,051.8 million propelled by the 20% growth in our investments in THNC and CBNC as a result of improved nickel and cobalt LME prices. However, the increase was partially offset by the application of 50% commission and royalties payable against the loan receivable from East Coast and reduction in the capitalized cost of mine rehabilitation and decommissioning.

Current liabilities rose by 3% to ₱9,866.1 million from ₱9,614.4 million due to the ₱180.6 million increase in income tax payable owing to the higher taxable income in 2018 compared to 2017.

Noncurrent liabilities slid by 6% to ₱2,715.6 million from ₱2,904.5 million due to the reduction in the capitalized cost of mine rehabilitation and decommissioning by ₱128.3 million and reclassification of the current portion of long-term debts amounting to ₱60.6 million.

NAC's equity net of non-controlling interests as at December 31, 2018 slightly improved by 1% to ₱29,664.7 million due to continued profitable operations, recognition of additional gains from valuation of financial assets as a result of PFRS 9 adoption and net of cash dividends paid.

Calendar year as at December 31, 2017 and 2016

Total assets amounted to ₱45,737.1 million in 2017 compared to ₱45,351.5 million in 2016.

Current assets increased to ₱20,898.4 million from ₱20,522.8 million mainly because of net acquisitions of AFS financial assets amounting to ₱153.0 million and increase in inventories by ₱291.6 million.

The increase in noncurrent assets from ₱24,828.7 million to ₱24,838.7 million was attributable to the additional project development cost incurred of ₱90.0 million and equity take up of net income of associates in 2017 amounting to ₱198.0 million. However, the increase was partially offset by the negative adjustment, amounting to ₱69.8 million, in the capitalized cost of mine rehabilitation and decommissioning under property and equipment and reclassification to current assets of long-term stockpile inventory amounting to ₱212.0 million.

The increase in total current liabilities from ₱7,945.8 million to ₱9,614.4 million pertains to the remaining ₱1,500.0 million loan of EPI from Security Bank Corporation (SBC) which is due for payment in September 2018. In 2016, the said loan was classified under noncurrent liabilities.

In 2017, EPI paid 50% of its outstanding loan from SBC and the remaining balance of ₱1,500.0 million was reclassified under current liabilities, thus total noncurrent liabilities decreased from ₱6,206.0 million to ₱2,904.5 million.

The Group's equity net of non-controlling interests as at December 31, 2017 increased to ₱29,457.0 million from ₱27,020.5 million as of year-end 2016, due to net difference of cash dividends paid and net earnings in 2017.

CASH FLOWS

Calendar years ended December 31, 2018, 2017 and 2016

Net cash flows from operating activities in 2018 amounted to ₱4,849.9 million compared to ₱5,285.8 million in 2017 and ₱4,513.4 million in 2016. In 2018, proceeds from sale of ore were higher than 2017 due to increase in shipment volume and improved average realized ore prices. In 2017, proceeds from sale of ore were also higher compared to 2016 because of higher ore prices as a result of change in the ore mix to the higher value ore. However, costs and operating expenses also went up due to inflation, increase in various taxes as a result of the implementation of the TRAIN law, and other factors affecting operations.

Cash from or used in investment activities arose from net acquisitions and/or disposals of property and equipment and financial assets pertaining to debt and equity securities, additions to geothermal exploration and evaluation assets, and receipt of interest. In 2018, the Parent Company received net proceeds of ₱1,581.2 million following the disposal of one of its investment portfolio managed by a foreign bank and the Group's spending for capital expenditures were notably lower compared to the two (2) previous years. As a result, in 2018 the Group has cash inflow from investments of ₱860.4 million. In 2017 and 2016, the Parent Company's net acquisitions of debt and equity securities amounted to ₱265.4 million and ₱344.8 million, respectively, and the net acquisitions of property and equipment was ₱1,474.3 million and ₱3,337.0 million, respectively. In 2017 and 2016, the Group used ₱1,468.1 million and ₱1,840.2 million for investments.

Cash used in financing activities were spent mainly for payments of cash dividends, short-term and long-term debts plus the related interest which amounted to a total of ₱6,170.1 million, ₱3,798.5 million and ₱1,766.5 million in 2018, 2017 and 2016, respectively. However, these payments were partially offset by the proceeds from bank loans amounting to ₱1,488.9 million in 2018 and ₱1,182.8 million in 2016.

As at December 31, 2018 and 2017, cash and cash equivalents amounted to ₱10,784.4 million and ₱9,635.5 million, respectively.

TOP FIVE KEY PERFORMANCE INDICATORS

1) SALES VOLUME

The volume of saprolite ore that NAC sells largely depends on the grade of saprolite ore that it mines. The volume of limonite ore that it sells to customers in China largely depends on the demand for NPI and carbon steel in China. PAMCO purchases high-grade saprolite ore that the Group is able to extract and ship at any given time. With respect to low-grade saprolite and limonite ore, in periods when the Group is able to extract more ore than it is able to ship, it generally continues its mining operations and stockpiles such ore for sale when demand improves or when prices rise to more attractive levels. As stated above, the volume of the Group's low-grade saprolite ore and limonite ore sales to Chinese customers is roughly correlated with the

LME nickel price, with volume increasing as nickel prices rise. In addition to sales of nickel ore to PAMCO and customers in China, the Group sells limonite ore from its Rio Tuba mine to the Coral Bay HPAL facility, in which we have a 10% equity interest, and from our Taganito mine to the Taganito HPAL facility, in which the Parent Company also has a 10% equity interest. CBNC purchases an amount of limonite ore from the Group sufficient to meet its ore requirements. The annual capacity of its Coral Bay HPAL facility was originally 10,000 tonnes of contained nickel and was expanded to 20,000 tonnes of contained nickel in the second half of 2009, resulting in a higher volume of limonite ore sales from RTN. In 2010, the Coral Bay HPAL facility was able to attain an annual capacity of 24,000 tonnes as a result of the facility's expansion in 2009 which became fully operational in 2010. The Taganito HPAL facility has an annual capacity of 30,000 tonnes of mixed nickel-cobalt sulfide over an estimated thirty (30) year project life.

Type and Grade of Ore that NAC Mines

NAC realizes higher sales prices for saprolite ore than for limonite ore. Accordingly, the type and grade (which is a factor of nickel content) of the ore that the Group mines affects its revenues from year to year. The quantity of saprolite ore that it mines annually depends on the customer demand and the availability of such ore at its mine sites. The mix between high-and low-grade saprolite ore at the Group's mine sites coupled with its long-term mining plan determines the quantities of each that it extracts on an annual basis. The quantity of limonite ore that it mines on an annual basis depends on the amount of such ore that needs to be removed in order to extract the saprolite ore, as well as market demand.

In 2018 and 2017, NAC sold an aggregate of 19.35 million WMT and 17.70 million WMT, respectively.

2) TOTAL COST PER VOLUME SOLD

The total cost per volume of ore sold provides a cost profile for each operating mine and allows the Group to measure and compare operating performance as well as changes in per unit costs from year to year.

The total cost includes cost of sale of ore, shipping and loading costs, excise taxes and royalties, marketing and general and administrative expenses incurred by the Group.

The average total cost per volume sold in 2018 is ₱595.20 per WMT on the basis of aggregate cash costs of ₱11,516.5 million and a total sales volume of 19.35 million WMT of ore. This compares to ₱535.83 per WMT in 2017 on the basis of aggregate cash costs of ₱9,485.6 million and a total sales volume of 17.70 million WMT of ore.

3) ATTRIBUTABLE NET INCOME

Attributable net income represents the portion of consolidated profit or loss for the year, net of income taxes, which is attributable to the Parent Company. This is a relevant and transparent metric of the information contained in the consolidated financial statements. The net income attributable to equity holders of the Parent Company is ₱3,008.1 million in 2018 compared to ₱2,770.8 million in 2017.

4) NUMBER OF HECTARES REHABILITATED/REFORESTED

NAC adheres to the principles and practices of sustainable development. The Group is committed to complying and following environmental regulations by implementing best practices in managing environmental impacts of its operations. To manage environmental impacts, the Parent Company's subsidiaries have an EPEP. This refers to the comprehensive and strategic environmental management plan for the life of mining projects to achieve the environmental management objectives, criteria and commitments including protection and rehabilitation of the affected environment. A major component under the Group's EPEP is the rehabilitation and reforestation of the areas affected by its mining operations. NAC also participates in the government's National Greening Program by planting trees and/or donating seedlings outside of its mining properties. In 2018 and 2017, the Group has rehabilitated and reforested a total of 293 hectares and 217 hectares, respectively, with corresponding number of trees planted of about 632,837 and 429,360, respectively.

5) FREQUENCY RATE

Health and safety are integral parts of the Group's personnel policies. Its comprehensive safety program is designed to minimize risks to health arising out of work activities and to assure compliance with occupational health and safety standards and rules and regulations that apply to its operations. The Group measures its safety effectiveness through the Frequency Rate which is the ratio of lost-time accidents to total man-hours worked for the year. In 2018 and 2017, NAC's frequency rate is 0.13 and 0.04, respectively.

OFF-BALANCE SHEET ARRANGEMENTS

Under the Suretyship Agreement executed by and between the Parent Company and SBC on August 4, 2015, the Parent Company, solidarily with EPI, guarantees and warrants to SBC, its assigns and successors-in-interest, prompt and full payment and performance of EPI's obligations to SBC (see Note 15 to the Consolidated Financial Statements).

Other than the Suretyship Agreement mentioned above, the Parent Company has not entered into any off-balance sheet transactions or obligations (including contingent obligations), or other relationships with unconsolidated entities or other persons.

Item 7. FINANCIAL STATEMENTS

The audited financial statements are presented in Part V, Exhibits and Schedules.

Item 8. INFORMATION ON INDEPENDENT ACCOUNTANTS AND OTHER RELATED MATTERS

NAC's consolidated financial statements have been audited by SyCip Gorres Velayo & Co (SGV & Co) (a member practice of Ernst & Young Global Limited), independent auditors, as stated in their reports appearing herein.

Mr. Jaime F. del Rosario is the Group's current audit partner. NAC has not had any disagreements on accounting and financial disclosures with its current external auditors for the same periods or any subsequent interim period.

Audit and Audit-Related Fees

For the years 2018, 2017 and 2016, SGV & Co. was engaged primarily to express an opinion on the financial statements of the Parent Company and its subsidiaries.

Non-Audit Services Fees

Non-audit services fees pertain to fees paid to SGV & Co. for the enterprise risk management, tax advisory, transfer pricing study, seminar fees and support services for the adoption of PFRS 9 and 15.

The following table sets out the aggregate fees incurred in 2018 and 2017 for professional services rendered by SGV & Co.:

	2018	2017
	(In Thousands)	
Audit and Audit-Related Services	₱15,169	₱14,207
Non-Audit Services	4,515	1,713
Total	₱19,684	₱15,920

Audit Committee's Approval of Policies and Procedures

Prior to the commencement of the year-end audit work, SGV & Co. present their program and schedule to the Company's Audit Committee, which include discussion of issues and concerns regarding the audit work to be done. At the completion of the audit works, the Group's audited financial statements for the year are likewise presented by SGV & Co. to the Audit Committee for committee approval and endorsement to the BOD for final approval. The Audit Committee pre-approve the terms of the annual audit services engagement. They also approve, if necessary, any changes in terms resulting from changes in audit scope.

PART III – CONTROL AND COMPENSATION INFORMATION

Item 9. DIRECTORS AND EXECUTIVE OFFICERS OF THE ISSUER

A. LIST OF DIRECTORS, EXECUTIVE OFFICERS AND COMMITTEES OF THE ISSUER

The BOD is principally responsible for the Company's overall direction and governance. The Company's Articles of Incorporation provide for nine (9) members of the BOD, who shall be elected by the stockholders. At present, two (2) of the Company's nine (9) directors are independent directors. The BOD holds office for one (1) year and until their successors are elected and qualified in accordance with the by-laws.

DIRECTORS

The following are the present directors of the Company:

Name	Age	Citizenship	Position	Date First Elected	Date Last Elected	No. of Years served as Director
Manuel B. Zamora, Jr.	80	Philippine National	Non-Executive Director, Chairman Emeritus	July 11, 2008	May 28, 2018	10 years and 5 months
Gerard H. Brimo	67	Philippine National	Executive Director, Chairman and Chief Executive Officer (CEO)	August 1, 2009	May 28, 2018	8 years and 4 months
Philip T. Ang	77	Philippine National	Executive Director and Vice Chairman	July 11, 2008	May 28, 2018	10 years and 5 months
Martin Antonio G. Zamora	46	Philippine National	Executive Director and President	July 30, 2013	May 28, 2018	5 years and 5 months
Luis J. L. Virata	65	Philippine National	Non-Executive Director	July 11, 2008	May 28, 2018	10 years and 5 months
Takanori Fujimura[1]	75	Japanese National	Non-Executive Director	September 20, 2010	May 28, 2018	7 years and 11 months
Toru Higo	57	Japanese National	Non-Executive Director	November 6, 2017	May 28, 2018	1 year and 1 month
Masahiro Kamiya[2]	59	Japanese National	Non-Executive Director	August 7, 2018	August 7, 2018	4 months and 24 days
Fulgencio S. Factoran, Jr.	75	Philippine National	Independent Director	September 20, 2010	May 28, 2018	8 years and 3 months
Frederick Y. Dy	64	Philippine National	Independent Director	September 24, 2010	May 28, 2018	8 years and 3 months

[1] *Mr. Takanori Fujimura resigned as Director effective August 6, 2018 in view of his retirement from SMMPH.*

[2] *Mr. Masahiro Kamiya was elected as Director by the BOD on August 7, 2018 to fill up the vacancy resulting from the resignation of Mr. Fujimura.*

Mr. Philip T. Ang is a majority shareholder of Ni Capital Corporation.

Certain information on the business and working experience of the Company's Directors and Executive Officers is set out below:

MANUEL B. ZAMORA, JR. is the Chairman Emeritus, a Director and a founder of the Company. He is the Chairman of the Corporate Governance and Nominations Committees of the Board. He is a Director of RTN, TMC, HMC, CMC, DMC, CExCI, Newminco, EPI and CBNC. He is also a director of a number of other companies in the Philippines, including CLSA Exchange Capital Inc. (CLSA). He once served as Chairman of the Chamber of Mines of the Philippines. Mr. Zamora is a lawyer and a member of the Integrated Bar of the Philippines. He received his Bachelor of Science degree from the University of the Philippines. He placed third in the 1961 Bar Examinations after receiving his Bachelor of Laws degree from the University of the Philippines.

GERARD H. BRIMO is the Chairman and CEO of the Company since August 7, 2018. He is a member of the Corporate Governance Committee. He is also the Chairman of the Board of RTN, TMC, CMC, HMC, DMC, CExCI, and Newminco, and a Director of EPI and its subsidiaries. Prior to his career in mining, he worked for Citibank for a period of eight (8) years, resigning as Vice President in the bank's Capital Markets Group in Hong Kong prior to joining Philex Mining Corporation as Vice President -Finance. Mr. Brimo served as Chairman and CEO of Philex Mining Corporation from 1994 until his retirement in December 2003. He served as President of the Chamber of Mines of the Philippines from 1993 to 1995, as Chairman from 1995 to 2003. He was again elected Chairman in 2017, a position he currently holds. He received his Bachelor of Science degree in Business Administration from Manhattan College, USA and his Master of Business Management degree from the Asian Institute of Management.

PHILIP T. ANG is the Vice Chairman of the Company. He is the Vice Chairman for TMC and a Director of RTN, CMC, HMC, DMC, CExCI, Newminco and EPI. He is an Independent Director of SBC. He was previously involved in the textile business as Chairman and President of Solid Mills, Inc. and Unisol Industries and Manufacturing Corp., and as a Director of Investors Assurance Corp. and International Garments Corp. He received his Bachelor of Science in Business Administration degree from Oregon State University and his Master of Business Administration degree from the University of Denver, USA.

MARTIN ANTONIO G. ZAMORA is the President of the Company and of all the mining subsidiaries of the Company. He is the Chairman of the Board and CEO of EPI and the Chairman of the Board of EPI's subsidiaries. Before joining NAC in 2007, Mr. Zamora was the Philippine Country Manager and a Director of UPC Renewables, a global developer, owner and operator of wind farms and solar facilities. Prior to that, he worked for ten (10) years for finance and investment banking firms such as CLSA, Robert Fleming & Co. (UK), Jardine Fleming, and SGV & Co. He received his Bachelor of Science in Management from Ateneo de Manila University (Philippines), his MBA from London Business School (UK), and his Masters in Organizational Psychology from INSEAD.

LUIS J. L. VIRATA is a Director of the Company. He is the Chairman and CEO of CLSA. Mr. Virata is also the Chairman of Cavitex Holdings, Inc., President of Exchange Properties Resources Corp., founder and a Director of Amber Kinetics, Inc. Mr. Virata is also a Director of Benguet Corporation. He is also a Founder, Trustee of Asia Society Philippine Foundation and the Metropolitan Museum of Manila and is a member of the Huntsman Foundation. Mr. Virata previously held positions with Dillon, Read and Co., Crocker National Bank, Bankers Trust Company, Philippine Airlines, NSC Properties, Inc., the Philippine Stock Exchange, the Makati Stock Exchange, and National Steel Corp. He received his Bachelor of Arts and Master of Arts degrees in Economics from Trinity College, Cambridge University and his Master of Business Administration degree from the Wharton School of the University of Pennsylvania.

TAKANORI FUJIMURA was a Director of the Company until August 6, 2018. While he served as Director, he chaired the Related Party Transactions Committee and was a member of the Audit Committee of the Board. Mr. Fujimura was also a Director of the following subsidiaries of SMM: SMMPH, THNC and CBNC. Prior to joining SMM in 2002, Mr. Fujimura was the Director and General Manager of the Overseas Business Department of PAMCO. He began his professional career in PAMCO in 1970, and was once assigned as the General Manager of PAMCO's New Caledonia and Manila offices. As PAMCO's representative in the Philippines, he was seconded as Vice President of RTN and TMC. He received his Bachelor of Science degree in Mining Engineering from Waseda University, Japan.

TORU HIGO is a Director of the Company and is a Qualified Executive of SMM and the President of SMMPH, CBNC and THNC. He began his career with SMM in 1986 and occupied the following positions prior to assuming his current post: Company Secretary of SMM Oceania, General Manager of the Nickel Sales and Raw Materials Department and General Manager of Copper and Precious Metals Raw Materials Department. He received his Bachelor of Science degree in Mathematics from Rikkyo University in Tokyo, Japan.

MASAHIRO KAMIYA was elected as a Director of the Company on August 7, 2018. He is an Executive Officer and the Senior Deputy General Manager of Non-Ferrous Metals Division of SMM since June 2017. Mr. Kamiya has held various positions within the SMM Group since he joined the same in April 1982. He was the President and Representative Director of Hyuga Smelting Co. Ltd., a subsidiary of SMM, from April 2016 until his recent resignation therefrom, and General Manager, Administration Department of the Taganito Project Division from September 2010 until March 2016. Prior thereto, he was the Executive Vice President of CBNC from February 2007 to August 2010, and Manager of the Ferro Nickel Section, Nickel Sales & Raw Materials Department of SMM from January 2002 to January 2007. He was also the General Manager of Sumitomo Metal Mining Oceania Pty. Ltd. from April 1998 to December 2001. Mr. Kamiya obtained his Bachelor of Arts in Political Science and Economics from Waseda University in Tokyo, Japan.

FULGENCIO S. FACTORAN, JR. is an independent director of the Company and is the Chairman of the Board Risk Oversight Committee and a member of the Related Party Transactions and Nominations Committees of the Board. Mr. Factoran is also the Chairman of GAIA South, Inc. and Agility, Inc., and an independent director of Atlas Consolidated Mining and Development Corporation. He was previously a Director of Central Azucarera de Tarlac and Business Certification International, Ltd. He previously held several government positions, such as Trustee of the Government Service and Insurance System, Secretary of the DENR, Chairman of the National Electrification Administration, Chairman of the Philippine Charity Sweepstakes, Director of the National Development Corp., Trustee of the Development Academy of the Philippines and Deputy Executive Secretary under the Corazon Aquino administration. He received his Bachelor of Arts in Humanities and Bachelor of Laws degrees, the latter as Valedictorian, from the University of the Philippines and his Master of Laws degree from Harvard Law School, USA.

FREDERICK Y. DY is an Independent Director of the Company, Chairman of the Audit Committee and a Member of the Related Party Transactions, Board Risk Oversight and Corporate Governance Committees of the Board. Mr. Dy is also the Chairman Emeritus of SBC, the Chairman of City Industrial Corporation, the Chairman of St. Luke’s Medical Center, a Trustee of St. Luke’s College of Medicine, and a Director of Ponderosa Leather Goods Company, Inc. He received his Bachelor of Science degree in Industrial Engineering from Cornell University, USA.

EXECUTIVE OFFICERS

The Company's Executive Officers, together with its Executive Directors, are responsible for its day-to-day management and operations. The following table sets forth information regarding the Company's Executive Officers.

Name	Age	Citizenship	Position
Jose B. Anievas	74	Philippine National	Senior Vice President - Chief Operating Officer/Chief Risk Officer
Emmanuel L. Samson	59	Philippine National	Senior Vice President - Chief Financial Officer
Raymundo B. Ferrer	62	Philippine National	Senior Vice President for Security
Rolando R. Cruz	58	Philippine National	Vice President for Project Development and Research
Augusto C. Villaluna	69	Philippine National	Vice President - Operations
Aloysius C. Diaz	70	Philippine National	Vice President - Operations
Rommel L. Cruz	55	Philippine National	Vice President - Operations[1]
Georgina Carolina Y. Martinez	52	Philippine National	Vice President for Legal and Special Projects/Assistant Corporate Secretary/Compliance Officer
Koichi S. Ishihara	45	Japanese National	Vice President for Marketing & Purchasing
Jose Bayani D. Baylon	56	Philippine National	Vice President for Corporate Communications
Ma. Angela G. Villamor	53	Philippine National	Vice President for Internal Audit/Chief Audit Executive
Gerardo Ignacio B. Ongkingco	60	Philippine National	Vice President - Human Resources/ Data Protection Officer
Michio Iwai	68	Japanese National	Vice President
Barbara Anne C. Migallos	64	Philippine National	Corporate Secretary

Information on the business and working experience of our Executive Officers is set out below:

JOSE B. ANIEVAS is the Senior Vice President for Operations, Chief Operating Officer and Chief Risk Officer of the Company. He started working with TMC in 2009 as its Resident Mine Manager and later as its Vice President for Operations. He has worked with the mining industry for more than fifty (50) years, thirty-seven (37) years with Philex Mining Corporation and Philex Gold Philippines as its Vice President for Operations until his retirement in December 2002, four (4) years as a freelance mining engineer, two (2) years with Carrascal Nickel Corporation, five (5) years with TMC and currently with NAC. He also served the Government in the Professional Regulation Commission as a member of the Board of Examiners for Mining Engineering in 1997-2000 and was President of the Philippine Society of Mining Engineers in the Caraga region in 2010-2012. He is a Fellow of the Society of Mining Engineers and a Competent Person in the Copper and Gold operations. Mr. Anievas earned his Bachelor of Science in Mining Engineering from Mapua Institute of Technology and subsequently passed the Board Exams in 1967. He also received a certificate for completing the Management Development Program from the Asian Institute of Management in 1978.

[1]*Effective October 8, 2018.*

EMMANUEL L. SAMSON is the Senior Vice President and Chief Financial Officer of the Company and is responsible for the finance and treasury functions of the NAC Group. He is a member of the BOD of EPI and is also its Treasurer. Prior to joining NAC in 2006, Mr. Samson was Senior Country Officer for Credit Agricole Indosuez in the Philippines. Mr. Samson has more than a decade of experience in the Philippine equities markets having held positions with W.I. Carr Indosuez Securities (Phils.) Inc., Amon Securities Corporation and Rizal Commercial Banking Corporation.

RAYMUNDO B. FERRER is the Senior Vice President for Security. He joined the Company in May 2012. He is a retired Lieutenant General from the Armed Forces of the Philippines. Some of his previous assignments prior to his compulsory retirement on January 23, 2012 was Commander of Western Mindanao Command, Commander of Eastern Mindanao Command, Commander of the 6th Infantry Division, Philippine Army operating in Central Mindanao; Commander of the 1st Infantry Division, Philippine Army operating in Zamboanga Peninsula; and Commander of 103rd Infantry Brigade in Basilan Province.

ROLANDO R. CRUZ is the Vice President for Project Development and Research of the Company and is responsible for the assessment and development of projects, concepts and plans for the growth and economic sustainability of the business. Engr. Cruz is a licensed mining engineer in the Philippines with over twenty five (25) years of professional experience in both mining operations and project development in gold, copper, chromite, concrete aggregates, nickel, and oil sands deposits using the open pit and underground bulk mining methods. He has held various positions with firms such as Albian Sands Energy, Inc. (Canada), Berong Nickel Corporation, Concrete Aggregates Corporation, Philex Mining Corporation, and Benguet Corporation.

AUGUSTO C. VILLALUNA is the Vice President for Operations responsible for CExCI, Newminco and EPI. Engr. Villaluna is a licensed Mining Engineer/Fellow with over forty two (42) years' experience in both underground and surface mining. He last served as Executive Vice President of Lepanto Consolidated Mining Company and Senior Vice President and member of the BOD of Manila Mining Corporation. He received his Bachelor of Science degree in Mining Engineering from Mapua Institute of Technology. He is a director of the Philippine Mine Safety and Environment Association. He is a Competent Person under the PMRC, as well as, a registered APEC and ASEAN Engineer. Engr. Villaluna sits as member of the Board of Mining Engineering of the Professional Regulation Commission.

ALOYSIUS C. DIAZ is the Vice President for Operations responsible for the Taganito and Cagdianao mines of the Company. Engr. Diaz is a Licensed Mining Engineer and Geologist with forty five (45) years' experience in surface mining and exploration, six (6) years of which were spent in a surface copper mine in Africa and coal mines in Indonesia. He started working with TMC as Resident Mine Manager in 2015. Prior to joining TMC, he worked as Project Director of a gold mining company charged with the rehabilitation of an old underground gold mine. He was a Chief Operating Officer of a large mining contractor with a nickel mining operation in Northern Mindanao. He is a Competent Person for Open Pit Copper and Coal. He is the President of the Caraga Chamber of Mines. Mr. Diaz received his Bachelor of Science in Mining Engineering and Bachelor of Science in Geology degrees from Adamson University.

ROMMEL L. CRUZ is the Vice President for Operations responsible for the Rio Tuba and Hinatuan mines of the Company since October 8, 2018. Engr. Cruz was a key member of the core team of mining professionals of PT Adaro Indonesia (Adaro) who grew the company to become Indonesia's largest single pit coal mine from 1991 to 2013. Thereafter, he was assigned to other companies within the Adaro Group, first, as Director of Operations of PT Rahman Abdjaya from 2014 to 2016, then as Senior Technical Advisor to the Director of Operations of PT Septaindra Sejati from 2016 to 2017. Prior to his stint in the Adaro Group, he served as Senior Geodetic Engineer of Semirara Coal Corporation from 1989 to 1991. Mr. Cruz obtained his Bachelor of Science degree in Geodetic Engineering from the University of the Philippines.

GEORGINA CAROLINA Y. MARTINEZ, is the Vice President for Legal and Special Projects and the Assistant Corporate Secretary of the Company, being primarily responsible for the Group's legal matters, including claims and tenements. She is likewise the Chief Compliance Officer of the Company, the Assistant Corporate Secretary of EPI, CExCI and Newminco and the Corporate Secretary of EPI's subsidiaries. Prior to her appointment with the Company, Ms. Martinez was the Senior Vice President for Legal/Human Resources/Administration of EPI. She obtained her Juris Doctor from Ateneo de Manila University and is a member of the Philippine Bar. Ms. Martinez has over twenty five (25) years' experience in the field of commercial and corporate law.

KOICHI S. ISHIHARA is the Vice President for Marketing and Purchasing. Prior to joining NAC in 2011, he was a Manager and Philippine Representative of PAMCO handling nickel and stainless market analysis and update in Asian countries. He has also supported establishing a Hydro Metallurgical Processing Plant.

JOSE BAYANI D. BAYLON is the Vice President for Corporate Communications. He joined the Company in June 2012. He has two (2) decades of experience in the field of corporate communications and public affairs. Prior to joining NAC, he was Vice President and Director for Public Affairs and Communications of The Coca-Cola Export Corporation for fourteen (14) years, and, prior to that, was executive assistant and speechwriter to Mr. Enrique Zobel at E. Zobel Inc. for nine (9) years. He was a public affairs commentator at Radio Station DWWW 774 KhZ from 2001-2011 and has been contributing opinion pieces to the newspaper Malaya Business Insight since 2001.

MA. ANGELA G. VILLAMOR is the Vice President for Internal Audit and Chief Audit Executive. She is responsible for reviewing the Company's organizational and operational controls, risk management policies, and governance. Prior to joining NAC in 2011, she was a Senior Director in the Assurance Division of SGV & Co. She also worked as Senior Manager in KPMG UAE.

GERARDO IGNACIO B. ONGKINGCO is the Vice President for Human Resources. His career in Human Resources started in the early 1980's and has been enriched with exposure to various industries; government, manufacturing, agriculture and hospitality. He was past President of the Philippine Quality and Productivity Movement, Davao Chapter. He earned his Bachelor's Degree in Community Development as well as his Masters in Industrial Relations from the University of the Philippines.

MICHIO IWAI, is a Vice President of the Company was a Vice President of TMC, a wholly-owned subsidiary of the Company, until April 2018. He began his career in PAMCO as a Geologist in its Engineering Department. Thereafter, he served as the Deputy Treasurer of TMC, before becoming the Deputy General Manager -Mineral Resources of PAMCO. He obtained his Bachelor of Science Degree in Earth Science from Waseda University in Japan and his Master's Degree from the Science and Engineering Division of the same university.

BARBARA ANNE C. MIGALLOS is the Corporate Secretary of the Company and its subsidiaries, EPI and CExCI. She is the Managing Partner of Migallos and Luna Law Offices, and was a Senior Partner of Roco Kapunan Migallos and Luna from 1986 to 2006. A practicing lawyer since 1980, Ms. Migallos focuses principally on corporate law, mergers and acquisitions, and securities law. She is a Director and Corporate Secretary of Philex Mining Corporation and a Director of Mabuhay Vinyl Corporation, both publicly listed companies. She is also Corporate Secretary of PXP Energy Corporation and of Alliance Select Foods International, Inc. both also listed companies. She is a Director of Philippine Resins Industries, Inc. and other corporations, and is Corporate Secretary of Eastern Telecommunications Philippines, Inc. Ms. Migallos is a professorial lecturer at the DLSU College of Law and chairs its Mercantile Law and Taxation Department.

No director or senior officer of the Company is or has been in the past two (2) years, a former employee or partner of the current external auditor.

Also, the Company discloses the transactions of its directors and officers as required by applicable laws and regulations.

B. SIGNIFICANT EMPLOYEES/EXECUTIVE OFFICERS

No single person is expected to make a significant contribution to the business since the Company considers the collective efforts of all its employees as instrumental to the overall success of the Company's performance.

C. FAMILY RELATIONSHIP

Aside from Mr. Martin Antonio G. Zamora being the son of Mr. Manuel B. Zamora, Jr., and Mr. Ryan Rene C. Jornada being a third civil degree relative by affinity of Mr. Manuel B. Zamora, Jr. and a fourth civil degree relative by affinity of Mr. Martin Antonio G. Zamora, none of the Company's Executive Officers are related to each other or to its Directors and substantial Shareholders.

D. INVOLVEMENT IN CERTAIN LEGAL PROCEEDINGS

None of the members of the Company's Board, nor any of its executive officers, has been or is involved in any criminal, bankruptcy or insolvency investigations or proceedings for the past five (5) years and up to the date of this report. None of the members of the Board, nor any executive officer, have been convicted by final judgment of any offense punishable by the laws of the Republic of the Philippines or of any other nation or country. None of the members of the Board nor any executive officers have been or are subject to any order, judgment, or decree, not subsequently reversed, suspended or vacated, of any court of competent jurisdiction, domestic or foreign, permanently or temporarily enjoining, barring, suspending or otherwise limiting his involvement in any type of business, securities, commodities or banking activities. None of the members of the Board nor any executive officer have been found by a domestic or foreign court of competent jurisdiction (in a civil action), the Commission or comparable foreign body, or a domestic or foreign Exchange or other organized trading market or self-regulatory organization, to have violated a securities or commodities law or regulation.

Item 10. EXECUTIVE COMPENSATION

The table set out below identifies the Corporation's CEO and four (4) most highly compensated executive officers (the "named executive officers") and summarizes their aggregate compensation in 2017 and 2018 and their estimated compensation for 2019. The amounts set forth in the table have been prepared based on what the Company paid for the compensation of its executive officers for the years indicated and what we expect to pay on the ensuing year.

	December 31, 2017			December 31, 2018			December 31, 2019 (Estimated)		
	Salary	Bonus	Total	Salary	Bonus	Total	Salary	Bonus	Total
	(In Php Thousands)								
Named executive officers [1]	₱33,967	₱27,766	₱61,733	₱39,539	₱33,308	₱72,847	₱43,613	₱26,012	₱69,625
All other officers and directors as a group unnamed	33,058	12,656	45,714	41,761	21,050	62,811	50,793	16,795	67,588

[1]The named executive officers are: Gerard H. Brimo (Chairman and CEO), Martin Antonio G. Zamora (President), Emmanuel L. Samson (Chief Financial Officer), Jose B. Anievas (Chief Operating Officer), Rolando R. Cruz (Vice President for Project Development and Research).

COMPENSATION OF DIRECTORS

Each of the directors of the Parent Company is entitled to a director's fee for each meeting attended. In addition, the directors who serve in the committees of the BOD are each entitled to a fee for each committee meeting attended.

The table below shows the compensation of the Company's Directors for each meeting:

Type	Board Meeting	Audit Committee Meeting	Board Risk Oversight	Related Party	Other Meetings	Stock Option
Executive Director	₱10,000	₱-	₱10,000	₱-	₱10,000	Yes
Non-executive Director	10,000	10,000	-	10,000	10,000	Yes, Except for the Non-Filipino Directors
Independent Director	150,000	50,000/ 25,000	50,000/ 25,000	25,000	10,000	Yes

Currently, there are no arrangements for additional compensation of directors.

STOCK OPTION PLANS

On April 5, 2018 and May 28, 2018, the Company's BOD and stockholders, respectively, approved the 2018 Executive Stock Option Plan (the 2018 ESOP or the New Plan) covering up to 155,000,000 shares allocated to the Company's directors, officers, corporate secretary and the officers of its operating mining subsidiaries, specifically those with positions of Assistant Vice President and higher, including all Resident Mine Managers of the operating mining subsidiaries. The optionees of the 2018 ESOP may avail of the ESOP shares at 90% of the Offer Price for a number of ESOP Shares equivalent to up to four (4) times the annual salary of the optionees. In case of non-executive directors and the corporate secretary, their grants shall be the average of the highest and lowest grants within the ESOP. The 2018 ESOP shall be valid for five (5) years commencing from the date of the approval of the New Plan. Options shall vest yearly at a rate of 25% of the entitlement, with the first vesting occurring one (1) year after the grant. The optionee can exercise the vested option by giving notice to the Parent Company within the term of the New Plan, and can opt to either purchase the shares directly at the exercise price or request the Parent Company to advance the purchase price and to sell the shares, in which case the participant will receive the sales proceeds less the exercise price.

On March 24, 2014 and June 6, 2014, the Company's BOD and stockholders, respectively, approved the 2014 Executive Stock Option Plan (the 2014 ESOP or the Plan) covering up to 32,000,000 shares allocated to our directors, officers, corporate secretary and the officers of its operating mining subsidiaries, specifically those with positions of Assistant Vice President and higher, including all Resident Mine Managers of the operating mining subsidiaries. The optionees of the 2014 ESOP may avail of the ESOP shares at 90% of the Offer Price for a number of ESOP Shares equivalent to up to four (4) times the annual salary of the optionees. In case of non-executive directors and the corporate secretary, their grants shall be the average of the highest and lowest grants within the ESOP. The 2014 ESOP shall be valid for five (5) years commencing from the date of the approval of the Plan. Options shall vest yearly at a rate of 25% of the entitlement, with the first vesting occurring one (1) year after the grant. The optionee can exercise the vested option by giving notice to the Parent Company within the term of the Plan, and can opt to either purchase the shares directly at the exercise price or request the Parent Company to advance the purchase price and to sell the shares, in which case the participant will receive the sales proceeds less the exercise price.

The cost of share-based payment plan in 2018, 2017 and 2016 amounted to ₱102.4 million, ₱11.0 million and ₱25.7 million, respectively.

As at March 14, 2019, the Parent Company is still waiting for SEC's approval of the exemption from registration of 170,083,608 common shares, which shall form part of the ESOP.

Item 11. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

A. SECURITY OWNERSHIP OF CERTAIN RECORD AND BENEFICIAL OWNERS

The following table sets forth the record owners and, to the best knowledge of the BOD and Management of the Company, the beneficial owners of more than 5% or more of the Company's outstanding share of common stock as at December 31, 2018 follows:

Title of class	Name, address of record owner and relationship with issuer	Name of Beneficial Owner and Relationship with Record Owner	Citizenship	No. of Shares Held	Percent
Common Stock	PCD Nominee Corporation (Filipino)		Filipino	18,405,279,170	61.42%
Common Stock	Mantra Resources Corporation 30th Floor NAC Tower, 32nd Street, Bonifacio Global City, Taguig		Filipino	0 - Direct 3,529,392,736[1] - Indirect	25.80%
Common Stock	Sumitomo Metal Mining Philippine Holdings Corporation 24F Pacific Star Building Makati Avenue, Makati City		Filipino	2,600,384,267 - Direct 1,014,013,620 - Indirect	26.43%
Common Stock	Ni Capital Corporation 28th Floor NAC Tower, 32nd Street, Bonifacio Global City, Taguig	Philip T. Ang - Vice Chairman	Filipino	0 - Direct 1,830,296,491[2] - Indirect	13.38%
Common Stock	Nonillion Holding Corporation 3/F Corporate Business Centre, 151 Paseo de Roxas Makati City		Filipino	1,296,000,000 - Direct	9.47%
Common Stock	PCD Nominee Corporation (Non-Filipino)		Foreign	944,872,089 - Direct	6.90%

B. SECURITY OWNERSHIP OF MANAGEMENT

The beneficial ownership of the Company's directors and executive officers as of December 31, 2018 follows:

Title of Class	Name of Beneficial Owner	Amount and Nature of Beneficial Ownership	Citizenship	Percent
Common Stock	Manuel B. Zamora Jr.	10,768,025 - Direct 11,762,787 - Indirect	Filipino	0.16%
Common Stock	Gerard H. Brimo	28,419,981 - Direct 245,565 - Indirect	Filipino	0.21%
Common Stock	Philip T. Ang	2,910,103 - Direct 264,664 - Indirect	Filipino	0.02%
Common Stock	Luis J. L. Virata	1 - Direct	Filipino	0%
Common Stock	Martin Antonio G. Zamora	540 - Direct 15,671 - Indirect	Filipino	0%

[1] *Lodged with PCD Nominee Corporation*

[2] *Lodged with PCD Nominee Corporation*

Title of Class	Name of Beneficial Owner	Amount and Nature of Beneficial Ownership	Citizenship	Percent
Common Stock	Fulgencio S. Factoran, Jr.	1,516 - Direct	Filipino	0%
Common Stock	Frederick Y. Dy	1,516 - Direct	Filipino	0%
Common Stock	Toru Higo	2,023 - Direct	Japanese	0%
Common Stock	Masahiro Kamiya	2,023 - Direct	Japanese	0%
Common Stock	Jose B. Anievas	573,750 - Direct 4,353,739 - Indirect	Filipino	0.03%
Common Stock	Emmanuel L. Samson	-	Filipino	0%
Common Stock	Raymundo B. Ferrer	-	Filipino	0%
Common Stock	Jose Bayani D. Baylon	34,200 - Indirect	Filipino	0%
Common Stock	Rolando R. Cruz	1,106,914 - Direct 594,000 - Indirect	Filipino	0.01%
Common Stock	Rommel L. Cruz	-	Filipino	0%
Common Stock	Aloysius C. Diaz	108,000 - Indirect	Filipino	0%
Common Stock	Koichi Ishihara	-	Japanese	0%
Common Stock	Michio Iwai	14,189,166 - Indirect	Japanese	0.1%
Common Stock	Georgina Carolina Y. Martinez	-	Filipino	0%
Common Stock	Gerardo Ignacio B. Ongkingco	-	Filipino	0%
Common Stock	Augusto C. Villaluna	-	Filipino	0%
Common Stock	Ma. Angela G. Villamor	972,554 - Indirect	Filipino	0%
Common Stock	Barbara Anne C. Migallos	-	Filipino	0%

C. VOTING TRUST HOLDERS OF 5% OR MORE

There is no voting trust holder of 5% or more of the Company's stock.

D. CHANGES IN CONTROL

There are no arrangements which may result in a change in control of the Company.

Item 12. CERTAIN RELATIONSHIP AND RELATED TRANSACTIONS

Related party relationships exist when one party has the ability to control, directly or indirectly through one or more intermediaries, the other party, or exercise significant influence over the other party in making financial and operating decisions. Such relationships also exist between and/or among entities which are under common control with the reporting enterprise, or between and/or among the reporting enterprise and their key management personnel, directors, or its stockholders.

All sales and purchases from related parties are made at prevailing market prices.

<u>Nickel Ore Sale Agreements with PAMCO</u>
The Group supplies saprolite ore to PAMCO. PAMCO is a stockholder of the Parent Company, RTN and TMC. All sales made to PAMCO are transacted at prevailing market prices. Under the terms of the agreement, the base price of the ore products for a specific shipment shall be based on LME. Effective April 2014, ore sales to PAMCO are benchmarked to China prices on the basis of a negotiated price per WMT of ore. PAMCO shall pay the Group 80% to 90% of the provisional invoice amount upon receipt of the required documents and pay the final payment of each shipment after the final dry weight and applicable assay have been determined.

<u>Nickel Ore Sale Agreement with PAMCO and Sojitz Corporation (Sojitz)</u>
RTN supplies saprolite ore to PAMCO under a sale agreement, which shall continue to be valid and in effect until December 2020, wherein PAMCO appointed Sojitz as agent. PAMCO owns 36% and Sojitz owns 4% of the outstanding shares in the capital stock of RTN.

Nickel Ore Supply Agreement with Mitsubishi Corporation RTM International Pte., Ltd. and Mitsubishi Corporation RTM Japan Ltd. (Mitsubishi)

RTN, TMC and HMC entered into an agreement with Mitsubishi's Singapore and Japan-based corporations covering the sale of its ore products. Under the terms of the agreement, the ore sales are benchmarked to China prices on the basis of a negotiated price per WMT of ore. Mitsubishi shall pay 85% of the provisional invoice amount upon receipt of the required documents and pay the final payment of each shipment after the final dry weight and applicable assay have been determined. Under the agreement, the end user of the material is PAMCO.

Nickel Ore Supply Agreement with CBNC

RTN entered into an agreement with CBNC to supply all of the limonite ore requirements for the Coral Bay Hydro Metallurgical Processing Plant (HPP) facility until the earlier of the cessation of operations at the Coral Bay HPP facility and exhaustion of the limonite ore reserves at the Rio Tuba mine. RTN has also entered into an agreement with CBNC to supply limestone and provide ancillary services to the Coral Bay HPAL facility. CBNC is the owner of the Coral Bay HPP facility.

Nickel Ore Supply Agreement with THNC

TMC entered into an agreement with THNC covering the sale of its ore products. Under the terms of the agreement, the base price of the ore products for a specific shipment shall be based on LME.

Service Agreements with CBNC

RTN entered into various service agreements with CBNC pertaining to materials handling and others.

Materials Handling Agreement with THNC

On October 7, 2013, TMC and THNC executed an agreement wherein TMC will render services related to the handling, hauling and transport of cargo for THNC. THNC shall compensate TMC based on the prices stipulated in the agreement which are agreed annually and determined on the basis of the weight of the cargo. Payment is collected within fifteen (15) days from receipt of TMC's billing.

Funding Commitment with SMM

RTN's long-term debt was incurred to complete infrastructure projects to support the development of the Coral Bay HPAL facility. These projects included the causeway, trestles and dolphins in the Rio Tuba foreshore and offshore areas.

Funding Commitment with THNC

TMC as owner/developer of Taganito Special Economic Zone (TSEZ) incurred a long-term debt to finance the construction of the pier facilities that will be utilized to support the operations of the Taganito HPAL facility. These projects included the jetty, dolphins, rubber fender, jettybollard and other pier facilities in the Taganito foreshore and offshore areas.

THNC Stockholder's Agreement

On September 15, 2010, NAC, SMM and Mitsui executed a Stockholders Agreement, pursuant to which the parties formed a joint venture company, THNC, to build and operate a plant in Barangay Taganito, Claver, Surigao del Norte for the purpose of producing and selling nickel-cobalt mixed sulfide to be used in the production of electrolytic nickel and electrolytic cobalt.

Pursuant to the Stockholders Agreement, SMM granted THNC a non-exclusive license of technology owned by SMM to produce the products and has undertaken to provide technical assistance to THNC. The Parent Company has undertaken to cause TMC to supply THNC with nickel ore and limestone and to further cause TMC to make available to THNC the use of the land and infrastructure necessary for the production of the products while Mitsui shall assist THNC in procuring materials and equipment necessary for the mine's operations. The Stockholders Agreement shall terminate upon the dissolution of THNC.

The Parent Company, along with the other stockholders of THNC, also agreed to make loans to THNC or guarantee the repayment of THNC's loan obligations in accordance with the financial requirements of THNC, in proportion to their shareholding ratio in THNC.

In a separate agreement dated December 9, 2011, SMM agreed to assume Parent Company's obligation to make loans to, or guarantee the repayment of THNC's loan obligations. The Parent Company, in consideration for this agreement, pays SMM an annual guarantee fee of 1% of THNC's outstanding loan obligations.

<u>Throughput Agreements</u>

THNC

On October 4, 2010, TMC and THNC executed a Throughput Agreement wherein TMC will construct the pier facilities within the TSEZ pursuant to its role as Developer. The TSEZ is located within the Surigao Mineral Reservation, an area declared for mineral development pursuant to Proclamation 391, under the supervision of the DENR that issued an "Order to Use Offshore Area" dated September 20, 2010 to TMC for the use of such portion of the Surigao Mineral Reservation for the construction of the pier facilities. In relation to this, THNC entered into a Registration Agreement with the PEZA to construct and operate a mineral processing plant within the TSEZ as an Ecozone Export Enterprise.

Under the agreement, TMC will make available the pier facilities and provide certain services to THNC in consideration for usage fees and service fees to be paid by the latter starting April 2011 until 2031, unless terminated earlier. The usage fee amounted to $1.3 million for each semi-annual period to be paid on or before October 10 and April 10.

THNC also agrees to pay service fee that will be agreed upon by both parties which shall be billed on a monthly basis.

Prior to the commencement date, THNC may also request TMC to use any part of the constructed pier facilities, which is ready for use, upon payment of reasonable compensation which shall be mutually agreed by TMC and THNC.

CBNC

Under the agreement, CBNC shall pay RTN the price which consists of all its direct costs for the pier facilities which includes but not limited to, financial costs, maintenance costs and tax as well as indirect costs directly used for the pier facilities and the services as agreed by the parties. CBNC shall pay to RTN in U.S. dollar, as a part of such financial costs, the amounts to be paid by RTN to SMM such as interests and loan repayments pursuant to the Omnibus Agreement made and entered into by and between RTN and SMM. The agreement shall continue for twenty-five (25) years after November 25, 2002 unless terminated earlier.

<u>Memorandum of Understanding</u>

On September 14, 2009, the Parent Company and TMC entered into a MOU with SMM. Pursuant to the terms thereof, the Parent Company and SMM will move ahead on a joint venture basis to build a nickel-cobalt processing plant (the Project) using the HPAL technology to be located within the TMC's mine in Surigao del Norte, while TMC will supply low-grade nickel ore to the plant over the life of the Project. The cost of the Project was estimated at US$1,420.0 million. The plant will have an annual capacity of 51,000 dry metric tons of mixed nickel-cobalt sulfide over an estimated thirty (30) year project life. The MOU provides that the equity share of the Parent Company and SMM shall be between 20%-25% and 75%-80%, respectively.

Subsequently, the Parent Company, SMM and Mitsui entered into the THNC Stockholders' Agreement on September 15, 2010, which contract provides that the Project will be undertaken by THNC, a company that will be jointly owned by the Parent Company, SMM and Mitsui with equity interest of 22.5%, 62.5% and 15.0%, respectively.

In October 2016, pursuant to the sale by the Parent Company of its 12.5% equity interest in THNC to SMM, the shareholding ratio of the Parent Company and SMM became 10% and 75%, respectively.

The THNC Stockholders' Agreement also sets forth the respective rights and obligations of the Parent Company, SMM and Mitsui, including their responsibilities in respect of financing the US$1,420.0 million Project investment of THNC, which cost increased to US$1,590.0 million over the three (3)-year construction period which commenced in the last quarter of 2010.

Also, under the THNC Stockholders' Agreement, the Parent Company, SMM and Mitsui agreed to grant loans to THNC or guarantee the repayment of THNC's obligations in accordance with the financial requirements of THNC and in proportion to their shareholding ratio in THNC. Pursuant thereto, the Parent Company, SMM and Mitsui agreed to extend loans to THNC amounting to a total of US$1,224.3 million as at December 31, 2018 and US$1,154.3 million as at December 31, 2017 to cover THNC's working capital requirement, loan repayments, capital investment and/or construction of tailings dam.

The THNC Agreement shall terminate upon the dissolution of THNC.

Loan Guarantee/Substitution Agreement

Under a loan guarantee/substitution agreement dated December 9, 2011 between the Parent Company and SMM, the latter agreed to substitute for the Parent Company in extending loans or guaranteeing the repayment of THNC pursuant to the THNC Stockholders' Agreement.

In consideration of the loans and guarantee made by SMM in substitution of the Parent Company, the latter agreed to pay SMM an annual fee equal to 1% of the relevant outstanding amount, which is payable every February 21 and August 21 of each year.

On January 26, 2015, December 18 and December 3, 2013, the Parent Company and SMM entered into another loan guarantee/substitution agreement with respect to the new loan agreements made and entered by THNC and SMM on August 4, 2014, December 3 and January 31, 2013, respectively. The annual fee is also equal to 1% of the relevant outstanding amount, which is payable every March 21 and September 21 of each year.

In case of default by the Parent Company, such loan guarantee/substitution agreements will be terminated and the Parent Company shall provide loans to THNC or guarantee the repayment of THNC's loans payable. Failure to provide such loans or guarantee shall be considered a default under the THNC Stockholders' Agreement.

Lease Agreement with THNC

On October 31, 2013, TMC and THNC executed a lease agreement wherein TMC will lease the land within the TSEZ to the lessee. The TSEZ leased area of approximately 675 hectares is located at Barangays Taganito and Hayanggabon, Claver, Surigao del Norte. The duration of the lease agreement shall be for a period of twenty (20) years starting January 1, 2013; however, rental rate shall be annually agreed upon by both parties.

Loan Agreements

Manta Equities Inc. (Manta)

On June 8, 2015, EPI entered into a one (1) year loan agreement with Manta amounting to ₱180.0 million to finance the development expenses of EPI's geothermal power project. The loan bears an annual interest of 5%. The principal and interest is payable at the end of the loan agreement. On June 6, 2016, EPI and Manta extended the loan for another year or up to June 7, 2017 under the same terms of the original loan. The principal and interest was paid in June 2017.

THNC
On October 4, 2010, TMC entered into an Omnibus Agreement with THNC, wherein the latter granted the former a total loan facility amounting to US$35.0 million at a prevailing one hundred eighty (180)-day British Banker Association London Inter-Bank Offered Rate (LIBOR) plus 2% spread, to exclusively finance the construction of the pier facilities within the TSEZ. The loan shall be drawn down in one or multiple times by July 31, 2011.

The interest on the loan is payable semi-annually, on October 10 and April 10. The total principal is payable in semi-annual installments of US$0.9 million starting on October 10, 2011 up to April 10, 2031.

SMM
On November 25, 2002, RTN entered into an Omnibus Agreement with SMM, wherein the latter granted the former a loan facility amounting to US$1.8 million at a prevailing one hundred eighty (180)-day LIBOR plus 2% spread, for the construction of the pier facilities.

In July 2003, an additional loan amounting to US$0.2 million was granted by SMM. Beginning in 2003, the interest on the original and additional loans is payable semi-annually, on February 28 and August 31. The total principal is payable in twenty (20) equal semi-annual installments starting on February 28, 2004 up to August 31, 2013. In February 2007, RTN and SMM agreed to an additional loan facility amounting to US$9.0 million. Of the total loan facility, the remaining US$0.5 million was drawn in February and March 2008. The additional loan facility is payable in semi-annual installments starting on August 31, 2008 up to February 28, 2018.

In consideration, and to ensure payment of these loans, RTN assigned, transferred, and set over to SMM, absolutely and unconditionally, all of RTN's rights, title, and interest over its future receivable from CBNC under the Throughput Agreements. RTN also constituted a first ranking mortgage on the pier facilities.

Lease Agreement with Manta
On March 18, 2013, the Group entered into a lease agreement with Manta for its office and parking space. The lease agreement is effective for a period of five (5) years starting May 15, 2013 and is renewable subject to negotiation of the terms and conditions and mutual agreement of both parties.
The lease agreement expired in May 2018 and was renewed for another period of five (5) years.

Notes 34 and 39 of the Notes to Consolidated Financial Statements of the Exhibits in Part IV is incorporated hereto by reference.

PART IV – EXHIBITS AND SCHEDULES

Item 13. EXHIBITS AND REPORTS ON SEC FORM 17-C

Exhibits
See accompanying Index to Exhibits as well as the Company's Audited Financial Statements for the recently completed fiscal year. These financial statements are reports from the Corporation's Independent Public Accountant, SGV & Co.

Reports on SEC Form 17-C
The Parent Company filed the following reports on SEC Form 17-C during the year 2018.

Items Reported	Date Reported
Press Release: NIKL's estimated value of shipments rises 9% in 2017	January 19, 2018
Press Release: Nickel Asia Corporation announces a 41% increase in net income in its 2017 financial and operating Results	March 14, 2018
Declaration of cash dividends at Php0.12 per common share	March 14, 2018
Notice of annual shareholders meeting	March 14, 2018
Adoption of new Stock Option Plan	April 5, 2018
NIKL reports 3 Million Wet Metric Tons of ore shipments in the first quarter 2018	April 17, 2018
Press Release entitled "Effect of Proposed DENR Administrative Order on Nickel Asia"	April 24, 2018
Nickel Asia 1Q 2018 Financial and Operating Results	May 3, 2018
Appointment of Mr. Michio Iwai as Vice President	May 3, 2018
Results of annual general meeting of the stockholders of Nickel Asia Corporation held on 28 May 2018	May 28, 2018
Results of the Organizational Meeting of the Board of Directors of Nickel Asia Corporation held on 28 May 2018	May 28, 2018
Clarification of news reports involving Nickel Asia Corporation's subsidiary, Hinatuan Mining Corporation	June 4, 2018
Nickel Asia Corporation announces the financial and operating results for the six months ended June 30, 2018	August 7, 2018
Resignation of Mr. Takanori Fujimura and appointment of Mr. Masahiro Kamiya, promotions of Mr. Manuel B. Zamora, Jr. as Chairman Emeritus, of Mr. Gerard H. Brimo as Chairman of the Board and CEO, and of Mr. Martin Antonio G. Zamora as President	August 7, 2018
Declaration of cash dividends at Php0.30 per common share and stock dividends at the rate of eighty percent (80%), subject to approval of the Corporation's shareholders. Amendment of By-Laws	August 28, 2018
Notice of special stockholders' meeting	August 28, 2018
Appointment of Mr. Rommel L. Cruz as Vice President for Operations effective 08 October 2018.	October 2, 2018
Results of special stockholders meeting: Disclosure on stockholders' approval of (1) 80% stock dividend declaration, and (2) amendments to the By-Laws	October 9, 2018
Nickel Asia announces financial and operating results for the nine months ended September 30, 2018	November 9, 2018
Nickel Asia Corporation announces share buy-back program up to Php1.5 billion	November 27, 2018
NIKL Share Buy-Back Transactions: Purchase by the Company through the open market of 425,000 common shares at the average price of ₱2.3241 per share on December 4, 2018	December 4, 2018
NIKL Share Buy-Back Transactions: Purchase by the Company through the open market of 1,020,000 common shares at the average price of ₱2.3498 per share on December 5, 2018	December 5, 2018

Items Reported	Date Reported
NIKL Share Buy-Back Transactions: Purchase by the Company through the open market of 1,000,000 common shares at the average price of ₱2.2477 per share on December 7, 2018	December 7, 2018
NIKL Share Buy-Back Transactions: Purchase by the Company through the open market of 2,500,000 common shares at the average price of ₱2.1232 per share on December 10, 2018	December 10, 2018
NIKL Share Buy-Back Transactions: Purchase by the Company through the open market of 720,000 common shares at the average price of ₱2.1395 per share on December 11, 2018	December 11, 2018
NIKL Share Buy-Back Transactions: Purchase by the Company through the open market of 122,000 common shares at the average price of ₱2.1800 per share on December 14, 2018	December 14, 2018
NIKL Share Buy-Back Transactions: Purchase by the Company through the open markettal of 2,145,000 common shares at the average price of ₱2.1109 per share on December 17, 2018	December 17, 2018
NIKL Share Buy-Back Transactions: Purchase by the Company through the open market of 800,000 common shares at the average price of ₱2.0813 per share on December 18, 2018	December 18, 2018
NIKL Share Buy-Back Transactions: Purchase by the Company through the open market of 625,000 common shares at the average price of ₱2.1945 per share on December 19, 2018	December 19, 2018

SIGNATURES

Pursuant to the requirements of Section 17 of the Code and Section 141 of the Corporation Code, this report is signed on behalf of the Issuer by the undersigned, thereunto duly authorized, in the City of Taguig on ____________________, 2019.

By:

GERARD H. BRIMO
Chairman and Chief Executive Officer

EMMANUEL L. SAMSON
Senior Vice President and
Chief Financial Officer

JOSE B. ANIEVAS
Senior Vice President and
Chief Operating Officer

BARBARA ANNE C. MIGALLOS
Corporate Secretary

Iryan J. Padillo

IRYAN JEAN U. PADILLO
Assistant Vice President - Finance

APR 10 2019

Subscribed and sworn to before me this _________ day of __________, 2019 affiant (s) exhibiting to me his/their Passport Number, as follows:

Names	Passport No.	Date of Issue	Place of Issue
Gerard H. Brimo	P1914438A	02/11/2017	Manila
Emmanuel L. Samson	P2955746A	05/10/2017	Manila
Jose B. Anievas	P4396681A	09/16/2017	Manila
Barbara Anne C. Migallos	P7148981A	05/11/2018	NCR South
Iryan Jean U. Padillo	EC1477706	06/25/2014	Manila

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SERIES OF 2019

KATHRYN ROSALIE B. FADERON-DIONISIO
Appointment No. 94 (2018-2019)
Notary Public for and in the City of Taguig
Until December 31, 2019
Roll No. 42738
PTR No. A-4285552 dated 16 January 2019 / Taguig City
IBP No. 05593 (Lifetime) / O.R. No 669506 / 09 January 2006
MCLE Compliance No. VI-0018369, until 14 April 2022
28F NAC Tower, 32nd St., BGC, Taguig City

NICKEL ASIA CORPORATION

SEC FORM 17-A

INDEX TO FINANCIAL STATEMENTS AND SUPPLEMENTARY SCHEDULES

NICKEL ASIA CORP.

STATEMENT OF MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL STATEMENTS

The management of **Nickel Asia Corporation and Subsidiaries** (the "Group") is responsible for the preparation and fair presentation of the consolidated financial statements including the schedules attached therein, for the years ended December 31, 2018 and 2017, in accordance with the prescribed financial reporting framework indicated therein, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group'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 or to cease operations, or has no realistic alternative but to do so.

The Board of Directors is responsible for overseeing the Group's financial reporting process.

The Board of Directors reviews and approves the consolidated financial statements including the schedules attached therein, and submits the same to the stockholders or members of the Group.

SyCip Gorres Velayo & Co., the independent auditor, appointed by the stockholders, has audited the consolidated financial statements of the Group in accordance with Philippine Standards on Auditing, and in its report to the stockholders or members, has expressed its opinion on the fairness of presentation upon completion of such audit.

Gerard H. Brimo
Chairman and Chief Executive Officer

Martin Antonio G. Zamora
President

Emmanuel L. Samson
Senior Vice President/Chief Financial Officer

Signed this 14th day of March 2019

28th Floor NAC Tower, 32nd St., Bonifacio Global City, Taguig City, Philippines 1634
Tel. No. +632 798-7622 | +632 892-6669 | Fax No. +632 892-5344

SUBSCRIBED and **SWORN** to before me, this APR 0 8 2019, at TAGUIG CITY,
affiants who exhibited to me their competent evidence of identity specified below:

Name	Competent Evidence of Identity	Date and Place Issued
GERARD H. BRIMO	Passport No. P1914438A	11 Feb. 2017/ DFA Manila
MARTIN ANTONIO G. ZAMORA	Passport No. EC6060964	24 Nov. 2015 / DFA Manila
EMMANUEL L. SAMSON	Passport No. P2955746A	10 May 2017 / DFA Manila

avowed under penalty of law as to the truth of the contents of this instrument.

Doc. No.: 215
Page No.: 44
Book No.: I
Series of 2019.

CHRISTINE JOANNE F. DE CLARO-NAVARRO
Appointment No. 95 (2018-2019)
Notary Public for and in the City of Taguig
Until December 31, 2019
Roll No. 55216
PTR No. A-4285551 / 16 January 2019 / Taguig City
IBP Life Member Roll No. 018905 / OR No. 032319 / 05 Feb 2018
MCLE Compliance No. VI-0019624, until 14 April 2022
28F NAC Tower, 32nd St., BGC, Taguig City

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SyCip Gorres Velayo & Co.
6760 Ayala Avenue
1226 Makati City
Philippines

Tel: (632) 891 0307
Fax: (632) 819 0872
ey.com/ph

BOA/PRC Reg. No. 0001,
October 4, 2018, valid until August 24, 2021
SEC Accreditation No. 0012-FR-5 (Group A),
November 6, 2018, valid until November 5, 2021

INDEPENDENT AUDITOR'S REPORT

The Board of Directors and Stockholders
Nickel Asia Corporation
28th Floor NAC Tower, 32nd Street
Bonifacio Global City, Taguig City

Opinion

We have audited the consolidated financial statements of Nickel Asia Corporation and its subsidiaries (the Group), which comprise the consolidated statements of financial position as at December 31, 2018 and 2017, and the consolidated statements of income, consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for each of the three years in the period ended December 31, 2018, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2018 and 2017, and its consolidated financial performance and its consolidated cash flows for each of the three years in the period ended December 31, 2018 in accordance with Philippine Financial Reporting Standards (PFRSs).

Basis for Opinion

We conducted our audits in accordance with Philippine Standards on Auditing (PSAs). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with the Code of Ethics for Professional Accountants in the Philippines (Code of Ethics) together with the ethical requirements that are relevant to our audit of the consolidated financial statements in the Philippines, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report, including in relation to these matters.

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Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

Estimation of ore reserves

Ore reserves are estimates of the amount of ore that can be economically and legally extracted from the Group's mining properties and are key inputs to depletion, amortization, and decommissioning provisions. The Group estimates its ore reserves based on information compiled by appropriately qualified specialist relating to the geological data on the size, depth and shape of the ore body, and requires complex geological judgments to interpret the data. The estimation of ore reserves is based upon factors such as estimates of foreign exchange rates, commodity prices, future capital requirements, and production costs along with geological assumptions and judgments made in estimating the size and grade of the ore body. Changes in the ore reserves may impact the carrying values of property and equipment, provision for mine rehabilitation and decommissioning, and depreciation and depletion charges.

The Group's mining properties and development costs are amortized using the units of production method. Under the units of production method, cost is amortized based on the ratio of the volume of actual ore extracted during the year over the estimated volume of ore reserves for the remaining life of the mine. The land improvements, machinery and equipment, and buildings and improvements are depreciated and amortized using the straight-line method, where the estimated useful life is based on the ore reserves. This matter is significant to our audit because the estimation of the ore reserves for mining projects located in Palawan and Surigao del Norte, for the remaining life of the mines, requires significant estimation from the management.

The Group's disclosures on mining properties and development costs are included in Notes 3 and 9 to the consolidated financial statements.

Audit response
We evaluated the competence, capabilities and objectivity of the internal specialist engaged by the Group to perform an independent assessment of its ore reserves. We reviewed the specialist's report and obtained an understanding of the nature, scope and objectives of his work, and the basis of the estimates including any changes in the reserves during the year. In addition, we tested the reserves estimates applied to the relevant areas of the consolidated financial statements including depletion, depreciation, amortization and decommissioning provisions.

Recoverability of geothermal exploration and evaluation assets and deferred mine exploration costs

The ability of the Group to recover its geothermal exploration and evaluation assets and deferred mine exploration costs would depend on the commercial viability of the reserves. The substantial amount of these accounts and the significant management judgment required in assessing whether there is any indication of impairment are key areas of focus in our audit.

The carrying values of geothermal exploration and evaluation assets and deferred mine exploration costs as of December 31, 2018 are disclosed in Note 11 and 13 to the consolidated financial statements.

Audit response
We obtained an understanding of the Group's capitalization policy and tested whether the policy has been applied consistently. We obtained management's assessment on whether there are impairment indicators affecting the recoverability of the geothermal exploration and evaluation assets and deferred mine exploration costs. We inquired into the status of these projects and their plans on operations. We reviewed contracts and agreements, and budgets for exploration and development costs. We inspected the licenses, permits and correspondences with regulatory agencies of each exploration project, to determine that the period for which the Group has the right to explore in the specific area, has not been cancelled or has not expired, will not expire in the near future, and will be renewed accordingly. We also inquired about the existing concession areas that are expected to be abandoned or any exploration activities that are planned to be discontinued in those areas.

Recoverability of solar project and construction in-progress

The Group is adversely affected by the continued decline in wholesale electricity prices. In the event that an impairment indicator is identified, the assessment of the recoverable amounts of the solar project and construction in-progress related to solar farms and geothermal projects, requires significant judgment and is based on assumptions. The assessment of the recoverable amounts of the Sta. Rita Solar Power and the Biliran Geothermal Power Projects, which require estimation and assumptions about future production levels and costs, as well as external inputs such as commodity prices, discount rate, and foreign currency exchange rates, is a key audit matter in our audit.

The carrying values of the Group's solar project and construction in-progress recorded as part of property and equipment as of December 31, 2018 are disclosed in Note 9 to the consolidated financial statements.

Audit response
We involved our internal specialist in evaluating the methodologies and the assumptions used in determining the recoverable amounts. These assumptions include the expected life of the plant, forecasted annual energy output, forecasted average price of wholesale electricity, forecasted contributions to the government based on current regulations, inflation rate, planned debt ratio, and interest rate. We compared the key assumptions used against the industry benchmark plant life, production reports from operations department, average market price of electricity on Wholesale Electric Spot Market (WESM), current tax laws and Department of Energy regulations, Bangko Sentral ng Pilipinas (BSP) forecasted inflation rate, industry debt ratio and discount rate based on industry weighted average capital cost. We tested the parameters used in the determination of the discount rate against the market data.

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Adoption of PFRS 9, Financial Instruments

On January 1, 2018, the Group adopted PFRS 9, *Financial Instruments*. PFRS 9, which replaced PAS 39, *Financial Instruments: Recognition and Measurement*, introduces a forward-looking expected credit loss model to assess impairment on debt financial assets not measured at fair value through profit or loss. The Group adopted the modified retrospective approach in adopting PFRS 9.

- Classification and Measurement of Financial Assets

As at January 1, 2018, the Group classified its financial assets based on its business models for managing these financial assets and the contractual cash flow characteristics of the financial assets. This resulted to transition adjustments that decreased other comprehensive income by ₱206.7 million, and increased retained earnings and noncontrolling interest by ₱339.6 million and ₱67.5 million, respectively. Thereafter, the financial assets were accounted for based on the transition date classification, while newly originated or acquired financial assets were also classified based on the PFRS 9 classification criteria.

The Group's application of PFRS 9 classification criteria is significant to our audit as the classification determines how financial assets are measured and accounted for in the consolidated financial statements.

The disclosures in relation to the adoption of the PFRS 9 classification criteria are included in Note 2 to the consolidated financial statements.

Audit Response
We obtained an understanding of the Group's contracts review process to establish the contractual cash flow characteristics of debt financial assets, including the identification of standard and non-standard contracts, and reviewed the assessment made by management by inspecting underlying contracts on a sample basis. We obtained the approved business models for the Group's financial assets. We compared the parameters set within the business models for the Group's portfolio and risk management policies of the Group. For significant portfolios, we assessed the frequency and relative amounts of sales in the past, understood how business performance is measured and evaluated performance measurements reports.

We checked the transition adjustments and reviewed the disclosures made in the consolidated financial statements required under PFRS 9.

- Expected Credit Loss (ECL)

The Group's adoption of the ECL model is significant to our audit as it involves the exercise of significant management judgment. Key areas of judgment include: segmenting the Group's credit risk exposures; defining default and credit-impaired financial assets; determining assumptions to be used in the ECL model such as timing and amounts of expected net recoveries from defaulted accounts; and incorporating forward-looking information (called overlays) in calculating ECL.

Refer to Notes 2 and 3 of the consolidated financial statements for the disclosure on the transition adjustments and details of the allowance for credit losses using the ECL model, respectively.

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Audit Response

We obtained an understanding of the methodologies and models used for the Group's different credit exposures and assessed whether these considered the requirements of PFRS 9 to reflect an unbiased and probability-weighted outcome, the time value of money, and the best available forward-looking information.

We (a) assessed the Group's segmentation of its credit risk exposures based on homogeneity of credit risk characteristics; (b) tested the definition of default against historical analysis of accounts and credit risk management policies and practices in place, (c) tested historical loss rates by inspecting historical recoveries and write-offs; (d) checked the classification of outstanding exposures to their corresponding aging buckets; and (e) checked the forward looking information used for overlay through statistical test and corroboration using publicly available information and our understanding of the Group's receivable portfolios and industry practices.

Further, we checked the data used in the ECL models, such as the historical aging analysis and default and recovery data, by reconciling data from source system reports to the data warehouse and from the data warehouse to the loss allowance analysis/models and financial reporting systems. To the extent that the loss allowance analysis is based on credit exposures that have been disaggregated into subsets with similar risk characteristics, we traced or re-performed the disaggregation from source systems to the loss allowance analysis. We also assessed the assumptions used where there are missing or insufficient data.

We recalculated impairment provisions on a sample basis. We checked the transition adjustments and reviewed the disclosures made in the consolidated financial statements based on the requirements of PFRS 9.

Adoption of PFRS 15, *Revenue from Contracts with Customers*

Effective January 1, 2018, the Group adopted the new revenue recognition standard, PFRS 15, *Revenue from Contracts with Customers*, under the modified retrospective approach. The following matters are significant to our audit because these involve application of significant management judgment in determining whether the transaction price includes variable consideration and in determining the timing of satisfaction of the performance obligation arising from the sale of nickel ore and limestone.

The disclosures related to the adoption of PFRS 15 are included in Notes 3 and 32 to the consolidated financial statements.

Audit Response
We obtained an understanding of the Group's process in implementing the new revenue standard. We reviewed the PFRS 15 adoption documentation and accounting policies prepared by management, including revenue streams identification and scoping, and contract analysis. For significant revenue streams, we obtained sample contracts and reviewed whether the accounting policies appropriately considered the five-step model of PFRS 15. In addition, we checked whether the performance obligations within the contracts have been identified and whether management has identified and estimated the components of the transaction price. We reviewed sample contracts and checked whether the Group's timing of revenue recognition is based on when the performance occurs and control of the goods are transferred to the customer.

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We reviewed the application of the accounting policy and the additional disclosures in the consolidated financial statements required under PFRS 15.

Other Information

Management is responsible for the other information. The other information comprises the information included in the SEC Form 20-IS (Definitive Information Statement), SEC Form 17-A and Annual Report for the year ended December 31, 2017, but does not include the consolidated financial statements and our auditor's report thereon. The SEC Form 20-IS (Definitive Information Statement), SEC Form 17-A and Annual Report for the year ended December 31, 2018 are expected to be made available to us after the date of this auditor's report.

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

In connection with our audits of the consolidated financial statements, our 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 financial statements or our knowledge obtained in the audits, or otherwise appears to be materially misstated.

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

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

In preparing the consolidated financial statements, management is responsible for assessing the Group'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 or to cease operations, or has no realistic alternative but to do so.

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

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

Our objectives are to obtain reasonable assurance about whether the consolidated 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 our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with PSAs 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 financial statements.

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

- Identify and assess the risks of material misstatement of the consolidated 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 our 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 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 ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated 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. We are responsible for the direction, supervision and performance of the audit. We remain solely responsible for our audit opinion.

We 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 we identify during our audit.

We also provide those charged with governance with a statement that we 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 our independence, and where applicable, related safeguards.

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

The engagement partner on the audit resulting in this independent auditor's report is Jaime F. del Rosario.

SYCIP GORRES VELAYO & CO.

Jaime F. del Rosario
Partner
CPA Certificate No. 56915
SEC Accreditation No. 0076-AR-4 (Group A),
May 1, 2016, valid until May 1, 2019
Tax Identification No. 102-096-009
BIR Accreditation No. 08-001998-72-2018,
February 14, 2018, valid until February 13, 2021
PTR No. 7332543, January 3, 2019, Makati City

March 14, 2019

NICKEL ASIA CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
(Amounts in Thousands)

	December 31 2018	2017
ASSETS		
Current Assets		
Cash and cash equivalents (Note 4)	₱10,784,369	₱9,635,514
Trade and other receivables (Note 5)	1,056,568	905,125
Inventories (Note 6)	3,744,274	3,502,414
Financial assets at (Note 7):		
Fair value through other comprehensive income (FVOCI)	2,608,301	–
Fair value through profit or loss (FVTPL)	1,420,718	–
Amortized cost	201,770	–
Available-for-sale (AFS) financial assets (Note 7)	–	5,925,682
Prepayments and other current assets (Note 8)	1,164,750	929,703
Total Current Assets	20,980,750	20,898,438
Noncurrent Assets		
Property and equipment (Note 9)	15,078,220	15,388,259
Investments in associates (Note 10)	3,540,589	2,952,132
Geothermal exploration and evaluation assets (Note 11)	1,793,444	1,784,183
Financial assets at - net of current portion (Note 7):		
FVTPL	585,928	–
Amortized cost	330,000	–
Deferred income tax assets (Note 36)	335,951	333,094
Long-term stockpile inventory - net of current portion (Note 12)	105,601	167,559
AFS financial assets - net of current portion (Note 7)	–	732,521
Other noncurrent assets (Note 13)	3,282,024	3,480,913
Total Noncurrent Assets	25,051,757	24,838,661
TOTAL ASSETS	₱46,032,507	₱45,737,099
LIABILITIES AND EQUITY		
Current Liabilities		
Trade and other payables (Note 14)	₱7,664,984	₱7,569,941
Income tax payable	415,789	235,233
Short-term debts (Note 15)	1,492,268	–
Other current liability (Note 39k)	169,079	169,079
Current portion of:		
Long-term debts (Note 15)	118,970	1,635,178
Long-term payable (Note 17)	5,000	5,000
Total Current Liabilities	9,866,090	9,614,431
Noncurrent Liabilities		
Long-term debts - net of current portion (Note 15)	1,288,562	1,349,211
Deferred income tax liabilities - net (Note 36)	754,101	766,874
Pension liability (Note 35)	327,905	320,781
Provision for mine rehabilitation and decommissioning (Note 16)	274,227	388,787
Deferred income - net of current portion (Note 39m)	54,469	58,659
Long-term payable - net of current portion (Note 17)	16,323	20,168
Total Noncurrent Liabilities	2,715,587	2,904,480
Total Liabilities	12,581,677	12,518,911

(Forward)

	December 31	
	2018	2017
Equity Attributable to Equity Holders of the Parent		
Capital stock (Note 18)	**₱6,849,836**	₱3,808,665
Treasury stock (Note 18)	**(20,366)**	–
Additional paid-in capital (Note 18)	**8,262,455**	8,262,455
Other components of equity:		
Share in cumulative translation adjustment (Note 10)	**780,412**	564,152
Cost of share-based payment plan (Note 19)	**240,003**	137,635
Net valuation gains (losses) on financial assets (Note 7)	**(92,504)**	163,935
Asset revaluation surplus	**31,714**	32,097
Retained earnings:		
Unappropriated	**11,794,529**	15,392,459
Appropriated (Note 18)	**1,818,628**	1,095,583
	29,664,707	29,456,981
Non-controlling Interests (NCI)	**3,786,123**	3,761,207
Total Equity	**33,450,830**	33,218,188
TOTAL LIABILITIES AND EQUITY	**₱46,032,507**	₱45,737,099

See accompanying Notes to Consolidated Financial Statements.

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NICKEL ASIA CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF INCOME

(Amounts in Thousands, Except Earnings per Share)

	Years Ended December 31		
	2018	2017	2016
REVENUES			
Revenue from contracts with customers (Note 32)	**₱18,647,672**	₱–	₱–
Sale of ore (Note 34)	–	14,897,080	13,574,382
Services and others (Note 34)	–	630,064	530,275
Sale of power (Notes 39g and 39p)	–	212,152	18,010
	18,647,672	15,739,296	14,122,667
COSTS			
Sale of ore (Note 21)	**6,770,953**	6,033,241	5,907,249
Services (Note 22)	**369,891**	351,339	328,457
Power generation (Note 23)	**360,622**	257,276	38,295
	7,501,466	6,641,856	6,274,001
OPERATING EXPENSES			
Shipping and loading costs (Note 24)	**1,949,489**	1,769,110	1,930,520
Excise taxes and royalties (Note 25)	**1,804,029**	1,103,686	1,006,712
General and administrative (Note 26)	**1,213,041**	863,153	850,251
Marketing (Notes 39e and 39l)	**140,210**	96,464	95,869
	5,106,769	3,832,413	3,883,352
FINANCE INCOME (Note 29)	**354,803**	301,967	228,430
FINANCE EXPENSES (Note 30)	**(193,992)**	(246,615)	(208,218)
EQUITY IN NET INCOME (LOSSES) OF ASSOCIATES (Note 10)	**348,168**	197,972	(413,702)
OTHER INCOME (CHARGES) - net (Note 31)	**(217,001)**	72,649	588,796
INCOME BEFORE INCOME TAX	**6,331,415**	5,591,000	4,160,620
PROVISION FOR (BENEFIT FROM) INCOME TAX (Note 36)			
Current	**2,173,934**	1,865,318	1,441,526
Deferred	**(65,459)**	(128,462)	7,952
	2,108,475	1,736,856	1,449,478
NET INCOME	**₱4,222,940**	₱3,854,144	₱2,711,142
Net income attributable to:			
Equity holders of the parent	**₱3,008,057**	₱2,770,768	₱1,966,107
NCI	**1,214,883**	1,083,376	745,035
	₱4,222,940	₱3,854,144	₱2,711,142
Basic/Diluted Earnings Per Share (EPS; Note 20)	**₱0.22**	₱0.20	₱0.14

See accompanying Notes to Consolidated Financial Statements.

NICKEL ASIA CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(Amounts in Thousands)

	Years Ended December 31		
	2018	2017	2016
NET INCOME	**₱4,222,940**	₱3,854,144	₱2,711,142
OTHER COMPREHENSIVE INCOME (LOSS)			
Other comprehensive income (loss) to be reclassified to consolidated statements of income in subsequent periods:			
Share in translation adjustment of associates (Note 10)	**240,289**	172,073	29,270
Income tax effect	**(24,029)**	(17,207)	(26,593)
	216,260	154,866	2,677
Net valuation gains (losses) on financial assets (Note 7)	**(52,241)**	194,243	153,124
Income tax effect (Note 7)	**2,542**	(41,132)	(3,035)
	(49,699)	153,111	150,089
Net other comprehensive income to be reclassified to consolidated statements of income in subsequent periods	**166,561**	307,977	152,766
Other comprehensive income (loss) not to be reclassified to consolidated statements of income in subsequent periods:			
Remeasurement gain (loss) on pension liability (Note 35)	**13,553**	(8,373)	(83,731)
Income tax effect	**(4,066)**	2,512	25,119
	9,487	(5,861)	(58,612)
Asset revaluation surplus	**(547)**	(547)	(547)
Income tax effect	**164**	164	164
	(383)	(383)	(383)
Net other comprehensive income (loss) not to be reclassified to consolidated statements of income in subsequent periods	**9,104**	(6,244)	(58,995)
TOTAL OTHER COMPREHENSIVE INCOME - NET OF TAX	**175,665**	301,733	93,771
TOTAL COMPREHENSIVE INCOME - NET OF TAX	**₱4,398,605**	₱4,155,877	₱2,804,913
Total comprehensive income attributable to:			
Equity holders of the parent	**₱3,186,229**	₱3,071,379	₱2,076,466
NCI	**1,212,376**	1,084,498	728,447
	₱4,398,605	₱4,155,877	₱2,804,913

See accompanying Notes to Consolidated Financial Statements.

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NICKEL ASIA CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

FOR THE YEARS ENDED DECEMBER 31, 2018, 2017 AND 2016

(Amounts in Thousands)

	Equity Attributable to Equity Holders of the Parent											
	Capital Stock (Note 18)	Treasury Stock (Note 18)	Additional Paid-in Capital (Note 18)	Share in Cumulative Translation Adjustment (Note 10)	Net Valuation Gains (Losses) on Financial Assets (Note 7)	Cost of Share-based Payment Plan (Note 19)	Asset Revaluation Surplus	Retained Earnings Unappropriated	Retained Earnings Appropriated (Note 18)	Total	NCI	Total
Balances at December 31, 2017	₱3,808,665	₱–	₱8,262,455	₱564,152	₱163,935	₱137,635	₱32,097	₱15,392,459	₱1,095,583	₱29,456,981	₱3,761,207	₱33,218,188
Effect of Philippine Financial Reporting Standards (PFRS) 9 adoption (Note 2)	–	–	–	–	(206,740)	–	–	339,586	–	132,846	67,540	200,386
Balances at January 1, 2018, As Restated	3,808,665	–	8,262,455	564,152	(42,805)	137,635	32,097	15,732,045	1,095,583	29,589,827	3,828,747	33,418,574
Net income	–	–	–	–	–	–	–	3,008,057	–	3,008,057	1,214,883	4,222,940
Other comprehensive income (loss)	–	–	–	216,260	(49,699)	–	(383)	11,994	–	178,172	(2,507)	175,665
Total comprehensive income (loss)	–	–	–	216,260	(49,699)	–	(383)	3,020,051	–	3,186,229	1,212,376	4,398,605
Cost of share-based payment plan (Notes 19 and 27)	–	–	–	–	–	102,368	–	–	–	102,368	–	102,368
Stock dividends (Note 18)	3,041,171	–	–	–	–	–	–	(3,041,171)	–	–	–	–
Cash dividends (Note 18)	–	–	–	–	–	–	–	(3,193,230)	–	(3,193,230)	–	(3,193,230)
7% Cash dividends - Preferred share (Note 34)	–	–	–	–	–	–	–	(504)	–	(504)	–	(504)
Cash dividends to NCI (Notes 33 and 34)	–	–	–	–	–	–	–	–	–	–	(1,255,000)	(1,255,000)
Acquisition of treasury stock (Note 18)	–	(20,366)	–	–	–	–	–	–	–	(20,366)	–	(20,366)
Reversal of appropriation (Note 18)	–	–	–	–	–	–	–	1,095,583	(1,095,583)	–	–	–
Appropriation of retained earnings (Note 18)	–	–	–	–	–	–	–	(1,818,628)	1,818,628	–	–	–
Asset revaluation surplus transferred to retained earnings (Note 9)	–	–	–	–	–	–	–	383	–	383	–	383
Balances at December 31, 2018	₱6,849,836	(₱20,366)	₱8,262,455	₱780,412	(₱92,504)	₱240,003	₱31,714	₱11,794,529	₱1,818,628	₱29,664,707	₱3,786,123	₱33,450,830

See accompanying Notes to Consolidated Financial Statements.

BUREAU OF INTERNAL REVENUE
APR 1 0 2019
EXCISE LT REGULATORY DIVISION

	Equity Attributable to Equity Holders of the Parent											
								Retained Earnings				
	Capital Stock (Note 18)	Treasury Stock	Additional Paid-in Capital (Note 18)	Share in Cumulative Translation Adjustment (Note 10)	Net Valuation Gains on Financial Assets (Note 7)	Cost of Share-based Payment Plan (Note 19)	Asset Revaluation Surplus	Unappropriated	Appropriated (Note 18)	Total	NCI	Total
Balances at December 31, 2016	P3,808,665	P–	P8,300,002	P409,286	P12,954	P126,622	P32,480	P13,221,526	P1,108,956	P27,020,491	P4,179,162	P31,199,653
Net income	–	–	–	–	–	–	–	2,770,768	–	2,770,768	1,083,376	3,854,144
Other comprehensive income (loss)	–	–	–	154,866	150,981	–	(383)	(4,853)	–	300,611	1,122	301,733
Total comprehensive income (loss)	–	–	–	154,866	150,981	–	(383)	2,765,915	–	3,071,379	1,084,498	4,155,877
Cost of share-based payment plan (Notes 19 and 27)	–	–	–	–	–	11,013	–	–	–	11,013	–	11,013
Cash dividends (Note 18)	–	–	–	–	–	–	–	(608,234)	–	(608,234)	–	(608,234)
7% Cash dividends - Preferred share (Note 34)	–	–	–	–	–	–	–	(504)	–	(504)	–	(504)
Cash dividends to NCI (Notes 33 and 34)	–	–	–	–	–	–	–	–	–	–	(1,540,000)	(1,540,000)
Reversal of appropriation (Note 18)	–	–	–	–	–	–	–	108,956	(108,956)	–	–	–
Appropriation of retained earnings (Note 18)	–	–	–	–	–	–	–	(95,583)	95,583	–	–	–
Dilution in NCI	–	–	(37,547)	–	–	–	–	–	–	(37,547)	37,547	–
Asset revaluation surplus transferred to retained earnings (Note 9)	–	–	–	–	–	–	–	383	–	383	–	383
Balances at December 31, 2017	P3,808,665	P–	P8,262,455	P564,152	P163,935	P137,635	P32,097	P15,392,459	P1,095,583	P29,456,981	P3,761,207	P33,218,188

See accompanying Notes to Consolidated Financial Statements.

BUREAU OF INTERNAL REVENUE
APR 10 2019
EXCISE LT REGULATORY DIVISION

	Capital Stock	Treasury Stock	Additional Paid-in Capital	Share in Cumulative Translation Adjustment	Net Valuation Gains (Losses) on Financial Assets	Cost of Share-based Payment Plan	Asset Revaluation Surplus	Retained Earnings Unappropriated	Retained Earnings Appropriated (Note 18)	Total	NCI	Total
	Equity Attributable to Equity Holders of the Parent											
Balances at December 31, 2015	₱3,805,670	₱–	₱8,284,767	₱406,609	(₱134,467)	₱104,824	₱32,863	₱11,300,347	₱1,711,260	₱25,511,873	₱3,901,315	₱29,413,188
Net income	–	–	–	–	–	–	–	1,966,107	–	1,966,107	745,035	2,711,142
Other comprehensive income (loss)	–	–	–	2,677	147,421	–	(383)	(39,356)	–	110,359	(16,588)	93,771
Total comprehensive income (loss)	–	–	–	2,677	147,421	–	(383)	1,926,751	–	2,076,466	728,447	2,804,913
Exercise of stock options	2,995	–	15,235	–	–	(3,855)	–	–	–	14,375	–	14,375
Cost of share-based payment plan (Note 27)	–	–	–	–	–	25,653	–	–	–	25,653	–	25,653
Cash dividends (Note 18)	–	–	–	–	–	–	–	(607,755)	–	(607,755)	–	(607,755)
7% Cash dividends - Preferred share (Note 34)	–	–	–	–	–	–	–	(504)	–	(504)	–	(504)
Cash dividends to NCI (Note 34)	–	–	–	–	–	–	–	–	–	–	(677,500)	(677,500)
Reversal of appropriation (Note 18)	–	–	–	–	–	–	–	711,260	(711,260)	–	–	–
Appropriation of retained earnings (Note 18)	–	–	–	–	–	–	–	(108,956)	108,956	–	–	–
Asset revaluation surplus transferred to retained earnings (Note 9)	–	–	–	–	–	–	–	383	–	383	–	383
Investments from non-controlling shareholders	–	–	–	–	–	–	–	–	–	–	226,900	226,900
Balances at December 31, 2016	₱3,808,665	₱–	₱8,300,002	₱409,286	₱12,954	₱126,622	₱32,480	₱13,221,526	₱1,108,956	₱27,020,491	₱4,179,162	₱31,199,653

See accompanying Notes to Consolidated Financial Statements.

BUREAU OF INTERNAL REVENUE
APR 10 2019
EXCISE LT REGULATORY DIVISION

NICKEL ASIA CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Amounts in Thousands)

	Years Ended December 31		
	2018	2017	2016
CASH FLOWS FROM OPERATING ACTIVITIES			
Income before income tax	**₱6,331,415**	₱5,591,000	₱4,160,620
Adjustments for:			
Depreciation, amortization and depletion (Notes 9 and 28)	**1,352,605**	1,480,045	1,475,139
Interest income (Note 29)	**(354,803)**	(301,967)	(228,430)
Equity in net losses (income) of associates (Note 10)	**(348,168)**	(197,972)	413,702
Loss (gain) on:			
Changes in fair value of financial assets (Note 31)	**143,711**	–	–
Sale of property and equipment (Note 31)	**(59,683)**	4,508	(6,644)
Sale of financial assets at FVOCI (Note 31)	**49,456**	–	–
Sale of financial assets at amortized cost (Note 31)	**(2,353)**	–	–
Write-off of investment property (Note 31)	**1,623**	–	–
Sale of AFS financial assets (Notes 7 and 31)	**–**	(14,336)	11,715
Debt extinguishment (see Notes 15 and 30)	**–**	3,433	–
Sale of interest in an associate (Notes 10 and 31)	**–**	–	(239,620)
Write-off of advances to claimowners (Note 31)	**–**	–	5,350
Write-off of AFS financial assets (Note 31)	**–**	–	3,000
Write-off of deferred mine exploration costs (Notes 31 and 39e)	**–**	–	2,278
Interest expense (Notes 22 and 30)	**166,732**	203,049	135,741
Unrealized foreign exchange losses (gains) - net (Note 31)	**(153,705)**	9,720	(300,086)
Cost of share-based payment plan (Notes 19 and 27)	**102,368**	11,013	25,653
Dividend income (Notes 7 and 31)	**(38,849)**	(36,967)	(35,117)
Accretion of interest on provision for mine rehabilitation and decommissioning (Notes 16 and 30)	**13,746**	16,123	8,942
Movements in pension liability	**(5,819)**	(36,225)	(17,119)
Provisions for (reversals of allowance for) impairment losses on:			
Deferred mine exploration costs (Notes 13 and 31)	**15**	1,233	460
AFS financial assets (Notes 7 and 31)	**–**	133,320	119,220
Property and equipment (Notes 9 and 31)	**–**	(12,825)	12,825
Operating income before working capital changes	**7,198,291**	6,853,152	5,547,629
Decrease (increase) in:			
Trade and other receivables	**(76,748)**	223,212	(235,789)
Inventories	**(179,902)**	(91,891)	217,927
Prepayments and other current assets	**(235,047)**	61,253	(7,108)
Increase in trade and other payables	**136,678**	296,999	119,395
Net cash generated from operations	**6,843,272**	7,342,725	5,642,054
Income taxes paid	**(1,993,378)**	(2,056,887)	(1,128,663)
Net cash flows from operating activities	**4,849,894**	5,285,838	4,513,391

(Forward)

	Years Ended December 31		
	2018	2017	2016
CASH FLOWS FROM INVESTING ACTIVITIES			
Proceeds from sale of:			
Financial assets at:			
FVTPL	**₱2,007,499**	₱–	₱–
FVOCI	**1,700,179**	–	–
Amortized cost	**198,401**	–	–
Property and equipment	**85,052**	20,116	12,794
AFS financial assets (Note 7)	**–**	4,981,173	8,296,174
Interest in an associate (Note 10)	**–**	–	2,037,188
Acquisitions of:			
Financial assets at (Note 7):			
FVOCI	**(1,489,737)**	–	–
FVTPL	**(786,674)**	–	–
Amortized cost	**(48,439)**	–	–
Property and equipment (Note 9)	**(1,144,269)**	(1,494,458)	(3,349,750)
AFS financial assets (Note 7)	**–**	(5,246,568)	(8,641,008)
Interest received	**354,958**	295,365	221,560
Decrease (increase) in:			
Other noncurrent assets	**(46,239)**	(52,212)	10,861
Geothermal exploration and evaluation assets (Note 11)	**(9,261)**	(8,384)	(463,184)
Dividends received (Note 7)	**38,924**	36,862	35,138
Net cash flows from (used in) investing activities	**860,394**	(1,468,106)	(1,840,227)
CASH FLOWS FROM FINANCING ACTIVITIES			
Payments of:			
Cash dividends (Notes 18 and 34)	**(4,418,734)**	(1,801,238)	(1,473,259)
Long-term debts	**(1,625,187)**	(1,628,463)	(114,827)
Long-term payable	**(5,000)**	(5,000)	–
Short-term debt	**–**	(180,000)	–
Proceeds from:			
Availment of short-term debts (Note 15)	**1,488,922**	–	–
Availment of long-term debt (Note 15)	**–**	–	1,182,846
Exercise of stock options	**–**	–	14,375
Interest paid	**(126,195)**	(188,840)	(178,460)
Acquisitions of treasury stock	**(20,366)**	–	–
Decrease in deferred income	**(4,190)**	(4,190)	(4,190)
Investments from non-controlling shareholders	**–**	–	226,900
Increase in other current liability (Note 39k)	**–**	–	21
Net cash flows used in financing activities	**(4,710,750)**	(3,807,731)	(346,594)
NET INCREASE IN CASH AND CASH EQUIVALENTS	**999,538**	10,001	2,326,570
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	**9,635,514**	9,647,943	7,073,171
EFFECT OF EXCHANGE RATE CHANGES IN CASH AND CASH EQUIVALENTS (Note 31)	**149,317**	(22,430)	248,202
CASH AND CASH EQUIVALENTS AT END OF YEAR (Note 4)	**₱10,784,369**	₱9,635,514	₱9,647,943

See accompanying Notes to Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in Thousands, Except Number of Shares, Per Share Data and as Indicated)

1. **Corporate Information**

Nickel Asia Corporation (NAC; Parent Company) was registered with the Philippine Securities and Exchange Commission (SEC) on July 24, 2008. The Parent Company is primarily engaged in investing in and holding of assets of every kind and description and wherever situated, as and to the extent permitted by law. It is also registered, within the limits prescribed by law, to engage in the business of mining of all kinds of ore, metals and minerals and in the business of generation, transmission, distribution and supply of electricity to cities and other localities and to the public in general.

The common shares of the Parent Company were listed on the Philippine Stock Exchange (PSE) on November 22, 2010. The registered office address of the Parent Company is at 28th floor NAC Tower, 32nd Street, Bonifacio Global City, Taguig City.

The Subsidiaries

Hinatuan Mining Corporation (HMC)
HMC was registered with the SEC on October 9, 1979, is a 100% owned subsidiary of the Parent Company and is primarily engaged in the exploration, mining and exporting of nickel ore located in Hinatuan Island, Surigao del Norte and Manicani Island, Eastern Samar. HMC is also engaged in the chartering out of Landing Craft Transport (LCT) and providing complete marine services.

Cagdianao Mining Corporation (CMC)
CMC was registered with the SEC on July 25, 1997, is a 100% owned subsidiary of the Parent Company and is primarily engaged in the exploration, mining and exporting of nickel ore located in Barangay Valencia, Municipality of Cagdianao, Province of Dinagat Island.

La Costa Shipping and Lighterage Corporation (LCSLC)
LCSLC was registered with the SEC on October 23, 1992, is a 100% owned subsidiary of the Parent Company through HMC, and is primarily engaged in the chartering out of LCT and providing complete marine services. LCSLC was acquired by HMC in April 2010. On May 6, 2014, the Board of Directors (BOD) of LCSLC authorized the sale of all of its LCT to HMC for a consideration.

Dinapigue Mining Corporation (DMC; formerly Geogen Corporation)
DMC was registered with the SEC on October 9, 1998, is a 100% owned subsidiary of the Parent Company and is primarily engaged in the exploration, exploitation and mining of metallic and non-metallic minerals, including, but not limited to, nickel, iron, cobalt, chromite and other associated mineral deposits. As at March 14, 2019, DMC has not yet started commercial operations and is currently under development stage. On March 5, 2018, the SEC approved the change in DMC's corporate name.

Samar Nickel Mining Resources Corporation (SNMRC)
SNMRC was registered with the SEC on March 11, 2010, is a 100% owned subsidiary of the Parent Company and is primarily engaged in the exploration, mining and exporting of mineral ores. As at March 14, 2019, SNMRC has not yet started commercial operations.

Falck Exp Inc. (FEI)
FEI was registered with the SEC on November 22, 2005, is an 88% owned subsidiary of the Parent Company through HMC, CMC and Taganito Mining Corporation (TMC), and is primarily engaged in the business of exploring, prospecting and operating mines and quarries of all kinds of ores and minerals, metallic and non-metallic. On August 8, 2014, the BOD of FEI approved the immediate dissolution of FEI. Thereafter, the liquidation process commenced and as a result, FEI changed from going-concern to liquidation basis of accounting. On November 17, 2016, the termination of FEI's registration with the Bureau of Internal Revenue (BIR) was approved. Final dissolution will take place after the approval of FEI's application with the SEC. As at March 14, 2019, FEI is still waiting for the approval of SEC.

Cordillera Exploration Co., Inc. (CExCI)
CExCI was registered with the SEC on October 19, 1994, is a 71.25% owned subsidiary of the Parent Company and is primarily engaged in the business of large-scale exploration, development and utilization of mineral resources. CExCI has a number of mining properties at various stages of exploration. As at March 14, 2019, CExCI is currently not engaged in any development or commercial production activities.

Newminco Pacific Mining Corporation (Newminco)
Newminco was registered with the SEC on October 9, 2006, is a 71.25% owned subsidiary of the Parent Company through CExCI, and is primarily engaged in the exploration, mining, development, utilization, extraction, beneficiation and marketing of minerals and mineral resources. As at March 14, 2019, Newminco is currently not engaged in any development or commercial production activities.

Taganito Mining Corporation
TMC was registered with the SEC on March 4, 1987, is a 65% owned subsidiary of the Parent Company and is primarily engaged in the exploration, mining and exporting of nickel ore located in Claver, Surigao del Norte. TMC also provides services which involves the handling, hauling and transportation of materials required in the processing operations of Taganito HPAL Nickel Corporation (THNC).

Rio Tuba Nickel Mining Corporation (RTN)
RTN was registered with the SEC on July 15, 1969, is a 60% owned subsidiary of the Parent Company and is primarily engaged in the exploration, mining and exporting of nickel ore located in Barangay Rio Tuba, Municipality of Bataraza, Palawan. RTN also provides services which involves the handling, hauling and transportation of materials required in the processing operations of Coral Bay Nickel Corporation (CBNC).

Emerging Power Inc. (EPI)
EPI was registered with the SEC on October 16, 2007, is an 86.29% owned subsidiary of the Parent Company and is primarily engaged in the renewable energy business.

Mindoro Geothermal Power Corporation (MGPC)
MGPC was registered with the SEC on May 7, 2014, is an 86.29% owned subsidiary of the Parent Company through EPI, and is primarily engaged in the renewable energy business. By virtue of a Deed of Assignment of rights and obligations of EPI under Geothermal Renewable Energy Service Contract (GRESC) No. 2010-02-013 on November 24, 2014, MGPC acquired the exclusive rights to explore, develop and exploit geothermal resources covering a geothermal field in the municipality of Naujan, Oriental Mindoro.

Manta Energy Inc. (MEI)
MEI was registered with the SEC on May 21, 2007, is an 86.29% owned subsidiary of the Parent Company through EPI, and is primarily engaged in power business, including but not limited to power generation, power trading and supply to retail customers and end users. On July 5, 2016, the Energy Regulatory Commission (ERC) approved MEI's registration as Registered Electric Supplier for a period of five (5) years, and renewable thereafter.

Biliran Holdings Inc. (BHI)
BHI was registered with the SEC on July 31, 2015, is an 86.29% owned subsidiary of the Parent Company through EPI, and is primarily engaged in investing in and holding of assets of every kind and description, as and to the extent permitted by law. It is also registered, within the limits prescribed by law, to engage in the business of infrastructure, power generation, real estate, manufacturing, trading and agribusiness and to pay other evidences of indebtedness or securities of this or any other corporation.

Jobin-SQM, Inc. (Jobin)
Jobin was registered with the SEC on January 6, 2010, is an 86.29% owned subsidiary of the Parent Company through EPI, and is primarily engaged in power business, including but not limited to power generation, power trading and supply to retail customers and end users. Jobin was acquired by EPI on September 11, 2015. On May 23, 2016, Jobin entered into the testing and commissioning phase for the 7.14 megawatt (MW) Sta. Rita Solar Power Project. On November 7, 2016, Jobin was granted by ERC a Provisional Authority to Operate (PAO) to transition from testing and commissioning phase to actual production and operation phase for a period of six (6) months for its 7.14 MW Sta. Rita Solar Power Plant pending approval of Jobin's dedicated point to point limited facilities to connect to the transmission system. On March 18, 2017, Jobin commenced testing and commissioning phase for the 25.19 MW Sta. Rita Solar Power Project and was granted by ERC a PAO to transition from testing and commissioning phase to actual production on September 27, 2017. In 2018, the ERC extended the effectivity of the PAO until May 14, 2019. Further, Jobin is expected to commence the construction of Phase III of the Sta. Rita Solar Power Project, or an estimated additional 20 to 30 MW in 2020 which is also expected to become operational on the same year.

Biliran Geothermal Inc. (BGI)
BGI was registered with the SEC on October 31, 2007, is a 51.77% owned subsidiary of the Parent Company through EPI. The principal activities of BGI are to explore, exploit, discover, develop, extract, dig and drill for, produce, utilize, refine, treat, process, transport, store, market, sell, use, supply, experiment with, distribute, manufacture, or otherwise deal in, any substance, minerals or otherwise, which by itself or in contribution with other substances generate or emanate heat or power and to enter into and perform service contracts including geothermal services. On December 28, 2014, BGI received the Confirmation of Commerciality for the Biliran Geothermal Project from the Philippine Government through the Department of Energy (DOE). BGI was acquired by BHI on December 17, 2015.

Mantex Services Inc. (Mantex)
Mantex was registered with the SEC on March 26, 2012, is a 43.15% owned subsidiary of the Parent Company through EPI. Mantex is established primarily to provide technical, financial and public relations advisory, management and investments services for infrastructure projects.

The consolidated financial statements as at December 31, 2018 and 2017 and for each of the three years in the period ended December 31, 2018 were authorized for issuance by the Parent Company's BOD on March 14, 2019.

2. Basis of Preparation and Consolidation, Statement of Compliance and Summary of Significant Accounting Policies

Basis of Preparation
The consolidated financial statements have been prepared on a historical cost basis, except for AFS financial assets in 2017, financial assets at FVTPL and at FVOCI in 2018, which are measured at fair value. The consolidated financial statements are presented in Philippine peso, which is the Parent Company and its subsidiaries' (collectively referred to as the Group) functional and presentation (or reporting) currency. All amounts are rounded to the nearest thousand (₱000), except when otherwise indicated.

Basis of Consolidation
The consolidated financial statements include the balances of its subsidiaries and equity share in earnings of its associates:

	Principal Place of Business	Principal Activities	Effective Ownership 2018	Effective Ownership 2017
Subsidiaries				
HMC	Philippines	Mining and Services	**100.00%**	100.00%
CMC	Philippines	Mining	**100.00%**	100.00%
LCSLC [(a)]	Philippines	Services	**100.00%**	100.00%
DMC	Philippines	Mining	**100.00%**	100.00%
SNMRC	Philippines	Mining	**100.00%**	100.00%
FEI [(b)]	Philippines	Mining	**88.00%**	88.00%
CExCI	Philippines	Mining	**71.25%**	71.25%
Newminco [(c)]	Philippines	Mining	**71.25%**	71.25%
TMC	Philippines	Mining and Services	**65.00%**	65.00%
RTN	Philippines	Mining and Services	**60.00%**	60.00%
EPI*	Philippines	Renewable Energy (RE) Developer	**86.29%**	86.29%
MGPC [(d)]	Philippines	RE Developer	**86.29%**	86.29%
MEI [(d)]	Philippines	Power Generation, Trading and Services	**86.29%**	86.29%
BHI [(d)]	Philippines	Services	**86.29%**	86.29%
Jobin [(d)]	Philippines	Power Generation	**86.29%**	86.29%
BGI [(d)]	Philippines	Power Generation	**51.77%**	51.77%
Mantex [(d)]	Philippines	Management and Advisory Services	**43.15%**	43.15%
Associates				
THNC	Philippines	Manufacturing	**10.00%**	10.00%
CBNC	Philippines	Manufacturing	**10.00%**	10.00%

* The Parent Company's equity interest in EPI increased from 70.92% to 86.29% as a result of capital infusion of ₱1,500.0 million in September 2017.

(a) Indirect ownership through HMC
(b) Indirect ownership through HMC, CMC and TMC
(c) Indirect ownership through CExCI
(d) Indirect ownership through EPI

The consolidated financial statements comprise the financial statements of the Group as at December 31, 2018 and 2017. The financial statements of the subsidiaries are prepared for the same reporting year as the Parent Company using uniform accounting policies. When necessary, adjustments are made to the separate financial statements of the subsidiaries to bring their accounting policies in line with the Group's accounting policies.

Subsidiaries
Subsidiaries are entities over which the Parent Company has control. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

The Group controls an investee if and only if the Group has:
- Power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee);
- Exposure, or rights, to variable returns from its involvement with the investee; and
- The ability to use its power over the investee to affect its returns.

When the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:
- The contractual arrangement with the other vote holders of the investee;
- Rights arising from other contractual arrangements; and
- The Group's voting rights and potential voting rights.

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated financial statements from the date the Group gains control until the date the Group ceases to control the subsidiary.

Consolidated statement of income and each component of consolidated statement of comprehensive income are attributed to the equity holders of the Parent Company and to the NCI, even if this results in the NCI having a deficit balance.

NCI
NCI represents interest in a subsidiary that is not owned, directly or indirectly, by the Parent Company.

NCI represents the portion of profit or loss and the net assets not held by the Group. Transactions with NCI are accounted for using the entity concept method, whereby the difference between the consideration and the book value of the share in the net assets acquired is recognized as an equity transaction.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction. If the Parent Company loses control over a subsidiary, it:
- Derecognizes the assets (including goodwill) and liabilities of the subsidiary;
- Derecognizes the carrying amount of any NCI;
- Derecognizes the cumulative translation differences recorded in equity;
- Recognizes the fair value of the consideration received;
- Recognizes the fair value of any investment retained;
- Recognizes any surplus or deficit in the consolidated statement of income; and
- Reclassifies the Parent Company's share of components previously recognized in the consolidated statement of comprehensive income to consolidated statement of income or retained earnings, as appropriate, as would be required if the Parent Company had directly disposed of the related assets or liabilities.

All intra-group balances, transactions, income and expenses and profits and losses resulting from intra-group transactions are eliminated in full.

Statement of Compliance
The consolidated financial statements of the Group have been prepared in compliance with PFRS.

Changes in Accounting Policies and Disclosures
The accounting policies adopted are consistent with those of the previous financial year except that the Group has applied for the first time certain pronouncements, which are effective for annual periods beginning on or after January 1, 2018. Adoption of these pronouncements did not have any significant impact on the Group's financial position or performance unless otherwise indicated.

- Amendments to PFRS 2, *Share-based Payment*, *Classification and Measurement of Share-based Payment Transactions*
  The amendments to PFRS 2 address three main areas: the effects of vesting conditions on the measurement of a cash-settled share-based payment transaction; the classification of a share-based payment transaction with net settlement features for withholding tax obligations; and the accounting where a modification to the terms and conditions of a share-based payment transaction changes its classification from cash-settled to equity-settled.

  Entities are required to apply the amendments to: (1) share-based payment transactions that are unvested or vested but unexercised as of January 1, 2018, (2) share-based payment transactions granted on or after January 1, 2018, and to (3) modifications of share-based payments that occurred on or after January 1, 2018. Retrospective application is permitted if elected for all three amendments and if it is possible to do so without hindsight.

  The amendments have no impact on the consolidated financial statements since the Group's share-based payment is equity settled, has no net settlement features for withholding tax obligations and the Group has not made any modifications to the terms and conditions.

- Amendments to PFRS 4, *Applying* PFRS 9*, Financial Instruments* with PFRS 4*, Insurance Contracts*
  The amendments address concerns arising from implementing PFRS 9, the new financial instruments standard before implementing the new insurance contracts standard. The amendments introduce two options for entities issuing insurance contracts: a temporary exemption from applying PFRS 9 and an overlay approach. The temporary exemption is first applied for reporting periods beginning on or after January 1, 2018. An entity may elect the overlay approach when it first applies PFRS 9 and apply that approach retrospectively to financial assets designated on transition to PFRS 9. The entity restates comparative information reflecting the overlay approach if, and only if, the entity restates comparative information when applying PFRS 9.

  The amendments are not applicable to the Group since none of the entities within the Group have activities that are predominantly connected with insurance or issue insurance contracts.

- PFRS 9, *Financial Instruments*
  PFRS 9, *Financial Instruments* replaces Philippine Accounting Standards (PAS) 39, *Financial Instruments: Recognition and Measurement* for annual periods beginning on or after January 1, 2018, bringing together all three aspects of the accounting for financial instruments: classification and measurement, impairment, and hedge accounting.

The Group chose not to restate comparative figures as permitted by the transitional provisions of PFRS 9, thereby resulting in the following impact:

- Comparative information for prior periods will not be restated. The classification and measurement requirements previously applied in accordance with PAS 39 and disclosures required in PFRS 7 will be retained for the comparative periods. Accordingly, the information presented for 2017 does not reflect the requirements of PFRS 9.
- The Group will disclose the accounting policies for both the current period and the comparative periods, one applying PFRS 9 beginning January 1, 2018 and one applying PAS 39 as at December 31, 2017.
- The difference between the previous carrying amount and the carrying amount at the beginning of the annual financial reporting period that includes the date of initial application was recognized in the opening retained earnings or other component of equity, as appropriate.
- As comparative information is not restated, the Group is not required to provide a third statement of financial position at the beginning of the earliest comparative period in accordance with PAS 1, *Presentation of Financial Statements*.

As at January 1, 2018, the Group has reviewed and assessed all of its existing financial assets. The table below illustrates the classification and measurement of financial assets and financial liabilities under PFRS 9 and PAS 39 at the date of initial application. The accounting policies adopted by the Group in its evaluation of the classification and measurement categories under PFRS 9 are discussed in the succeeding sections of this note.

A reconciliation between the carrying amounts under PAS 39 to the balances reported under PFRS 9 as at January 1, 2018 is, as follows:

		PAS 39 Measurement		Reclassification/ Remeasurement		PFRS 9 Measurement	
		Category	Amount	ECL	Other	Amount	Category
Financial assets							
Cash and cash equivalents		Loans and receivables	₱9,635,514	₱–	₱–	₱9,635,514	Amortized cost
Trade and other receivables		Loans and receivables	902,152	–	–	902,152	Amortized cost
Loan receivable - net of current portion		Loans and receivables	767,641	–	–	767,641	Amortized cost
Long-term negotiable instruments		Loans and receivables	40,000	–	–	40,000	Amortized cost
Debt instruments at amortized cost	A		–	–	693,275	693,275	Amortized cost
		Loans and receivables	₱11,345,307	₱–	₱693,275	₱12,038,582	Amortized cost
AFS financial assets			₱6,658,203	₱–	₱–	₱–	
To: Debt instruments at:							
Amortized cost	A		–	–	(695,640)	–	
FVOCI	B		–	–	(2,858,666)	–	
FVTPL	C		–	–	(1,543,354)	–	
To: Equity instruments at FVTPL	D		–	–	(1,560,543)	–	
		AFS financial assets	₱6,658,203	₱–	(₱6,658,203)	₱–	

		PAS 39 Measurement		Reclassification/ Remeasurement		PFRS 9 Measurement	
		Category	Amount	ECL	Other	Amount	Category
Debt instruments at FVOCI			₱–	₱–	₱–	₱–	FVOCI
From: AFS financial assets	B		–	–	2,858,666	2,858,666	
			₱–	₱–	₱2,858,666	₱2,858,666	FVOCI
Debt instruments at FVTPL			₱–	₱–	₱–	₱–	FVTPL
From: AFS financial assets	C		–	–	1,543,354	1,543,354	
			₱–	₱–	₱1,543,354	₱1,543,354	FVTPL
Equity instruments at FVTPL			₱–	₱–	₱–	₱–	FVTPL
From: AFS financial assets	D		–	–	1,787,569	1,787,569	
			₱–	₱–	₱1,787,569	₱1,787,569	FVTPL
Financial liabilities							
Trade and other payables		Amortized cost	₱7,342,009	₱–	₱–	₱7,342,009	Amortized cost
Long-term debts		Amortized cost	2,988,329	–	–	2,988,329	Amortized cost
Long-term payable		Amortized cost	29,000	–	–	29,000	Amortized cost
			₱10,359,338	₱–	₱–	₱10,359,338	

A *As at January 1, 2018, the Group has classified a portion of its previous AFS portfolio as debt instruments at amortized cost. These instruments represent solely payments of principal and interest (SPPI) on the principal amount outstanding or the SPPI criterion, were not actively traded and were held with the intention to collect cash flows and without the intention to sell. The fair value of these instruments that Group still held at December 31, 2018 was ₱521.3 million. The change in fair value over 2018, that would have been recorded in OCI had these instruments continued to be revalued through OCI, would have been ₱12.8 million loss.*

B *As at January 1, 2018, the Group has assessed its liquidity portfolio which had previously been classified as AFS debt instruments. The Group concluded that these instruments are managed within a business model of collecting contractual cash flows and selling the financial assets. Accordingly, the Group has classified these investments as debt instruments measured at FVOCI.*

C *As at January 1, 2018, the Group has classified a portion of its AFS securities as financial assets measured at FVTPL as the payments did not meet the SPPI criterion.*

D *As at January 1, 2018, the Group has classified its quoted and unquoted AFS equity securities as financial assets measured at FVTPL. The unquoted AFS equity securities were previously measured at cost under PAS 39. Such securities were remeasured at fair value on January 1, 2018 under PFRS 9 resulting to fair value adjustment of ₱227.0 million.*

Any differences in the comparative amounts from the amounts in the consolidated financial statements for the year ended December 31, 2017 are solely the result of reclassifications and remeasurements for comparative purposes.

The assessment of our business models was made as at the date of initial application, January 1, 2018, and applied modified retrospectively to those financial assets that were not derecognized before January 1, 2018. The assessment of whether contractual cash flows on debt instruments are SPPI was made based on the facts and circumstances as at the initial recognition of the assets.

The effects of adopting PFRS 9 are set out below:

	Adjustments	January 1, 2018
Assets		
Financial assets at:		
FVTPL	*(a)*	₱227,026
Amortized cost	*(a)*	(2,365)
		224,661
Liabilities		
Deferred income tax liabilities	*(c)*	24,275
Total adjustment on equity:		
Net valuation gains on financial assets	*(a)*	(206,740)
Retained earnings	*(a), (c)*	339,586
NCI	*(a), (c)*	67,540
		₱200,386

The nature of these adjustments pertains mainly to classification and measurement as described below:

a) *Classification and Measurement*

Under PFRS 9, debt instruments are subsequently measured at FVTPL, amortized cost, or FVOCI. The classification is based on two criteria: the Group's business model for managing the assets; and whether the instruments' contractual cash flows represent SPPI on the principal amount outstanding.

The assessment of the Group's business model was made as of the date of initial application, January 1, 2018. The assessment of whether contractual cash flows on debt instruments are solely comprised of principal and interest was made based on the facts and circumstances as at the initial recognition of the assets.

The following are the changes in the classification and measurement of the Group's financial assets:

- Cash and cash equivalents, trade and other receivables, loan receivable and long-term negotiable instruments previously classified as loans and receivables are held to collect contractual cash flows and give rise to cash flows representing SPPI. These are now classified and measured as financial assets at amortized cost.

- Quoted debt instruments previously classified as AFS financial assets are now classified and measured as follows:
  - Debt instruments at FVTPL - These are debt instruments that failed the SPPI test.
  - Debt instruments at FVOCI - The Group expects not only to hold the assets to collect contractual cash flows, but also to sell a significant amount on a relatively frequent basis.
  - Debt instruments at amortized cost - These are not actively traded and were held with the intention to collect cash flows and without the intention to sell.
- Equity investments in listed and non-listed companies previously classified as AFS financial assets are now classified and measured as financial assets at FVTPL.

As a result of the change in classification and measurement of the Group's equity and debt investments, the net valuation gains on financial assets of ₱204.3 million was reclassified to retained earnings and ₱2.4 million was reversed to recognize the financial assets at its amortized cost as at January 1, 2018. The remaining amount of net valuation losses on financial assets amounted to ₱42.8 million. In addition, the net valuation gains of ₱193.0 million, net of ₱34.0 million deferred income tax liability, from unquoted equity investments were also recognized in retained earnings as at January 1, 2018.

The Group has not designated any financial liabilities as at FVTPL. There are no changes in classification and measurement for the Group's financial liabilities.

In summary, upon the adoption of PFRS 9, the Group had the following required or elected reclassifications as at January 1, 2018:

		PFRS 9 measurement category		
		FVOCI	FVTPL	Amortized cost
PAS 39 measurement category				
Loans and receivable				
Cash and cash equivalents	₱9,635,514	₱–	₱–	₱9,635,514
Trade and other receivables	902,152	–	–	902,152
Loan receivable - net of current portion	767,641	–	–	767,641
Long-term negotiable instruments	40,000	–	–	40,000
AFS financial assets				
Quoted equity securities	1,353,957	–	1,353,957	–
Unquoted equity securities	206,586	–	206,586	–
Quoted debt securities	5,097,660	2,858,666	1,543,354	695,640
	₱18,003,510	₱2,858,666	₱3,103,897	₱12,040,947

b) *Impairment*

The adoption of PFRS 9 has fundamentally changed the Group's accounting for impairment losses for financial assets by replacing PAS 39's incurred loss approach with a forward-looking expected credit loss (ECL) approach. PFRS 9 requires the Group to recognize an allowance for ECLs for all debt instruments not held at FVTPL.

Upon adoption of PFRS 9, no additional impairment was recognized on the Group's cash and cash equivalents, trade and other receivables, financial assets at FVOCI and at amortized cost, loan receivable and long-term negotiable instruments as at January 1, 2018.

Set out below is the reconciliation of the ending impairment allowances in accordance with PAS 39 to the opening loss allowances determined in accordance with PFRS 9:

	Allowance for impairment under PAS 39 as at December 31, 2017	Remeasurement	ECL under PFRS 9 as at January 1, 2018
Loans and receivables under PAS 39/Financial assets at amortized cost under PFRS 9 and contract assets	₱45,749	₱–	₱45,749
AFS financial assets under PAS 39/Debt instruments at FVOCI and at amortized cost under PFRS 9	–	–	–
	₱45,749	₱–	₱45,749

c) *Other Adjustments*

In addition to the adjustments described above, other items such as deferred income taxes were adjusted to retained earnings as necessary upon adoption of PFRS 9 as at January 1, 2018.

d) *Hedge Accounting*

The Group has elected to adopt the new general hedge accounting model in PFRS 9. However, the changes introduced by PFRS 9 relating to hedge accounting currently have no impact, as the Group does not apply hedge accounting.

- PFRS 15, *Revenue from Contracts with Customers*
PFRS 15 supersedes PAS 18, *Revenue* and related Interpretations and it applies, with limited exceptions, to all revenue arising from contracts with its customers. PFRS 15 establishes a five-step model to account for revenue arising from contracts with customers. The five-step model is as follows:
    1. Identify the contract with a customer;
    2. Identify the performance obligations in the contract;
    3. Determine the transaction price;
    4. Allocate the transaction price to the performance obligations in the contract; and,
    5. Recognize revenue as the entity satisfies a performance obligation

PFRS 15 requires that revenue be recognized at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. PFRS 15 requires entities to exercise judgement, taking into consideration all of the relevant facts and circumstances when applying each step of the model to contracts with their customers. The standard also specifies the accounting for the incremental costs of obtaining a contract and the costs directly related to fulfilling a contract. In addition, the standard requires extensive disclosures.

The Group adopted PFRS 15 using the modified retrospective method of adoption with the date of initial application of January 1, 2018. Under this method, PFRS 15 can be applied either to all contracts at the date of initial application or only to contracts that are not completed at this date. The Group elected to apply the method only to those contracts that are not completed as at January 1, 2018.

The cumulative effect of initially applying PFRS 15 is recognized at the date of initial application as an adjustment to the opening balance of retained earnings. Therefore, the comparative information was not restated and continues to be reported under PAS 18 and related Interpretations.

The adoption of PFRS 15 did not have material impact on the consolidated statement of income and statement of financial position as at and for the year ended December 31, 2018 and the Group's statement of cash flows.

- Amendments to PAS 28, *Investments in Associates and Joint Ventures*, *Measuring an Associate or Joint Venture at Fair Value* (*Part of Annual Improvements to PFRSs 2014 - 2016 Cycle*)
  The amendments clarify that an entity that is a venture capital organization, or other qualifying entity, may elect, at initial recognition on an investment-by-investment basis, to measure its investments in associates and joint ventures at FVTPL. They also clarify that if an entity that is not itself an investment entity has an interest in an associate or joint venture that is an investment entity, the entity may, when applying the equity method, elect to retain the fair value measurement applied by that investment entity associate or joint venture to the investment entity associate's or joint venture's interests in subsidiaries. This election is made separately for each investment entity associate or joint venture, at the later of the date on which (a) the investment entity associate or joint venture is initially recognized; (b) the associate or joint venture becomes an investment entity; and (c) the investment entity associate or joint venture first becomes a parent. Retrospective application is required.

  The amendments have no impact on the consolidated financial statements of the Group.

- Amendments to PAS 40, *Investment Property*, *Transfers of Investment Property*
  The amendments clarify when an entity should transfer property, including property under construction or development into, or out of investment property. The amendments state that a change in use occurs when the property meets, or ceases to meet, the definition of investment property and there is evidence of the change in use. A mere change in management's intentions for the use of a property does not provide evidence of a change in use. Retrospective application of the amendments is not required and is only permitted if this is possible without the use of hindsight.

  Since the Group's current practice is in line with the clarifications issued, the amendments have no significant effect on the consolidated financial statements.

- Philippine Interpretation based on International Financial Reporting Interpretations Committee (IFRIC) 22, *Foreign Currency Transactions and Advance Consideration*
  The interpretation clarifies that, in determining the spot exchange rate to use on initial recognition of the related asset, expense or income (or part of it) on the derecognition of a nonmonetary asset or nonmonetary liability relating to advance consideration, the date of the transaction is the date on which an entity initially recognizes the nonmonetary asset or nonmonetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, then the entity must determine the date of the transaction for each payment or receipt of advance consideration. Retrospective application of this interpretation is not required.

  Since the Group's current practice is in line with the clarifications issued, the amendments have no significant effect on the consolidated financial statements.

Standards and Interpretations Issued but not yet Effective

Pronouncements issued but not yet effective are listed below. Unless otherwise indicated, the Group does not expect that the future adoption of the said pronouncements will have a significant impact on its consolidated financial statements. The Group intends to adopt the following pronouncements when they become effective.

Effective beginning on or after January 1, 2019:

- Amendments to PFRS 9, *Prepayment Features with Negative Compensation*
  Under PFRS 9, a debt instrument can be measured at amortized cost or at FVOCI, provided that the contractual cash flows are SPPI on the principal amount outstanding and the instrument is held within the appropriate business model for that classification. The amendments to PFRS 9 clarify that a financial asset passes the SPPI criterion regardless of the event or circumstance that causes the early termination of the contract and irrespective of which party pays or receives reasonable compensation for the early termination of the contract. The amendments should be applied retrospectively and are effective from January 1, 2019, with earlier application permitted.

  These amendments are not expected to have any impact on the consolidated financial statements of the Group.

- PFRS 16, *Leases*
  PFRS 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model similar to the accounting for finance leases under PAS 17, *Leases*. The standard includes two (2) recognition exemptions for lessees - leases of "low-value" assets (e.g., personal computers) and short-term leases (i.e., leases with a lease term of twelve (12) months or less). At the commencement date of a lease, a lessee will recognize a liability to make lease payments (i.e., the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e., the right-of-use asset). Lessees will be required to separately recognize the interest expense on the lease liability and the depreciation expense on the right-of-use asset.

  Lessees will be also required to remeasure the lease liability upon the occurrence of certain events (e.g., a change in the lease term, a change in future lease payments resulting from a change in an index or rate used to determine those payments). The lessee will generally recognize the amount of the remeasurement of the lease liability as an adjustment to the right-of-use asset.

  Lessor accounting under PFRS 16 is substantially unchanged from today's accounting under PAS 17. Lessors will continue to classify all leases using the same classification principle as in PAS 17 and distinguish between two (2) types of leases: operating and finance leases.

  PFRS 16 also requires lessees and lessors to make more extensive disclosures than under PAS 17. A lessee can choose to apply the standard using either a full retrospective or a modified retrospective approach. The standard's transition provisions permit certain reliefs.

  The Group is currently assessing the impact of adopting PFRS 16 on the consolidated financial statements.

- Amendments to PAS 19, *Employee Benefits, Plan Amendment, Curtailment or Settlement*
  The amendments to PAS 19 address the accounting when a plan amendment, curtailment or settlement occurs during a reporting period. The amendments specify that when a plan amendment, curtailment or settlement occurs during the annual reporting period, an entity is required to:
  - Determine current service cost for the remainder of the period after the plan amendment, curtailment or settlement, using the actuarial assumptions used to remeasure the net defined benefit liability (asset) reflecting the benefits offered under the plan and the plan assets after that event
  - Determine net interest for the remainder of the period after the plan amendment, curtailment or settlement using: the net defined benefit liability (asset) reflecting the benefits offered under the plan and the plan assets after that event; and the discount rate used to remeasure that net defined benefit liability (asset).

  The amendments also clarify that an entity first determines any past service cost, or a gain or loss on settlement, without considering the effect of the asset ceiling. This amount is recognized in profit or loss. An entity then determines the effect of the asset ceiling after the plan amendment, curtailment or settlement. Any change in that effect, excluding amounts included in the net interest, is recognized in other comprehensive income.

  The amendments apply to plan amendments, curtailments, or settlements occurring on or after the beginning of the first annual reporting period that begins on or after January 1, 2019, with early application permitted.

  The Group is currently assessing the impact of adopting amendments to PAS 19 on the consolidated financial statements.

- Amendments to PAS 28, *Long-term Interests in Associates and Joint Ventures*
  The amendments clarify that an entity applies PFRS 9 to long-term interests in an associate or joint venture to which the equity method is not applied but that, in substance, form part of the net investment in the associate or joint venture (long-term interests). This clarification is relevant because it implies that the ECL model in PFRS 9 applies to such long-term interests.

  The amendments also clarified that, in applying PFRS 9, an entity does not take account of any losses of the associate or joint venture, or any impairment losses on the net investment, recognized as adjustments to the net investment in the associate or joint venture that arise from applying PAS 28, *Investments in Associates and Joint Ventures*.

  The amendments should be applied retrospectively and are effective from January 1, 2019, with early application permitted.

  Adoption of these amendments is not expected to have any impact on the consolidated financial statements of the Group.

- Philippine Interpretation IFRIC 23, *Uncertainty over Income Tax Treatments*
  The interpretation addresses the accounting for income taxes when tax treatments involve uncertainty that affects the application of PAS 12, *Income Taxes,* and does not apply to taxes or levies outside the scope of PAS 12, nor does it specifically include requirements relating to interest and penalties associated with uncertain tax treatments.

The interpretation specifically addresses the following:
- Whether an entity considers uncertain tax treatments separately
- The assumptions an entity makes about the examination of tax treatments by taxation authorities
- How an entity determines taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates
- How an entity considers changes in facts and circumstances

An entity must determine whether to consider each uncertain tax treatment separately or together with one or more other uncertain tax treatments. The approach that better predicts the resolution of the uncertainty should be followed.

The Group is currently assessing the impact of adopting this interpretation on the consolidated financial statements.

Annual Improvements to PFRSs 2015-2017 Cycle

- Amendments to PFRS 3, *Business Combinations,* and PFRS 11, *Joint Arrangements*, *Previously Held Interest in a Joint Operation*
  The amendments clarify that, when an entity obtains control of a business that is a joint operation, it applies the requirements for a business combination achieved in stages, including remeasuring previously held interests in the assets and liabilities of the joint operation at fair value. In doing so, the acquirer remeasures its entire previously held interest in the joint operation.

  A party that participates in, but does not have joint control of, a joint operation might obtain joint control of the joint operation in which the activity of the joint operation constitutes a business as defined in PFRS 3. The amendments clarify that the previously held interests in that joint operation are not re-measured.

  An entity applies those amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2019 and to transactions in which it obtains joint control on or after the beginning of the first annual reporting period beginning on or after January 1, 2019, with early application permitted.

  These amendments are currently not applicable to the Group but may apply to future transactions.

- Amendments to PAS 12*, Income Tax Consequences of Payments on Financial Instruments Classified as Equity*
  The amendments clarify that the income tax consequences of dividends are linked more directly to past transactions or events that generated distributable profits than to distributions to owners. Therefore, an entity recognizes the income tax consequences of dividends in profit or loss, other comprehensive income or equity according to where the entity originally recognized those past transactions or events.

  An entity applies those amendments for annual reporting periods beginning on or after January 1, 2019, with early application is permitted.

  These amendments are not relevant to the Group because dividends declared by the Group do not give rise to tax obligations under the current tax laws.

- Amendments to PAS 23, *Borrowing Costs, Borrowing Costs Eligible for Capitalization*
  The amendments clarify that an entity treats as part of general borrowings any borrowing originally made to develop a qualifying asset when substantially all of the activities necessary to prepare that asset for its intended use or sale are complete.

  An entity applies those amendments to borrowing costs incurred on or after the beginning of the annual reporting period in which the entity first applies those amendments. An entity applies those amendments for annual reporting periods beginning on or after January 1, 2019, with early application permitted.

  Since the Group's current practice is in line with these amendments, the Group does not expect any effect on its consolidated financial statements upon adoption.

Effective beginning on or after January 1, 2020:

- Amendments to PFRS 3, *Definition of a Business*
  The amendments to PFRS 3 clarify the minimum requirements to be a business, remove the assessment of a market participant's ability to replace missing elements, and narrow the definition of outputs. The amendments also add guidance to assess whether an acquired process is substantive and add illustrative examples. An optional fair value concentration test is introduced which permits a simplified assessment of whether an acquired set of activities and assets is not a business.

  An entity applies those amendments prospectively for annual reporting periods beginning on or after January 1, 2020, with earlier application permitted.

  These amendments will apply on future business combinations of the Group.

- Amendments to PAS 1, *Presentation of Financial Statements*, and PAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors*, *Definition of Material*
  The amendments refine the definition of material in PAS 1 and align the definitions used across PFRSs and other pronouncements. They are intended to improve the understanding of the existing requirements rather than to significantly impact an entity's materiality judgements.

  An entity applies those amendments prospectively for annual reporting periods beginning on or after January 1, 2020, with earlier application permitted.

Effective beginning on or after January 1, 2021:

- PFRS 17, *Insurance Contracts*
  PFRS 17 is a comprehensive new accounting standard for insurance contracts covering recognition and measurement, presentation and disclosure. Once effective, PFRS 17 will replace PFRS 4, *Insurance Contracts*. This new standard on insurance contracts applies to all types of insurance contracts (i.e., life, nonlife, direct insurance and reinsurance), regardless of the type of entities that issue them, as well as to certain guarantees and financial instruments with discretionary participation features. A few scope exceptions will apply.

  The overall objective of PFRS 17 is to provide an accounting model for insurance contracts that is more useful and consistent for insurers. In contrast to the requirements in PFRS 4, which are largely based on grandfathering previous local accounting policies, PFRS 17 provides a comprehensive model for insurance contracts, covering all relevant accounting aspects. The core of PFRS 17 is the general model, supplemented by:

- A specific adaptation for contracts with direct participation features (the variable fee approach)
- A simplified approach (the premium allocation approach) mainly for short-duration contracts

PFRS 17 is effective for reporting periods beginning on or after January 1, 2021, with comparative figures required. Early application is permitted.

The new standard is not expected to have any impact on the consolidated financial statements of the Group.

Deferred Effectivity:

- Amendments to PFRS 10, *Consolidated Financial Statements*, and PAS 28, *Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*
  The amendments address the conflict between PFRS 10 and PAS 28 in dealing with the loss of control of a subsidiary that is sold or contributed to an associate or joint venture. The amendments clarify that a full gain or loss is recognized when a transfer to an associate or joint venture involves a business as defined in PFRS 3. Any gain or loss resulting from the sale or contribution of assets that does not constitute a business, however, is recognized only to the extent of unrelated investors' interests in the associate or joint venture.

  On January 13, 2016, the Financial Reporting Standards Council deferred the original effective date of January 1, 2016 of the said amendments until the International Accounting Standards Board completes its broader review of the research project on equity accounting that may result in the simplification of accounting for such transactions and of other aspects of accounting for associates and joint ventures.

  The Group is currently assessing the impact of adopting the amendments to this standard on its consolidated financial statements.

The revised, amended and additional disclosures or accounting changes provided by the standards and interpretations will be included in the consolidated financial statements in the year of adoption, if applicable.

Summary of Significant Accounting Policies

Presentation of Consolidated Financial Statements
The Group has elected to present all items of recognized income and expense in two statements: a statement displaying components of profit or loss (consolidated statement of income) and a second statement beginning with profit or loss and displaying components of OCI (consolidated statement of comprehensive income).

Foreign Currency Transactions
Transactions in foreign currencies are initially recorded in the functional currency rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated at functional currency rate of exchange ruling at the end of the financial reporting period. Nonmonetary items that are measured in terms of historical cost in a foreign currency are

translated using the exchange rates prevailing as at the date of the initial transactions. Nonmonetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. All differences are taken to “Other income (charges) - net” in the consolidated statement of income.

As at the end of the financial reporting period, the statement of financial position of associates (whose functional currency is other than the Philippine peso) is translated into the presentation currency of the Group (the Philippine peso) using the rate of exchange prevailing at the end of the financial reporting period and the consolidated statement of income is translated using the weighted average exchange rate for the year. The exchange differences arising on the translation is recognized in OCI. Upon disposal of such associate, the component of OCI relating to that particular associate will be recognized in the consolidated statement of income.

Current versus Noncurrent Classification

The Group presents assets and liabilities in the consolidated statement of financial position based on current/noncurrent classification. An asset is current when it is:

- Expected to be realized or intended to be sold or consumed in normal operating cycle;
- Held primarily for the purpose of trading;
- Expected to be realized within twelve (12) months after the end of the financial reporting period; or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve (12) months after the end of the financial reporting period.

The Group classifies all other assets as noncurrent.

A liability is current when:

- It is expected to be settled in normal operating cycle;
- It is held primarily for the purpose of trading;
- It is due to be settled within twelve (12) months after the end of the financial reporting period; or
- There is no unconditional right to defer the settlement of the liability for at least twelve (12) months after the end of the financial reporting period.

The Group classifies all other liabilities as noncurrent.

Fair Value Measurement

The Group measures financial instruments at fair value at each end of the financial reporting period. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability; or
- In the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible to the Group. The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a nonfinancial asset takes into account a market participant’s ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the consolidated financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest-level input that is significant to the fair value measurement as a whole:

- Level 1 - Quoted (unadjusted) market prices in active markets for identical assets or liabilities;
- Level 2 - Valuation techniques for which the lowest-level input that is significant to the fair value measurement is directly or indirectly observable; and
- Level 3 - Valuation techniques for which the lowest-level input that is significant to the fair value measurement is unobservable.

For assets and liabilities that are recognized in the consolidated financial statements on a recurring basis, the Group determines whether transfers have occurred between Levels in the hierarchy by re-assessing categorization (based on the lowest level input that is significant to the fair value measurement as a whole) at each end of the financial reporting period.

The fair value of financial instruments that are actively traded in organized financial markets is determined by reference to quoted market close prices at the close of business at the end of the financial reporting period.

For financial instruments where there is no active market, fair value is determined using valuation techniques. Such techniques include comparison to similar investments for which market observable prices exist and discounted cash flow analysis or other valuation models.

For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the Level of the fair value hierarchy as explained above.

Cash and Cash Equivalents

Cash includes cash on hand, with banks and under managed funds. Cash with banks and under managed funds earn interest at the prevailing bank deposit rates. Cash equivalents pertain to short-term cash investments that are made for varying periods of up to three (3) months depending on the immediate cash requirements of the Group and earn interest at the respective short-term cash investment rates.

Financial Instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Date of Recognition

The Group recognizes a financial asset or a financial liability in the consolidated statement of financial position when it becomes a party to the contractual provisions of the instrument.

Purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace (regular way trades) are recognized on the trade date (i.e., the date that the Group commits to purchase or sell the asset).

Financial Assets - Prior to the Adoption of PFRS 9

Initial Recognition, Classification and Measurement of Financial Instruments

The Group determines the classification of financial instruments at initial recognition and, where allowed and appropriate, re-evaluates this designation at every end of the financial reporting period.

Financial assets within the scope of PAS 39 are classified in the following categories: financial assets at FVTPL, loans and receivables, held-to-maturity (HTM) investments, AFS financial assets, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

The classification depends on the purpose for which the investments were acquired and whether they are quoted in an active market.

All financial instruments are recognized initially at fair value. Directly attributable transaction costs are included in the initial measurement of all financial instruments, except for financial instruments measured at FVTPL.

The Group's financial assets are in the nature of loans and receivables and AFS financial assets. The Group has no financial assets at FVTPL, HTM investments and derivatives designated as hedging instruments in an effective hedge.

Subsequent Measurement

The subsequent measurement of financial instruments depends on their classification as follows:

Loans and Receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are not entered into with the intention of immediate or short-term resale and are not classified as "Financial assets held for trading", designated as "AFS financial assets" or "Financial assets designated at FVTPL". After initial measurement, loans and receivables are subsequently measured at amortized cost using the effective interest rate (EIR) method, less any allowance for impairment. Amortized cost is calculated by taking into account any discount or premium on acquisition and fee or costs that are an integral part of the EIR. The amortization and losses arising from impairment are included in "Other income (charges) - net" in the consolidated statement of income. Gains and losses are recognized in the consolidated statement of income when the loans are derecognized or impaired as well as through the amortization process.

Loans and receivables are included in current assets if maturity is within twelve (12) months from the end of the financial reporting period or within the Group's normal operating cycle, whichever is longer. Otherwise, these are classified as noncurrent assets.

The Group's loans and receivables include cash and cash equivalents, trade and other receivables, loan receivable and long-term negotiable instruments (see Notes 4, 5 and 13).

AFS Financial Assets

AFS financial assets are those which are designated as such or do not qualify to be classified or designated at FVTPL, HTM investments or loans and receivables.

Financial assets may be designated at initial recognition as AFS financial assets if they are purchased and held indefinitely, and may be sold in response to liquidity requirements or changes in market conditions.

AFS financial assets are included in current assets if it is expected to be realized or disposed of within twelve (12) months from the end of the financial reporting period. Otherwise, these are classified as noncurrent assets.

When the security is disposed of, the cumulative gain or loss previously recognized in "Net valuation gains (losses) on financial assets" under equity is recognized in the consolidated statement of income. Where the Group holds more than one investment in the same security, these are deemed to be disposed of on a first-in, first-out basis. Interest earned on holding AFS financial assets are reported as "Interest income" using the EIR. Dividends earned on holding AFS financial assets are recognized in the consolidated statement of income when the right to receive payment has been established. The losses arising from impairment of such investments are recognized in the consolidated statement of income.

The Group uses the specific identification method in determining the cost of securities sold.

The Group's investments in debt and equity instruments are classified under this category (see Note 7).

Impairment of Financial Assets
The Group assesses at the end of each financial reporting period whether there is any objective evidence that a financial asset or a group of financial assets is impaired. A financial asset or a group of financial assets is deemed to be impaired if, and only if, there is objective evidence of impairment as a result of one or more events that has occurred after the initial recognition of the asset (an incurred "loss event") and that loss event has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated.

Evidence of impairment may include indications that the debtors or a group of debtors is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganization and where observable data indicate that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

<u>Loans and Receivables</u>
For financial assets carried at amortized cost, the Group first assesses individually whether objective evidence of impairment exists individually for financial assets that are individually significant, or collectively for financial assets that are not individually significant. If the Group determines that no objective evidence of impairment exists for an individually assessed financial asset, whether significant or not, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for impairment. Assets that are individually assessed for impairment and for which an impairment loss is, or continues to be, recognized are not included in a collective assessment of impairment.

If there is objective evidence that an impairment loss was incurred, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future ECL that have not yet been incurred). The present value of the estimated future cash flows is discounted at the financial assets' original EIR. If a loan has a variable interest rate, the discount rate for measuring any impairment loss is the current EIR.

The carrying amount of the assets is reduced through the use of an allowance account and the amount of loss is recognized in the consolidated statement of income. Interest income continues to be accrued on the reduced carrying amount and is accrued using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss. The interest income is recorded as part of "Finance income" in the consolidated statement of income.

Loans, together with the associated allowance, are written-off when there is no realistic prospect of future recovery and all collateral has been realized or has been transferred to the Group.

If, in a subsequent year, the amount of the estimated impairment loss decreases because of an event occurring after the impairment loss was recognized, the previously recognized impairment loss is increased or reduced by adjusting the allowance account. Any subsequent reversal of an impairment loss is recognized in the consolidated statement of income, to the extent that the carrying value of the asset does not exceed its amortized cost at the reversal date.

AFS Financial Assets

For AFS financial assets, the Group assesses at each end of the financial reporting period whether there is objective evidence that a financial asset or group of financial assets is impaired.

In the case of equity investments classified as AFS financial assets, objective evidence would include a significant or prolonged decline in the fair value of the investments below its cost. The determination of what is "significant" or "prolonged" requires judgment. "Significant" is to be evaluated against the original cost of the investment and "prolonged" is to be evaluated against the period in which the fair value has been below its original cost. Where there is evidence of impairment, the cumulative loss (measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that investment previously recognized in OCI) is removed from OCI and recognized in the consolidated statement of income.

Impairment losses on equity investments are not reversed through the consolidated statement of income while increases in fair value after impairment are recognized directly in OCI under equity.

In the case of debt instruments classified as AFS financial assets, the impairment is assessed based on the same criteria as financial assets carried at amortized cost. However, the amount recorded for impairment is the cumulative loss measured as the difference between the amortized cost and the current fair value, less any impairment loss on that investment previously recognized in the consolidated statement of income.

Future interest income continues to be accrued based on the reduced carrying amount of the asset, using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss. The interest income is recorded as part of "Finance income" in the consolidated statement of income. If, in the subsequent year, the fair value of a debt instrument increases and the increase can be objectively related to an event occurring after the impairment loss was recognized through the consolidated statement of income, the impairment loss is reversed through the consolidated statement of income.

If there is objective evidence of impairment loss in unquoted equity instrument for AFS financial assets carried at cost, such as unquoted equity instrument that is not carried at fair value because its fair value cannot be reliably measured, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at the current market rate of return for a similar financial asset. Objective evidence of impairment includes, but is not limited to, significant financial difficulty of the issuer or obligor and it becoming probable that the borrower will enter bankruptcy or other financial reorganization.

Financial Assets - Upon Adoption of PFRS 9

Initial Recognition, Classification and Measurement of Financial Instruments

Financial assets are classified, at initial recognition, as subsequently measured at amortized cost, FVOCI, and FVTPL.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at FVTPL, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient for contracts that have a maturity of one (1) year or less, are measured at the transaction price determined under PFRS 15.

In order for a financial asset to be classified and measured at amortized cost or FVOCI, it needs to give rise to cash flows that are SPPI on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

In making this assessment, the Group determines whether the contractual cash flows are consistent with a basic lending arrangement, i.e., interest includes consideration only for the time value of money, credit risk and other basic lending risks and costs associated with holding the financial asset for a particular period of time. In addition, interest can include a profit margin that is consistent with a basic lending arrangement. The assessment as to whether the cash flows meet the test is made in the currency in which the financial asset is denominated. Any other contractual terms that introduce exposure to risks or volatility in the contractual cash flows that is unrelated to a basic lending arrangement, such as exposure to changes in equity prices or commodity prices, do not give rise to contractual cash flows that are SPPI on the principal amount outstanding.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both. Relevant factors considered by the Group in determining the business model for a group of financial assets include how the performance of the business model and the financial assets held within that business model are evaluated and reported to the Group's key management personnel, the risks that affect the performance of the business model (and the financial assets held within that business model) and how these risks are managed and how managers of the business are compensated.

Subsequent Measurement

For purposes of subsequent measurement, the Group's financial assets are classified in the following categories:

- Financial assets at amortized cost (debt instruments)
- Financial assets at FVOCI with recycling of cumulative gains and losses (debt instruments)
- Financial assets at FVTPL

Financial Assets at Amortized Cost

The Group measures financial assets at amortized cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows, and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are SPPI on the principal amount outstanding

Financial assets at amortized cost are subsequently measured using the EIR method and are subject to impairment. Gains and losses are recognized in the consolidated statement of income when the asset is derecognized, modified or impaired.

The Group's financial assets at amortized cost includes cash and cash equivalents, trade and other receivables, investment in certain debt instruments, short-term cash investments, loan receivable and long-term negotiable instruments (see Notes 4, 5, 7, 8 and 13).

Financial Assets at FVOCI (Debt Instruments)
The Group measures debt instruments at FVOCI if both of the following conditions are met:
- The financial asset is held within a business model with the objective of both holding to collect contractual cash flows and selling, and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are SPPI on the principal amount outstanding

For debt instruments at FVOCI, interest income, foreign exchange revaluation and impairment losses or reversals are recognized in the consolidated statement of income and computed in the same manner as for financial assets measured at amortized cost. The remaining fair value changes are recognized in OCI. Upon derecognition, the cumulative fair value change recognized in OCI is recycled to the consolidated statement of income.

The Group's debt instruments at FVOCI include investments in quoted debt instruments such as government and corporate bonds and other similar investments (see Note 7).

Financial Assets at FVTPL
Financial assets at FVTPL include financial assets held for trading, financial assets designated upon initial recognition at FVTPL, or financial assets mandatorily required to be measured at fair value. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. Financial assets with cash flows that are not SPPI are classified and measured at FVTPL, irrespective of the business model. Notwithstanding the criteria for debt instruments to be classified at amortized cost or at FVOCI, as described above, debt instruments may be designated at FVTPL on initial recognition if doing so eliminates, or significantly reduces, an accounting mismatch.

Financial assets at FVTPL are carried in the consolidated statement of financial position at fair value with net changes in fair value recognized in the consolidated statement of income.

This category includes debt and equity investments which the Group had not irrevocably elected to classify at FVOCI (see Note 7). Dividends on equity investments are also recognized under "Other income (charges) - net" in the consolidated statement of income when the right of payment has been established. The Group does not hold equity instrument measured at FVOCI.

Impairment of Financial Assets
The Group recognizes an allowance for ECLs for all debt instruments not held at FVTPL. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original EIR. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

Financial assets migrate through the following three (3) stages based on the change in credit quality since initial recognition:

Stage 1: 12-month ECL. For credit exposures where there have not been significant increases in credit risk since initial recognition and that are not credit-impaired upon origination, the portion of lifetime ECLs that represent the ECLs that result from default events that are possible within the twelve (12)-months after the financial reporting date are recognized.

Stage 2: Lifetime ECL - not credit-impaired. For credit exposures where there have been significant increases in credit risk since initial recognition on an individual or collective basis but are not credit-impaired, lifetime ECLs representing the ECLs that result from all possible default events over the expected life of the financial asset are recognized.

Stage 3: Lifetime ECL - credit-impaired. Financial assets are credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of those financial assets have occurred. For these credit exposures, lifetime ECLs are recognized and interest revenue is calculated by applying the credit-adjusted EIR to the amortized cost of the financial asset.

<u>Determining the Stage for Impairment</u>
At each financial reporting date, the Group assesses whether there has been a significant increase in credit risk for financial assets since initial recognition by comparing the risk of default occurring over the expected life between the financial reporting reporting date and the date of initial recognition. The Group considers reasonable and supportable information that is relevant and available without undue cost or effort for this purpose. This includes quantitative and qualitative information and forward-looking analysis.

Exposures that have not deteriorated significantly since origination, or where the deterioration remains within the Group's investment grade criteria are considered to have a low credit risk. The provision for credit losses for these financial assets is based on a twelve (12)-month ECL. The low credit risk exemption has been applied on debt investments that meet the investment grade criteria of the Group from the time of origination.

An exposure will migrate through the ECL stages as asset quality deteriorates. If, in a subsequent period, asset quality improves and also reverses any previously assessed significant increase in credit risk since origination, then the loss allowance measurement reverts from lifetime ECL to twelve (12)-months ECL.

For cash and cash equivalents and short-term cash investments, the Group applies a general approach in calculating ECLs. The Group recognizes a loss allowance based on either a twelve (12)-month ECL or lifetime ECL, depending on whether there has been a significant increase in credit risk on its cash and cash equivalents and short-term cash investments since initial recognition.

The Group computes ECLs using the discounted product of the Probability of Default (PD), Loss Given Default (LGD), and Exposure at Default (EAD) for trade receivables. The Group does not track changes in credit risk, but instead recognizes a loss allowance based on lifetime ECLs at each end of the financial reporting period.

The Group's debt instruments at FVOCI and at amortized cost comprise of quoted bonds and government securities that are graded in the investment category by either Standard and Poor's (S&P), Moody's, Bloomberg or Fitch (collectively referred to as the Credit Rating Agencies), whichever is applicable, and, therefore, are considered to be low credit risk investments. It is the

Group's policy to measure ECLs on such instruments on a twelve (12)-month basis. However, when there has been a significant increase in credit risk since origination, the allowance will be based on the lifetime ECL. The Group uses the ratings from the Credit Rating Agencies both to determine whether the debt instrument has significantly increased in credit risk and to estimate ECLs.

The Group considers a financial asset in default when contractual payments are ninety (90) days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

The Group writes-off a financial asset measured at amortized cost, in whole or in part, when the asset is considered uncollectible, it has exhausted all practical recovery efforts and has concluded that it has no reasonable expectations of recovering the financial asset in its entirety or a portion thereof. The Group writes-off an account when all of the following conditions are met:

- the asset is past due for over ninety (90) days, or is already an item-in-litigation with any of the following:
    a. no properties of the counterparty could be attached
    b. the whereabouts of the counterparty cannot be located
    c. it would be more expensive for the Group to follow-up and collect the amount, hence the Group have ceased enforcement activity, and
    d. collections can no longer be made due to insolvency or bankruptcy of the counterparty
- expanded credit arrangement is no longer possible;
- filing of legal case is not possible; and
- the account has been classified as 'Loss'.

Derecognition
A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognized (i.e., removed from the Group's consolidated statement of financial position) when:

- The rights to receive cash flows from the asset have expired, or
- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a "passthrough" arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a passthrough arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Group continues to recognize the transferred asset to the extent of its continuing involvement. Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay. In that case, the Group also recognizes an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Financial Liabilities

Initial Recognition, Classification and Measurement of Financial Instruments

Financial liabilities are classified, at initial recognition, as financial liabilities at FVTPL, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

Financial instruments are classified as liabilities or equity in accordance with the substance of the contractual arrangement. Interest, dividends, gains and losses relating to a financial instrument or a component that is a financial liability, are reported as expense or income. Distributions to holders of financial instruments classified as equity are charged directly to equity net of any related income tax.

All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The Group's financial liabilities are in the nature of other financial liabilities. The Group has no financial liabilities classified as at FVTPL and derivatives designated as hedging instruments in an effective hedge.

Subsequent Measurement

The measurement of financial liabilities depends on their classification, as described below:

Other Financial Liabilities

This category pertains to financial liabilities that are not held for trading, not derivatives, or not designated at FVTPL upon the inception of the liability. After initial recognition, other financial liabilities are subsequently measured at amortized cost using the EIR method. Gains and losses are recognized in the consolidated statement of income when the liabilities are derecognized as well as through the EIR amortization process.

Amortized cost is calculated by taking into account any issue cost, and any discount or premium on settlement. The EIR amortization is included under "Finance income" in the consolidated statement of income.

Other financial liabilities are included in current liabilities if settlement is within twelve (12) months from the end of the financial reporting period, otherwise, these are classified as noncurrent liabilities.

This accounting policy applies primarily to the Group's trade and other payables, short-term and long-term debts, long-term payable and other obligations that meet the above definition (excluding government payables and other liabilities that are covered by other accounting standards, such as income tax payable and pension; see Notes 14, 15 and 17).

Derecognition

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or has expired.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts of a financial liability extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognized in the consolidated statement of income.

Reclassifications of Financial Instruments - Upon Adoption of PFRS 9
The Group reclassifies its financial assets when, and only when, there is a change in the business model for managing the financial assets. Reclassifications shall be applied prospectively by the Group and any previously recognized gains, losses or interest shall not be restated. The Group does not reclassify its financial liabilities.

Offsetting of Financial Instruments
Financial assets and financial liabilities are offset and the net amount is reported in the consolidated statement of financial position if there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, or to realize the assets and settle the liabilities simultaneously. The Group assesses that it has a currently enforceable right of offset and the right is not contingent on a future event, event of default and event of insolvency or bankruptcy of the Group and all of the counterparties, and is legally enforceable in the normal course of business.

Inventories
Inventories, including the long-term stockpile inventory, are carried at the lower of cost and net realizable value (NRV). Cost is determined by the moving average production cost during the year for beneficiated nickel ore and limestone exceeding a determined cut-off grade and average handling costs of limonite ores. The NRV of beneficiated nickel ore and limestone inventories is the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale. Periodic ore inventory survey is performed to determine the volume of ore inventory.

For materials and supplies, cost is determined using the moving average method and composed of purchase price, transport, handling and other costs directly attributable to its acquisition. The NRV of materials and supplies is the current replacement cost. Any provision for inventory losses is determined by reference to specific items of stock. A regular review is undertaken to determine the extent of any provision or obsolescence.

The long-term stockpile inventory cost is represented by the fair value of the long-term stockpile inventory related to the acquisition of the controlling interest in RTN in August 2006. The fair value was determined using the present value of the estimated cash flows, which RTN will derive from the sale of this inventory to CBNC under its Nickel Ore Supply Agreement with CBNC (see Note 34a). After initial recognition, the long-term stockpile inventory is subsequently charged to cost of sale of ore based on actual tonnage delivered to CBNC. NRV of long-term stockpile inventory is the estimated selling price in the ordinary course of business less the estimated costs necessary to make the sale.

Prepayments and Other Current Assets
Prepayments and other current assets include short-term cash investments, input Value Added Tax (VAT), advances and deposits, prepaid taxes, tax credit certificates, current portion of long-term negotiable instruments, restricted cash, and various prepayments which the Group expects to realize or consume the assets within twelve (12) months after the end of the financial reporting period.

VAT
Revenues, expenses, and assets are recognized net of the amount of VAT, if applicable.

When VAT from sales of goods and/or services (output VAT) exceeds VAT passed on from purchases of goods or services (input VAT), the excess is recognized as payable in the consolidated statement of financial position. When VAT passed on from purchases of goods or services (input VAT) exceeds VAT from sales of goods and/or services (output VAT), the excess is recognized as an asset in the consolidated statement of financial position. Deferred input VAT, which represents input VAT on capital assets subject to amortization, and any excess input VAT which: (1) may be utilized against output VAT, if any, beyond twelve (12) months from the end of the financial reporting period; or (2) are being claimed for refund or as tax credits with the BIR and/or Court of Tax Appeals are presented as part of "Other noncurrent assets" in the consolidated statement of financial position. Input VAT is stated at cost less any impairment in value.

Property and Equipment

Property and equipment, except land, is stated at cost, excluding the costs of day-to-day servicing, less accumulated depreciation, amortization and depletion and accumulated impairment loss, if any. The initial cost of property and equipment consists of its purchase price including import duties and any directly attributable costs of bringing the property and equipment to its working condition and location for its intended use. Such cost also includes the cost of replacing part of such property and equipment when the recognition criteria are met. When each major inspection is performed, its cost is recognized in the carrying amount of the property and equipment as a replacement if the recognition criteria are satisfied. Land is carried at cost less any impairment loss.

Depreciation and amortization are computed using the straight-line method over the following estimated useful lives of the assets:

Category	Number of Years
Land improvements	5
Machinery and equipment	2-15
Buildings and improvements	2-25
Transmission lines and substations	10-40
Solar farm	5-40

Mining properties and development costs include the capitalized cost of mine rehabilitation and decommissioning and other development cost necessary to prepare the area for operations. Depletion of mining properties and development costs is calculated using the unit-of-production method based on the estimated economically recoverable reserves to which they relate to or are written-off if the property is abandoned. Development costs are depreciated using the straight-line method over the estimated useful life of the asset of twenty (20) to thirty (30) years.

Construction in-progress represents work under construction and is stated at cost. Construction in-progress is not depreciated until such time that the relevant assets are completed and available for use. This also include interest on borrowed funds incurred during the construction period. Depreciation, amortization and depletion of property and equipment, except land, begins when it becomes available for use, i.e., when it is in the location and condition necessary for it to be capable of operating in the manner intended by management, or in case of mining properties, from start of commercial operations upon extraction of ore reserves. Depreciation, amortization and depletion ceases when the assets are fully depreciated, amortized or depleted, or at the earlier of the date that the item is classified as held for sale (or included in the disposal group that is classified as held for sale) in accordance with PFRS 5, *Noncurrent Assets Held for Sale and Discontinued Operations*, and the date the item is derecognized.

The assets' estimated recoverable reserves, residual values, useful lives and depreciation, amortization and depletion methods are reviewed periodically to ensure that the estimated recoverable reserves, residual values, periods and methods of depreciation, amortization and depletion are consistent with the expected pattern of economic benefits from items of property and equipment. If there is an indication that there has been a significant change in depreciation, amortization and depletion rate, useful life or residual value of an asset, these are revised prospectively to reflect the new expectations.

The carrying values of property and equipment are reviewed for impairment when events or changes in circumstances indicate that the carrying value may not be recoverable.

An item of property and equipment is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the consolidated statement of income in the year the asset is derecognized.

The asset revaluation surplus which arose from the acquisition of the controlling interest in RTN in August 2006, relates to the land, machinery and equipment, and building and improvements. The related and applicable depreciation on these assets is transferred periodically to retained earnings.

Fully depreciated assets are retained in the accounts until they are no longer in use and no further depreciation is charged to current operations.

Borrowing Cost
Borrowing costs directly attributable to the development of the Group's projects that necessarily take a substantial period of time to get ready for its intended use are capitalized. Borrowing costs consist of interest on borrowed funds used to finance the construction of the asset and other financing costs that the Group incurs in connection with the borrowing of funds. The capitalization of the borrowing cost as part of the cost of the asset: (a) commences when the expenditures and borrowing costs are being incurred during the construction and related activities necessary to prepare the asset for its intended use are in progress; and (b) ceases when substantially all the activities necessary to prepare the asset for its intended use are complete. Capitalized borrowing costs are based on the applicable borrowing rate agreed in the agreement.

<u>Investments in Associates</u>
Associates are entities over which the Group is able to exert significant influence. Significant influence is the power to participate in the financial and reporting policy decisions of the investee, but has no control or joint control over those policies. The considerations made in determining significant influence are similar to those necessary to determine control activities. The Group's investments in associates are accounted for using the equity method, less any impairment in value, in the consolidated statement of financial position.

The consolidated statement of income reflects the Group's share of the results of operations of the associates. When there has been a change recognized directly in the equity of the associate, the Group recognizes its share of any changes, when applicable, in the consolidated statement of changes in equity. Unrealized gains and losses resulting from transactions between the Group and the associates are eliminated to the extent of the interest in the associate. The aggregate of the Group's share in profit or loss of an associate is shown in the consolidated statement of income outside operating profit and represents profit or loss after tax and NCI in the subsidiaries of the associate.

Upon loss of significant influence over the associate, the Group measures and recognizes any retained investment at its fair value. Any difference between the carrying amount of the associate upon loss of significant influence and the fair value of the retained investment and proceeds from disposal is recognized in the consolidated statement of income.

If the ownership interest in an associate is reduced, but the investment continuous to be an associate, the Group shall reclassify to profit or loss the proportion gain or loss that had previously been recognized in OCI relating to the reduction in ownership interest if that gain or loss would be required to be reclassified to profit or loss on the disposal of the related asset.

The financial statements of the associates are prepared for the same reporting period and using uniform accounting policies as the Group. When necessary, adjustments are made to bring the accounting policies of the associates in line with those of the Group.

Geothermal Exploration and Evaluation Assets
The Group follows the full cost method of accounting for its geothermal exploration and evaluation assets determined on the basis of the service contract. Under this method, all exploration costs relating to each service contract are accumulated and deferred under "Geothermal exploration and evaluation assets" account in the consolidated statement of financial position pending the determination of whether the wells have proved reserves. Capitalized expenditures include costs of license acquisition, technical services and studies, exploration drilling and testing, and appropriate technical and administrative expenses. General overhead or costs incurred prior to having obtained the legal rights to explore an area are recognized as expense in the consolidated statement of income when incurred.

If tests conducted on the drilled exploratory wells reveal that these wells cannot produce proved reserves, the capitalized costs are charged to expense except when the management decides to use the unproductive wells, for recycling or waste disposal.

Once the technical feasibility and commercial viability of the project to produce proved reserves are established, the geothermal exploration and evaluation assets are reclassified to property and equipment.

Geothermal exploration and evaluation assets are derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the assets. Any gain or loss arising from the derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the assets) is included in the consolidated statement of income in the year the item is derecognized.

Geothermal exploration and evaluation assets also include interest on borrowed funds that are directly attributable to the construction and development of the Group's projects.

Other Noncurrent Assets
Other noncurrent assets of the Group include deferred mine exploration costs, input VAT, loan receivable, mine rehabilitation fund (MRF), advances and deposits, long-term negotiable instruments, Social Development Management Program (SDMP) funds, investment properties, project development costs, pension asset, and other deposits. Aside from MRF, SDMP funds and restricted cash which are restriced as to withdrawal for specified purpose, these are classified as noncurrent since the Group expects to utilize the assets beyond twelve (12) months from the end of the financial reporting period.

Deferred Mine Exploration Costs
Expenditures for the acquisition of property rights are capitalized. Expenditures for mine exploration work prior to drilling are charged to operations. When it has been established that a mineral deposit is commercially mineable and a decision has been made to formulate a mining plan (which occurs upon completion of a positive economic analysis of the mineral deposit), costs subsequently incurred to develop a mine on the property prior to the start of mining operations are capitalized. Upon the start of commercial operations, such costs are transferred to property and equipment. Capitalized amounts may be written down if future cash flows, including potential sales proceeds related to the property, are projected to be less than the carrying value of the property. If no mineable ore body is discovered, capitalized acquisition costs are expensed in the period in which it is determined that the mineral property has no future economic value. Costs incurred during the start-up phase of a mine are expensed as incurred. Ongoing mining expenditures on producing properties are charged against earnings as incurred. Major development expenditures incurred to expose the ore, increase production or extend the life of an existing mine are capitalized.

Deferred Stripping Costs
Stripping costs incurred in the development of a mine before production commences are capitalized as part of the cost of constructing the mine which are amortized subsequently. Where a mine operates several open pit that are regarded as separate operations for the purpose of mine planning, stripping costs are accounted for separately by reference to the ore from each separate pit. If, however, the pits are highly integrated for the purpose of the mine planning, the second and subsequent pits are regarded as extensions of the first pit in accounting for stripping costs. In such cases, the initial stripping (i.e., overburden and other waste removal) of the second and subsequent pits is considered to be production phase stripping relating to the combined operation.

For stripping costs incurred subsequently during the production stage of the operation, the stripping activity cost is accounted as part of the cost of inventory if the benefit from the stripping activity will be realized in the current period. When the benefit is the improved access to ore, the Group shall recognize these costs as stripping activity assets. The stripping activity asset is accounted for as an addition to, or as an enhancement of, an existing asset. After initial recognition, the deferred stripping cost is carried at its cost less depreciation or amortization and less impairment losses.

Project Development Costs
Project development costs are expensed as incurred until management determines that the project is technically, commercially, and financially viable, at which time project development costs are capitalized. Project's viability generally occurs in tandem with management's determination that a project should be classified as an advanced project as evidenced by a favorable system impact study, interconnection agreements, or when project financing is in place.

Following initial recognition of the project development cost as an asset, the cost model is applied requiring the asset to be carried at cost less accumulated amortization and any accumulated impairment losses. Amortization of the asset begins when the development of the wind and solar energy projects is complete and the asset is available for use. It is amortized using the straight-line method over the period of expected future benefit. During the period in which the asset is not yet available for use, the project development costs are tested for impairment annually, irrespective of whether there is indication of impairment.

Investment Properties
Investment properties, which pertain to land, are measured initially at cost, including transaction costs. The carrying amount includes the cost of replacing part of an existing investment property at the time that cost is incurred if the recognition criteria are met and excludes the costs of day-to-day servicing of an investment property. Subsequent to initial recognition, investment property is carried at cost less any accumulated impairment losses.

Investment property is derecognized when either they have been disposed of or when the investment property is permanently withdrawn from use and no future economic benefit is expected from its disposal. Any gains or losses on the retirement or disposal of an investment property are recognized in the consolidated statement of income in the year of retirement or disposal.

Transfers are made to investment properties when, and only when, there is a change in use, evidenced by ending of owner-occupation or commencement of an operating lease to another party. Transfers are made from investment properties when, and only when, there is a change in use, evidenced by commencement of owner-occupation or commencement of development with a view to sale.

Under the cost model, transfers between investment property and owner-occupied property do not change the carrying amount of the property transferred and they do not change the cost of that property for measurement or disclosure purposes.

Impairment of Nonfinancial Assets
Inventories and Long-term Stockpile Inventory
The Group determines the NRV of inventories and long-term stockpile inventory at each end of the financial reporting period. If the cost of the inventories and long-term stockpile inventory exceeds its NRV, the asset is written down to its NRV and impairment loss is recognized in the consolidated statement of income in the year the impairment is incurred. In the case when NRV of the inventories and long-term stockpile inventory increased subsequently, the NRV will increase the carrying amounts of inventories but only to the extent of their original acquisition costs.

Property and Equipment and Nonfinancial Prepayments and Other Current and Noncurrent Assets
The Group assesses, at each end of the financial reporting period, whether there is an indication that an asset may be impaired. Assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If any such indication exists and where the carrying amount of an asset exceeds its recoverable amount, the asset or cash generating unit (CGU) is written down to its recoverable amount. An asset's recoverable amount is the higher of an asset's or CGU's fair value less costs to sell and its value in use. The fair value less costs to sell is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date less the costs of disposal, while value in use is the present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. These calculations are corroborated by valuation multiples or other available fair value indicators. For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the CGU to which the asset belongs. Impairment losses are recognized in the consolidated statement of income.

Recovery of impairment loss recognized in prior years is recorded when there is an indication that the impairment losses recognized for the asset no longer exist or have decreased. The recovery is recorded in the consolidated statement of income. However, the increased carrying amount of an asset due to a recovery of an impairment loss is recognized to the extent it does not exceed the carrying amount that would have been determined (net of depreciation, amortization and depletion) had no impairment loss been recognized for that asset in prior years.

Investments in Associates
After application of the equity method, the Group determines whether it is necessary to recognize an impairment loss on its investments in associates. At each end of the financial reporting period, the Group determines whether there is objective evidence that the investments in associates are impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate and its carrying value, and then recognizes the amount in the consolidated statement of income.

Geothermal Exploration and Evaluation Assets and Deferred Mine Exploration Costs
An impairment review is performed, either individually or at the CGU level, when there are indicators that the carrying amount of the assets may exceed their recoverable amounts. To the extent that this occurs, the excess is fully provided against, in the financial reporting period in which this is determined.

Facts and circumstances that would require an impairment assessment as set forth in PFRS 6, *Exploration for and Evaluation of Mineral Resources*, are as follows:
- The period for which the Group has the right to explore in the specific area has expired or will expire in the near future and is not expected to be renewed;
- Substantive expenditure on further exploration and evaluation of mineral resources in the specific area is neither budgeted nor planned;
- Exploration for and evaluation of mineral resources in the specific area have not led to the discovery of commercially viable quantities of mineral resources and the entity has decided to discontinue such activities in the specific area;
- When a service contract where the Group has participating interest in is permanently abandoned; and
- Sufficient data exist to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full from successful development or by sale.

Geothermal exploration and evaluation assets and deferred mine exploration costs are reassessed for impairment on a regular basis.

<u>Other Current Liability</u>
Other current liability pertains to deposits for future stock subscription which represents advance payments from stockholders for the subscription of future issuance of shares.

The Group classifies its deposits for future stock subscription as a separate account under equity if and only if, all of the following elements are present as at the end of the financial reporting period:
- There is a lack of or insufficiency in unissued authorized capital stock;
- The BOD and stockholders have approved the proposed increase in authorized capital stock; and
- An application for the approval of the proposed increase in authorized capital stock has been presented for filing or has been filed with the SEC.

If any or all of the foregoing elements are not present, the deposits for future stock subscription shall be recognized and included as a separate line item under liabilities in the consolidated statement of financial position.

Deferred Income

Deferred income is advance payments received for lease arrangements during one (1) financial reporting period but earned and shown in the consolidated statement of income in the year when it can be matched with the period in which it is realized as income.

Provisions

General

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, 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. Provisions are reviewed at each end of the financial reporting period and adjusted to reflect the current best estimate. The expense relating to any provision is presented in the consolidated statement of income, net of any reimbursement. If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognized as part of “Finance expense” in the consolidated statement of income.

Provision for Mine Rehabilitation and Decommissioning

The Group records the present value of estimated costs of legal and constructive obligations required to restore operating locations in the period in which the obligation is incurred. The nature of these restoration activities includes dismantling and removing structures, rehabilitating mines and tailings dams, dismantling operating facilities, closure of plant and waste sites, and restoration, reclamation and re-vegetation of affected areas. The obligation generally arises when the asset is installed or the ground/environment is disturbed at the production location. When the liability is initially recognized, the present value of the estimated cost is capitalized by increasing the carrying amount of the related mining assets. Over time, the discounted liability is increased for the change in present value based on the discount rates that reflect current market assessments and the risks specific to the liability.

The periodic unwinding of the discount is recognized as part of “Finance expense” in the consolidated statement of income. Additional disturbances or changes in rehabilitation costs will be recognized as additions or charges to the corresponding assets and provision for mine rehabilitation and decommissioning when they occur. When rehabilitation is conducted systematically over the life of the operation, rather than at the time of closure, provision is made for the estimated outstanding continuous rehabilitation work at each end of the financial reporting period and the cost is charged to consolidated statement of income.

The ultimate cost of mine rehabilitation and decommissioning is uncertain and cost estimates can vary in response to many factors including changes to the relevant legal requirements, the emergence of new restoration techniques or experience. The expected timing of expenditure can also change, for example in response to changes in ore reserves or production rates. As a result, there could be significant adjustments to the provision for mine rehabilitation and decommissioning, which would affect future financial results. For closed sites, changes to estimated costs are recognized immediately in the consolidated statement of income.

MRF committed for use in satisfying environmental obligations are included within “Other noncurrent assets” in the consolidated statement of financial position.

Capital Stock
Common shares are classified as equity and are measured at par value for all shares issued and outstanding.

Preferred shares are classified as equity if it is non-redeemable, or redeemable only at the Parent Company's option, and any dividends are discretionary. Dividends thereon are recognized as distributions within equity upon approval by the Parent Company's BOD. Preferred shares are classified as a liability if it is redeemable on a specific date or at the option of the shareholders, or if dividend payments are not discretionary. Dividends thereon are recognized as interest expense in the consolidated statement of income as accrued.

Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction from proceeds. The excess of proceeds from issuance of shares over the par value of shares are credited to "Additional paid-in capital".

Unpaid subscriptions are recognized as a reduction from subscribed capital shares.

Treasury Stock
Own equity instruments that are reacquired (treasury stock) are recognized at cost and deducted from equity. No gain or loss is recognized in the consolidated statement of income on the purchase, sale, issue or cancellation of the Group's own equity instruments. Any difference between the carrying amount and the consideration, if reissued, is recognized in the "Additional paid-in capital".

OCI
OCI comprises items of income and expense (including items previously presented under the consolidated statement of changes in equity) that are not recognized in the consolidated statement of income for the year in accordance with PFRS.

Retained Earnings
Retained earnings represent the cumulative balance of periodic net income or loss, prior period adjustments, effect of changes in accounting policies in accordance with PAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors* and other capital adjustments, net of any dividend declaration.

Dividends are recognized as a liability and deducted from equity when they are approved or declared by the BOD and/or stockholders. Dividends for the period that are approved after the end of the financial reporting period are dealt with as an event after the end of the financial reporting period.

Share-based Payment Transactions
The executives of the Group receive remuneration in the form of share-based payments, whereby employees render services as consideration for equity instruments (equity-settled transactions).

The cost of equity-settled transaction is determined by the fair value at the date when the grant is made using the Black Scholes-Merton model. The cost of equity-settled transaction is recognized, together with a corresponding increase in equity, over the period in which the service conditions are fulfilled ending on the date on which the relevant employees become fully entitled to the award ("the vesting date"). The cumulative expense recognized for equity-settled transactions at the end of each financial reporting period until the vesting date reflects the extent to which the vesting period has expired and the Parent Company's best estimate of the number of equity instruments that will ultimately vest.

The charge or credit in the consolidated statement of income for a period represents the movement in cumulative expense recognized as at the beginning and end of that period and are recognized in "Personnel costs".

No expense is recognized for awards that do not ultimately vest.

Where the terms of an equity-settled transaction award are modified, the minimum expense recognized is the expense as if the terms had not been modified, if the original terms of the award are met. An additional expense is recognized for any modification that increases the total fair value of the share-based payment transaction, or is otherwise beneficial to the employee as measured at the date of modification.

Where an equity-settled award is cancelled, it is treated as if it vested on the date of cancellation, and any expense not yet recognized for the award is recognized immediately. However, if a new award is substituted for the cancelled award, and designated as a replacement award on the date that it is granted, the cancelled and new awards are treated as if they were a modification of the original award, as described in the previous paragraph.

The dilutive effect of outstanding options is reflected as additional share dilution in the computation of diluted EPS.

Basic/Diluted EPS

Basic EPS

Basic EPS amounts are calculated by dividing the net income attributable to ordinary equity holders of the Parent Company by the weighted average number of ordinary shares outstanding, after giving retroactive effect for any stock dividends, stock splits or reverse stock splits during the year.

Diluted EPS

Diluted EPS amounts are calculated by dividing the net income attributable to ordinary equity holders of the Parent Company by the weighted average number of ordinary shares outstanding, adjusted for any stock dividends declared during the year plus weighted average number of ordinary shares that would be issued on the conversion of all the dilutive ordinary shares into ordinary shares, excluding treasury shares.

Revenue from Contracts with Customers

The Group is principally engaged in the business of producing beneficiated nickel ore and limestone, rendering of services and generates revenue from sale of power. Revenue from contracts with customers is recognized when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

The Group has generally concluded that it is the principal in its revenue contracts because it typically controls the goods or services before transferring them to the customer.

Contract Balances

Contract Assets

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Group performs by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognized for the earned consideration that is conditional. The Group does not have any contract assets as performance and a right to consideration occurs within a short period of time and all rights to consideration are unconditional.

Trade Receivables
A receivable represents the Group's right to an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due). Refer to accounting policies of financial assets in section "*Financial Assets - Initial Recognition, Classification and Measurement*".

Contract Liabilities
A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognized when the payment is made or the payment is due (whichever is earlier). Contract liabilities are recognized as revenue when the Group performs under the contract.

From time to time, the Group recognizes contract liabilities in relation to its sale of ore which are sold under free-on-board (FOB) Incoterms, whereby a portion of the cash may be received from the customer before the loading of ore are completed.

The following specific recognition criteria must also be met before revenue is recognized:

- *Sale of Beneficiated Nickel Ore and Limestone*
  <u>PAS 18, *Revenue*</u>
  Revenue is recognized when the significant risks and rewards of ownership of the goods have passed to the buyer which, in the case of deliveries other than to CBNC and THNC, coincides with the loading of the ores into the buyer's vessel and the date of the bill of lading issued by the buyer's shipping agent. In the case of deliveries to CBNC and THNC, this occurs at the time the ore passes into the ore preparation hopper of the respective plants. Under the terms of the arrangements with customers, other than CBNC and THNC, the Group bills the remaining balance, generally at 5% to 20% of the ore shipped, based on the assay results agreed by both the Group and the customers. Where the assay results are not yet available as at the end of the financial reporting period, the Group accrues the remaining 5% to 20% of the revenue based on the amount of the initial billing made. For CBNC and THNC, 100% of the revenue is billed monthly.

  <u>PFRS 15, *Revenue from Contracts with Customers*</u>
  For the sale of beneficiated nickel ore and limestone, the enforceable contract is each purchase order, which is an individual, short-term contract. Purchase orders are executed through an Addendum to the master supply agreements with customers. While there are master supply agreements with customers that set out the general terms and conditions governing any sales that occur, they do not contain any minimum volumes.

  The Group's sale of ore allows price adjustment provision where final ore price shall be based on the final results of the final assay exchange with customer. If the consideration in a contract includes a variable amount, the Group estimates the amount of consideration to which it will be entitled in exchange for transferring the goods to the customer. The variable consideration is estimated at contract inception and constrained until it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognized will not occur when the associated uncertainty with the variable consideration is subsequently resolved.

Revenue is recognized when control passes to the customer, which occurs at a point in time when the ore, in the case of deliveries other than to CBNC and THNC, is physically transferred onto a vessel. In the case of deliveries to CBNC and THNC, this occurs at the time the ore passes into the ore preparation hopper of the respective plants. The revenue is measured at the amount to which the Group expects to be entitled, being the estimate of the price expected to be received.

- *Sale of Power.* Revenue from sale of power primarily pertains to sale of electricity to Independent Electricity Market Operator (IEMO), formerly known as Philippine Electricity Market Corporation (PEMC), which are traded through Philippine Wholesale Electricity Spot Market (WESM) and to Surigao Del Norte Electric Cooperative, Inc. (SURNECO).

  <u>PAS 18, *Revenue*</u>
  Revenue from sale of electricity using solar power is based on sales price and is composed of generation fees from spot sales to the WESM. On the other hand, revenue from sale of electricity using bunker-fired diesel power station is based on rates approved by the ERC. Revenue from sale of power is recognized monthly based on the actual energy delivered.

  <u>PFRS 15, *Revenue from Contracts with Customers*</u>
  For the sale of power to IEMO, the enforceable contract is the Market Participation Agreement dated February 11, 2016 together with the WESM Rules that implement the provisions of the Electric Power Industry Reform Act (EPIRA) of 2001, its Implementing Rules and Regulations and other related laws. For the sale of power to SURNECO, the enforceable contract is the Power Supply Agreement (PSA) dated October 31, 2013.

  The performance obligation is the sale of power since the customer can benefit from it in conjunction with other readily available resources and it is also distinct within the context of the contract. The performance obligation qualifies as a series of distinct goods or services that are substantially the same and have the same pattern of transfer.

  The Group concluded that revenue should be recognized over time since the customer simultaneously receives and consumes the benefits as the Group supplies power.

  The sale of power to IEMO provide unspecified quantity of energy. The unit price for the sale of power is also determined at each trading interval of each day. Such provisions under PFRS 15 give rise to variable consideration. The variable consideration is estimated at contract inception and constrained until the associated uncertainty is subsequently resolved. The application of constraint on variable consideration resulted in the same revenue recognition under PAS 18.

Rendering of Services
Revenue from rendering of services consists of shipsiding activities, service fees, usage fees, assaying fees, drilling fees and materials handling fees are recognized when the services are rendered.

Interest
Income is recognized as interest accrues (using the EIR method that is the rate that exactly discounts estimated future cash receipts through the expected life of the financial instrument to the net carrying amount of the financial asset).

Dividend
Dividend income is recognized when the Group’s right to receive payment is established.

Rental
Revenue is recognized based on a straight-line basis over the term of the lease agreement. Rental income is also recognized based on the capital recovery fee of the power station over the term of the PSA.

Issuance of Fuel, Oil and Lubricants
Revenue is recognized upon release of inventory from the depot.

Other Income
Revenue is recognized in the consolidated statement of income as they are earned.

Cost and Expense Recognition
Cost and expenses are decreases in economic benefits during the financial reporting period in the form of outflows or decrease of assets or incurrence of liabilities that result in decrease in equity, other than those relating to distributions to equity participants. Cost and expenses, finance expenses and other charges are generally recognized when the expense arises, incurred or accrued in the appropriate period.

Cost of Sale of Ore
Cost of sale of ore is incurred in the normal course of business and is recognized when incurred. They comprise mainly of cost of goods sold, which are provided in the period when goods are delivered.

Cost of Services
Cost of services is incurred in the normal course of business and is provided in the period when the related service has been rendered.

Cost of Power Generation
Cost of power generation using solar energy and diesel power station include expenses incurred directly for the generation of revenues from power at operating project locations. Cost of power generation are expensed when incurred.

Operating Expenses
Operating expenses consist of costs associated with the development and execution of marketing and promotional activities, costs of shipping and loading which are expenses incurred in connection with the distribution of ores, excise taxes and royalties due to the government and to indigenous people, and expenses incurred in the direction and general administration of day-to-day operation of the Group. These are generally recognized when the expense arises.

Leases
Determination of Whether an Arrangement Contains a Lease
The determination of whether an arrangement is, or contains, a lease is based on the substance of the arrangement at the inception of the lease. The arrangement is, or contains, a lease if fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset or assets, even if that right is not explicitly specified in an arrangement.

A reassessment is made after inception of the lease only if one of the following applies:
a) There is a change in contractual terms, other than a renewal or extension of the arrangement;
b) A renewal option is exercised or extension granted, unless that term of the renewal or extension was initially included in the lease term;

c) There is a change in the determination of whether fulfillment is dependent on a specified asset; or
d) There is a substantial change to the asset.

Where a reassessment is made, lease accounting shall commence or cease from the date when the change in circumstances gave rise to the reassessment for scenarios (a), (c) or (d) above, and at the date of renewal or extension period for scenario (b).

Group as a Lessee
Leases where the lessor retains substantially all the risks and benefits of ownership of the asset are classified as operating leases. Operating lease payments are amortized as expense in the consolidated statement of income on a straight-line basis over the lease term.

Group as a Lessor
Leases where the Group retains substantially all the risks and rewards of ownership of the asset are classified as operating leases. Initial direct costs incurred in negotiating an operating lease are added to the carrying amount of the leased asset and recognized over the lease term on the same basis as rental income.

<u>Pension Costs</u>
The net defined benefit liability or asset is the aggregate of the present value of the pension liability at the end of the financial reporting period reduced by the fair value of plan assets (if any), adjusted for any effect of limiting a net defined benefit asset to the asset ceiling. The asset ceiling is the present value of any economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan.

The cost of providing benefits under the defined benefit plans is actuarially determined using the projected unit credit method. This method reflects service rendered by employees to the date of valuation and incorporates assumptions concerning the employees' projected salaries.

Defined benefit costs comprise the following:
- Service cost;
- Net interest on the net defined benefit liability or asset; and
- Remeasurements of net defined benefit liability or asset.

Service costs which include current service costs, past service costs and gains or losses on non-routine settlements are recognized as pension costs under "Personnel costs" in the consolidated statement of income. Past service costs are recognized when plan amendment or curtailment occurs. These amounts are calculated periodically by independent qualified actuaries.

Net interest on the net defined benefit liability or asset is the change during the period in the net defined benefit liability or asset that arises from the passage of time which is determined by applying the discount rate based on government bonds to the net defined benefit liability or asset. Net interest on the net defined benefit liability or asset is recognized and included under "Finance expense" or "Finance income" in the consolidated statement of income.

Remeasurements comprising actuarial gains and losses, return on plan assets and any change in the effect of the asset ceiling (excluding net interest on defined benefit liability) are recognized immediately in OCI in the period in which they arise. Remeasurements are not reclassified to consolidated statement of income in subsequent periods. Remeasurements recognized in OCI after the initial adoption of Revised PAS 19 are closed to retained earnings.

Plan assets are assets that are held by a long-term employee benefit fund or qualifying insurance policies. Plan assets are not available to the creditors of the Group, nor can they be paid directly to the Group. Fair value of plan assets is based on market price information. When no market price is available, the fair value of plan assets is estimated by discounting expected future cash flows using a discount rate that reflects both the risk associated with the plan assets and the maturity or expected disposal date of those assets (or, if they have no maturity, the expected period until the settlement of the related obligations).

If the fair value of the plan assets is higher than the present value of the defined benefit obligation, the measurement of the resulting defined benefit asset is limited to the present value of economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan.

The Group's right to be reimbursed of some or all of the expenditure required to settle a defined benefit obligation is recognized as a separate asset at fair value when and only when reimbursement is virtually certain.

Income Taxes

Current Income Tax

Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities. The income tax rates and income tax laws used to compute the amount are those that are enacted or substantively enacted at the end of the financial reporting period. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretations and establishes provisions where appropriate.

Deferred Income Tax

Deferred income tax is provided using the balance sheet liability method on temporary differences at the end of the financial reporting period between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred income tax liabilities are recognized for all taxable temporary differences, except:

- Where the deferred income tax liability arises from the initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable income or loss; and
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred income tax assets are recognized for all deductible temporary differences, carryforward benefits of unused tax credits and unused tax losses, to the extent that it is probable that sufficient taxable income will be available against which the deductible temporary differences, and the carryforward benefits of unused tax credits and unused tax losses can be utilized except:

- Where the deferred income tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting income nor taxable income or loss; and
- In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred income tax assets are recognized only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilized.

The carrying amount of deferred income tax assets is reviewed at each end of the financial reporting period and reduced to the extent that it is no longer probable that sufficient taxable income will be available to allow all or part of the deferred income tax asset to be utilized. Unrecognized deferred income tax assets are reassessed at each end of the financial reporting period and are recognized to the extent that it has become probable that future taxable profit will allow the deferred income tax asset to be recovered.

Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realized or the liability is settled, based on income tax rates (and income tax laws) that have been enacted or substantively enacted as at the end of the financial reporting period.

Deferred income tax relating to items recognized outside the consolidated statement of income is recognized outside the consolidated statement of income. Deferred income tax items are recognized in correlation to the underlying transaction either in OCI or directly in equity.

Deferred income tax assets and deferred income tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred income taxes relate to the same taxable entity and the same taxation authority.

Business Segments

For management purposes, the Group is organized into operating segments (mining, power and services) according to the nature of the products and the services provided, with each segment representing a strategic business unit that offers different products and serves different markets. The segment locations are the basis upon which the Group reports its primary segment information for the mining segment. All of the segments operate and generate revenue only in the Philippines. Financial information on business segments is presented in Note 42.

Contingencies

Contingent liabilities are not recognized in the consolidated financial statements. These are disclosed in the notes to consolidated financial statements unless the possibility of an outflow of resources embodying economic benefits is remote. Contingent assets are not recognized in the consolidated financial statements but are disclosed when an inflow of economic benefits is probable.

Events after the End of the Financial Reporting Period

Post year-end events that provide additional information about the Group's position at each end of the financial reporting period (adjusting events) are reflected in the consolidated financial statements. Post year-end events that are not adjusting events are disclosed in the notes to the consolidated financial statements when material.

3. **Significant Accounting Judgments, Estimates and Assumptions**

The consolidated financial statements prepared in accordance with PFRS requires management to make judgments, estimates and assumptions that affect the amounts reported in the consolidated financial statements and related notes. Future events may occur which will cause the assumptions used in arriving at the estimates to change. The effects of any change in estimates are reflected in the consolidated financial statements as they become reasonably determinable.

Judgments, estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. However, actual outcome can differ from these estimates.

Judgments

In the process of applying the Group's accounting policies, management has made the following judgments, apart from those involving estimations, which has the most significant effect on the amounts recognized in the consolidated financial statements:

Determining Functional Currency

Based on the economic substance of the underlying circumstances relevant to the Group, the functional currency of the Parent Company and its subsidiaries has been determined to be the Philippine peso. The functional currency is the currency of the primary economic environment in which the Group operates. It is the currency that mainly influences labor, material and other costs of providing goods and services.

Classifying Financial Instruments

The Group classifies a financial instrument, or its component parts, on initial recognition as a financial asset, a financial liability or an equity instrument in accordance with the substance of the contractual agreement and the definitions of a financial asset, a financial liability or an equity instrument. The substance of the financial instrument, rather than its legal form, governs its classification in the consolidated statements of financial position.

Assessing Production Start Date

The Group assesses the stage of each mine development project to determine when a mine moves into the production stage. The criteria used to assess the start date of a mine are determined based on the unique nature of each mine development project. The Group considers various relevant criteria to assess when the mine is substantially complete, ready for its intended use and moves into the production phase.

Some of the criteria include, but are not limited to the following:

- The level of capital expenditure compared to construction cost estimates;
- Completion of a reasonable period of testing of the property and equipment;
- Ability to produce ore in saleable form; and
- Ability to sustain ongoing production of ore.

When a mine development project moves into the production stage, the capitalization of certain mine construction costs ceases and costs are either regarded as inventory or expensed, except for capitalizable costs related to mining asset additions or improvements, mine development or mineable reserve development. It is also at this point that depreciation or depletion commences.

Assessing Units-of-Production Depletion

Estimated recoverable reserves are used in determining the depletion of mine assets. This results in a depletion charge proportional to the depletion of the anticipated remaining mine life. Each item's life, which is assessed annually, has regard to both physical life limitations and to present assessments of economically recoverable reserves of the mine property at which the asset is located. The calculations require the use of estimates of future capital expenditure. The Group uses the tons of ore produced as the basis for depletion. Any change in estimates is accounted for prospectively.

Determining Whether Significant Influence Exists
The Parent Company recognized its ownership interest in THNC and CBNC as investments in associates. In accordance with the provisions of PAS 28 (2011), *Investments in Associates and Joint Ventures,* the existence of significant influence by an entity is usually evidenced in one or more of the following ways:
- Participation in policy-making processes through its representation on the BOD; or
- Material transactions between the entity and its investee such as the supply of all the nickel ore and limestone requirement of the investee and/or the use of the Group's land and infrastructure necessary for the production of the products of the investee.

Due to the nature of the Parent Company's involvement in THNC and CBNC and other various factors, the Parent Company assessed that significant influence exists (see Note 10).

Determining Capitalizability of Geothermal Exploration and Evaluation Assets and Deferred Mine Exploration Costs
Careful judgment by management is applied when deciding whether the recognition requirements for geothermal exploration and evaluation assets and deferred mine exploration costs relating to the Group's geothermal and mining projects have been met. Capitalization of these costs is based, to a certain extent, on management's judgment of the degree to which the expenditure may be associated with finding specific geothermal and ore reserve. This is necessary as the economic success of the exploration is uncertain and may be subject to future technical problems at the time of recognition. Judgments are based on the information available at the end of each financial reporting period.

Determining Applicability of IFRIC 12, Service Concession Arrangements on the Solar Energy Service Contract (SESC) and PSA with SURNECO
An arrangement would fall under IFRIC 12 if the two conditions below are met:
a) the grantor controls or regulates the services that the operator must provide using the infrastructure, to whom it must provide them, and at what price, and
b) the grantor controls any significant residual interest in the property at the end of the concession term through ownership, beneficial entitlement or otherwise.

The infrastructure used for its entire useful life ('whole of life assets') is within the scope of IFRIC 12 if the arrangement meets the conditions in (a).

However, based on management's judgment, the SESC entered into by Jobin is outside the scope of IFRIC 12 since Jobin controls the significant residual interest in the properties at the end of the concession term through ownership. For the PSA with SURNECO, management assessed that it is also outside the scope of IFRIC 12 since SURNECO does not control or regulates the services of the operator, which is the Parent Company, in using the power plant including its pricing.

Operating Lease - Parent Company as the Lessor
In accounting for its PSA with SURNECO, the Group's management has made a judgment that the PSA is an arrangement that contains a lease. The Parent Company has not transferred substantially all the risks and rewards incidental to the ownership of the power plant principally by virtue of its right to control the capacity of power plant and its right to transfer the power plant at the end of the PSA for no consideration. Accordingly, the Group accounted for the agreement as an operating lease. The capacity fees billed to SURNECO are recorded as operating revenue based on the terms of the PSA.

Identifying the Enforceable Contract
Sale of beneficiated nickel ore and limestone
The Group made an irrevocable and firm commitment to sell nickel ore on FOB of mother vessel terms, while the buyer made an irrevocable and firm commitment to purchase the quantity of the nickel ore under the terms and conditions specified and agreed upon in the contract. Throughout the year, the parties executed addendums to the contract to deliver nickel ore with quantity and specifications indicated therein.

The Group executed a five (5)-year contract with PAMCO, where the former expressed its wish to sell to the latter all beneficiated nickel saprolite ore which meets the specifications as stated in the contract.

For the above arrangements, the enforceable contracts have been determined to be the annual and long-term contracts and the addendums thereon. While there are master supply agreements with customers that set out the general terms and conditions governing any sales that occur, they do not contain any minimum volumes. Therefore, for above arrangements, the enforceable contracts have been determined to be the annual and long-term contracts and the addendum thereon.

Rendering of services
The Group and its customers entered into various service agreements, such as materials handling services, power supply and rental of property, that sets out the general terms and conditions governing each services that occur. The Group has the experience, expertise, equipment, facilities, and personnel required for the services needed and the customers recognizes the capability of Group and hires its services under the terms and conditions specified and agreed upon in the contract. Therefore, the enforceable contracts are the service and/or PSAs entered into with different customers.

Identifying Performance Obligations
The Group identifies performance obligations by considering whether the promised goods or services in the contract are distinct goods or services. A good or service is distinct when the customer can benefit from the good or service on its own or together with other resources that are readily available to the customer and the Group's promise to transfer the good or service to the customer is separately identifiable from the other promises in the contract.

The Group assesses performance obligations as a series of distinct goods and services that are substantially the same and have the same pattern of transfer if: i) each distinct good or services in the series are transferred over time, and ii) the same method of progress will be used (i.e., units of delivery) to measure the entity's progress towards complete satisfaction of the performance obligation.

With regards to the sale of beneficiated nickel ore and limestone, the Group and its buyers agree to respectively sell and purchase a specific quantity of nickel ore during the term of the sales contracts. This performance obligation is a promise to transfer to the buyer distinct goods (i.e. nickel ore and limestone) that shall be satisfied at a point in time. It is capable of being distinct since the customers can benefit from it in conjunction with other readily available resources. It is distinct within the context of the sales contracts because it is not integrated, not highly interdependent on or highly interrelated with other promised services in the contract. The obligation is to transfer nickel ore which shall be satisfied once the control to the goods has been transferred to the buyer at a point in time.

With regards to the sale of power, it is considered as a performance obligation since the customer can benefit from it in conjunction with other readily available resources and it is also distinct within the context of the contract.

The performance obligation qualifies as a series of distinct goods or services that are substantially the same and have the same pattern of transfer since the delivery of energy every month are distinct services which are all recognized over time and have the same measure of progress.

Determining Method to Estimate Variable Consideration and Assessing the Constraint
The Group assessed that it has variable consideration pertaining to quantity of ore shipped to customer. The variability arises from the uncertainty of final quantity and is assessed based on preliminary assay which is the Group's estimate of the most likely amount that is not highly probable to result in a significant reversal in cumulative revenue recognized when final assay is completed.

The Group's sale of power to IEMO provide unspecified quantity of energy and unspecified unit price that give rise to variable consideration. In estimating the variable consideration, the Group is required to use either the expected value method or the most likely amount method based on which method better predicts the amount of consideration to which it will be entitled. The expected value method of estimation takes into account a range of possible outcomes while the most likely amount is used when the outcome is binary. The Group determined that the expected value method is the appropriate method to use in estimating the variable consideration given the large range of possible outcomes.

Before including any amount of variable consideration in the transaction price, the Group considers whether the amount of variable consideration is constrained. The Group determined that the estimates of variable consideration are to be fully constrained based on its historical experience (i.e., volume and unit price), the range of possible outcomes (i.e., unspecified quantity of energy and unspecified unit price), and the unpredictability of other factors outside the Group's influence.

Allocating Variable Consideration
Variable consideration may be attributable to the entire contract or to a specific part of the contract. For the revenue from sale of power which is considered as series of distinct goods or services that are substantially the same and have the same pattern of transfer, the Group allocates the variable amount that is no longer subject to constraint to the satisfied portion (i.e., month) which forms part of the single performance obligation, and forms part of the monthly billing of the Group.

Determining the Timing of Satisfaction of the Sale of Ore and Power
The Group recognizes revenue when it satisfies an identified performance obligation by transferring a promised good or service to a customer. A good or service is considered to be transferred when the customer obtains control. The Group determines, at contract inception, whether it will transfer control of a promised good or service over time. If the Group does not satisfy a performance obligation over time, the performance obligation is satisfied at a point in time.

The Group concluded that revenue from sale of power are to be recognized over time since customers simultaneously receives and consumes the benefits as the Group supplies power.

The sale of ore is satisfied at a point in time. All risk of loss, damage or destruction respective of the ore delivered shall progressively pass to the buyer at the time the ore passes over the rail and into the vessel. In case of deliveries to CBNC and THNC title, risk of loss and damage passed to the buyer at the time the ore passes into the ore preparation hopper of the respective plants.

Identifying Methods for Measuring Progress of Revenue Recognized over Time
The Group determines the appropriate method of measuring progress which is either through the use of input or output methods. Input method recognizes revenue on the basis of the entity's efforts or inputs to the satisfaction of a performance obligation while output method recognizes revenue on the basis of direct measurements of the value to the customer of the goods or services transferred to date.

For sale of power, the Group determined that the output method is the best method in measuring progress since actual electricity is supplied to customers. The Group recognizes revenue based on the actual energy dispatched billed at the spot price calculated during the trading interval which is a one (1) hour period commencing on the hour or based on the rates approved by the ERC.

Determining the Group's Business Model
The Group's business model is determined at a level that reflects how groups of financial assets are managed together to achieve a particular business objective. The Group's business model does not depend on management's intentions for an individual instrument.

The Group's business model refers to how it manages its financial assets in order to generate cash flows. The Group's business model determines whether cash flows will result from collecting contractual cash flows, selling financial assets or both. Relevant factors considered by the Group in determining the business model for a group of financial assets include how the performance of the business model and the financial assets held within that business model are evaluated and reported to the Group's key management personnel, the risks that affect the performance of the business model (and the financial assets held within that business model) and how these risks are managed and how managers of the business are compensated.

Defining Default and Credit-Impaired Financial Assets
Upon adoption of PFRS 9, the Group defines a financial instrument as in default, which is fully aligned with the definition of credit impaired, when it meets one or more of the following criteria:

- *Quantitative Criteria.* The borrower is more than ninety (90) days past due on its contractual payments, which is consistent with the Group's definition of default.
- *Qualitative Criteria.* The borrower meets unlikeliness to pay criteria, which indicates the borrower is in significant financial difficulty. These are instances where:
    a. The borrower is experiencing financial difficulty or is insolvent;
    b. The borrower is in breach of financial covenant(s);
    c. An active market for that financial assets has disappeared because of financial difficulties;
    d. Concessions have been granted by the Group, for economic or contractual reasons relating to the borrower's financial difficulty;
    e. It is becoming probable that the borrower will enter bankruptcy or other financial reorganization; or
    f. Financial assets are purchased or originated at a deep discount that reflects the incurred credit losses.

The criteria above have been applied to all financial instruments held by the Group and are consistent with the definition of default used for internal credit risk management purposes. The default definition has been applied consistently to model the PD, LGD and EAD throughout the Group's ECL calculation.

An instrument is no longer in default (i.e. to have cured) when it no longer meets any of the default criteria.

Identifying Forward Looking Information
In its ECL models, the Group relies on forward looking information as economic inputs, such as:
- Dollar index rate
- Gross Domestic Product growth
- Inflation rates

Predicted relationship between the key indicators and default and loss rates on portfolios of financial assets have been developed based on analyzing historical data over the past five (5) years. The methodologies and assumptions including any forecasts of future economic conditions are reviewed regularly.

The inputs and models used for calculating ECLs may not always capture all characteristics of the market at the end of the financial reporting period. To reflect this, qualitative adjustments or overlays are occasionally made as temporary adjustments when such differences are significantly material.

Determining Significant Increase in Credit Risk
The criteria for determining whether credit risk has increased significantly vary and include quantitative changes in PDs and qualitative factors, including a backstop based on delinquency.

Using its expert credit judgement and, where possible, relevant historical experience, the Group may determine that an exposure has undergone a significant increase in credit risk based on qualitative indicators that it considers are indicative of such and whose effect may not otherwise be fully reflected in its quantitative analysis on a timely basis. As a backstop, the Group considers that a significant increase in credit risk occurs no later than when an asset is more than ninety (90) days past due. Days past due are determined by counting the number of days since the earliest elapsed due date in respect of which full payment has not been received. Due dates are determined without considering any grace period that might be available to the related party/customer.

The Group monitors the effectiveness of the criteria used to identify significant increases in credit risk by regular reviews to confirm that:
- the criteria can identify significant increase in credit risk before an exposure is in default;
- the criteria do not align with the point in time when an asset becomes ninety (90) days past due; and
- there is no unwarranted volatility in loss allowance from transfers between twelve (12)-month PD (stage 1) and lifetime PD (stage 2).

Exposures that have not deteriorated significantly since origination, or where the deterioration remains within the Group's investment grade criteria, or which are less than ninety (90) days past due, are considered to have a low credit risk. The provision for expected credit losses for these financial assets is based on a twelve (12)-month ECL. The low credit risk exemption has been applied on debt investments that meet the investment grade criteria of the Group from the time of origination.

An exposure will migrate through the ECL stages as asset quality deteriorates. If, in a subsequent period, asset quality improves and also reverses any previously assessed significant increase in credit risk since origination, then the loss allowance measurement reverts from lifetime ECL to twelve (12)-months ECL.

Estimates and Assumptions
The key estimates and assumptions concerning the future and other key sources of estimation uncertainty as at the end of the financial reporting period, that have the most significant risk of causing a material adjustment to the carrying amounts of assets within the next financial year are as follows:

Estimating Ore Reserves
Ore reserves are estimates of the amount of ore that can be economically and legally extracted from the Group’s mining properties. The Group estimates its ore reserves based on information compiled by appropriately qualified persons relating to the geological data on the size, depth and shape of the ore body, and requires complex geological judgments to interpret the data. The estimation of recoverable reserves is based upon factors such as estimates of foreign exchange rates, commodity prices, future capital requirements, and production costs along with geological assumptions and judgments made in estimating the size and grade of the ore body. Changes in the reserve or resource estimates may impact upon the carrying values of property and equipment, provision for mine rehabilitation and decommissioning, recognition of deferred income tax assets and depreciation and depletion charges.

The Group also makes estimates and assumptions regarding a number of economic and technical factors, such as production rates, grades, production and transport costs and prices. These economic and technical estimates and assumptions may change in the future in ways that affect the quality and quantity of the reserves. The Group reviews and updates estimates as required, but at least annually, to reflect actual production, new exploration data or developments and changes in other assumptions or parameters. These estimates will change from time to time to reflect mining activities, analyses of new engineering and geological data, changes in ore reserve and mineral resource holdings, modifications of mining plans or methods, changes in nickel or limestone prices or production costs and other factors.

Estimating Recoverability of Geothermal Exploration and Evaluation Assets and Deferred Mine Exploration Costs
The application of the Group’s accounting policy for geothermal exploration and evaluation assets and deferred mine exploration costs requires judgment in determining whether it is likely that future economic benefits are certain, which may be based on assumptions about future events or circumstances. Estimates and assumptions made may change if new information becomes available. If, after explorations costs are capitalized, information becomes available suggesting that the recovery of expenditure is unlikely, the amount capitalized is written off in the consolidated statement of income in the period when the new information becomes available. An impairment loss is recognized when the carrying value of those assets is not recoverable and exceeds their fair value.

The carrying values of geothermal exploration and evaluation assets amounted to ₱1,793.4 million and ₱1,784.2 million as at December 31, 2018 and 2017, respectively (see Note 11).

Deferred mine exploration costs, included in “Other noncurrent assets” in the consolidated statements of financial position, as at December 31, 2018 and 2017 amounted to ₱1,244.8 million and ₱1,229.4 million, respectively (net of allowance for impairment losses of ₱143.6 million as at December 31, 2018 and 2017; see Note 13). The Group has directly written-off deferred mine exploration costs amounting to nil in 2018 and 2017 and ₱2.3 million in 2016 (see Note 31).

Estimating Allowance for Impairment Losses on Solar Project and Construction In-Progress
The Group is adversely affected by the continued decline in wholesale electricity prices. In the event that an impairment indicator is identified, the assessment of the recoverable amount of the solar project and construction in-progress related to solar farms and geothermal projects, requires significant judgment and is based on assumptions. The carrying value of the Group's solar project and construction in-progress recorded as property and equipment as at December 31, 2018 and 2017 are dislosed in Note 9 to the consolidated financial statements.

The factors that the Group considers important which could trigger an impairment review include the following:
- Significant underperformance relative to expected historical or projected future operating results;
- Significant changes in the manner of use of the acquired assets or the strategy for overall business; and
- Significant negative industry or economic trends.

In determining the present value of estimated future cash flows expected to be generated from the continued use of the assets, the Group is required to make estimates and assumptions that can materially affect the consolidated financial statements.

These assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss would be recognized whenever evidence exists that the carrying value is not recoverable. For purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows.

An impairment loss is recognized and charged to profit or loss if the discounted expected future cash flows are less than the carrying amount. Fair value is estimated by discounting the expected future cash flows using a discount factor that reflects the market rate for a term consistent with the period of expected cash flows. As at December 31, 2018 and 2017, the Group has not provided any allowance for impairment losses on its property and equipment. The impairment recognized in 2016 was related to dump trucks which has become inoperational. In 2017, machinery and equipment, including the said dump trucks, were sold, thus the Group reversed the previously recognized allowance for impairment losses related to these assets (see Notes 9 and 31).

Estimating Allowance for Impairment Losses on Trade and Other Receivables and Loan Receivable Prior to the Adoption of PFRS 9
The Group evaluates specific accounts where the Group has information that certain customers are unable to meet their financial obligations. The Group assesses individually the receivables based on factors that affect its collectibility. Factors such as the Group's length of relationship with the customers, the customer's current credit status, and probability of insolvency and significant financial difficulties of customers are considered to ascertain the amount of allowances that will be recorded in the receivables account. These allowances are re-evaluated and adjusted as additional information is received.

In addition to specific allowance against individually significant loans and receivables, the Group also makes a collective impairment allowance against exposures which, although not specifically identified as requiring a specific allowance, have a greater risk of default than when originally granted. This collective allowance is based on any deterioration in the Group's assessment of the accounts since their inception. The Group's assessments take into consideration factors such as any deterioration in country risk and industry, as well as identified structural weaknesses or deterioration in cash flows.

As at December 31, 2017, the carrying values of trade and other receivables and loan receivable - net of current portion amounted to ₱905.1 million (net of allowance for impairment losses of ₱45.9 million) and ₱767.6 million, respectively (see Notes 5 and 13).

Estimating Allowance for Impairment Losses on AFS Financial Assets Prior to the Adoption of PFRS 9
The Group treats AFS financial assets as impaired when there has been a significant or prolonged decline in the fair value below its cost or where other objective evidence of impairment exists. The determination of what is "Significant" or "Prolonged" requires judgment. The Group treats "Significant" generally as 20% or more of the original cost of investment, and "Prolonged" as greater than one (1) year. In addition, the Group evaluates other factors, including normal volatility in share price for quoted equities and the future cash flows and discount factors for unquoted equities in determining the amount to be impaired.

The Group treats unquoted AFS financial assets as impaired when there is objective evidence of impairment as a result of one or more events or loss events and that loss event has an impact on the estimated future cash flows of the AFS financial assets. An objective evidence may include information about significant changes with an adverse effect that have taken place in the market, technological, economic or legal environment in which the investees operate, and indicates that the cost of the investment in the equity instruments may not be recovered.

In 2017 and 2016, the Group recognized a provision for impairment losses on its AFS financial assets amounting to ₱133.3 million and ₱119.2 million, respectively (see Note 31). The carrying value of AFS financial assets amounted to ₱6,658.2 million as at December 31, 2017 (see Note 7).

Estimating Allowance for ECL on Trade and Other Receivables Upon Adoption of PFRS 9
The Group uses a provision matrix to calculate ECLs for trade and other receivables. The provision rates are based on days past due for groupings of various customer segments that have similar loss patterns.

The provision matrix is initially based on the Group's historical observed default rates. The Group calibrates the matrix to adjust the historical credit loss experience with forward-looking information. At every end of the financial reporting period, the historical observed default rates are updated and changes in the forward-looking estimates are analyzed.

The assessment of the correlation between historical observed default rates, forecast economic conditions and ECLs is a significant estimate. The amount of ECLs is sensitive to changes in circumstances and of forecast economic conditions. The Group's historical credit loss experience and forecast of economic conditions may also not be representative of customer's actual default in the future. The information about the ECLs on the Group's trade and other receivables is disclosed in Note 5.

Calculating ECL
The Group calculates ECLs based on unbiased and a three (3) probability-weighted scenarios to measure the expected cash shortfalls, discounted at an approximation to the EIR. A cash shortfall is the difference between the cash flows that are due to an entity in accordance with the contract and the cash flows that the entity expects to receive.

The mechanics of the ECL calculations are outlined below and the key elements are, as follows:

- PD is an estimate of the likelihood of default over a given time horizon. A default may only happen at a certain time over the assessed period, if the facility has not been previously derecognized and is still in the portfolio.

- EAD is an estimate of the exposure at a future default date, taking into account expected changes in the exposure after the financial reporting period, including repayments of principal and interest, whether scheduled by contract or otherwise, expected drawdowns on committed facilities, and accrued interest from missed payments.
- LGD is an estimate of the loss arising in the case where a default occurs at a given time. It is based on the difference between the contractual cash flows due and those that the lender would expect to receive, including from the realization of any collateral. It is usually expressed as a percentage of the EAD.

When estimating the ECLs, the Group considers three scenarios (a base case, a best case, and a worst case). Each of these is associated with different PDs, EADs and LGDs. When relevant, the assessment of multiple scenarios also incorporates how defaulted loans are expected to be recovered, including the probability that the loans will cure and the value of collateral or the amount that might be received for selling the asset. The maximum period for which the credit losses are determined is the contractual life of a financial instrument unless the Group has the legal right to call it earlier.

Estimating Allowance for Impairment Losses on Inventories
The Group maintains allowance for inventory losses at a level considered adequate to reflect the excess of cost of inventories over their NRV. NRV tests are performed at least annually and represent the estimated future sales price of the product based on prevailing spot metals prices at the end of the financial reporting period, less estimated costs to complete production and bring the product to sale. Stockpiles are measured by estimating the number of tonnes added and removed from the stockpile and the number of contained nickel ore ounces based on assay data. Stockpile tonnages are verified by periodic surveys. NRV test for materials and supplies is also performed annually and it represents the current replacement cost. Increase in the NRV of inventories will increase the cost of inventories but only to the extent of their original production costs.

As at December 31, 2018 and 2017, inventories carried at lower of cost and NRV amounted to ₱3,744.3 million and ₱3,502.4 million, respectively (net of allowance for inventory losses of ₱102.9 million and ₱85.6 million as at December 31, 2018 and 2017, respectively; see Note 6).

Estimating Recoverability of Long-term Stockpile Inventory
The determination of the Group's long-term stockpile inventory include among others, projected revenues and operating and delivering costs from the sale of the long-term stockpile. Actual results that differ from the Group's assumptions generally affect the Group's recognized expense. The long-term stockpile inventory is carried at the lower of cost and NRV. An allowance for inventory losses is recognized when the carrying value of the asset is not recoverable and exceeds the NRV. Long-term stockpile inventory - net of current portion amounted to ₱105.6 million and ₱167.6 million as at December 31, 2018 and 2017, respectively (see Note 12).

Estimating Useful Lives of Property and Equipment (except Land)
The Group estimates the useful lives of property and equipment, except land, based on the period over which the assets are expected to be available for use. The estimated useful lives of property and equipment are reviewed periodically and are updated if expectations differ from previous estimates due to physical wear and tear, technical or commercial obsolescence and legal or other limits on the use of the assets. In addition, estimation of the useful lives of property and equipment is based on collective assessment of industry practice, internal technical evaluation and experience with similar assets. It is possible, however, that future results of operations could be materially affected by changes in estimates brought about by changes in factors mentioned above.

The amounts and timing of recorded expenses for any period would be affected by changes in these factors and circumstances. There is no change in the estimated useful lives of property and equipment in 2018 and 2017.

The carrying values of property and equipment, except land which amounted to ₱268.4 million, as at December 31, 2018 and 2017 amounted to ₱14,809.8 million and ₱15,119.9 million, respectively (net of accumulated depreciation, amortization and depletion of ₱10,723.2 million and ₱9,837.8 million, respectively; see Note 9).

Estimating Allowance for Impairment Losses on Investments in Associates
Impairment review on investments in associates are performed when events or changes in circumstances indicate that the carrying value exceeds its fair value. If any such indication exists and where the carrying value exceeds the estimated recoverable amount, the investment is written down to its recoverable amount. Management has determined that there are no events or changes in circumstances in 2018 and 2017 that may indicate that the carrying value of investments in associates may not be recoverable. No impairment loss was recognized on investments in associates in 2018 and 2017. The carrying values of the Group's investments in associates amounted to ₱3,540.6 million and ₱2,952.1 million as at December 31, 2018 and 2017, respectively (see Note 10).

Estimating Allowance for Impairment Losses on Nonfinancial Other Assets
The Group provides allowance for impairment losses on nonfinancial other assets when they can no longer be realized. The amounts and timing of recorded expenses for any period would differ if the Group made different judgments or utilized different estimates. An increase in allowance for impairment losses would increase recorded expenses and decrease other assets.

The carrying values of nonfinancial prepayments and other current assets amounted to ₱455.5 million and ₱929.7 million as at December 31, 2018 and 2017, respectively, while nonfinancial other noncurrent assets amounted to ₱2,665.1 million and ₱2,673.3 million as at December 31, 2018 and 2017, respectively (see Notes 8 and 13).

The allowance for impairment losses on the Group's nonfinancial prepayments and other current assets amounted to ₱570.2 million and ₱55.3 million as at December 31, 2018 and 2017, respectively (see Note 8). The allowance for impairment losses on the Group's nonfinancial other noncurrent assets as at December 31, 2018 and 2017 amounted to ₱249.4 million (see Note 13).

Determining Pension Benefits
The cost of defined benefit retirement as well as the present value of the pension liability is determined using actuarial valuations. The actuarial valuation involves making various assumptions, as described in Note 35. These include the determination of the discount rates and future salary increases. Due to the complexity of the valuation, the underlying assumptions and its long-term nature, defined benefit pension liability are highly sensitive to changes in these assumptions. In determining the appropriate discount rate, management considers the interest rates of government bonds that are denominated in the currency in which the benefits will be paid, with extrapolated maturities corresponding to the expected duration of the defined benefit pension liability. All assumptions are reviewed at each end of the financial reporting period. While management believes that its assumptions are reasonable and appropriate, significant differences in actual experience or significant changes in the assumptions may materially affect the Group's pension liability.

As at December 31, 2018 and 2017, pension asset included under "Other noncurrent assets" in the consolidated statements of financial position amounted to ₱7.2 million and nil, respectively, and pension liability amounted to ₱327.9 million and ₱320.8 million, respectively (see Notes 13 and 35).

Estimating Provision for Mine Rehabilitation and Decommissioning
The Group assesses its provision for mine rehabilitation and decommissioning annually. Significant estimates and assumptions are made in determining the provision for mine rehabilitation as there are numerous factors that will affect the provision. These factors include estimates of the extent and costs of rehabilitation activities, technological changes, regulatory changes, cost increases and changes in discount rates. Those uncertainties may result in future actual expenditure differing from the amounts currently provided.

The provision at the end of the financial reporting period represents management's best estimate of the present value of the future rehabilitation costs required. Changes to estimated future costs are recognized in the consolidated statement of financial position by adjusting the rehabilitation asset and liability. For closed sites, changes to estimated costs are recognized immediately in the consolidated statement of income.

Provision for mine rehabilitation and decommissioning amounted to ₱274.2 million and ₱388.8 million as at December 31, 2018 and 2017, respectively (see Note 16).

Estimating Fair Value of Share-based Payment Transactions
The Parent Company's Executive Stock Option Plan (ESOP) grants qualified participants the right to purchase common shares of the Parent Company at a grant price. The ESOP recognizes the services received from the eligible employees and an equivalent adjustment to the equity account over the vesting period. The Parent Company measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date at which they are granted. Estimating fair value for share-based payment transactions requires determining the most appropriate valuation model, which is dependent on the terms and conditions of the grant.

This estimate also requires determining the most appropriate inputs to the valuation model including the expected life of the share option, volatility and dividend yield. The assumptions and models used for estimating the fair value of share-based payment transactions are disclosed in Note 19. While management believes that the estimates and assumptions used are reasonable and appropriate, significant differences in actual experience or significant changes in the estimates and assumptions may no longer affect the stock compensation costs charged to operations.

The cost of share-based payment plan recognized as expense in 2018, 2017 and 2016, with a corresponding charge to the equity account, amounted to ₱102.4 million, ₱11.0 million and ₱25.7 million, respectively (see Notes 19 and 27). As at December 31, 2018 and 2017, the balance of the cost of share-based payment plan in the equity section of the consolidated statements of financial position amounted to ₱240.0 million and ₱137.6 million, respectively (see Note 19).

Assessing Recoverability of Deferred Income Tax Assets
The Group reviews the carrying amounts of deferred income tax assets at each end of the financial reporting period and reduces the amounts to the extent that it is no longer probable that sufficient future taxable income will be available to allow all or part of the deferred income tax assets to be utilized. The Group has deferred income tax assets amounting to ₱336.0 million and ₱333.1 million as at December 31, 2018 and 2017, respectively (see Note 36).

As at December 31, 2018 and 2017, the Group has temporary difference amounting to ₱2,128.0 million and ₱1,381.6 million, respectively, for which no deferred income tax assets were recognized because it is more likely than not that the carryforward benefits will not be realized in the future (see Note 36).

Determining Fair Values of Financial Instruments
Where the fair values of financial assets and liabilities recorded in the consolidated statement of financial position cannot be derived from active markets, they are determined using internal valuation techniques using generally accepted market valuation models. The inputs to these models are taken from observable markets where possible, but where this is not feasible, estimates are used in establishing fair values. These estimates may include considerations of liquidity, volatility and correlation. Certain financial assets and liabilities were initially recorded at its fair value (see Note 38).

4. Cash and Cash Equivalents

	2018	2017
Cash on hand and with banks	**₱835,643**	₱944,696
Cash under managed funds	**106,954**	177,014
Short-term cash investments	**9,841,772**	8,513,804
	₱10,784,369	₱9,635,514

Cash with banks and under managed funds earn interest at the prevailing bank deposit rates. Cash equivalents are short-term cash investments that are made for varying periods of up to three (3) months depending on the immediate cash requirements of the Group and earn interest at the respective short-term cash investment rates. The carrying value of cash and cash equivalents approximates their fair value as of the end of the financial reporting period.

The Group has United States dollar (US$) denominated cash and cash equivalents amounting to US$126.6 million, equivalent to ₱6,657.5 million, and US$134.4 million, equivalent to ₱6,711.4 million, as at December 31, 2018 and 2017, respectively (see Note 37).

Interest income from cash and cash equivalents amounted to ₱188.1 million, ₱134.2 million and ₱73.8 million in 2018, 2017 and 2016, respectively (see Note 29).

5. Trade and Other Receivables

	2018	2017
Trade (see Note 34)	**₱759,516**	₱660,883
Current portion of loan receivable (see Note 39a)	**146,158**	94,203
Interest receivable	**53,315**	53,619
Receivable from CBNC (see Note 34)	**41,835**	40,679
Advances to officers and employees	**38,009**	48,845
Amounts owed by related parties (see Note 34)	**9,255**	7,351
Others	**65,878**	45,417
	1,113,966	950,997
Less allowance for ECL/impairment losses	**57,398**	45,872
	₱1,056,568	₱905,125

The movements of allowance for ECL/impairment losses follows:

2018	**Trade**	**Others**	**Total**
Balances at January 1	**₱41,155**	**₱4,717**	**₱45,872**
Provisions (see Note 31)	**–**	**9,924**	**9,924**
Foreign exchange adjustments	**1,602**	**–**	**1,602**
Balances at December 31	**₱42,757**	**₱14,641**	**₱57,398**

2017	Trade	Others	Total
Balances at January 1	₱41,029	₱4,717	₱45,746
Provisions	–	–	–
Foreign exchange adjustments	126	–	126
Balances at December 31	₱41,155	₱4,717	₱45,872

Trade receivables and receivable from CBNC are noninterest-bearing and are generally on seven (7) to thirty (30)-days' term, except for the usage fee billed to THNC which is collected on a semi-annual basis.

Loan receivable represents the loan agreement executed by CMC and East Coast Mineral Resources Co., Inc. (East Coast), which will be settled based on the agreed repayment terms (see Note 39a).

Interest receivable is derived from short-term cash investments placed in various local/foreign banks, which are collectible upon maturity, from debt securities and long-term negotiable instruments which are collectible monthly, quarterly or semi-annually, and from loan issued to East Coast which is collectible based on the agreed repayment terms.

Advances to officers and employees are noninterest-bearing and are generally subject to liquidation or collectible through salary deduction.

Amounts owed by related parties are noninterest-bearing with no fixed maturities and are generally collectible on demand.

Other receivables include advances to third party companies which are noninterest-bearing, with no fixed maturities and are generally collectible on demand. These also include despatch receivables which are generally on seven (7) to thirty (30)-days' terms.

In 2018, the Group written-off trade and other receivables amounting to ₱7.4 million (see Note 31).

The Group has US$ denominated trade and other receivables amounting to US$11.5 million, equivalent to ₱605.0 million, and to US$11.5 million, equivalent to ₱576.2 million, as at December 31, 2018 and 2017, respectively (see Note 37).

6. Inventories

	2018	2017
Beneficiated nickel ore and limestone - at cost	**₱2,700,539**	₱2,432,633
Beneficiated nickel ore - at NRV	**539,222**	434,178
Materials and supplies:		
At NRV	**437,780**	210,612
At cost	**11,427**	212,980
Current portion of long-term stockpile inventory (see Note 12)	**55,306**	212,011
	₱3,744,274	₱3,502,414

The movements of allowance for impairment losses on inventories follows:

2018	**Beneficiated nickel ore**	**Materials and supplies**	**Total**
Balances at January 1	**₱68,241**	**₱17,384**	**₱85,625**
Provisions (see Note 31)	**–**	**18,966**	**18,966**
Reversals (see Note 31)	**(1,718)**	**–**	**(1,718)**
Balances at December 31	**₱66,523**	**₱36,350**	**₱102,873**

2017	Beneficiated nickel ore	Materials and supplies	Total
Balances at January 1	₱74,345	₱10,036	₱84,381
Provisions (see Note 31)	–	7,348	7,348
Reversals (see Note 31)	(6,104)	–	(6,104)
Balances at December 31	₱68,241	₱17,384	₱85,625

As at December 31, 2018 and 2017, the cost of beneficiated nickel ore and limestone provided with allowance for impairment losses amounted to ₱3,361.6 million and ₱3,147.1 million, respectively, while the cost of materials and supplies provided with allowance for impairment losses amounted to ₱485.6 million and ₱441.0 million, respectively.

Costs of inventories charged as expense amounted to ₱7,271.1 million, ₱6,410.6 million and ₱6,228.8 million in 2018, 2017 and 2016, respectively (see Notes 21, 22, 23, 24, 26 and 31).

7. Financial Assets

	2018			2017
	FVOCI	**FVTPL**	**Amortized Cost**	AFS Financial Assets
Quoted instruments:				
Debt securities	**₱2,608,301**	**₱475,202**	**₱531,770**	₱5,097,660
Equity securities	**–**	**1,062,349**	**–**	1,353,957
Unquoted equity instruments	**–**	**469,095**	**–**	206,586
	₱2,608,301	**₱2,006,646**	**₱531,770**	₱6,658,203

The Group's financial assets pertain to investments in common and preferred shares of various local and foreign public and private companies, mutual funds, golf club shares and debt securities which are either unquoted or with quoted market prices. Quoted and unquoted instruments are carried either at fair market value or at amortized cost as at the end of the financial reporting period.

The movements in financial assets follows:

	2018				2017
	FVOCI	**FVTPL**	**Amortized Cost**	**AFS Financial Assets**	AFS Financial Assets
Balances at January 1	**₱–**	**₱–**	**₱–**	**₱6,658,203**	₱6,318,861
Effect of PFRS 9 adoption (see Note 2)	**2,858,666**	**3,330,923**	**693,275**	**(6,658,203)**	–
Balances at January 1, as restated	**2,858,666**	**3,330,923**	**693,275**	**–**	6,318,861
Additions	**1,539,437**	**789,181**	**48,439**	**–**	5,234,667
Disposals	**(1,764,230)**	**(2,007,499)**	**–**	**–**	(4,957,281)
Redemption	**–**	**–**	**(196,048)**	**–**	–
Effect of changes in foreign exchange rate (see Note 31)	**26,669**	**23,856**	**–**	**–**	1,033
Net valuation gains (losses) on financial assets	**(52,241)**	**(129,815)**	**(13,896)**	**–**	194,243
	2,608,301	**2,006,646**	**531,770**	**–**	6,791,523
Less provision for ECL/impairment losses (see Note 31)	**–**	**–**	**–**	**–**	133,320
Balances at December 31	**2,608,301**	**2,006,646**	**531,770**	**–**	6,658,203
Less noncurrent portion	**–**	**585,928**	**330,000**	**–**	732,521
Current portion	**₱2,608,301**	**₱1,420,718**	**₱201,770**	**₱–**	₱5,925,682

The movements in "Net valuation gains (losses) on financial assets" presented as a separate component of equity follows:

	2018	2017
Balances at January 1	**₱163,935**	₱12,954
Effect of PFRS 9 adoption (see Note 2)	**(206,740)**	–
Balances at January 1, as restated	**(42,805)**	12,954
Movements recognized in equity:		
Gains (losses) recognized in equity	**(101,697)**	208,579
Reclassification adjustments for loss (income) included in the consolidated statements of income (see Notes 29 and 30)	**49,456**	(14,336)
Income tax effect	**2,542**	(41,132)
Valuation gains (losses) taken into the consolidated statements of comprehensive income - net of tax	**(49,699)**	153,111
Less share of NCI in gains recognized in equity	**–**	2,130
Balances at December 31	**(₱92,504)**	₱163,935

Dividend income from equity securities amounted to ₱38.8 million, ₱37.0 million and ₱35.1 million in 2018, 2017 and 2016, respectively, of which ₱15.3 million in 2018, 2017 and 2016 relates to dividends coming from investments in unquoted equity securities (see Note 31), while interest income from debt securities amounted to ₱133.7 million, ₱135.6 million and ₱121.8 million in 2018, 2017 and 2016, respectively (see Note 29).

The Group sold some of its debt and equity securities at a net loss of ₱47.1 million and ₱11.7 million in 2018 and 2016, respectively, and at a gain of ₱14.3 million in 2017 (see Note 31).

In 2018, the Group did not recognize any provision for ECL on its financial assets at FVOCI and at amortized cost. In 2017 and 2016, the Group recognized a provision for impairment losses on its equity security amounting to ₱133.3 million and ₱119.2 million, respectively (see Note 31).

As at December 31, 2018, the Group has US$ denominated financial assets at FVTPL and FVOCI amounting to US$17.6 million, equivalent to ₱924.5 million, and US$15.9 million, equivalent to ₱838.4 million, respectively. As at December 31, 2017, the Group's US$ denominated AFS financial assets amounted to US$56.9 million, equivalent to ₱2,841.7 million (see Note 37).

8. Prepayments and Other Current Assets

	2018	2017
Short-term cash investments	**₱679,206**	₱–
Input VAT (net of allowance for impairment losses of ₱54.8 million as at December 31, 2018 and 2017)	**121,366**	103,563
Advances and deposits to suppliers and contractors (net of allowance for impairment losses of ₱514.9 million and nil as at December 31, 2018 and 2017, respectively)	**105,026**	574,876
Prepaid taxes	**75,088**	64,569
Prepaid rent and others	**65,418**	70,585
Tax credit certificates (net of allowance for impairment losses of ₱0.5 million as at December 31, 2018 and 2017)	**47,170**	79,384
Prepaid insurance	**30,206**	26,308
Current portion of long-term negotiable instruments	**30,000**	–
Restricted cash	**11,270**	10,418
	₱1,164,750	₱929,703

Short-term cash investments include local currency and US$ denominated cash placements that will mature within four (4) to twelve (12) months from the end of the financial reporting period. Short-term cash investments denominated in local and US$ currency earn interest ranging from 5.60% per annum (p.a.) to 6.75% p.a. and at 3.12% p.a., respectively, in 2018 and nil in 2017. Interest income from short-term cash investments amounted to ₱0.9 million in 2018 and nil in 2017 and 2016 (see Note 29).

As at December 31, 2018 and 2017, the Group has US$ denominated short-term cash investments amounting to US$8.1 million, equivalent to ₱427.1 million, and nil, respectively (see Note 37). Input VAT represents the VAT passed on from purchases of applicable goods and services which can be recovered as tax credit against future output VAT from the sale of goods and services of the Group.

Advances and deposits to suppliers and contractors represent payments made in advance to suppliers and contractors which will be offset against future billings upon the delivery of goods and/or completion of services. This includes the advances made to Asiacrest Marketing Corporation (Asiacrest) which is related to the Engineering Procurement Construction (EPC) Contract for the 100 MW solar power plant in Subic. As at December 31, 2018, there was a pending case against Asiacrest and First Integrated Bonding and Insurance Co. (FIBIC), the surety which secured Asiacrest's performance of its obligation, jointly and severally liable to the extent of the value of the performance bond, for the breach of EPC contract and doubts have been raised on the financial capacity of these companies. Jobin has assessed the current financial position of Asiacrest and FIBIC and the increase in the credit risk associated to advance payment it has made to Asiacrest. As a result, in 2018, Jobin recognized a provision for impairment losses amounting to ₱514.9 million (see Note 31).

Prepaid taxes represent certificates of creditable withholding taxes for services rendered to other parties which can be recovered as tax credits against certain future tax liabilities of the Group.

Prepayments are amortized within three (3) to twelve (12) months at the end of the financial reporting period.

Tax credit certificates are tax refunds received by the Group.

The long-term negotiable instrument will mature in October 2019 and earns interest at 5.25% p.a. Interest income from current portion of long-term negotiable instruments amounted to ₱1.3 million in 2018 and nil in 2017 and 2016 (see Note 29).

Restricted cash pertains to the cash required to be set aside by Jobin for the funding of amortization due on the outstanding long-term debt of Jobin with the Land Bank of the Philippines (LBP). The restricted cash represents at least one (1) amortization payment of principal and interest due for the forthcoming period. The restriction will lapse when the related long-term debt is paid off.

9. Property and Equipment

	2018							
	Land and Land Improvements	Mining Properties and Development Costs	Machinery and Equipment	Buildings and Improvements	Transmission Lines and Substations	Solar Farm	Construction In-progress	Total
Cost:								
Balances at January 1	₱292,343	₱704,829	₱10,676,657	₱3,527,885	₱865,028	₱1,959,180	₱7,200,124	₱25,226,046
Additions	–	–	946,358	22,887	235	621	174,168	1,144,269
Disposals	–	–	(480,117)	(844)	–	(1,017)	–	(481,978)
Transfers/reclassification	–	–	458,376	429,289	70,198	(12,382)	(904,049)	41,432
Adjustment for capitalized cost of mine rehabilitation and decommissioning (see Note 16)	–	(128,306)	–	–	–	–	–	(128,306)
Balances at December 31	292,343	576,523	11,601,274	3,979,217	935,461	1,946,402	6,470,243	25,801,463
Accumulated depreciation, amortization and depletion:								
Balances at January 1	7,740	279,641	7,668,646	1,675,963	43,782	162,015	–	9,837,787
Depreciation, amortization and depletion (see Note 28)	2,411	26,744	927,098	247,885	34,949	113,518	–	1,352,605
Disposals	–	–	(455,479)	(729)	–	(401)	–	(456,609)
Transfers/reclassification	–	2,685	(3,377)	–	(4,507)	(5,341)	–	(10,540)
Balances at December 31	10,151	309,070	8,136,888	1,923,119	74,224	269,791	–	10,723,243
Net book values	₱282,192	₱267,453	₱3,464,386	₱2,056,098	₱861,237	₱1,676,611	₱6,470,243	₱15,078,220

	2017							
	Land and Land Improvements	Mining Properties and Development Costs	Machinery and Equipment	Buildings and Improvements	Transmission Lines and Substations	Solar Farm	Construction In-progress	Total
Cost:								
Balances at January 1	₱292,343	₱774,649	₱10,583,221	₱3,369,082	₱849,472	₱1,469,457	₱7,115,313	₱24,453,537
Additions	–	–	576,405	60,314	15,556	537,427	304,756	1,494,458
Disposals	–	–	(528,705)	(13,306)	–	–	–	(542,011)
Transfers/reclassification	–	–	45,736	111,795	–	(47,704)	(219,945)	(110,118)
Adjustment for capitalized cost of mine rehabilitation and decommissioning (see Note 16)	–	(69,820)	–	–	–	–	–	(69,820)
Balances at December 31	292,343	704,829	10,676,657	3,527,885	865,028	1,959,180	7,200,124	25,226,046
Accumulated depreciation, amortization and depletion:								
Balances at January 1	5,329	250,642	7,141,484	1,421,187	16,215	39,430	–	8,874,287
Depreciation, amortization and depletion (see Note 28)	2,411	28,999	1,031,141	267,342	27,567	122,585	–	1,480,045
Disposals	–	–	(503,979)	(12,566)	–	–	–	(516,545)
Balances at December 31	7,740	279,641	7,668,646	1,675,963	43,782	162,015	–	9,837,787
Allowance for impairment losses:								
Balances at January 1	–	–	12,825	–	–	–	–	12,825
Reversal of allowance for impairment losses (see Note 31)	–	–	(12,825)	–	–	–	–	(12,825)
Balances at December 31	–	–	–	–	–	–	–	–
Net book values	₱284,603	₱425,188	₱3,008,011	₱1,851,922	₱821,246	₱1,797,165	₱7,200,124	₱15,388,259

Construction in-progress includes the costs incurred to date for the Biliran Geothermal Project, which management assessed to be completed in 2021.

Pier facilities (included under “Buildings and improvements”) which are fully depreciated as at December 31, 2018 and 2017 and are still being used in operations were mortgaged as collateral for the long-term debt of RTN (see Note 15).

The carrying value of the 7.14 MW Sta. Rita Solar Power Plant that was pledged as collateral for Jobin’s borrowing with LBP amounted to ₱509.8 million and ₱522.8 million as at December 31, 2018 and 2017, respectively (see Note 15).

Depreciation on the excess of the fair value of the assets acquired from RTN over their corresponding book values transferred to retained earnings amounted to ₱0.4 million in 2018, 2017 and 2016.

10. Investments in Associates

	2018	2017
THNC	**₱2,247,912**	₱2,083,079
CBNC	**1,292,677**	869,053
	₱3,540,589	₱2,952,132

The movements in investments in associates follows:

	2018			2017		
	THNC	**CBNC**	**Total**	THNC	CBNC	Total
Balances at January 1	**₱1,974,700**	**₱724,410**	**₱2,699,110**	₱1,974,700	₱724,410	₱2,699,110
Accumulated equity in net earnings (losses):						
Balances at January 1	**(371,303)**	**(53,639)**	**(424,942)**	(467,168)	(155,746)	(622,914)
Equity in net income	**67,048**	**281,120**	**348,168**	95,865	102,107	197,972
	(304,255)	**227,481**	**(76,774)**	(371,303)	(53,639)	(424,942)
Share in cumulative translation adjustment:						
Balances at January 1	**479,682**	**198,282**	**677,964**	317,564	188,327	505,891
Movements	**97,785**	**142,504**	**240,289**	162,118	9,955	172,073
	577,467	**340,786**	**918,253**	479,682	198,282	677,964
Balances at December 31	**₱2,247,912**	**₱1,292,677**	**₱3,540,589**	₱2,083,079	₱869,053	₱2,952,132

The share in cumulative translation adjustment of associates is gross of deferred income tax liability of ₱137.8 million and ₱113.8 million as at December 31, 2018 and 2017, respectively (see Note 36).

THNC
THNC, a private entity that is not listed on any public exchange, was incorporated and registered with the Philippine SEC on August 22, 2008. THNC is engaged in the manufacture and export of nickel/cobalt mixed sulfide, nickel hydroxide and any and all ingredient and products and by-products, wherein TMC has a Nickel Ore Supply Agreement to supply all of the limonite ore requirements of the Taganito High Pressure Acid Leach (HPAL) facility. TMC also provides services related to the handling, hauling and transportation of materials required in the processing operations of THNC. THNC started commercial operations in October 2013.

The Parent Company, together with Sumitomo Metal Mining Co., Ltd. (SMM) and Mitsui and Co., Ltd. (Mitsui) signed a Stockholders' Agreement on September 15, 2010, dividing the ownership of THNC, into 22.5%, 62.5% and 15.0%, respectively.

On November 4, 2010, pursuant to the terms of the Stockholders' Agreement, the Parent Company entered into a subscription agreement with THNC for the subscription of 921,375,000 common shares for a total amount of US$102.4 million or ₱4,443.1 million which is equivalent to 22.5% interest in THNC.

On October 17, 2016, the Parent Company sold a portion of its shareholdings in THNC, equivalent to 511,875,000 shares or 12.5% interest in THNC, to SMM for US$42.0 million, which is equivalent to ₱2,037.2 million (see Note 39o). A net gain of ₱239.6 million was recognized on the sale of its investment interest in THNC in 2016 (see Note 31). As at December 31, 2018 and 2017, the Parent Company's equity interest in THNC is 10%. In accordance with the provisions of PAS 28 (2011), *Investments in Associates and Joint Ventures*, and due to the nature of the Parent Company's involvement in THNC, the Parent Company evaluated various factors and assessed that significant influence exists.

THNC's financial statements are stated in US$ and translated at the closing rate of US$1 = ₱52.58 and US$1 = ₱49.93 as at December 31, 2018 and 2017, respectively, for assets and liabilities accounts, historical rates for equity accounts and average rate of US$1 = ₱52.69 and US$1 = ₱50.40, respectively, for the statement of income accounts for the years then ended.

The following are the summarized financial information of THNC as at December 31, 2018 and 2017:

	2018	2017
Current assets	**₱8,466,177**	₱7,295,491
Noncurrent assets	**79,825,082**	75,123,509
Current liabilities	**(37,444,499)**	(28,105,542)
Noncurrent liabilities	**(30,748,684)**	(35,863,707)
Net assets	**₱20,098,076**	₱18,449,751

	2018	2017
Revenue	**₱19,333,648**	₱17,693,870
Expenses	**(18,663,167)**	(16,735,220)
Net income	**₱670,481**	₱958,650

CBNC

CBNC, a private entity that is not listed on any public exchange, was incorporated and registered with the Philippine SEC on April 4, 2002. CBNC is engaged in the manufacture and export of nickel/cobalt mixed sulfide wherein RTN has a Nickel Ore Supply Agreement to supply all of the limonite ore requirements of the Coral Bay Hydro Metallurgical Processing Plant (HPP) facility. The agreement provides that it will terminate until the earlier of the cessation of operations at the Coral Bay HPP facility and exhaustion of the limonite ore reserves at the Rio Tuba mine. RTN also supplies limestone and provide ancillary services to Coral Bay HPAL facility.

The Parent Company acquired its 10% equity interest in CBNC by way of property dividend distributed by RTN in March 2014. In accordance with the provisions of PAS 28 (2011), and due to the nature of the Parent Company's involvement in CBNC, the Parent Company evaluated various factors and assessed that significant influence exists.

CBNC's financial statements are stated in US$ and translated at the closing rate of US$1 = ₱52.58 and US$1 = ₱49.93 as at December 31, 2018 and 2017, respectively, for assets and liabilities accounts, historical rates for equity accounts and average rate of US$1 = ₱52.69 and US$1 = ₱50.40, respectively, for the statement of income accounts for the years then ended.

The following are the summarized financial information of CBNC as at December 31, 2018 and 2017:

	2018	2017
Current assets	**₱10,790,270**	₱6,472,570
Noncurrent assets	**21,812,588**	21,688,174
Current liabilities	**(1,226,565)**	(1,007,843)
Noncurrent liabilities	**(182,472)**	(195,318)
Net assets	**₱31,193,821**	₱26,957,583

	2018	2017
Revenue	**₱15,517,623**	₱11,429,382
Expenses	**(12,706,425)**	(10,408,307)
Net income	**₱2,811,198**	₱1,021,075

11. Geothermal Exploration and Evaluation Assets

	2018	2017
Balances at January 1	**₱1,784,183**	₱1,775,799
Additions	**9,261**	21,776
Reversal	**–**	(13,392)
Balances at December 31	**₱1,793,444**	₱1,784,183

Geothermal exploration and evaluation assets represent the accumulated costs incurred in connection with the exploration and development activities for the Montelago Geothermal Project. The recovery of these costs depends upon determination of technical feasibility, success of exploration activities and discovery of geothermal resource that can be produced in commercial quantities.

In 2017, the reversal of ₱13.4 million pertains to the refund made by Iceland Drilling Corporation (IDC) as a result of the termination of the Well Services Master Agreement (WSMA) with the latter. IDC was initially engaged to drill twelve (12) geothermal wells in Oriental Mindoro, however, the WSMA was pre-terminated after IDC completed the drilling of two (2) geothermal wells.

As at December 31, 2018 and 2017, no allowance for impairment losses was recognized on geothermal exploration and evaluation assets.

12. Long-term Stockpile Inventory

The long-term stockpile inventory pertains to low grade ore extracted from RTN's minesite. This amount was not recognized in RTN's books but was recognized by the Parent Company when it acquired the controlling interest in RTN in August 2006. The low grade ore inventory was initially recognized at fair value. The fair value of the long-term stockpile inventory was computed using the present value of the estimated future cash flows of RTN which it will derive from the long-term Nickel Ore Supply Agreement with CBNC (see Note 34a). Subsequently, this fair value represented the cost of the long-term stockpile inventory.

The cost of the long-term stockpile inventory is periodically charged to cost of sale of ore based on the actual tonnage delivered to CBNC from the long-term stockpile. The cost of long-term stockpile inventory amounting to ₱218.7 million, ₱163.5 million and ₱201.6 million were charged to "Cost of sale of ore" in 2018, 2017 and 2016, respectively (see Note 21).

A portion amounting to ₱55.3 million and ₱212.0 million, representing the estimated costs of the long-term stockpile inventory that will be delivered to CBNC in the next financial reporting period, were shown as part of "Inventories" as at December 31, 2018 and 2017, respectively (see Note 6).

The carrying value of long-term stockpile inventory - net of current portion amounted to ₱105.6 million and ₱167.6 million as at December 31, 2018 and 2017, respectively.

13. **Other Noncurrent Assets**

	2018	2017
Deferred mine exploration costs	**₱1,244,827**	₱1,229,432
Input VAT - net of current portion	**781,607**	797,685
Loan receivable - net of current portion (see Note 39a)	**576,946**	767,641
Mine rehabilitation funds	**476,745**	392,450
Advances to claimowners (see Note 39e)	**114,839**	144,839
Deposit for aircraft acquisition	**97,781**	97,781
Advance royalties	**55,904**	55,904
Long-term negotiable instruments	**40,000**	40,000
Social development management program funds	**35,834**	37,764
Investment properties (see Note 31)	**29,000**	30,623
Project development costs	**27,349**	112,670
Pension asset (see Note 35)	**7,199**	–
Others	**43,360**	23,476
	3,531,391	3,730,265
Less allowance for impairment losses	**249,367**	249,352
	₱3,282,024	₱3,480,913

The movements of allowance for impairment losses follows:

2018	**Deferred mine exploration costs**	**Input VAT**	**Total**
Balances at January 1	**₱143,578**	**₱105,774**	**₱249,352**
Provisions (see Note 31)	**15**	–	**15**
Reversals	–	–	–
Reclass	–	–	–
Balances at December 31	**₱143,593**	**₱105,774**	**₱249,367**

2017	Deferred mine exploration costs	Input VAT	Total
Balances at January 1	₱142,345	₱110,712	₱253,057
Provisions (see Note 31)	1,233	–	1,233
Reversals (see Note 31)	–	(21,209)	(21,209)
Reclass	–	16,271	16,271
Balances at December 31	₱143,578	₱105,774	₱249,352

Deferred mine exploration costs include mining rights of ₱945.6 million as at December 31, 2018 and 2017.

Input VAT represents the VAT passed on from purchases of applicable goods and services. Input VAT, in excess of output tax, can be recovered as tax credit against future tax liability of the Group. The noncurrent portion of input VAT pertains to the unamortized portion of input VAT on purchase of capital goods spread evenly over the life of the capital goods or five (5) years, whichever is shorter. The balance is recoverable in future periods.

Loan receivable represents the loan agreement executed by CMC and East Coast, which will be settled based on the agreed repayment terms (see Note 39a).

MRF, which includes the Final Mine Rehabilitation and Decommisioning Fund, is the amount deposited in local bank accounts established by the Group in compliance with the requirements of the Philippine Mining Act of 1995 as amended by Department of Environment and Natural Resources (DENR) Administrative Order No. 2005-07. The MRF is earmarked for physical and social rehabilitation of areas and communities affected by mining activities and for research on the social, technical and preventive aspects of rehabilitation. Any disbursement in the MRF should be authorized by the MRF Committee, the external overseeing body charged with the duties of managing, operating, monitoring and looking after the safety of the MRF. The MRF earns interest at the respective bank deposit rates. Interest income earned from MRF amounted to ₱5.0 million, ₱3.1 million and ₱1.9 million in 2018, 2017 and 2016, respectively (see Note 29).

Advances to claimowners represent advance royalty payments to East Coast, La Salle Mining Exploration Company (La Salle), Kepha Mining Exploration Company (Kepha) and Ludgoron Mining Corporation (Ludgoron; see Note 39e).

Deposit for aircraft acquisition pertains to advance payments made by RTN to World Aviation Corporation in 2013, for an absolute and exclusive right to purchase an aircraft which is exercisable within twelve (12) years.

Advance royalties pertain to royalty payments to claimowners.

The long-term negotiable instruments that will mature in 2023 earn interest at 3.87% p.a. and 4.50% p.a. Interest income from long-term negotiable instruments amounted to ₱1.0 million in 2018 and ₱1.3 million in 2017 and 2016 (see Note 29).

The SDMP funds shall be used for the sustainable development of the host and neighboring communities of the mine site. The programs are intended for health, education, livelihood, public utilities and socio-cultural preservation. Its implementation is under the audit, monitoring and evaluation of the Mines and Geosciences Bureau (MGB). Interest income earned from SDMP funds amounted to ₱0.2 million, ₱0.1 million and ₱0.2 million in 2018, 2017 and 2016, respectively (see Note 29).

Investment properties consist of parcels of land located in Surigao City, which is intended for leasing to THNC in the future, and parcels of land located in Manggahan, Pasig and Cainta, Rizal.

As at December 31, 2018 and 2017, the carrying values of the Group's investment properties amounted to ₱29.0 million and ₱30.6 million, respectively, and the appraised value of the land amounted to ₱44.4 million, with a zonal value of ₱6.4 million. In 2018, 2017 and 2016, no income was earned and no direct expenses, other than real property tax, were incurred related to the investment properties.

Project development cost pertains to the development cost incurred for various projects of EPI and Jobin.

Others include various security deposits, deposit to suppliers and restricted cash.

14. **Trade and Other Payables**

	2018	2017
Trade (see Note 34)	**₱735,582**	₱867,453
Amounts owed to related parties (see Note 34)	**5,425,849**	5,343,367
Dividends payable (see Note 34)	**663,500**	636,450
Accrued expenses:		
Third parties	**391,101**	398,558
Related party (see Note 34)	**20,236**	21,086
Government payables:		
Excise taxes and royalties payable	**189,552**	69,804
Withholding taxes payable	**145,478**	140,497
Output VAT	**5,681**	5,367
Documentary stamp taxes (DST) payable	**1,114**	1,355
Fringe benefit taxes (FBT) payable	**1,072**	565
Interest payable (see Note 34)	**15,626**	11,533
Deferred income	**11,720**	4,483
Contract liability	**8,891**	–
Retention fees payable	**3,629**	19,134
Others	**45,953**	50,289
	₱7,664,984	₱7,569,941

Trade, accrued expenses and other payables are noninterest-bearing and are generally settled within one (1) year. Trade payables relate to payables to suppliers in the ordinary course of business. Accrued expenses substantially consist of contractor's fees, trucking and stevedoring services, hauling and rental expenses, guarantee service fees and others which are usual in the business operations of the Group.

Amounts owed to related parties pertain to advances received from Orka Geothermal Investments Pte. Ltd. (OGI), Biliran Geothermal Holdings Incorporated (BGHI) and SMM. Amounts owed to OGI pertain to funds used in the drilling operations of BGI and purchases paid by OGI in behalf of BGI. Amounts owed to BGHI pertain mainly to the amount originally payable to OGI but were sold by the latter to the former in 2014. Part of this amount pertains also to miscellaneous expenses paid by BGHI in behalf of BGI. Amounts owed to SMM pertain to the advances made to CExCI.

Dividends payable refers to the cash dividends declared by TMC and RTN to Pacific Metals Co., Ltd. (PAMCO) and Sojitz Corporation (Sojitz) in December 2018 and 2017 and payable in January of the following year. The amount is net of final withholding tax.

Government payables include withholding taxes which are normally settled within ten (10) to fifteen (15) days after the end of each financial reporting month or thirty (30) days after the end of each financial reporting quarter, and FBT which are normally settled within thirty (30) days after the end of the quarter on which the fringe benefits are granted to the recipients. Excise tax payable is settled within fifteen (15) days after the end of the quarter when the beneficiated nickel ore and limestone were shipped. Royalties are paid on or before the deadline agreed with the MGB or other parties. DST is normally settled within five (5) days after the close of the month when the taxable document was issued.

Contract liability pertains to the advance payment received by RTN from CBNC for the materials handling services of limestone and coal from CBNC's stockyard to plant site.

Interest payable on loans is settled based on the agreed repayment terms.

Retention fees payable pertains to the amount retained by the Group from its suppliers/contractors and will be paid after the completion of the construction of the projects.

The Group has US$ denominated trade and other payables amounting to US$23.7 million, equivalent to ₱1,244.7 million, and US$30.6 million, equivalent to ₱1,527.8 million, as at December 31, 2018 and 2017, respectively (see Note 37).

15. Short-term and Long-term Debts

Short-term debts

Manta Equities Inc. (Manta)

On June 8, 2015, EPI entered into a one (1) year loan agreement with Manta amounting to ₱180.0 million to finance the development expenses of EPI's geothermal power project. The loan bears an annual interest of 5.00%. The principal and interest is payable at the end of the loan agreement. On June 6, 2016, EPI and Manta extended the loan for another year or up to June 7, 2017 under the same terms of the original loan. The principal and interest was paid in June 2017.

Interest expense incurred in connection with the loans amounted to nil, ₱4.3 million, and ₱9.0 million in 2018, 2017 and 2016, respectively. Out of the total interest expense incurred in 2016, ₱3.0 million were capitalized as part of solar farm under "Property and equipment", ₱1.0 million as part of "Geothermal exploration and evaluation assets" and ₱0.7 million as part of project development costs under "Other noncurrent assets". There were no capitalized borrowing costs in 2018 and 2017 (see Notes 30 and 34).

Security Bank Corporation (SBC)

On March 23, 2018, SBC approved the renewal of EPI's original loan facility to the extent of ₱1,500.0 million. On August 3, 2018 and September 21, 2018, EPI made drawdowns from the said renewal amounting to ₱300.0 million and ₱1,200.0 million, respectively. Proceeds of the loan drawdowns were used by EPI to settle promissory notes under the original SBC loan facility, which matured in 2018.

Details of the drawdowns are as follows:

Drawdowns	Drawdown Date	Maturity Date	Interest Rate	Amount	Debt Issue Costs
First	August 3, 2018	July 26, 2019	6.95%	₱300,000	₱1,290
Second	September 21, 2018	September 16, 2019	6.95%	1,200,000	6,442
				₱1,500,000	₱7,732

The carrying amount of short-term debt with SBC, net of unamortized debt issue cost, follows:

	2018	2017
Loans payable	**₱1,500,000**	₱–
Less unamortized debt issue cost	**(7,732)**	–
Balances at December 31	**₱1,492,268**	₱–

Debt issue costs pertain to DST and other transaction costs incurred in connection with the availment of the loans. These are deducted from the amount of loans payable and are amortized using the EIR method.

The movements of the unamortized debt issue costs in 2018 and 2017 are as follows:

	2018	2017
Balances at January 1	**₱–**	₱–
Additions	**11,078**	–
Amortization	**(3,346)**	–
Balances at December 31	**₱7,732**	₱–

Interest expense in 2018 and 2017 are summarized below:

	2018	2017
Interest on loans	**₱25,896**	₱–
Amortization of debt issue costs	**3,346**	–
	₱29,242	₱–

Long-term debts
Long-term debts of the following subsidiaries are as follows:

	2018	2017
TMC	**₱1,150,188**	₱1,179,596
Jobin	**257,344**	284,265
EPI	–	1,498,159
RTN	–	22,369
	1,407,532	2,984,389
Less noncurrent portion:		
TMC	**1,058,172**	1,092,219
Jobin	**230,390**	256,992
	1,288,562	1,349,211
Current portion	**₱118,970**	₱1,635,178

TMC Loan
On October 4, 2010, TMC entered into an Omnibus Agreement with THNC, wherein the latter granted the former a total loan facility amounting to US$35.0 million at a prevailing one hundred eighty (180)-day British Banker Association London Inter-Bank Offered Rate (LIBOR) plus 2.00% spread, to exclusively finance the construction of the pier facilities within the Taganito Special Economic Zone (TSEZ). The loan shall be drawn down in one or multiple times by July 31, 2011.

The interest on the loan is payable semi-annually, on October 10 and April 10. The total principal is payable in semi-annual installments of US$0.9 million starting on October 10, 2011 up to April 10, 2031.

The Omnibus Agreement provides for restriction with respect to creation, assumption, incurrence and permission to exist any lien upon the pier facilities and all TMC's other real rights over the same except as permitted under the Omnibus Agreement. Also, the Omnibus Agreement provides for certain conditions which include, among others, maintenance and preservation of TMC's corporate existence, rights, privileges and licenses, prompt submission of written notice to THNC of any and all litigations and administrative arbitration proceedings before any Governmental authority affecting TMC, prompt payment of all amounts due under the loan documents and maintenance of all Governmental approvals necessary to perform the obligations. As at December 31, 2018 and 2017, TMC is in compliance with the restrictions.

Interest expense in 2018, 2017 and 2016 amounting to ₱51.6 million, ₱42.6 million and ₱36.5 million, respectively, were included in equipment operating cost under "Cost of services" (see Notes 22 and 34).

As at December 31, 2018 and 2017, the carrying amount of long-term debt with THNC amounted to ₱1,150.2 million and ₱1,179.6 million, respectively (see Note 34).

The US$ denominated long-term debts amounted to US$21.9 million, equivalent to ₱1,150.2 million, and US$24.1 million, equivalent to ₱1,202.0 million, as at December 31, 2018 and 2017, respectively (see Note 37).

Jobin Loan
On April 26, 2016, Jobin entered into a twelve (12)-year term loan agreement with LBP amounting to ₱300.0 million to partially finance the construction and development of a 7.14 MW Sta. Rita Solar Power Plant and inter-connection assets located in Subic Bay Freeport Zone (SBFZ). The loan is subject to an interest based on the applicable benchmark rate (3-month PDST-R2) plus a minimum spread of 1.50% p.a., with a floor rate of 4.75% p.a., subject to quarterly repricing. The loan is payable in forty-four (44) equal quarterly payments, starting at the end of the fifth (5th) quarter from the date of the initial loan and interest is payable quarterly in arrears from the date of initial loan. Jobin is also required to pay gross receipt tax equal to 1.00% of each interest payment.

The loan shall be secured by the following:
a) Chattel mortgage on the 7.14 MW Sta. Rita Solar Power Plant (see Note 9)
b) Corporate guarantee of EPI
c) Assignment of leasehold rights between Jobin and Subic Bay Metropolitan Authority (SBMA) on the lot at Mt. Sta. Rita, SBFZ, and 2,300 square meter (sq.m.) lot and 280 sq.m. building located near the National Grid Corporation of the Philippines (NGCP) facility, Subic Gateway Park, SBFZ
d) Pledge of shares of stock of Jobin

The loan agreement contains positive, negative and financial covenants which include, among others, payment of interest, strict compliance with regulatory provisions regarding internal revenue taxes and environmental requirements, and the maintenance of certain financial and project ratios. As at December 31, 2018 and 2017, Jobin has been compliant with the covenants contained in the loan agreement.

The carrying amount of long-term debt with LBP, net of unamortized debt issue cost, follows:

	2018	2017
Loans payable	**₱259,091**	₱286,364
Less unamortized debt issue cost	**(1,747)**	(2,099)
Balances at December 31	**₱257,344**	₱284,265

The movements of the unamortized debt issue cost in 2018 and 2017 are as follows:

	2018	2017
Balances at January 1	**₱2,099**	₱2,474
Amortization	**(352)**	(375)
Balances at December 31	**₱1,747**	₱2,099

Interest expense in 2018 and 2017 are summarized below:

	2018	2017
Interest on loans	**₱14,203**	₱14,058
Amortization of debt issue costs	**352**	375
	₱14,555	₱14,433

Interest expense capitalized as part of solar farm under "Property and equipment" amounted to nil in 2018 and 2017 and ₱9.3 million in 2016.

EPI Loan

On July 15, 2015, SBC approved the loan facility of EPI amounting to ₱3,000.0 million which will be used by EPI in funding its investments and working capital requirements. Staggered releases of loans are allowed up to August 31, 2016 with terms of up to three (3) years from date of every drawdown and payable upon maturity. In the event of default, the loans, together with accrued interest and any other sums payable under the promissory notes will immediately become due and payable.

The loans are secured by a continuing suretyship of the Parent Company. Under the Suretyship Agreement executed by and between the Parent Company and SBC on August 4, 2015, the Parent Company solidarily with EPI, guarantees and warrants to SBC, its assigns and successors-in-interest, prompt and full payment and performance of EPI's obligations to SBC (see Note 39q).

Details of the drawdowns received from the ₱3,000.0 million loan facility are as follows:

Drawdowns	Drawdown Date	Maturity Date	Interest Rate	Amount	Debt Issue Costs
First*	August 5, 2015	August 3, 2018	4.60%	₱510,000	₱2,551
Second	September 21, 2015	September 21, 2018	4.60%	1,200,000	6,000
Third**	December 2, 2015	December 3, 2018	4.90%	400,000	2,000
Fourth**	February 9, 2016	February 9, 2019	4.90%	200,000	1,000
Fifth**	March 1, 2016	March 1, 2019	5.00%	200,000	1,000
Sixth**	March 28, 2016	March 28, 2019	4.85%	200,000	1,000
Seventh**	May 12, 2016	May 12, 2019	4.85%	150,000	751
Eight**	May 25, 2016	May 25, 2019	4.85%	140,000	701
				₱3,000,000	₱15,003

**partial payment amounting to ₱210.0 million was made on September 29, 2017*
***prepaid on September 29, 2017*

On September 29, 2017, EPI prepaid certain promissory notes totaling ₱1,500.0 million. There were no prepayment penalty charged by SBC and the terms of the unpaid promissory notes remain the same. In 2018, EPI paid in full the remaining balance of the loan.

The carrying amount of long-term debt with SBC, net of unamortized debt issue cost, follows:

	2018	2017
Loans payable	**₱–**	₱1,500,000
Less unamortized debt issue cost	**–**	(1,841)
Balances at December 31	**₱–**	₱1,498,159

The movements of the unamortized debt issue costs in 2018 and 2017 are as follows:

	2018	2017
Balances at January 1	**₱1,841**	₱9,662
Amortization	**(1,841)**	(4,388)
Reduction due to early payment of loan (see Note 30)	**–**	(3,433)
Balances at December 31	**₱–**	₱1,841

Interest expense in 2018 and 2017 are summarized below:

	2018	2017
Interest on loans	**₱48,721**	₱116,603
Amortization of debt issue costs	**1,841**	4,388
	₱50,562	₱120,991

Interest expense capitalized as part of solar farm under "Property and equipment" and "Geothermal exploration and evaluation assets" amounted to ₱48.4 million and ₱21.0 million, respectively, in 2016. There were no capitalized borrowing costs in 2018 and 2017.

The Term Loan Agreement with SBC provides for restrictions with respect to creation or permission to exist any mortgage or pledge, lien or any encumbrance on all free assets owned or acquired by EPI. Also, the Term Loan Agreement restricts EPI to assume, guarantee, endorse or otherwise become directly or contingently liable in connection with any obligation of any other person, firm or corporation; participate or enter into any merger or consolidation; sell, lease, dispose or convey all or substantially all of EPI's assets; make advances or loans to any of the affiliates, subsidiaries, stockholders, directors and officers except in compliance with formally established and existing fringe benefit program of EPI; suspend its business operation or dissolve its affairs; and to enter into any credit or loan agreement or arrangement with any creditor under such terms and conditions that would place SBC in an inferior position risk-wise, vis-a-vis such other creditors. Moreover, the Term Loan Agreement provides for certain conditions, which include, among others, prompt disclosure in writing of any material change in EPI's financial position and conduct of its operations or any substantial change in its management or ownership, conduct operations in accordance with sound business practice, maintenance and preservation of corporate existence, and prompt payment of all taxes, assessment and other governmental charges due. As at December 31, 2018 and 2017, EPI has been compliant with the covenants contained in the loan facility and agreements.

RTN Loan

On November 25, 2002, RTN entered into an Omnibus Agreement with SMM, wherein the latter granted the former a loan facility amounting to US$1.8 million at a prevailing one hundred eighty (180)-day LIBOR plus 2% spread, for the construction of the pier facilities.

In July 2003, an additional loan amounting to US$0.2 million was granted by SMM. Starting 2003, the interest on the original and additional loans is payable semi-annually, on February 28 and August 31. The total principal is payable in twenty (20) equal semi-annual installments starting on February 28, 2004 up to August 31, 2013. In February 2007, RTN and SMM agreed to an additional loan facility amounting to US$9.0 million. Of the total loan facility, the remaining US$0.5 million was drawn in February and March 2008. The additional loan facility is payable in semi-annual installments starting on August 31, 2008 up to February 28, 2018.

In consideration, and to ensure payment of these loans, RTN will assign, transfer, and set over to SMM, absolutely and unconditionally, all of RTN's rights, title, and interest over its future receivable from CBNC under the Throughput Agreements (see Note 39b). RTN also constituted a first ranking mortgage on the pier facilities. As at December 31, 2018 and 2017, the pier facilities is fully depreciated (see Note 9).

The Omnibus Agreement provides for restrictions with respect to creation, assumption, incurrence and permission to exist any lien upon the pier facilities and all RTN's other real rights over the same except as permitted under the Omnibus Agreement. Also, the Omnibus Agreement provides for certain conditions which include, among others, maintenance and preservation of RTN's corporate existence, rights, privileges and licenses, prompt submission of written notice to SMM of any and all litigations or administrative or arbitration proceedings before any Governmental authority affecting RTN. As at December 31, 2018 and 2017, RTN is in compliance with the restrictions.

Interest expense amounted to ₱0.1 million, ₱1.5 million and ₱2.4 million in 2018, 2017 and 2016, respectively (see Notes 30 and 34).

As at December 31, 2018 and 2017, the carrying amount of long-term debt with SMM amounted to nil and ₱22.4 million, respectively (see Note 34).

16. Provision for Mine Rehabilitation and Decommissioning

	2018	2017
Balances at January 1	**₱388,787**	₱442,484
Effect of change in estimate (see Note 9)	**(128,306)**	(69,820)
Accretion of interest on provision for mine rehabilitation and decommissioning (see Note 30)	**13,746**	16,123
Balances at December 31	**₱274,227**	₱388,787

Provision for mine rehabilitation and decommissioning pertains to the estimated decommissioning costs to be incurred in the future on the mined-out areas of the Group.

The Group makes a full provision for the future cost of rehabilitating mine site and related production facilities on a discounted basis on the development of mines or installation of those facilities. The rehabilitation provision represents the present value of rehabilitation costs. These provisions have been created based on the Group's internal estimates. Assumptions, based on the current economic environment, have been made which management believes are a reasonable basis upon which to estimate the future liability. These estimates are reviewed regularly to take into account any material changes to the assumptions. However, actual rehabilitation costs will ultimately depend upon future market prices for the necessary decommissioning works required which will reflect market conditions at the relevant time. Furthermore, the timing of rehabilitation is likely to depend on when the mine ceases to produce at economically viable rates. This, in turn, will depend upon future ore prices, which are inherently uncertain.

17. Long-term Payable

On December 14, 2015, CExCI and the stockholders of Newminco entered into a Share Purchase Agreement (SPA) wherein CExCI agreed to acquire 100% equity interest of Newminco, on a deferred payment basis, for a total consideration of ₱64.8 million.

Upon execution of the SPA, a downpayment of ₱30.8 million was paid and the remaining balance of ₱34.0 million, which is noninterest-bearing, is payable over a seven (7) year period. The total principal is payable in annual installment of ₱5.0 million starting in 2017 up to 2020 and annual installment of ₱7.0 million for the remaining term of the SPA. The unamortized discount on deferred payment, at 4.58% risk free rate, amounted to ₱2.7 million and ₱3.8 million as at December 31, 2018 and 2017, respectively.

The carrying amount of long-term payable, net of unamortized discount, amounted to ₱21.3 million and ₱25.2 million as at December 31, 2018 and 2017, respectively.

	2018	2017
Long-term payable	**₱24,000**	₱29,000
Less unamortized discount	**2,677**	3,832
	21,323	25,168
Less noncurrent portion	**16,323**	20,168
Current portion	**₱5,000**	₱5,000

In 2018, 2017 and 2016, the accretion of interest on long-term payable amounted to ₱1.2 million, ₱1.3 million and ₱1.2 million, respectively (see Note 30).

18. Equity

Capital Stock

The capital structure of the Parent Company follows:

	2018	2017
Common stock - ₱0.50 par value		
Authorized - 19,265,000,000 shares		
Issued - 13,685,272,117 shares in 2018 and 7,602,928,954 in 2017		
Outstanding - 13,675,915,117 shares in 2018 and 7,602,928,954 in 2017	**₱6,842,636**	₱3,801,465
Preferred stock - ₱0.01 par value		
Authorized and Issued - 720,000,000 shares	**7,200**	7,200
	₱6,849,836	₱3,808,665

Preferred share is voting, non-participating but with a fixed cumulative dividend rate of 7.00% p.a.

Issued Capital Stock
Beginning November 22, 2010, the common shares of the Parent Company were listed and traded in PSE with an initial public offering of 304,500,000 common shares (consisting of 132,991,182 shares held in treasury and new common shares of 171,508,818) with an offer price of ₱15.00 per share, which is equivalent to ₱1.48 per share after the stock dividends.

As at December 31, 2018 and 2017, a total of 32% or 4,335,120,858 common shares and 2,414,938,006 common shares, respectively, of the outstanding common shares of the Parent Company are registered in the name of eighty-four (84) and eighty-six (86) shareholders, respectively, while the balance of 68% or 9,350,151,259 common shares and 5,187,990,948 common shares, respectively, are lodged with the Philippine Depository and Trust Corporation.

The movements in common stock follows:

	2018	
	Number of Shares	**Amount**
Balances at January 1	**7,602,928,954**	**₱3,801,465**
Issuance of stock dividends	**6,082,343,163**	**3,041,171**
Balances at December 31	**13,685,272,117**	**₱6,842,636**

	2017	
	Number of Shares	Amount
Balances at January 1	7,602,928,954	₱3,801,465
Issuance of stock dividends	–	–
Balances at December 31	7,602,928,954	₱3,801,465

On March 24, 2014, the BOD of the Parent Company approved ESOP (2014 ESOP; the Plan) which was ratified by the Parent Company's stockholders on June 6, 2014. On November 21, 2014, the Plan was approved by the SEC. A total of 32.0 million shares of stock were reserved for issue under the Plan.

On April 5, 2018, the BOD of the Parent Company approved the adoption of a new ESOP (2018 ESOP; the New Plan) which was ratified by the Parent Company's stockholders on May 28, 2018. As at March 14, 2019, the New Plan is yet to be approved by the SEC. A total of 155.0 million shares of stock were reserved for issue under the New Plan.

The basic terms and conditions of the stock option plans are disclosed in Note 19.

Treasury Stock
On November 27, 2018, the BOD of the Parent Company approved to undertake a two (2)-year share buy-back program authorizing management to buy from the market at its discretion the Parent Company's common shares up to an aggregate value of ₱1,500.0 million. In December 2018, the Parent Company purchased from the market a total of 9,357,000 of its own common shares at an average price of ₱2.1766 per share or a total of ₱20.4 million.

Additional Paid-In Capital
The movements in additional paid-in capital follows:

	2018	2017
Balances at January 1	**₱8,262,455**	₱8,300,002
Dilution in NCI	**–**	(37,547)
Balances at December 31	**₱8,262,455**	₱8,262,455

Dividends
Dividends declared and paid by the Parent Company follows:

Year	Type of Dividend	Date of Declaration	Date of Record	Amount Declared	Dividend per Share	Date of Payment/Issuance
2018	***Cash Dividends***					
	Regular	**March 14, 2018**	**March 28, 2018**	**₱912,351**	**₱0.12**	**April 10, 2018**
	Special	**August 28, 2018**	**September 11, 2018**	**2,280,879**	**0.30**	**September 27, 2018**
	Stock Dividends	**August 28, 2018**	**October 23, 2018**	**3,041,171**	**80%**	**November 20, 2018**
2017	*Cash Dividends*	March 15, 2017	March 29, 2017	608,234	0.08	April 11, 2017
2016	*Cash Dividends*	March 15, 2016	March 31, 2016	607,755	0.08	April 12, 2016

Appropriation of Retained Earnings
Parent Company
On November 27, 2018, the Parent Company's BOD approved the appropriation of retained earnings amounting to ₱1,500.0 million in relation to the share buy-back program of the Parent Company.

On November 5, 2013, the Parent Company's BOD approved the appropriation of retained earnings amounting to ₱1,000.0 million, for the construction, operation and maintenance of a bunker-fired diesel power station. In 2018, the power plant started the commercial operations of the two (2) generator sets, hence the reversal of the appropriation which was approved by the Parent Company's BOD on August 7, 2018 (see Note 39g).

HMC
On December 6, 2018, the BOD of HMC approved the reversal of the ₱95.6 million appropriation following the completion of the purchase of mining equipments. On the same date, an appropriation was approved amounting to ₱318.6 million for HMC's capital expenditures for the year 2019.

On December 7, 2017, the BOD of HMC approved the reversal of the ₱109.0 million appropriation following the completion of the purchase of mining equipments and funding of the final mine rehabilitation fund. On the same date, the BOD of HMC approved the appropriation of retained earnings amounting to ₱95.6 million for HMC's capital expenditures for the year 2018.

On November 7, 2016, the BOD of HMC approved the reversal of ₱136.3 million appropriation following the completion of the acquisition of mining equipment in 2016. On the same date, the BOD of HMC approved the appropriation of retained earnings amounting to ₱41.5 million for the final mine rehabilitation and decommissioning plan and ₱67.5 million for the capital expenditures for the year 2017.

TMC
On July 4, 2016, the BOD of TMC approved the reversal of ₱575.0 million appropriation following the completion and full operation of TMC's second conveyor system.

19. **Executive Stock Option Plan**

2018 ESOP

On April 5, 2018, the New Plan was approved by the Parent Company's BOD and was ratified by the stockholders on May 28, 2018. As at March 14, 2019, the New Plan is yet to be approved by the SEC. The basic terms and conditions of the New Plan are as follows:

1. The New Plan covers up to 155.0 million shares allocated to the Parent Company's eligible participants.
2. The eligible participants are the directors and officers of the Parent Company and its operating subsidiaries, specifically those with positions of Assistant Vice President and higher, including the Resident Mine Managers of the subsidiaries.
3. The exercise price is ₱4.38, which is equivalent to ₱2.43 after the effect of stock dividends.
4. The New Plan was granted on June 15, 2018.
5. The term of the New Plan shall be five (5) years and the shares will vest to the participant at the rate of 25% after the first year of the New Plan.
6. The participant can exercise the vested options by giving notice within the term of the New Plan, and can opt to either purchase the shares at the exercise price or request the Parent Company to advance the purchase price and to sell the shares in which case the participant will receive the sales proceeds less the exercise price.

The fair value of the stock option is ₱2.19, which was estimated as at grant date, using the Black Scholes-Merton model, taking into consideration the terms and conditions upon which the options were granted.

2014 ESOP

On March 24, 2014, the Plan was approved by the Parent Company's BOD and was ratified by the stockholders on June 6, 2014. On November 21, 2014, the Plan was approved by the SEC. The basic terms and conditions of the Plan are as follows:

1. The Plan covers up to 32.0 million shares allocated to the Parent Company's eligible participants.
2. The eligible participants are the directors and officers of the Parent Company and its operating subsidiaries, specifically those with positions of Assistant Vice President and higher, including the Resident Mine Managers of the subsidiaries.
3. The exercise prices are as follows:

Exercise prices, before stock dividends	Equivalent exercise prices, after the effect of stock dividends
₱25.52	₱4.73
6.11	3.39
6.04	3.36
5.94	3.30
5.67	3.15
5.62	3.12
5.03	2.79

4. The Plan was granted on June 6, 2014, January 13, 2015 and July 15, 2018.
5. The term of the Plan shall be five (5) years and the shares will vest to the participant at the rate of 25% after the first year of the New Plan or July 18, 2015.
6. The participant can exercise the vested options by giving notice within the term of the Plan, and can opt to either purchase the shares at the exercise price or request the Parent Company to

advance the purchase price and to sell the shares in which case the participant will receive the sales proceeds less the exercise price.

The fair values of the stock option are ₱7.53, ₱8.42, and an average of ₱0.23,which were estimated as at grant date, June 6, 2014, January 13, 2015 and July 15, 2018, respectively, using the Black Scholes-Merton model, taking into consideration the terms and conditions upon which the options were granted.

The following assumptions were used to determine the fair value of the stock options at effective grant date:

	2018 ESOP		2014 ESOP	
Grant date	June 15, 2018	July 15, 2018	January 13, 2015	June 6, 2014
Spot price per share	₱5.01	₱4.34	₱15.63	₱28.55
Exercise price	₱4.38	₱5.72*	₱8.51	₱25.52
Expected volatility	45.34%	37.14%	33.52%	33.28%
Option life	5.00 years	0.89 years	4.40 years	5.00 years
Dividend yield	2.16%	2.49%	0.58%	3.88%
Risk-free rate	5.93%	4.52%	3.23%	3.30%

* Based on average exercise prices

The expected volatility reflects the assumption that the historical volatility over a period similar to the life of the options is indicative of future trends, which may also not necessarily be the actual outcome.

There have been no modifications or cancellations in 2018 and 2017.

The following table illustrates the number of stock options and its movements during the year:

	Number of Options		Weighted Average Exercise Price	
	2018	2017	**2018**	2017
2018 ESOP				
Granted	**154,970,988**	–	**₱4.38**	₱–
Stock dividends	**123,976,792**	–	**2.43**	–
Balances at December 31	**278,947,780**	–	**₱2.43**	₱–
2014 ESOP				
Balances at January 1	**55,027,152**	56,222,764	**₱8.51**	₱8.51
Granted	**2,606,367**	–	**5.72**	–
Stock dividends	**46,106,816**	–	**8.38**	–
Forfeited	–	(1,195,612)	–	8.51
Balances at December 31	**103,740,335**	55,027,152	**₱8.38**	₱8.51

As at March 14, 2019, the Parent Company is still waiting for SEC's approval of the exemption from registration of 170,083,608 common shares, which shall form part of the ESOP.

The number of exercisable vested stock options as at December 31, 2018 and 2017 are 107,450,742 common shares and 41,270,374 common shares, respectively.

The movements in the cost of share-based payment plan included in equity are as follows:

	2018	2017
Balances at January 1	**₱137,635**	₱126,622
Stock option expense (see Note 27)	**102,368**	11,013
Balances at December 31	**₱240,003**	₱137,635

The weighted average remaining contractual life of options outstanding under the New Plan was five (5) years and nil as at December 31, 2018 and 2017, respectively.

The weighted average remaining contractual life of options outstanding under the Plan was approximately half (0.5) year and one and a half (1.5) years as at December 31, 2018 and 2017, respectively.

In 2018, 2017 and 2016, the cost of share-based payment plan amounting to ₱102.4 million, ₱11.0 million and ₱25.7 million, respectively, are included in "Personnel costs" (see Note 27).

20. **Earnings Per Share**

The following reflects the income and share data used in the basic and diluted EPS computations:

	2018	2017	2016
Net income attributable to equity holders of the parent	**₱3,008,057**	₱2,770,768	₱1,966,107
Preferred stock dividends	**504**	504	504
Net income attributable to equity holders of the parent for basic earnings	**3,007,553**	2,770,264	1,965,603
Dividends on dilutive potential ordinary shares	–	–	–
Net income attributable to ordinary equity holders of the parent adjusted for the effect of dilution	**₱3,007,553**	₱2,770,264	₱1,965,603
Weighted average number of common shares for basic EPS	**13,684,492,367**	13,685,272,117	13,675,389,446
Effect of dilution from stock options	–	–	–
Weighted average number of common shares adjusted for the effect of dilution	**13,684,492,367**	13,685,272,117	13,675,389,446
Basic/Diluted EPS	**₱0.22**	₱0.20	₱0.14

There have been no other transactions involving ordinary shares or potential ordinary shares between the end of the financial reporting period and the date of authorization of the consolidated financial statements.

21. Cost of Sale of Ore

	2018	2017	2016
Production overhead	**₱3,071,357**	₱2,490,866	₱2,160,707
Outside services	**1,858,540**	1,673,832	1,592,452
Personnel costs (see Note 27)	**1,137,002**	972,142	828,658
Depreciation, amortization and depletion (see Note 28)	**856,623**	939,804	1,099,255
Long-term stockpile inventory sold (see Note 12)	**218,663**	163,471	201,625
	7,142,185	6,240,115	5,882,697
Net changes in beneficiated nickel ore and limestone	**(371,232)**	(206,874)	24,552
	₱6,770,953	₱6,033,241	₱5,907,249

Production overhead consists of fuel, oil and lubricants, materials and supplies, equipment rentals and other miscellaneous charges.

Outside services pertain to services offered by the contractors related to the mining activities of the Group. These services include, but are not limited to, hauling, stevedoring, maintenance, security and equipment rental.

22. Cost of Services

	2018	2017	2016
Depreciation (see Note 28)	**₱99,651**	₱106,032	₱110,733
Personnel costs (see Note 27)	**97,888**	101,470	82,242
Overhead	**83,779**	69,063	65,106
Equipment operating cost	**78,395**	64,976	55,873
Outside services	**10,178**	9,798	14,503
	₱369,891	₱351,339	₱328,457

Equipment operating cost includes interest expense amounting to ₱51.6 million, ₱42.6 million and ₱36.5 million in 2018, 2017 and 2016, respectively (see Note 15).

23. Cost of Power Generation

	2018	2017	2016
Depreciation and amortization (see Note 28)	**₱179,392**	₱154,024	₱18,673
Overhead	**64,608**	29,477	10,211
Purchased power (see Note 39g)	**47,442**	33,092	262
Distribution wheeling service charges (see Note 39q)	**21,560**	19,456	–
Personnel costs (see Note 27)	**19,124**	10,461	4,403
Materials and supplies	**16,725**	631	871
Outside services	**11,771**	10,135	3,875
	₱360,622	₱257,276	₱38,295

Overhead in cost of power generation consists of insurance, taxes and licenses, utilities and other miscellaneous charges.

Distribution wheeling service charges pertain to the payments made to Manila Electric Company (Meralco) and Leyte V Electric Cooperative (LEYECO V) for the conveyance of electricity through Meralco's and LEYECO V's distribution systems.

24. Shipping and Loading Costs

	2018	2017	2016
Contract fees	**₱1,184,594**	₱1,007,742	₱1,262,207
Supplies and fuel, oil and lubricants	**380,016**	289,402	249,714
Other services and fees	**159,351**	225,310	205,164
Depreciation and amortization (see Note 28)	**140,047**	177,043	152,124
Personnel costs (see Note 27)	**85,481**	69,613	61,311
	₱1,949,489	₱1,769,110	₱1,930,520

25. Excise Taxes and Royalties

	2018	2017	2016
Royalties (see Notes 39e and 39q)	**₱1,094,367**	₱805,744	₱735,224
Excise taxes (see Note 39e)	**709,662**	297,942	271,488
	₱1,804,029	₱1,103,686	₱1,006,712

26. General and Administrative

	2018	2017	2016
Personnel costs (see Note 27)	**₱533,639**	₱353,527	₱307,726
Taxes and licenses	**162,794**	65,195	90,504
Outside services	**124,004**	120,282	118,668
Depreciation and amortization (see Note 28)	**66,887**	56,557	51,493
Entertainment, amusement and recreation	**45,665**	18,700	19,507
Supplies	**39,910**	24,590	17,490
Transportation and travel	**36,809**	42,097	41,081
Rentals (see Note 34)	**36,247**	34,276	59,143
Publicity and promotion	**23,960**	15,086	10,115
Repairs and maintenance	**20,184**	21,186	22,913
Dues and subscription	**15,905**	15,951	16,235
Communications, light and water	**12,865**	14,464	10,759
Donations	**3,310**	3,190	18,886
Others	**90,862**	78,052	65,731
	₱1,213,041	₱863,153	₱850,251

Other general and administrative expense is composed of other service fees and other numerous transactions with minimal amounts.

27. **Personnel Costs**

	2018	2017	2016
Salaries, wages and employee benefits	**₱1,677,926**	₱1,412,942	₱1,198,056
Cost of share-based payment plan (see Note 19)	**102,368**	11,013	25,653
Pension cost (see Note 35)	**92,840**	83,258	62,253
	₱1,873,134	₱1,507,213	₱1,285,962

The amounts of personnel costs are distributed as follows:

	2018	2017	2016
Cost of:			
Sale of ore (see Note 21)	**₱1,137,002**	₱972,142	₱828,658
Services (see Note 22)	**97,888**	101,470	82,242
Power generation (see Note 23)	**19,124**	10,461	4,403
General and administrative (see Note 26)	**533,639**	353,527	307,726
Shipping and loading costs (see Note 24)	**85,481**	69,613	61,311
Others	**–**	–	1,622
	₱1,873,134	₱1,507,213	₱1,285,962

28. **Depreciation, Amortization and Depletion**

The amounts of depreciation, amortization and depletion expense, including capitalized depreciation, are distributed as follows:

	2018	2017	2016
Cost of:			
Sale of ore (see Note 21)	**₱856,623**	₱939,804	₱1,099,255
Power generation (see Note 23)	**179,392**	154,024	18,673
Services (see Note 22)	**99,651**	106,032	110,733
Shipping and loading costs (see Note 24)	**140,047**	177,043	152,124
General and administrative (see Note 26)	**66,887**	56,557	51,493
Others	**10,005**	46,585	82,991
	₱1,352,605	₱1,480,045	₱1,515,269

29. Finance Income

	2018	2017	2016
Interest income from:			
Cash and cash equivalents (see Note 4)	**₱188,136**	₱134,248	₱73,846
Financial assets at (see Note 7):			
FVOCI	**98,723**	–	–
Amortized cost	**30,582**	–	–
FVTPL	**4,361**	–	–
Loans (see Note 39a)	**24,490**	27,145	29,423
MRF (see Note 13)	**4,962**	3,103	1,921
Long-term negotiable instruments (see Notes 8 and 13)	**2,284**	1,305	1,260
Short-term cash investments (see Note 8)	**944**	–	–
SDMP funds (see Note 13)	**158**	148	160
Pension (see Note 35)	**150**	300	–
AFS financial assets (see Note 7)	**–**	135,557	121,820
Others	**13**	161	–
	₱354,803	₱301,967	₱228,430

30. Finance Expenses

	2018	2017	2016
Interest expense on:			
Long-term debts (see Notes 15 and 34)	**₱65,254**	₱136,890	₱79,493
Pension (see Note 35)	**19,447**	17,907	14,335
Long-term payable (see Note 17)	**1,155**	1,322	1,205
Short-term debt (see Notes 15 and 34)	**29,242**	4,284	4,234
Guarantee service fee (see Notes 34 and 39f)	**65,148**	66,656	100,009
Accretion of interest on provision for mine rehabilitation and decommissioning (see Note 16)	**13,746**	16,123	8,942
Loss on debt extinguishment (see Note 15)	**–**	3,433	–
	₱193,992	₱246,615	₱208,218

Interest expense amounted to a total of ₱166.7 million, ₱203.0 million and ₱135.7 million in 2018, 2017 and 2016, respectively, of which ₱51.6 million, ₱42.6 million and ₱36.5 million in 2018, 2017 and 2016, respectively, were included as part of equipment operating cost under "Cost of services" (see Note 22).

31. **Other Income (Charges)** - net

	2018	2017	2016
Reversals of allowance for (provisions for) impairment losses on:			
Advances and deposits to suppliers and contractors (see Note 8)	**(₱514,856)**	₱–	₱–
Materials and supplies (see Note 6)	**(18,966)**	(7,348)	–
Beneficiated nickel ore inventory (see Note 6)	**1,718**	6,104	20,074
Deferred mine exploration costs (see Note 13)	**(15)**	(1,233)	(460)
AFS financial assets (see Note 7)	**–**	(133,320)	(119,220)
Input VAT (see Note 13)	**–**	21,209	(21,494)
Property and equipment (see Note 9)	**–**	12,825	(12,825)
Foreign exchange gains - net	**362,790**	80,295	363,241
Gain (loss) on:			
Changes in fair value of financial assets (see Note 7)	**(143,711)**	–	–
Sale of property and equipment	**59,683**	(4,508)	6,644
Sale of financial assets at (see Note 7):			
FVOCI	**(49,456)**	–	–
Amortized cost	**2,353**	–	–
Write-off of trade and other receivables (see Note 5)	**(7,363)**	–	–
Write-off of input VAT	**(2,267)**	(12,504)	(15)
Write-off of investment property (see Note 13)	**(1,623)**	–	–
Sale of interest in an associate (see Note 10)	**–**	–	239,620
Write-off of advances to claimowners (see Note 39e)	**–**	–	(5,350)
Write-off of AFS financial assets	**–**	–	(3,000)
Write-off of deferred mine exploration costs (see Note 39e)	**–**	–	(2,278)
Sale of AFS financial assets (see Note 7)	**–**	14,336	(11,715)
Special projects	**73,491**	62,732	81,681
Dividend income (see Note 7)	**38,849**	36,967	35,117
Management fee	**(17,804)**	(22,171)	(19,024)

(Forward)

	2018	2017	2016
Rent income	**₱15,499**	₱20,788	₱12,382
Provisions for ECL/impairment losses on trade and other receivables (see Note 5)	**(9,924)**	–	(24,961)
Other services	**7,783**	1,466	2,383
Issuance of fuel, oil and lubricants	**535**	1,419	33,018
Others - net	**(13,717)**	(4,408)	14,978
	(₱217,001)	₱72,649	₱588,796

Others include miscellaneous services provided to CBNC on per job order basis, net of related cost incurred and cost of testing and commissioning - net.

Breakdown of the foreign exchange gains (losses) - net follows:

	2018	2017	2016
Realized foreign exchange gains - net	**₱254,472**	₱101,711	₱146,139
Unrealized foreign exchange gains (losses) - net on:			
Cash and cash equivalents	**149,317**	(22,430)	248,202
Trade and other payables	**(58,716)**	(5,131)	(82,224)
Long-term debt	**(46,137)**	11,677	(61,379)
Financial assets at (see Note 7):			
FVOCI	**26,669**	–	–
FVTPL	**23,856**	–	–
Prepayments and other current assets	**12,193**	–	–
Trade and other receivables	**1,136**	(6,565)	(760)
AFS financial assets (see Note 7)	**–**	1,033	113,263
	₱362,790	₱80,295	₱363,241

32. Revenue from Contracts with Customers

Disaggregated Revenue Information

The table below shows the disaggregation of revenues of the Group by location of the customers for sale of ore and limestone, type of services rendered for sale of services and others and source of electricity for sale of power for the year ended December 31, 2018:

Sale of ore (see Notes 34 and 39d)	
China	₱10,899,779
Local	4,543,669
Japan	2,298,112
	₱17,741,560

Services and others (see Note 34)	
Materials handling and others	₱650,095

Sale of power (see Notes 39g and 39p)	
Solar	₱239,934
Diesel	16,083
	₱256,017

Timing of recognition:

At a point in time	₱17,741,560
Over time	906,112
	₱18,647,672

All revenue from sale of ore and limestone is recognized at a point in time when control transfers to the customer, which occurs at a point in time when the ore is physically transferred into a vessel or when the ore passes into the ore preparation hopper of the HPAL plants.

Revenue from sale of services and others is recognized over time or as the services is rendered while revenue from sale of power is recognized over time based on the actual energy dispatched.

33. Material Partly-Owned Subsidiaries

Financial information of subsidiaries that have material NCI are provided below:

Proportion of equity interest held by NCI:

	Principal Place of Business	2018	2017
RTN	Philippines	**40.00%**	40.00%
TMC	Philippines	**35.00%**	35.00%

Equity attributable to material NCI:

	2018	2017
RTN	**₱1,057,643**	₱1,044,560
TMC	**2,495,979**	2,272,090

Net income attributable to material NCI:

	2018	2017
RTN	**₱540,423**	₱627,293
TMC	**883,477**	609,792

Other comprehensive income (loss) attributable to material NCI:

	2018	2017
RTN	**(₱8,942)**	(₱1,836)
TMC	**6,435**	2,959

The summarized financial information of these subsidiaries are based on amounts before inter-company eliminations.

The summarized statements of comprehensive income for the years ended December 31, 2018 and 2017 follows:

	2018		2017	
	RTN	**TMC**	RTN	TMC
Revenues	**₱4,602,188**	**₱8,285,920**	₱4,757,156	₱6,195,462
Cost of sale of ore and services	**(2,044,815)**	**(2,776,590)**	(2,012,921)	(2,433,283)
Operating expenses	**(797,151)**	**(2,035,748)**	(629,908)	(1,340,314)
Other income - net	**136,314**	**96,601**	93,467	19,859
Finance income - net	**24,935**	**29,995**	21,442	21,580
Income before income tax	**1,921,471**	**3,600,178**	2,229,236	2,463,304
Provision for income tax - net	**(570,414)**	**(1,075,958)**	(661,003)	(721,040)
Net income	**1,351,057**	**2,524,220**	1,568,233	1,742,264
Other comprehensive income (loss) - net	**(22,356)**	**18,386**	(4,591)	8,453
Total comprehensive income - net	**₱1,328,701**	**₱2,542,606**	₱1,563,642	₱1,750,717
Attributable to NCI	**₱531,480**	**₱889,912**	₱625,457	₱612,751
Dividends paid to NCI	**520,000**	**735,000**	840,000	700,000

The summarized statements of financial position as at December 31, 2018 and 2017 follows:

	RTN		**TMC**	
	2018	2017	**2018**	2017
Current assets	**₱3,295,760**	₱3,305,371	**₱5,927,058**	₱4,955,468
Noncurrent assets	**946,137**	868,882	**4,424,566**	4,419,776
Current liabilities	**(1,437,102)**	(1,415,649)	**(1,897,759)**	(1,491,234)
Noncurrent liabilities	**(160,687)**	(147,204)	**(1,322,495)**	(1,392,323)
Total equity	**₱2,644,108**	₱2,611,400	**₱7,131,370**	₱6,491,687
Attributable to equity holders of parent	**₱1,586,465**	₱1,566,840	**₱4,635,390**	₱4,219,597
NCI	**1,057,643**	1,044,560	**2,495,980**	2,272,090

The summarized cash flow information for the years ended December 31, 2018 and 2017 follows:

	RTN		**TMC**	
	2018	2017	**2018**	2017
Operating	**₱1,503,937**	₱2,011,056	**₱3,278,413**	₱2,312,124
Investing	**(261,405)**	(44,057)	**(351,058)**	(330,555)
Financing	**(1,418,487)**	(1,516,581)	**(2,042,936)**	(1,872,703)
Net increase (decrease) in cash and cash equivalents	**(₱175,955)**	₱450,418	**₱884,419**	₱108,866

34. **Related Party Transactions**

Related party relationships exist when one party has the ability to control, directly or indirectly through one or more intermediaries, the other party or exercise significant influence over the other party in making financial and operating decisions. Such relationship also exist between and/or among entities which are under common control with the reporting enterprise, or between and/or among the reporting enterprise and their key management personnel, directors, or its stockholders.

Set out on next page are the Group's transactions with related parties in 2018, 2017 and 2016, including the corresponding assets and liabilities arising from the said transactions as at December 31, 2018 and 2017.

	Amount			Trade and Other Receivables (see Note 5)		Trade and Other Payables (see Note 14)		Amounts Owed by Related Parties (see Note 5)		Amounts Owed to Related Parties (see Note 14)		Short-term and Long-term Debts (see Note 15)			
	2018	2017	2016	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017	Terms	Conditions
Stockholders															
PAMCO															
Sale of ore (see Note 39d)	**₱2,298,112**	₱2,480,426	₱2,333,894	**₱95,426**	₱113,209	**₱–**	₱141	**₱–**	₱–	**₱–**	₱–	**₱–**	₱–	90% upon receipt of documents and 10% after the final dry weight and applicable assay have been determined; noninterest- bearing	Unsecured; no guarantee
Draft survey fee	**267**	602	483	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–	Payable on demand; noninterest-bearing	Unsecured; no guarantee
Despatch income	**6,419**	6,153	1,309	**–**	405	**–**	–	**–**	–	**–**	–	**–**	–	Collectible on demand; noninterest-bearing	Unsecured; no guarantee
Other service fee	**1,818**	99	–	**–**	–	**1,047**	–	**–**	–	**–**	–	**–**	–	Collectible upon billing; noninterest-bearing	Unsecured; no guarantee
Dividends	**1,343,505**	1,541,009	678,509	**–**	–	**663,500**	636,450	**–**	–	**–**	–	**–**	–	Payable in January of the following year	Unsecured; no guarantee
Sumitomo Metal Mining Philippine Holdings Corporation															
Short-term advances	**1,250**	1,269	1,250	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–	Collectible upon billing; noninterest-bearing	Unsecured; no guarantee
SMM															
Guarantee service fee (see Notes 30 and 39f)	**65,149**	66,656	100,009	**–**	–	**20,236**	21,086	**–**	–	**–**	–	**–**	–	Every twenty first (21st) of February, March, August and September	Unsecured
Loan facility	**–**	–	–	**–**	–	**–**	–	**–**	–	**–**	–	**–**	22,369	Principal is payable in semi-annual installments, interest is based on one hundred eighty (180)-day British Banker Association LIBOR plus 2% spread	Secured; with guarantee
Interest expense on long-term debt (see Notes 15 and 30)	**137**	1,466	2,383	**–**	–	**–**	182	**–**	–	**–**	–	**–**	–	Payable semi-annually on February 28 and August 31	Secured; with guarantee
Short-term advances	**24,000**	28,000	–	**–**	–	**–**	–	**–**	–	**52,000**	28,000	**–**	–	Collectible upon billing; noninterest-bearing	Unsecured; no guarantee
Nickel Asia Holdings Inc.															
Short-term advances	**1**	1	–	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–	Collectible upon billing; noninterest-bearing	Unsecured; no guarantee
Dividends	**504**	504	504	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–	Payable on demand	Unsecured; no guarantee

(Forward)

	Amount			Trade and Other Receivables (see Note 5)		Trade and Other Payables (see Note 14)		Amounts Owed by Related Parties (see Note 5)		Amounts Owed to Related Parties (see Note 14)		Short-term and Long-term Debts (see Note 15)			
	2018	2017	2016	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017	Terms	Conditions
With Common Stockholders															
Manta															
Rentals, dues and utilities	**₱32,606**	₱28,626	₱27,657	**₱–**	₱–	**₱632**	₱193	**₱–**	₱–	**₱–**	₱–	**₱–**	₱–	Payable upon billing; noninterest-bearing	Unsecured; no guarantee
Rental deposits	**17,789**	10,205	10,184	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–	Collectible at the end of the lease; noninterest-bearing	Unsecured; no guarantee
Interest expense on short-term debt (see Notes 15 and 30)	**–**	4,284	4,234	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–	Interest is payable at the end of the loan agreement	Unsecured; no guarantee
Sale of power (see Note 39p)	**27,841**	28,165	243	**2,355**	2,506	**–**	–	**–**	–	**–**	–	**–**	–	Collectible upon billing; noninterest-bearing	Unsecured; no guarantee
Associates															
CBNC															
Sale of ore	**1,959,845**	1,319,472	1,064,817	**155,768**	102,830	**–**	–	**–**	–	**–**	–	**–**	–	Seven (7) to thirty (30) days; noninterest-bearing	Unsecured; no guarantee
Materials handling	**204,694**	162,627	139,921	**42,860**	28,187	**–**	–	**–**	–	**–**	–	**–**	–	Collectible on demand; noninterest-bearing	Unsecured; no guarantee
Infralease and throughput	**14,350**	63,251	52,092	**21,840**	30,936	**–**	–	**–**	–	**–**	–	**–**	–	Collectible at the end of February and August; noninterest-bearing	Unsecured; no guarantee
Other income	**69,829**	52,531	95,637	**19,995**	9,743	**–**	–	**–**	–	**–**	–	**–**	–	Collectible on demand; noninterest-bearing	Unsecured; no guarantee
THNC															
Sale of ore	**2,427,682**	1,574,639	915,150	**156,275**	168,162	**–**	–	**–**	–	**–**	–	**–**	–	Thirty (30) days term, noninterest-bearing	Unsecured; no guarantee
Rendering of service (see Note 39b)	**159,060**	139,819	133,241	**37,153**	33,433	**–**	–	**–**	–	**–**	–	**–**	–	Semi-annual term; noninterest-bearing	Unsecured; no guarantee
Materials handling (see Note 34a)	**233,103**	287,750	225,298	**20,655**	28,418	**–**	–	**–**	–	**–**	–	**–**	–	Collectible on demand; noninterest-bearing	Unsecured; no guarantee
Rental income (see Note 39m)	**6,703**	6,703	6,703	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–	Collectible on demand; noninterest-bearing	Unsecured; no guarantee
Rental deposit payable	**–**	–	–	**–**	–	**3,352**	3,352	**–**	–	**–**	–	**–**	–	Collectible at the end of the lease term; noninterest-bearing	Unsecured; no guarantee

(Forward)

	Amount			Trade and Other Receivables (see Note 5)		Trade and Other Payables (see Note 14)		Amounts Owed by Related Parties (see Note 5)		Amounts Owed to Related Parties (see Note 14)		Short-term and Long-term Debts (see Note 15)			
	2018	2017	2016	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017	Terms	Conditions
THNC															
Loan facility	**₱–**	₱–	₱–	**₱–**	₱–	**₱–**	₱–	**₱–**	₱–	**₱–**	₱–	**₱1,150,188**	₱1,179,596	Principal is payable in semi-annual installments, interest is based on one hundred eighty (180)-day British Banker Association LIBOR plus 2% spread	Unsecured; with guarantee
Interest expense on long-term debt (see Notes 15 and 22)	**51,633**	42,645	36,474	**–**	–	**9,814**	7,656	**–**	–	**–**	–	**–**	–	Payable semi-annually on April 10 and October 10	Unsecured; no guarantee
Rendering of other service	**–**	4,170	863	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–	Collectible upon billing; noninterest-bearing	Unsecured; no guarantee
Short-term advances	**21,766**	20,651	19,945	**–**	–	**–**	–	**4,342**	6,666	**–**	–	**–**	–	Collectible upon billing; noninterest-bearing; with allowance for ECL of ₱4.2 million in 2018	Unsecured; no guarantee
Affiliates															
OGI															
Short-term advances	**58,482**	–	–	**–**	–	**–**	–	**–**	–	**1,179,544**	1,121,062	**–**	–	Collectible upon billing; noninterest-bearing	Unsecured; no guarantee
Orka Geothermal Holdings, Inc.															
Short-term advances	**–**	–	–	**–**	–	**–**	–	**666**	666	**–**	–	**–**	–	Collectible upon billing; noninterest-bearing	Unsecured; no guarantee
BGHI															
Short-term advances	**–**	–	–	**–**	–	**–**	–	**19**	19	**4,194,305**	4,194,305	**–**	–	Collectible upon billing; noninterest-bearing	Unsecured; no guarantee
				₱552,327	₱517,829	**₱698,581**	₱669,060	**₱5,027**	₱7,351	**₱5,425,849**	₱5,343,367	**₱1,150,188**	₱1,201,965		

Terms and Conditions of Transactions with Related Parties

All sales to and purchases from related parties are made at prevailing market prices. Outstanding balances as at December 31, 2018 and 2017 pertain to the extension and receipt of advances to and from related parties and these are unsecured, short-term, interest-free and settlement occurs in cash. Except for the guarantee on CBNC, THNC and EPI's Loan Obligations (see Note 39f and 39q), there have been no guarantees received or provided for any related party receivables or payables, respectively. This assessment is undertaken at each end of the financial reporting period through the examination of the financial position of the related party and the market in which the related party operates.

a. Sales and Service Agreements

Nickel Ore Sale Agreements with PAMCO

The Group supplies saprolite ore to PAMCO. PAMCO is a stockholder of the Parent Company, RTN and TMC. All sales made to PAMCO are transacted at prevailing market prices. Under the terms of the agreement, the base price of the ore products for a specific shipment shall be based on London Metal Exchange (LME). Effective April 2014, ore sales to PAMCO are benchmarked to China prices on the basis of a negotiated price per wet metric ton (WMT) of ore. PAMCO shall pay the Group 80% to 90% of the provisional invoice amount upon receipt of the required documents and pay the final payment of each shipment after the final dry weight and applicable assay have been determined. Outstanding balances as at December 31, 2018 and 2017 are unsecured, interest-free and settlement occurs in cash. Receivable from PAMCO is included as part of "Trade and other receivables" and is expected to be collected subsequently.

Nickel Ore Sale Agreement with PAMCO and Sojitz

RTN supplies saprolite ore to PAMCO under a sale agreement, which shall continue to be valid and in effect until December 2020, wherein PAMCO appointed Sojitz as agent. PAMCO owns 36% and Sojitz owns 4% of the outstanding capital stock of RTN.

Nickel Ore Supply Agreement with CBNC

RTN entered into an agreement with CBNC to supply all of the limonite ore requirements for the Coral Bay HPP facility until the earlier of the cessation of operations at the Coral Bay HPP facility and exhaustion of the limonite ore reserves at the Rio Tuba mine. RTN has also entered into an agreement with CBNC to supply limestone and provide ancillary services to the Coral Bay HPAL facility. CBNC is the owner of the Coral Bay HPP facility. Receivable from CBNC is included as part of "Trade and other receivables" and is expected to be collected subsequently.

Nickel Ore Supply Agreement with THNC

TMC entered into an agreement with THNC covering the sale of its ore products. Under the terms of the agreement, the base price of the ore products for a specific shipment shall be based on LME.

Service Agreements with CBNC

RTN entered into various service agreements with CBNC pertaining to materials handling and others.

Materials Handling Agreement with THNC
On October 7, 2013, TMC and THNC executed an agreement wherein TMC will render services related to the handling, hauling and transport of cargo for THNC. THNC shall compensate TMC based on the prices stipulated in the agreement which are determined on the basis of the weight of the cargo. Payment is collected within fifteen (15) days from receipt of TMC's billing.

b. Stockholder Agreements

THNC Stockholder's Agreement
On September 15, 2010, NAC, SMM and Mitsui executed a Stockholders Agreement, pursuant to which the parties formed a joint venture company, THNC, to build and operate a plant in Barangay Taganito, Claver, Surigao del Norte for the purpose of producing and selling nickel-cobalt mixed sulfide to be used in the production of electrolytic nickel and electrolytic cobalt.

Pursuant to the Stockholders Agreement, SMM granted THNC a non-exclusive license of technology owned by SMM to produce the products and has undertaken to provide technical assistance to THNC. The Parent Company has undertaken to cause TMC to supply THNC with nickel ore and limestone and to further cause TMC to make available to THNC the use of the land and infrastructure necessary for the production of the products while Mitsui shall assist THNC in procuring materials and equipment necessary for the mine's operations. The Stockholders Agreement shall terminate upon the dissolution of THNC.

The Parent Company, along with the other stockholders of THNC, also agreed to make loans to THNC or guarantee the repayment of THNC's loan obligations in accordance with the financial requirements of THNC, in proportion to their shareholding ratio in THNC.

In a separate agreement dated December 9, 2011, SMM agreed to assume the Parent Company's obligation to make loans to, or guarantee the repayment of THNC's loan obligations. The Parent Company, in consideration for this agreement, pays SMM an annual guarantee fee of 1% of THNC's outstanding loan obligations.

c. Other Agreements

Funding Commitment with SMM
RTN's long-term debt was incurred to complete infrastructure projects to support the development of the Coral Bay HPAL facility. These projects included the causeway, trestles and dolphins in the Rio Tuba foreshore and offshore areas (see Note 15).

Funding Commitment with THNC
TMC as owner/developer of TSEZ incurred a long-term debt to finance the construction of the pier facilities that will be utilized to support the operations of the Taganito HPAL facility. These projects included the jetty, dolphins, rubber fender, jettybollard and other pier facilities in the Taganito foreshore and offshore areas (see Note 15).

d. Compensation of Key Management Personnel

The Group considers as key management personnel the employees holding managerial positions up to the chairman. The short-term benefits of key management personnel of the Group in 2018, 2017 and 2016 amounted to about ₱434.4 million, ₱274.9 million and ₱236.7 million, respectively, inclusive of cost of share-based payment of ₱102.4 million, ₱11.0 million and ₱25.7 million, respectively. The post-employment benefits of key management personnel of the Group amounted to ₱17.3 million, ₱16.7 million, and ₱15.5 million in 2018, 2017 and 2016, respectively.

e. Lease Agreement

On March 18, 2013, the Group entered into a lease agreement with Manta for its office and parking space. The lease agreement is effective for a period of five (5) years starting May 15, 2013 and is renewable subject to negotiation of the terms and conditions and mutual agreement of both parties. The lease agreement expired in May 2018 and was renewed for another period of five (5) years. Rent expense pertaining to the lease amounted to ₱26.3 million, ₱22.4 million and ₱21.5 million in 2018, 2017 and 2016, respectively.

The future minimum rent payable under the lease as at December 31, 2018 and 2017 are as follows:

	2018	2017
Within one (1) year	**₱29,221**	₱27,768
After one (1) year but not more than five (5) years	**111,944**	141,165
	₱141,165	₱168,933

35. **Pension Liability**

The existing regulatory framework, RA 7641, *The Retirement Pay Law,* requires a provision for retirement pay to qualified private sector employees in the absence of any retirement plan in the entity, provided however that the employee's retirement benefits under any collective bargaining and other agreements shall not be less than those provided under the law. The law does not require minimum funding of the plan.

The following tables summarize the pension liability and pension asset recognized in the consolidated statements of financial position:

	2018	2017
Funded pension liabilities:		
TMC	**₱158,523**	₱172,704
RTN	**102,721**	56,801
CMC	**47,525**	50,418
NAC	**19,136**	39,496
HMC	**–**	1,362
	₱327,905	₱320,781
Funded pension asset:		
HMC (see Note 13)	**₱7,199**	₱–

The following tables summarize the components of net pension costs recognized in the consolidated statements of income and the funded status and amounts recognized in the consolidated statements of financial position for the respective plans:

Changes in net defined benefit liability and fair value of pension assets in 2018, 2017 and 2016 are as follows:

	December 31, 2018												
		Net benefit cost in consolidated statements of income				Remeasurements in other comprehensive income							
	January 1, 2018	Current service cost	Net interest	Subtotal	Benefits paid	Return on plan assets (excluding amount included in net interest)	Actuarial changes arising from demographic adjustments	Actuarial changes arising from experience adjustments	Actuarial changes arising from changes in financial assumptions	Effect of asset ceiling	Subtotal	Contributions	December 31, 2018
RTN	**₱473,362**	**₱36,796**	**₱27,313**	**₱64,109**	**(₱99,758)**	**₱–**	**₱–**	**₱31,392**	**(₱53,732)**	**₱–**	**(₱22,340)**	**₱–**	**₱415,373**
TMC	**344,213**	**37,611**	**19,964**	**57,575**	**(16,269)**	**–**	**–**	**39,664**	**(83,352)**	**–**	**(43,688)**	**–**	**341,831**
HMC	**42,202**	**4,835**	**2,444**	**7,279**	**(2,156)**	**–**	**–**	**2,736**	**(10,498)**	**–**	**(7,762)**	**–**	**39,563**
CMC	**57,748**	**5,290**	**3,344**	**8,634**	**(5,635)**	**–**	**501**	**4,170**	**(8,896)**	**–**	**(4,225)**	**–**	**56,522**
NAC	**60,313**	**8,308**	**3,486**	**11,794**	**–**	**–**	**(219)**	**(3,218)**	**(10,379)**	**–**	**(13,816)**	**–**	**58,291**
Defined benefit liability	**977,838**	**92,840**	**56,551**	**149,391**	**(123,818)**	**–**	**282**	**74,744**	**(166,857)**	**–**	**(91,831)**	**–**	**911,580**
RTN	**(416,561)**	**–**	**(21,970)**	**(21,970)**	**99,758**	**54,277**	**–**	**–**	**–**	**–**	**54,277**	**(28,156)**	**(312,652)**
TMC	**(171,509)**	**–**	**(10,491)**	**(10,491)**	**16,269**	**17,423**	**–**	**–**	**–**	**–**	**17,423**	**(35,000)**	**(183,308)**
HMC	**(40,840)**	**–**	**(2,594)**	**(2,594)**	**2,156**	**3,855**	**–**	**–**	**–**	**–**	**3,855**	**(10,082)**	**(47,505)**
CMC	**(7,330)**	**–**	**(473)**	**(473)**	**5,635**	**501**	**–**	**–**	**–**	**–**	**501**	**(7,330)**	**(8,997)**
NAC	**(20,817)**	**–**	**(1,726)**	**(1,726)**	**–**	**1,479**	**–**	**–**	**–**	**–**	**1,479**	**(18,091)**	**(39,155)**
Fair value of plan assets	**(657,057)**	**–**	**(37,254)**	**(37,254)**	**123,818**	**77,535**	**–**	**–**	**–**	**–**	**77,535**	**(98,659)**	**(591,617)**
RTN	**56,801**	**36,796**	**5,343**	**42,139**	**–**	**54,277**	**–**	**31,392**	**(53,732)**	**–**	**31,937**	**(28,156)**	**102,721**
TMC	**172,704**	**37,611**	**9,473**	**47,084**	**–**	**17,423**	**–**	**39,664**	**(83,352)**	**–**	**(26,265)**	**(35,000)**	**158,523**
HMC	**1,362**	**4,835**	**(150)**	**4,685**	**–**	**3,855**	**–**	**2,736**	**(10,498)**	**743**	**(3,164)**	**(10,082)**	**(7,199)**
CMC	**50,418**	**5,290**	**2,871**	**8,161**	**–**	**501**	**501**	**4,170**	**(8,896)**	**–**	**(3,724)**	**(7,330)**	**47,525**
NAC	**39,496**	**8,308**	**1,760**	**10,068**	**–**	**1,479**	**(219)**	**(3,218)**	**(10,379)**	**–**	**(12,337)**	**(18,091)**	**19,136**
Pension liability	**₱319,419**	**₱88,005**	**₱19,447**	**₱107,452**	**₱–**	**₱73,680**	**₱282**	**₱72,008**	**(₱156,359)**	**₱–**	**(₱10,389)**	**(₱88,577)**	**₱327,905**
Pension liability (asset)	**₱1,362**	**₱4,835**	**(₱150)**	**₱4,685**	**₱–**	**₱3,855**	**₱–**	**₱2,736**	**(₱10,498)**	**₱743**	**(₱3,164)**	**(₱10,082)**	**(₱7,199)**

	December 31, 2017												
		Net benefit cost in consolidated statements of income				Remeasurements in other comprehensive income							
	January 1, 2017	Current service cost	Net interest	Subtotal	Benefits paid	Return on plan assets (excluding amount included in net interest)	Actuarial changes arising from demographic adjustments	Actuarial changes arising from experience adjustments	Actuarial changes arising from changes in financial assumptions	Effect of asset ceiling	Subtotal	Contributions	December 31, 2017
RTN	₱440,039	₱29,925	₱24,994	₱54,919	(₱33,912)	₱–	₱–	₱16,260	(₱3,944)	₱–	₱12,316	₱–	₱473,362
TMC	308,081	35,506	17,468	52,974	(10,385)	–	–	(798)	(5,659)	–	(6,457)	–	344,213
HMC	31,022	4,978	1,812	6,790	(1,025)	–	–	5,136	279	–	5,415	–	42,202
CMC	50,266	4,989	2,790	7,779	(3,629)	–	–	4,158	(826)	–	3,332	–	57,748
NAC	54,096	7,860	3,169	11,029	–	–	(9,216)	4,117	287	–	(4,812)	–	60,313
Defined benefit liability	883,504	83,258	50,233	133,491	(48,951)	–	(9,216)	28,873	(9,863)	–	9,794	–	977,838
RTN	(375,979)	–	(21,727)	(21,727)	33,912	(5,757)	–	–	–	–	(5,757)	(47,010)	(416,561)
TMC	(144,183)	–	(8,787)	(8,787)	10,385	3,076	–	–	–	–	3,076	(32,000)	(171,509)
HMC	(32,316)	–	(2,112)	(2,112)	1,025	1,269	–	–	–	–	1,269	(8,706)	(40,840)
CMC	–	–	–	–	–	–	–	–	–	–	–	(7,330)	(7,330)
NAC	–	–	–	–	–	(9)	–	–	–	–	(9)	(20,808)	(20,817)
Fair value of plan assets	(552,478)	–	(32,626)	(32,626)	45,322	(1,421)	–	–	–	–	(1,421)	(115,854)	(657,057)
RTN	64,060	29,925	3,267	33,192	–	(5,757)	–	16,260	(3,944)	–	6,559	(47,010)	56,801
TMC	163,898	35,506	8,681	44,187	–	3,076	–	(798)	(5,659)	–	(3,381)	(32,000)	172,704
HMC	(1,294)	4,978	(300)	4,678	–	1,269	–	5,136	279	–	6,684	(8,706)	1,362
CMC	50,266	4,989	2,790	7,779	(3,629)	–	–	4,158	(826)	–	3,332	(7,330)	50,418
NAC	54,096	7,860	3,169	11,029	–	(9)	(9,216)	4,117	287	–	(4,821)	(20,808)	39,496
Pension liability	₱331,026	₱83,258	₱17,607	₱100,865	(₱3,629)	(₱1,421)	(₱9,216)	₱28,873	(₱9,863)	₱–	₱8,373	(₱115,854)	₱320,781

	December 31, 2016												
		Net benefit cost in consolidated statements of income				Remeasurements in other comprehensive income							
	January 1, 2016	Current service cost	Net interest	Subtotal	Benefits paid	Return on plan assets (excluding amount included in net interest)	Actuarial changes arising from demographic adjustments	Actuarial changes arising from experience adjustments	Actuarial changes arising from changes in financial assumptions	Effect of asset ceiling	Subtotal	Contributions	December 31, 2016
RTN	₱377,308	₱24,641	₱24,298	₱48,939	(₱38,259)	₱–	₱–	₱22,841	₱29,210	₱–	₱52,051	₱–	₱440,039
TMC	257,295	23,716	15,463	39,179	(7,133)	–	–	5,972	12,768	–	18,740	–	308,081
HMC	28,781	4,167	1,851	6,018	(214)	–	–	(6,220)	2,657	–	(3,563)	–	31,022
Defined benefit liability	663,384	52,524	41,612	94,136	(45,606)	–	–	22,593	44,635	–	67,228	–	779,142
RTN	(359,130)	–	(22,753)	(22,753)	38,259	(5,716)	–	–	–	–	(5,716)	(26,639)	(375,979)
TMC	(120,301)	–	(7,917)	(7,917)	7,133	6,902	–	–	–	–	6,902	(30,000)	(144,183)
HMC	(13,896)	–	(1,478)	(1,478)	–	1,238	–	–	–	–	1,238	(18,180)	(32,316)
Fair value of plan assets	(493,327)	–	(32,148)	(32,148)	45,392	2,424	–	–	–	–	2,424	(74,819)	(552,478)
RTN	–	–	–	–	–	–	–	–	–	–	–	–	–
Restrictions on asset recognized	–	–	–	–	–	–	–	–	–	–	–	–	–
RTN	18,178	24,641	1,545	26,186	–	(5,716)	–	22,841	29,210	–	46,335	(26,639)	64,060
TMC	136,994	23,716	7,546	31,262	–	6,902	–	5,972	12,768	–	25,642	(30,000)	163,898
HMC	14,885	4,167	373	4,540	(214)	1,238	–	(6,220)	2,657	–	(2,325)	(18,180)	(1,294)
Pension liability	₱155,172	₱48,357	₱9,091	₱57,448	₱–	₱1,186	₱–	₱28,813	₱41,978	₱–	₱71,977	(₱56,639)	₱227,958
Pension liability (asset)	₱14,885	₱4,167	₱373	₱4,540	(₱214)	₱1,238	₱–	(₱6,220)	₱2,657	₱–	(₱2,325)	(₱18,180)	(₱1,294)

Changes in unfunded pension liability as at December 31, 2018, 2017 and 2016 are as follows:

December 31, 2018

	January 1, 2018	Net benefit cost in consolidated statements of income: Current service cost	Interest cost	Subtotal	Benefits paid	Remeasurements in other comprehensive income: Actuarial changes arising from changes in demographic assumptions	Actuarial changes arising from experience adjustments	Actuarial changes arising from changes in financial assumptions	Subtotal	December 31, 2018
NAC	**₱–**	**₱–**	**₱–**	**₱–**	**₱–**	**₱–**	**₱–**	**₱–**	**₱–**	**₱–**
CMC	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Pension liability	**₱–**	**₱–**	**₱–**	**₱–**	**₱–**	**₱–**	**₱–**	**₱–**	**₱–**	**₱–**

December 31, 2017

	January 1, 2017	Net benefit cost in consolidated statements of income: Current service cost	Interest cost	Subtotal	Benefits paid	Remeasurements in other comprehensive income: Actuarial changes arising from changes in demographic assumptions	Actuarial changes arising from experience adjustments	Actuarial changes arising from changes in financial assumptions	Subtotal	December 31, 2017
NAC	₱–	₱–	₱–	₱–	₱–	₱–	₱–	₱–	₱–	₱–
CMC	–	–	–	–	–	–	–	–	–	–
Pension liability	₱–	₱–	₱–	₱–	₱–	₱–	₱–	₱–	₱–	₱–

December 31, 2016

	January 1, 2016	Net benefit cost in consolidated statements of income: Current service cost	Interest cost	Subtotal	Benefits paid	Remeasurements in other comprehensive income: Actuarial changes arising from changes in demographic assumptions	Actuarial changes arising from experience adjustments	Actuarial changes arising from changes in financial assumptions	Subtotal	December 31, 2016
NAC	₱39,643	₱6,068	₱2,509	₱8,577	(₱1,411)	₱–	₱1,884	₱5,403	₱7,287	₱54,096
CMC	40,379	3,661	2,362	6,023	(2,928)	–	5,276	1,516	6,792	50,266
Pension liability	₱80,022	₱9,729	₱4,871	₱14,600	(₱4,339)	₱–	₱7,160	₱6,919	₱14,079	₱104,362

The main categories of plan assets as a percentage of the fair value of total plan assets follow:

2018	**NAC**	**RTN**	**TMC**	**HMC**	**CMC**
Fixed income securities	**51.08%**	**59.71%**	**94.16%**	**91.93%**	**48.01%**
Investments in shares of stock	**0.00%**	**0.00%**	**5.59%**	**8.07%**	**0.00%**
Others	**48.92%**	**40.29%**	**0.25%**	**–**	**51.99%**
	100.00%	**100.00%**	**100.00%**	**100.00%**	**100.00%**

2017	NAC	RTN	TMC	HMC	CMC
Fixed income securities	24.02%	14.23%	72.38%	84.19%	0.00%
Investments in shares of stock	28.82%	36.21%	5.97%	7.81%	0.00%
Others	47.16%	49.56%	21.65%	8.00%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%

The overall expected rate of return on assets is determined based on the market expectations prevailing on that date, applicable to the period over which the obligation is to be settled.

The principal assumptions used in determining the pension asset (liability) for the Group's plans are shown below:

2018	**NAC**	**RTN**	**TMC**	**HMC**	**CMC**
Discount rate	**7.70%**	**7.64%**	**7.60%**	**7.70%**	**7.70%**
Expected salary increase rate	**5.00%**	**5.00%**	**10.00%**	**5.00%**	**5.00%**

2017	NAC	RTN	TMC	HMC	CMC
Discount rate	5.78%	5.77%	5.80%	5.79%	5.79%
Expected salary increase rate	6.00%	5.00%	10.00%	5.00%	5.00%

2016	NAC	RTN	TMC	HMC	CMC
Discount rate	5.86%	5.68%	5.67%	5.84%	5.55%
Expected salary increase rate	6.00%	5.00%	10.00%	5.00%	5.00%

Assumptions regarding future mortality rate are based on the 2001 CSO Table - Generational developed by the Society of Actuaries, which provides separate rates for males and females.

The sensitivity analysis below has been determined based on reasonably possible changes of each significant assumption on the defined retirement benefits liability - net as at the end of the financial reporting period, assuming all other assumptions were held constant:

	Increase (decrease)	**2018**	2017
Discount rates	+100 basis points	**(₱79,886)**	(₱91,505)
	-100 basis points	**94,386**	109,284
Salary increase rate	+100 basis points	**₱93,825**	₱96,704
	-100 basis points	**(80,895)**	(82,961)

As at March 14, 2019, the Group has not yet reasonably determined the amount of 2019 contributions to the retirement fund.

Shown below is the maturity analysis of the undiscounted benefit payments:

	2018	2017
Within the next twelve (12) months	**₱116,388**	₱159,662
Between two (2) and five (5) years	**306,727**	264,683
Between six (6) and ten (10) years	**575,517**	539,429
Total expected payments	**₱998,632**	₱963,774

The weighted average duration of the pension liability as at December 31, 2018 and 2017 is 8.8 years and 9.7 years, respectively.

36. **Income Taxes**

The provision for current income tax shown in the consolidated statements of income includes the Regular Corporate Income Tax (RCIT) of TMC, RTN, CMC, NAC and HMC, Gross Income Tax (GIT) of TMC and RTN and Minimum Corporate Income Tax (MCIT) of MEI, EPI, BGI and CExCI in 2018, RCIT of TMC, RTN, CMC, NAC and HMC, GIT of TMC and RTN and MCIT of MEI, EPI, BGI, CExCI, DMC and Newminco in 2017, RCIT of TMC, RTN, CMC, NAC and HMC, GIT of TMC and RTN and MCIT of EPI, BGI and DMC in 2016, as follows:

	2018	2017	2016
TMC	**₱1,062,374**	₱756,771	₱574,908
RTN	**573,853**	661,275	517,143
CMC	**278,203**	140,020	163,235
NAC	**153,190**	157,231	65,226
HMC	**106,190**	149,634	120,875
MEI	**94**	86	–
EPI	**28**	177	108
BGI	**1**	65	30
CExCI	**1**	13	–
DMC	**–**	34	1
Newminco	**–**	12	–
	₱2,173,934	₱1,865,318	₱1,441,526

All other companies under the Group were in a gross and/or net taxable loss positions in 2018, 2017 and 2016.

The reconciliation between the provisions for income tax computed at the statutory income tax rates and the provisions for income tax computed at the effective income tax rates as shown in the consolidated statements of income follows:

	2018	2017	2016
Income tax at statutory rates from non-registered activities	**₱2,509,112**	₱2,666,111	₱1,829,232
Add (deduct) tax effects of:			
Dividend income exempt from income tax	**(649,765)**	(1,014,489)	(613,377)
Change in unrecognized deferred income tax assets	**224,088**	115,206	135,853
Interest income subjected to final tax	**(87,098)**	(66,206)	(44,569)
Movements in deductible temporary differences for which deferred income taxes were recognized	**(69,369)**	(52,812)	(41,874)
Derecognized deferred income tax assets	**41,969**	–	–
Expired net operating loss carry over (NOLCO) and excess of MCIT over RCIT	**54,458**	23,021	11,894
Nondeductible expenses	**50,722**	74,853	174,304
Loss (income) subject to other taxes	**36,218**	(1,973)	4,643
Effect of change in tax rate	**(4,054)**	–	–
Realized benefit from ESOP exercised	**–**	–	(8,857)
Others	**(1)**	(8,490)	455
	2,106,280	1,735,221	1,447,704
Income tax at statutory rates from PEZA registered activities	**(1,351)**	651	(2,296)
Add (deduct) tax effects of:			
Nondeductible expenses	**3,644**	1,056	4,111
Interest income subjected to final tax	**(98)**	(72)	(41)
	2,195	1,635	1,774
Income tax at effective rates	**₱2,108,475**	₱1,736,856	₱1,449,478

The Tax Reform for Acceleration and Inclusion Act (TRAIN) or Republic Act (RA) No. 10963 was signed into law on December 19, 2017 and took effect on January 1, 2018. The TRAIN amended various provisions in the existing 1997 National Internal Revenue Code and increase the capital gains tax on sale of shares of stock not traded in the stock exchange to 15%. Previously, the tax was computed at 5% for the first ₱100,000 of net capital gains plus 10% of the excess.

The components of the Group's net deferred income tax assets and liabilities follow:

	2018	2017
Deferred income tax assets:		
At 30%		
Pension costs	**₱96,257**	₱96,234
Provision for mine rehabilitation and decommissioning	**82,268**	116,636
Allowance for impairment losses on:		
Inventories	**30,862**	25,687
Trade and other receivables	**14,901**	11,833
Others	**1,097**	1,097
NOLCO	**37,998**	20,936
Cost of share-based payment plan	**29,406**	40,665
Unamortized past service cost	**18,021**	16,815
Long-term stockpile inventory	**14,715**	–
Unrealized valuation losses on financial assets	**7,445**	–
Excess of MCIT over RCIT	**34**	34
At 5%		
Deferred income	**2,947**	3,157
	₱335,951	₱333,094
Deferred income tax liabilities:		
At 30%		
Fair value adjustment arising from business combination	**₱251,590**	₱251,590
Asset revaluation surplus	**151,098**	154,252
Unrealized foreign exchange gains - net	**104,925**	60,392
Unrealized valuation gains on financial assets	**53,219**	38,107
Undepleted asset retirement obligation	**29,089**	72,267
Capitalized borrowing cost	**23,267**	23,963
Unamortized debt issue costs	**2,844**	1,378
Long-term stockpile inventory	**–**	50,884
At 10%		
Share in cumulative translation adjustment (see Note 10)	**137,841**	113,812
At 5%		
Unrealized foreign exchange gains - net	**228**	229
	₱754,101	₱766,874

The Group did not recognize net deferred income tax asset on the following temporary differences since the management believes that it is not probable that sufficient taxable profit will be available against which the benefits of the net deferred income tax assets can be utilized in the future.

	2018	2017
NOLCO	**₱1,172,477**	₱1,011,711
Allowance for impairment losses	**658,450**	143,578
Unrealized foreign exchange losses - net	**259,970**	206,157
Levelized rent expense	**16,655**	909
Allowance for ECL/impairment losses	**15,332**	15,332
Interest expense on long-term payable	**3,740**	2,587
Excess of MCIT over RCIT	**616**	515
Others	**802**	802
	₱2,128,042	₱1,381,591

As at December 31, 2018 and 2017, the Group, except for FEI, has NOLCO and excess of MCIT over RCIT that can be claimed as deduction from future taxable income and income tax liabilities, respectively, as follows:

		NOLCO		Excess of MCIT over RCIT	
Year Incurred	Year of Expiration	**2018**	2017	**2018**	2017
2018	2021	**₱399,360**	₱–	**₱123**	₱–
2017	2020	**400,367**	400,367	**388**	388
2016	2019	**498,931**	498,931	**139**	139
2015	2018	–	181,453	–	22
		₱1,298,658	₱1,080,751	**₱650**	₱549

As at December 31, 2018 and 2017, FEI has NOLCO that can be claimed as deduction from future taxable income as follows:

Year Incurred	Year of Expiration	**2018**	2017
2017	2022	**₱6**	₱6
2016	2021	**134**	134
2015	2020	**191**	191
2014	2019	**146**	146
2013	2018	–	272
		₱477	₱749

The movements in NOLCO are as follows:

	2018	2017
Balances at January 1	**₱1,081,500**	₱756,642
Additions	**399,360**	400,373
Expirations	**(181,725)**	(75,156)
Applications	–	(359)
Balances at December 31	**₱1,299,135**	₱1,081,500

The movements in excess of MCIT over RCIT are as follows:

	2018	2017
Balances at January 1	**₱549**	₱636
Additions	**123**	388
Expirations	**(22)**	(475)
Balances at December 31	**₱650**	₱549

37. **Financial Risk Management Objectives and Policies and Capital Management**

The Group's main financial instruments are cash and cash equivalents, financial assets in debt and equity securities, short-term cash investments and short-term and long-term debts. The main purpose of these financial instruments is to raise funds and maintain continuity of funding and financial flexibility for the Group. The Group has various other financial assets and liabilities such as trade and other receivables, loan receivable, long-term negotiable instruments, trade and other payables and long-term payable which arise directly from its operations, investing and financing activities.

The main risks arising from the Group's financial instruments are credit risk, liquidity risk and market risk. The BOD reviews and approves policies for managing each of these risks and they are summarized below.

Credit Risk

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Group is exposed to credit risk primarily from its operating (primarily for trade receivables) and investing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments.

In managing credit risk on investments, capital preservation is paramount. The Group trades only with recognized, reputable and creditworthy third parties and/or transacts only with institutions and/or banks which have demonstrated financial soundness. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures. In addition, receivable balances are monitored on an ongoing basis with the result that the Group's exposure to bad debts is not significant. Except for the impaired trade and other receivables, the Group assessed the receivables as collectible and in good standing.

For investments in debt instruments, funds are invested in highly recommended, creditworthy debt instruments that provides satisfactory interest yield and capital appreciation. Investments in foreign and local equity funds are made in mutual funds with investments in A-rated companies, with good dividend track record as well as capital appreciation. The investment portfolio mix between debt and equities is reviewed regularly by the Chief Finance Officer and the Audit and Risk Committee.

Credit Risk Exposure

With respect to credit risk arising from cash and cash equivalents, trade and other receivables, financial assets in debt and equity securities, short-term cash investments, loan receivable and long-term negotiable instruments, the Group's exposure to credit risk arises from default of the counterparty, with a maximum exposure equal to the carrying amount of these instruments.

Credit Quality and Aging Analysis of Financial Assets

The credit quality and aging analysis of the Group's financial assets as at December 31, 2018 and 2017 are summarized in the following tables:

2018	Neither Past Due Nor Impaired (High)	Past Due But Not Impaired (30-180 days)	Past Due and Individually Impaired	Total
Cash and cash equivalents	**₱10,769,669**	**₱–**	**₱–**	**₱10,769,669**
Cash with banks	820,943	–	–	820,943
Cash under managed funds	106,954	–	–	106,954
Short-term cash investments	9,841,772	–	–	9,841,772
Trade and other receivables	**919,359**	**99,323**	**57,275**	**1,075,957**
Trade	655,032	61,781	42,703	759,516
Current portion of loan receivable	146,158	–	–	146,158
Interest receivable	53,315	–	–	53,315
Receivable from CBNC	13,638	28,197	–	41,835
Amounts owed by related parties	5,027	–	4,228	9,255
Others	46,189	9,345	10,344	65,878
Financial assets at:	**5,146,717**	**–**	**–**	**5,146,717**
FVOCI	2,608,301	–	–	2,608,301
FVTPL	2,006,646	–	–	2,006,646
Amortized cost	531,770	–	–	531,770
AFS financial assets	**–**	**–**	**–**	**–**
Quoted debt securities	–	–	–	–
Quoted equity securities	–	–	–	–
Unquoted equity securities	–	–	–	–
Prepayments and other current assets	**709,206**	**–**	**–**	**709,206**
Short-term cash investments	679,206	–	–	679,206
Current portion of long-term negotiable instruments	30,000	–	–	30,000
Other noncurrent assets	**616,946**	**–**	**–**	**616,946**
Loan receivable - net of current portion	576,946	–	–	576,946
Long-term negotiable instruments	40,000	–	–	40,000
	₱18,161,897	**₱99,323**	**₱57,275**	**₱18,318,495**

2017	Neither Past Due Nor Impaired (High)	Past Due But Not Impaired (30-180 days)	Past Due and Individually Impaired	Total
Cash and cash equivalents	₱9,628,763	₱–	₱–	₱9,628,763
Cash with banks	937,945	–	–	937,945
Cash under managed funds	177,014	–	–	177,014
Short-term cash investments	8,513,804	–	–	8,513,804
Trade and other receivables	817,171	39,232	45,749	902,152
Trade	602,348	17,383	41,152	660,883
Current portion of loan receivable	94,203	–	–	94,203
Interest receivable	53,619	–	–	53,619
Receivable from CBNC	18,830	21,849	–	40,679
Amounts owed by related parties	7,351	–	–	7,351
Others	40,820	–	4,597	45,417
Financial assets at:	–	–	–	–
FVOCI	–	–	–	–
FVTPL	–	–	–	–
Amortized cost	–	–	–	–
AFS financial assets	6,658,203	–	–	6,658,203
Quoted debt securities	5,097,660	–	–	5,097,660
Quoted equity securities	1,353,957	–	–	1,353,957
Unquoted equity securities	206,586	–	–	206,586
Prepayments and other current assets	–	–	–	–
Short-term cash investments	–	–	–	–
Current portion of long-term negotiable instruments	–	–	–	–
Other noncurrent assets	807,641	–	–	807,641
Loan receivable - net of current portion	767,641	–	–	767,641
Long-term negotiable instrument	40,000	–	–	40,000
	₱17,911,778	₱39,232	₱45,749	₱17,996,759

Credit Quality of Financial Assets
The credit quality of financial assets is managed by the Group using internal credit ratings and is classified into three: High grade, which has no history of default; Standard grade, which pertains to accounts with history of one or two defaults; and Substandard grade, which pertains to accounts with history of at least three (3) payment defaults.

Accordingly, the Group has assessed the credit quality of the following financial assets classified as neither past due nor impaired:

- Cash and cash equivalents and short-term cash investments are placed in various foreign and local banks. Material amounts are held by local banks that have good reputation and with low probability of insolvency. The rest are held by various foreign banks having a S&P credit rating of at least A. Management assesses the quality of these assets as high grade.

- Trade receivables, loan receivable and receivable from CBNC pertain to receivables from customers or related parties which have good financial capacity and with which the Group has already established a long outstanding and good business relationship. Management assesses the quality of these assets as high grade. Trade and other receivables which are not foreseen to be collected are classified as substandard grade.

- Interest receivables derived from short-term cash investments placed in various foreign banks with S&P credit rating of at least A and with local banks with low probability of insolvency, are assessed as high grade. Interest receivable from debt securities and long-term negotiable instruments are also assessed as high grade since these are invested in companies with good reputation and sound financial condition. Interest receivable from loans are also assessed as high grade since these are collectible from third parties which are capable of repaying the amount due.

- Amounts owed by related parties are advances that are due and demandable. The related parties are operating firms and/or capable of repaying the amount due. Management assesses the quality of these assets as high grade.

- Management assesses the quality of other receivables as standard grade since amounts are settled after due date.

- Financial assets in debt and equity securities are investments that can be traded and from companies with good financial capacity, making the investment secured and realizable. Management assesses the quality of these assets as high grade.

- Long-term negotiable instruments are investments placed in local banks with good financial capacity and with low probability of insolvency. Management assessed the quality of these assets as high grade.

Liquidity Risk

Liquidity risk arises from the possibility that the Group may encounter difficulties in raising funds to meet commitments from financial instruments.

The Group's objective is to maintain sufficient funding to finance its exploration, mining and power generation activities through internally generated funds, advances from related parties and borrowings from banks. Aside from yielding good returns, the Group ensures that investments have ample liquidity to finance operations and capital requirements. The Group considers its available funds and its liquidity in managing its long-term financial requirements. For its short-term funding, the Group's policy is to ensure that there are sufficient capital inflows to match repayments of short-term debt.

The tables below summarize the maturity profile of the Group's financial liabilities as at December 31, 2018 and 2017 based on contractual undiscounted payments.

2018	**On Demand**	**Less Than Three (3) Months**	**Three (3) to Twelve (12) Months**	**More Than One (1) Year**	**Total**
Trade and other payables					
Trade	₱422,607	₱233,567	₱79,408	₱–	₱735,582
Amounts owed to related parties	5,425,849	–	–	–	5,425,849
Dividends payable	–	663,500	–	–	663,500
Accrued expenses	363,400	44,330	252	–	407,982
Interest payable	–	5,812	9,814	–	15,626
Contract liability	8,891	–	–	–	8,891
Retention fees payable	3,505	124	–	–	3,629
Others	40,178	–	–	–	40,178
Short-term debts					
Carrying amount	–	–	1,492,268	–	1,492,268
Unamortized debt issue cost	–	–	7,732	–	7,732
Long-term debts					
Carrying amount	–	6,818	112,152	1,288,562	1,407,532
Unamortized debt issue cost	–	–	318	1,429	1,747
Long-term payable					
Carrying amount	–	–	5,000	16,323	21,323
Unamortized discount	–	–	–	2,677	2,677
	₱6,264,430	**₱954,151**	**₱1,706,944**	**₱1,308,991**	**₱10,234,516**

2017	On Demand	Less Than Three (3) Months	Three (3) to Twelve (12) Months	More Than One (1) Year	Total
Trade and other payables					
Trade	₱464,200	₱311,455	₱91,798	₱–	₱867,453
Amounts owed to related parties	5,343,367	–	–	–	5,343,367
Dividends payable	–	636,450	–	–	636,450
Accrued expenses	285,007	134,448	189	–	419,644
Interest payable	11,533	–	–	–	11,533
Contract liability	–	–	–	–	–
Retention fees payable	19,134	–	–	–	19,134
Others	44,428	–	–	–	44,428
Short-term debts					
Carrying amount	–	–	–	–	–
Unamortized debt issue cost	–	–	–	–	–
Long-term debts					
Carrying amount	–	29,187	1,605,991	1,349,211	2,984,389
Unamortized debt issue cost	–	–	1,841	2,099	3,940
Long-term payable					
Carrying amount	–	–	5,000	20,168	25,168
Unamortized discount	–	–	–	3,832	3,832
	₱6,167,669	₱1,111,540	₱1,704,819	₱1,375,310	₱10,359,338

The tables below summarize the maturity profile of the Group's financial assets used to manage the liquidity risk of the Group as at December 31, 2018 and 2017.

2018	**On Demand**	**Less Than Three (3) Months**	**Three (3) to Twelve (12) Months**	**More Than One (1) Year**	**Total**
Cash and cash equivalents					
Cash on hand and with banks	**₱835,643**	**₱–**	**₱–**	**₱–**	**₱835,643**
Cash under managed funds	**106,954**	**–**	**–**	**–**	**106,954**
Short-term cash investments	**9,841,772**	**–**	**–**	**–**	**9,841,772**
Trade and other receivables					
Trade	**614,555**	**102,258**	**–**	**–**	**716,813**
Current portion of loan receivable	**–**	**–**	**146,158**	**–**	**146,158**
Interest receivable	**–**	**48,001**	**5,314**	**–**	**53,315**
Receivable from CBNC	**13,638**	**28,197**	**–**	**–**	**41,835**
Amounts owed by related parties	**5,027**	**–**	**–**	**–**	**5,027**
Others	**46,189**	**9,345**	**–**	**–**	**55,534**
Financial assets at:					
FVOCI	**2,608,301**	**–**	**–**	**–**	**2,608,301**
FVTPL	**1,420,718**	**–**	**–**	**585,928**	**2,006,646**
Amortized cost	**201,770**	**–**	**–**	**330,000**	**531,770**
AFS financial assets					
Quoted debt securities	**–**	**–**	**–**	**–**	**–**
Quoted equity securities	**–**	**–**	**–**	**–**	**–**
Unquoted equity securities	**–**	**–**	**–**	**–**	**–**
Prepayments and other current assets					
Short-term cash investments	**–**	**–**	**679,206**	**–**	**679,206**
Current portion of long-term negotiable instruments	**–**	**–**	**30,000**	**–**	**30,000**
Other noncurrent assets					
Loan receivable - net of current portion	**–**	**–**	**–**	**576,946**	**576,946**
Long-term negotiable instruments	**–**	**–**	**–**	**40,000**	**40,000**
	₱15,694,567	**₱187,801**	**₱860,678**	**₱1,532,874**	**₱18,275,920**

2017	On Demand	Less Than Three (3) Months	Three (3) to Twelve (12) Months	More Than One (1) Year	Total
Cash and cash equivalents					
Cash on hand and with banks	₱944,696	₱–	₱–	₱–	₱944,696
Cash under managed funds	177,014	–	–	–	177,014
Short-term cash investments	8,513,804	–	–	–	8,513,804
Trade and other receivables					
Trade	538,760	73,608	7,363	–	619,731
Current portion of loan receivable	1,884	–	92,319	–	94,203
Interest receivable	–	52,595	1,024	–	53,619
Receivable from CBNC	18,830	21,849	–	–	40,679
Amounts owed by related parties	7,351	–	–	–	7,351
Others	31,827	8,993	–	–	40,820
Financial assets at:					
FVOCI	–	–	–	–	–
FVTPL	–	–	–	–	–
Amortized cost	–	–	–	–	–
AFS financial assets					
Quoted debt securities	4,725,078	–	–	372,582	5,097,660
Quoted equity securities	1,120,776	–	–	233,181	1,353,957
Unquoted equity securities	79,828	–	–	126,758	206,586
Prepayments and other current assets					
Short-term cash investments	–	–	–	–	–
Current portion of long-term negotiable instruments	–	–	–	–	–
Other noncurrent assets					
Loan receivable - net of current portion	–	–	–	767,641	767,641
Long-term negotiable instrument	–	–	–	40,000	40,000
	₱16,159,848	₱157,045	₱100,706	₱1,540,162	₱17,957,761

Market Risk
Market risk is the risk of loss to future earnings, to fair values or to future cash flows that may result from changes in the price of a financial instrument. The value of a financial instrument may change as a result of changes in foreign currency exchanges rates, commodity prices, interest rates, equity prices and other market changes.

Foreign Currency Risk
Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign currency exchange rates.

Transactions with companies outside the Philippines and with CBNC and THNC for the sale of saprolite and limonite ore are carried out with currencies that management believes to be stable such as the US$.

The Group has transactional currency exposures. Such exposure arises from cash and cash equivalents, trade and other receivables, financial assets at FVTPL and FVOCI, AFS financial assets, short-term cash investments under "Prepayments and other current assets", trade and other payables and long-term debts. The Group did not seek to hedge the exposure on the change in foreign exchange rates between the US$ and the Philippine peso. The Group does not generally believe that active currency hedging would provide long-term benefits to stockholders.

To mitigate the effects of foreign currency risk, the Group ensures timely follow-up and accelerates the collection of foreign currency-denominated receivables and the settlement of foreign currency-denominated payables and loans, whenever practicable. Also, foreign exchange movements are monitored on a daily basis.

The Group's foreign currency-denominated financial assets and liabilities and their Philippine peso equivalents as at December 31, 2018 and 2017 are as follows:

	2018		2017	
	US$ Amount	**Peso Equivalent**	US$ Amount	Peso Equivalent
Financial assets:				
Cash and cash equivalents	**$126,619**	**₱6,657,471**	$134,416	₱6,711,375
Trade and other receivables	**11,507**	**605,038**	11,540	576,170
Financial assets at:				
FVTPL	**17,584**	**924,550**	–	–
FVOCI	**15,945**	**838,388**	–	–
AFS financial assets	**–**	**–**	56,915	2,841,746
Prepayments and other current assets	**8,122**	**427,086**	–	–
	$179,777	**₱9,452,533**	$202,871	₱10,129,291
Financial liabilities:				
Trade and other payables	**$23,673**	**₱1,244,718**	$30,598	₱1,527,753
Long-term debts	**21,875**	**1,150,187**	24,073	1,201,965
	$45,548	**₱2,394,905**	$54,671	₱2,729,718

The exchange rate used for conversion of US$1.00 to peso equivalent was ₱52.58 and ₱49.93 as at December 31, 2018 and 2017, respectively.

The sensitivity of all the Group's financial instruments to a reasonably possible change in the exchange rate, with all other variables held constant, in the Group's income before income tax (due to changes in fair value of monetary assets and liabilities) as at December 31, 2018 and 2017 follows:

	Peso Weakens (Strengthens)	Sensitivity to pretax income
2018	**₱0.70**	**₱93,960**
	(0.70)	**(93,960)**
2017	₱0.40	₱59,280
	(0.70)	(103,740)

There is no other impact on the Group's equity other than those already affecting the consolidated statements of income.

Interest Rate Risk
The Group's exposure to the risk of changes in market interest rate relates to quoted fixed and floating debt instruments and floating-rate long-term debt.

Floating rate instruments expose the Group to cash flow interest rate risk, whereas, fixed interest rate instruments expose the Group to fair value risk. The Group regularly monitors the market interest rate movements and manages its interest rate risks by using a mix of fixed and variable rates.

The following tables set out the carrying amount, by maturity, of the Group's financial instrument that is exposed to cash flow interest rate risk:

Long-term debts	<1 year	1-5 years	>5 years	Total
2018	**₱118,970**	**₱503,265**	**₱785,297**	**₱1,407,532**
2017	1,635,178	484,398	864,813	2,984,389

Management believes that cash generated from operations is sufficient to pay for its obligations under the loan agreements as they fall due.

The sensitivity to a reasonably possible change in the interest rate (in basis points), with all other variables held constant, in the Group's income before income tax and equity as at December 31, 2018 and 2017 are as follows:

		Change in interest rate (in basis points)	Sensitivity to income before income tax	Sensitivity to equity
2018	**Financial assets**	**+100**		**₱36,153**
		-100		**(36,153)**
	Long-term debts	**+100**	**(₱14,075)**	
		-100	**14,075**	
2017	Financial assets	+100		₱50,977
		-100		(50,977)
	Long-term debts	+100	(₱29,844)	
		-100	29,844	

The impact on the Group's income before income tax is caused by changes in the interest of the floating-rate long-term debt, while the impact on the Group's equity is caused by the changes in the market value of quoted debt due to interest rate movements. The impact on the Group's equity excludes the impact on transactions affecting the consolidated statements of income.

Equity Price Risk
Equity price risk is the risk to earnings or capital arising from changes in stock prices relating to its quoted equity securities. The Group's exposure to equity price risk relates primarily to its financial assets on various stocks of listed companies.

The Group's policy is to maintain the risk to an acceptable level. Movement of share price is monitored regularly to determine impact on its financial position.

The table shows the sensitivity to a reasonably possible change in equity prices of quoted equity instruments as at December 31, 2018 and 2017, except equity-linked investments.

The equity impact is arrived using the reasonably possible change of the relevant market indices and the specific adjusted beta of each stock the Group holds. Adjusted beta is the forecasted measure of the volatility of a security or a portfolio in comparison to the market as a whole.

	Average change in market indices (in percentage)	Sensitivity to equity
2018	**21.24%**	**₱24,551**
	-21.24%	**(24,551)**
2017	12.36%	₱31,258
	-12.36%	(31,258)

Capital Management
The Group considers its equity as capital. Its primary objective in capital management is to maintain a strong credit rating in order to support its business and maximize shareholder value.

The Group manages its capital structure and makes adjustments to it, in light of changes in economic conditions. To maintain or adjust the capital structure, the Group may issue new shares or declare dividend payments to shareholders. No changes were made in the objectives, policies or processes during the years ended December 31, 2018 and 2017.

The Group monitors capital using the debt-to-equity ratio, which is total liabilities divided by equity. The Group's policy is to keep the debt-to-equity ratio to not more than 1:1. Total liabilities include trade and other payables, income tax payable, other current liability, short-term and long-term debts, long-term payable, deferred income tax liabilities, pension liability, provision for mine rehabilitation and decommissioning and deferred income.

The Group considers the following as capital:

	2018	2017
Capital stock	**₱6,849,836**	₱3,808,665
Treasury stock	**(20,366)**	–
Additional paid-in capital	**8,262,455**	8,262,455
Share in cumulative translation adjustment	**780,412**	564,152
Net valuation gains (losses) on financial assets	**(92,504)**	163,935
Cost of share-based payment plan	**240,003**	137,635
Asset revaluation surplus	**31,714**	32,097
Retained earnings:		
Unappropriated	**11,794,529**	15,392,459
Appropriated	**1,818,628**	1,095,583
NCI	**3,786,123**	3,761,207
	₱33,450,830	₱33,218,188

The table below shows the Group's debt-to-equity ratio as at December 31, 2018 and 2017.

	2018	2017
Total liabilities (a)	**₱12,581,677**	₱12,518,911
Equity (b)	**33,450,830**	33,218,188
Debt-to-equity ratio (a/b)	**0.38:1**	0.38:1

38. **Financial Instruments**

The following method and assumptions were used to estimate the fair value of each class of financial instruments for which it is practicable to estimate such values:

Cash and Cash Equivalents and Short-term Cash Investments
The carrying amounts of cash and cash equivalents and short-term cash investments approximate their fair value due to the short-term nature and maturity of these financial instruments.

Trade and Other Receivables, Trade and Other Payables and Short-term Debts
Similarly, the carrying amounts of trade and other receivables, trade and other payables and short-term debts approximate their fair values due to the short-term nature of these accounts.

Loan Receivable
The carrying amount of loan receivable, which is the transaction price, approximates its fair value.

Long-term Negotiable Instruments
The carrying amount of long-term negotiable instruments approximate their fair values since interest are earned based on long-term cash investment rates.

Financial Assets at FVOCI and FVTPL and AFS Financial Assets
The fair values were determined by reference to market bid quotes as at the end of the financial reporting period. Upon adoption of PFRS 9, the Group used the net asset approach with consideration of lack of marketability discount and lack of control discount in determining the fair value of unquoted equity securities since the fair value measurement is unobservable (Level 3)

Financial Assets at Amortized Cost
The carrying amount of financial assets at amortized cost, which is measured using the EIR, is calculated by taking into account any discount or premium on acquisition and fee or costs that are an integral part of the EIR.

Long-term Debts and Long-term Payable
The fair values of long-term debts and long-term payable are based on the present value of future cash flows discounted using applicable risk free rates for similar types of loans adjusted for credit risk.

Fair Value Hierarchy
The Group uses the following hierarchy in determining and disclosing the fair value by valuation technique:

- Quoted prices in active markets for identical asset or liability (Level 1);
- Those involving inputs other than quoted prices included in Level 1 that are observable for the asset or liability; either directly (as prices) or indirectly (derived from prices; Level 2); and
- Those inputs for assets or liability that are not based on observable market date (unobservable inputs; Level 3).

	2018			2017		
	Level 1	**Level 2**	**Level 3**	Level 1	Level 2	Level 3
Assets measured at fair value:						
Financial assets at:						
FVOCI	**₱2,608,301**	**₱–**	**₱–**	₱–	₱–	₱–
FVTPL	**1,623,792**	**–**	**382,854**	–	–	–
AFS financial assets						
Debt securities	**–**	**–**	**–**	5,097,660	–	–
Equity securities	**–**	**–**	**–**	1,353,957	–	–
	₱4,232,093	**₱–**	**₱382,854**	₱6,451,617	₱–	₱–

As at December 31, 2018 and 2017, the fair value at the close of the business of the quoted debt and equity securities is the quoted market price (Level 1) and the fair value of unquoted equity securities is determined using the net asset approach since the fair value measurement is unobservable (Level 3).

As at December 31, 2018 and 2017, there were no transfers between Level 1 and Level 2 fair value measurements and no transfers into and out of Level 3 fair value measurements.

39. Significant Agreements and Other Matters

Significant Agreements

a. Loan Agreement

East Coast
In relation to the Supplemental Agreement executed by CMC and East Coast on December 18, 2015, CMC and East Cost executed a Loan Agreement wherein CMC granted East Coast a loan facility amounting to ₱1,000.0 million with an interest rate of 3.00% p.a. The loan was issued in two tranches of ₱150.0 million in October 2015 and ₱850.0 million in December 2015. As payment for the loan, CMC shall deduct 50% of the commission and royalties, net of withholding tax and interest, each time a commission, royalty or additional royalty is paid by CMC to East Coast. The loan is secured by a Pledge Agreement between CMC and East Coast

covering the latter's rights, interests, receivables, obligations, and liabilities over the Mineral Production Sharing Agreements (MPSA) on the Cagdianao property owned by East Coast (see Note 39e).

The current portion of loan receivable amounting to ₱146.2 million and ₱92.3 million was included under "Trade and other receivables", while the noncurrent portion amounting to ₱576.9 million and ₱767.6 million was included under "Other noncurrent assets" as at December 31, 2018 and 2017, respectively (see Notes 5 and 13). Interest income from the loan amounted to ₱24.3 million, ₱27.1 million and ₱29.4 million in 2018, 2017 and 2016, respectively (see Note 29).

b. Throughput Agreements

THNC
On October 4, 2010, TMC and THNC executed a Throughput Agreement wherein TMC will construct the pier facilities within the TSEZ pursuant to its role as Developer. The TSEZ is located within the Surigao Mineral Reservation, an area declared for mineral development pursuant to Proclamation 391, under the supervision of the DENR that issued an "Order to Use Offshore Area" dated September 20, 2010 to TMC for the use of such portion of the Surigao Mineral Reservation for the construction of the pier facilities. In relation to this, THNC entered into a Registration Agreement with the PEZA to construct and operate a mineral processing plant within the TSEZ as an Ecozone Export Enterprise.

Under the agreement, TMC will make available the pier facilities and provide certain services to THNC in consideration for usage fees and service fees to be paid by the latter starting April 2011 until 2031, unless terminated earlier. The usage fee amounted to US$1.3 milion for each semi-annual period to be paid on or before October 10 and April 10.

THNC also agrees to pay service fee that will be agreed upon by both parties which shall be billed on a monthly basis.

Prior to the commencement date, THNC may also request TMC to use any part of the constructed pier facilities, which is ready for use, upon payment of reasonable compensation which shall be mutually agreed by TMC and THNC.

In 2018, 2017 and 2016, service revenues from usage of pier facilities of TMC amounted to ₱154.7 million, ₱135.2 million and ₱127.9 million, respectively (see Note 34).

CBNC
Under the agreement, CBNC shall pay RTN the price which consists of all its direct costs for the pier facilities which includes but not limited to, financial costs, maintenance costs and tax as well as indirect costs directly used for the pier facilities and the services as agreed by the parties. CBNC shall pay to RTN in US$, as a part of such financial costs, the amounts to be paid by RTN to SMM such as interests and loan repayments pursuant to the Omnibus Agreement made and entered into by and between RTN and SMM. The agreement shall continue for twenty-five (25) years after November 25, 2002 unless terminated earlier.

c. Memorandum of Understanding (MOU)
On September 14, 2009, the Parent Company and TMC entered into a MOU with SMM. Pursuant to the terms thereof, the Parent Company and SMM will move ahead on a joint venture basis to build a nickel-cobalt processing plant (the Project) using the HPAL technology to be

located within the TMC's mine in Surigao del Norte, while TMC will supply low-grade nickel ore to the plant over the life of the Project. The estimated cost of the Project is US$1,420.0 million, which further increased to US$1,590.0 million, over a three-year construction period, which started in the last quarter of 2010. The plant will have an annual capacity of 51,000 dry metric tons of mixed nickel-cobalt sulfide over an estimated thirty (30) year project life. The MOU provides that the equity share of the Parent Company and SMM shall be 20%-25% and 75%-80%, respectively.

Following the MOU is the THNC's Stockholders Agreement (the Agreement) entered into by the Parent Company, SMM and Mitsui on September 15, 2010 stating that the Project will be undertaken by THNC, a company that will be jointly owned by the Parent Company, SMM and Mitsui with equity interest of 22.5%, 62.5% and 15.0%, respectively.

Pursuant to the sale of 12.5% equity interest of the Parent Company to SMM in October 2016, the shareholding ratio of the Parent Company and SMM is 10% and 75%, respectively, as at December 31, 2018 and 2017 (see Note 10).

The Agreement also sets forth the respective rights and obligations of the Parent Company, SMM and Mitsui, including their responsibilities in respect of financing the US$1,420.0 million, which further increased to US$1,590.0 million, project investment undertaken by THNC.

Also, under the Agreement, the Parent Company, SMM and Mitsui agreed to make loans to THNC or guarantee the repayment of THNC's obligations in accordance with the financial requirements of THNC and in proportion to their shareholding ratio in THNC.

Pursuant to the Agreement, the Parent Company, SMM and Mitsui agreed to extend loans to THNC amounting to a total of US$1,224.3 million as at December 31, 2018 and US$1,154.3 million as at December 31, 2017 to cover THNC's working capital requirement, loan repayments, capital investment and/or construction of tailings dam.

The Agreement shall terminate upon the dissolution of THNC.

d. Sales Agreements

Nickel Ore Sale Agreement with PAMCO and Sojitz (see Note 34a)

Nickel Ore Supply and Service Agreement with CBNC (see Note 34a)

Nickel Ore Supply Agreement with THNC (see Note 34a)

Materials Handling Agreement with THNC (see Note 34a)

Nickel Ore Supply Agreements with Chinese Customers
HMC, CMC, RTN and TMC have ore supply agreements with a number of Chinese customers, each for a fixed tonnage at specific nickel grades and iron content.

The fixed tonnage of ore is generally the volume of expected delivery within a few months. Sale of ore to Chinese customers amounted to ₱10,899.8 million, ₱9,391.3 million and ₱9,084.7 million in 2018, 2017 and 2016, respectively (see Note 32).

Nickel Ore Supply Agreements with Queensland Nickel Pty Ltd (QNI)
RTN entered into agreements with QNI covering the sale of RTN's ore products at a fixed tonnage and specific nickel grade and iron content. Sale of ore to QNI amounted to nil in 2018 and 2017 and ₱68.9 million in 2016 (see Note 32).

Nickel Ore Supply Agreement with Mitsubishi Corporation RTM International Pte., Ltd. and Mitsubishi Corporation RTM Japan Ltd. (Mitsubishi)
RTN, TMC and HMC entered into an agreement with Mitsubishi, a Singapore and Japan-based corporations, covering the sale of its ore products. Under the terms of the agreement, the ore sales are benchmarked to China prices on the basis of a negotiated price per WMT of ore. Mitsubishi shall pay 85% of the provisional invoice amount upon receipt of the required documents and pay the final payment of each shipment after the final dry weight and applicable assay have been determined. Under the agreement, the end user of the material is PAMCO. Sale of ore to Mitsubishi amounted to ₱281.0 million, ₱724.8 million and ₱257.8 million in 2018, 2017 and 2016, respectively (see Note 34).

e. Mining Agreements

i. *MPSA*

RTN
On June 4, 1998, the Government approved the conversion of RTN's Mining Lease Contracts under the old mining regime into an MPSA with the Government pursuant to the Philippine Mining Act of 1995. The MPSA allows RTN to explore, develop and continue mining operations for nickel ore within the contract area covering 990 hectares in the Municipality of Bataraza, Southern Palawan Island. Under RTN's Environmental Compliance Certificate (ECC), however, 144 hectares of the contract area are excluded from mining operations, being located within an area classified as "core zone" where mining is prohibited under current regulations of the Palawan Council for Sustainable Development (PCSD).

On April 28, 2005, RTN and the Government entered into a second MPSA covering 85 hectares in the Municipality of Bataraza, which allows RTN to mine limestone in Sitio Gotok. Limestone being mined by RTN pursuant to this second MPSA is being sold to CBNC for the latter's Coral Bay HPAL plant and to a third party.

Under both MPSAs, RTN pays a 2% excise tax on gross revenues as provided in the Philippine National International Revenue Code as the Government's share in its output. Both MPSAs are valid for twenty-five (25) years from issuance and renewable for another term of not more than twenty-five (25) years at the option of RTN, with approval from the Government.

On June 20, 2003, RTN submitted an Application for MPSA covering previously approved Mining Lease Contracts over an area of 4,274 hectares within the Municipalities of Bataraza and Rizal. Most of the contract area is within the core zone and the application is pending.

On May 30, 2008, the PCSD issued a resolution interposing no objections to the revision by the Municipality of Bataraza of its Environmentally Critical Areas Network map that, among others, seeks to reclassify the core zone within the contract area into a mineral development area. The reclassification was approved by the Municipal Development Council of the Municipality of Bataraza on November 18, 2009, and subsequently approved by the Provincial Board on January 5, 2010.

On September 1, 2015, the Strategic Environmental Plan clearance was issued by PCSD to RTN which is a requirement in obtaining ECC approval from DENR. The processing of the Application for MPSA by the MGB is consequently under way.

HMC

Taganaan Nickel Project

On July 25, 2008, the Government approved the conversion of HMC's Mining Lease Contract into an MPSA, which allows HMC to explore, develop and continue mining operations for nickel ore within the contract area covering 773.77 hectares in the Municipality of Taganaan, Surigao del Norte. Under the MPSA, HMC pays the Government a 2% excise tax and a 5% royalty on gross revenues, as the contract area is within the Surigao Mineral Reservation. The MPSA is valid for twenty-five (25) years from issuance and renewable at the option of HMC, with approval from the Government.

Manicani Nickel Project

On August 13, 1992, HMC and the Government entered into an MPSA, which allows HMC to explore, develop and mine nickel ore within the contract area covering 1,165 hectares in Manicani Island, Municipality of Guiuan, Eastern Samar. Under the MPSA, HMC shall pay the Government a 2% excise tax, a 1% royalty and 10% of its net revenues, defined as gross revenues less all cost items that are deductible for income tax purposes. The MPSA is valid for twenty-five (25) years from issuance and renewable at the option of HMC, with approval from the Government.

On August 2, 2004, the Regional Panel of Arbitrators of the MGB recommended the cancellation of the MPSA as a result of allegations by third parties against the operations of HMC. On September 4, 2009, the Mines and Adjudication Board of the DENR issued a decision setting aside the decision of the Panel of Arbitrators. Hence, the MPSA remains in effect. HMC is currently not conducting mining operations in Manicani.

On May 23, 2016, HMC applied for the renewal of its MPSA in Manicani which expired on August 13, 2017. As at March 14, 2019, HMC is yet to receive the confirmation from DENR.

TMC

On July 28, 2008, the Government approved the conversion of TMC's Operating Contract into an MPSA, which allows TMC to explore, develop and continue mining operations for nickel ore within the contract area covering 4,584.51 hectares in the Municipality of Claver, Surigao del Norte. On June 18, 2009, the MPSA was amended, increasing the contract area to 4,862.71 hectares. The MPSA is valid until July 28, 2033.

Under the MPSA, TMC pays the Government a 2% excise tax and a 5% royalty, as the contract area is within the Surigao Mineral Reservation. The MPSA is valid for twenty-five (25) years from issuance and renewable at the option of TMC, with approval from the Government.

DMC

On July 30, 2007, the Platinum Group Metals Corporation (PGMC) and the Government entered into an MPSA, which allows PGMC to explore, develop and mine nickel ore within the contract area covering 2,392 hectares in the Municipality of Dinapigue, Province of Isabela.

On January 6, 2009, PGMC and DMC executed a Deed of Assignment transferring to DMC all the rights, title and interest in and into the MPSA over the contract area.

Under the MPSA, DMC shall pay the Government a 2% excise tax. The MPSA is valid for twenty-five (25) years from issuance and renewable at the option of DMC, with approval from the Government.

ii. Operating Agreements

TMC

La Salle

On December 18, 2006, TMC entered into an Operating Agreement with La Salle, the holder of an Application for MPSA covering 6,824 hectares in the Municipality of Gigaquit, Surigao del Norte. The Operating Agreement allows TMC to explore, develop and mine nickel ore and limestone once the MPSA is approved, and obliges it to assist La Salle in obtaining the MPSA and to comply with the terms thereof once issued.

The Operating Agreement specifies a royalty to La Salle of 5% for nickel ore and ₱10.00 per metric ton for limestone. Upon signing of the Operating Agreement, TMC made an advance royalty payment of ₱1.0 million repayable by deductions from future royalties at a rate of 25% per year over a period of four (4) years. As at December 31, 2018, the MPSA remains pending.

On January 11, 2016, TMC issued a Notice of Exclusion of the limestone deposit from the Operating Agreement to La Salle. TMC has written-off the deferred charges relating to the limestone development and exploration amounting to nil in 2018 and 2017 and ₱1.5 million in 2016 (see Note 31).

Kepha

On February 14, 2007, TMC entered into an Operating Agreement with Kepha, the holder of MPSA No. 284-2009-XII-SMR covering 6,980.75 hectares in the Municipality of Claver, Surigao del Norte. The Operating Agreement allows TMC to explore, develop and mine nickel ore and limestone and obliges it to comply with the terms of the MPSA.

The Operating Agreement specifies a royalty to Kepha of 5% for nickel ore and ₱10.00 per metric ton for limestone. Upon signing of the Operating Agreement, TMC made an advance royalty payment of US$1.0 million and ₱6.3 million, repayable by deductions from future royalties at a rate of 10% per year over a period of ten (10) years.

On June 19, 2009, the MPSA was issued to Kepha. Under the terms thereof, upon the start of mining operations, TMC shall pay the Government a 2% excise tax and a 5% royalty, as the contract area is within the Surigao Mineral Reservation. The MPSA is valid for twenty-five (25) years from issuance and renewable at the option of Kepha, with approval from the Government. There were no drilling activities related to the Kepha project in 2018 and 2017.

On February 13, 2017, the DENR issued a show cause order directing Kepha to explain why its MPSA should not be cancelled for being allegedly within a watershed, which is protected under the Philippine Mining Act of 1995 and other existing applicable laws, rules and regulations. On February 24, 2017, Kepha replied to the letter stating that based on the MGB Region XIII's downloadable tenement map, the MPSA area is outside of any existing legally proclaimed watershed.

Ludgoron
On August 28, 2007, TMC entered into an Operating Agreement with Ludgoron, the holder of an MPSA with Government issued on July 27, 2007 covering a contract area of 3,248 hectares in the Municipality of Carrascal, Surigao del Sur. The Operating Agreement allows TMC to explore, develop and mine nickel ore and obliges it to comply with the terms of the MPSA.

Under the MPSA, upon the start of mining operations, TMC shall pay the Government a 2% excise tax and a 5% royalty, as the contract area is within the Surigao Mineral Reservation. The MPSA is valid for twenty-five (25) years from issuance and renewable at the option of Ludgoron, with approval from the Government.

Under the Operating Agreement, TMC shall pay Ludgoron a royalty of 5%. Upon signing of the Operating Agreement, TMC made an advance royalty payment of US$1.0 million, repayable by deductions from future royalties at a rate of 10% per year over a period of ten (10) years. In 2009, an additional advances against royalties amounting to ₱10.0 million was made in order to allow Ludgoron to settle a claims conflict.

On October 10, 2014, TMC rescinded and terminated the Operating Agreement with Ludgoron. Ludgoron is obliged to return to TMC the amount of ₱66.8 million which represent advances to claimowners. Ludgoron already paid TMC an amount of ₱10.0 million and will pay additional ₱23.4 million upon approval of MGB of the transfer of the Operating Agreement to Kafugan Mining Incorporated. The remaining balance will be assumed and settled by Kepha as its own valid and legal obligation in due time.

On January 20, 2016, Ludgoron paid an additional ₱23.4 million in relation to the termination of the Operating Agreement with TMC.

<u>CMC</u>
East Coast
On November 19, 1997, CMC entered into a Memorandum of Agreement (MOA) with East Coast, the holder of an MPSA with the Government issued on the same date covering a contract area of 697.05 hectares in the Municipality of Cagdianao, Dinagat Islands. The MOA allows CMC to explore, develop and mine nickel ore and obliges it to comply with the terms of the MPSA.

The MOA expired on November 19, 2007 and was renewed for a period of ten (10) years. In consideration, East Coast was paid ₱100.0 million upon signing of the extension which was recorded as advances to claimowners, repayable over a ten (10) year period at a rate of ₱10.0 million per year. The MPSA is valid for twenty-five (25) years from issuance and renewable at the option of East Coast, with approval from the Government.

Under the MPSA, CMC pays the Government a 4% and 2% excise tax in 2018 and 2017, respectively, and a 5% royalty, as the contract area is within the Surigao Mineral Reservation.

Further, on December 18, 2015, CMC and East Coast executed a Supplemental Agreement to provide for the automatic renewal of the term of the MOA for another twenty-five (25) years, or from 2022 to 2047. The MOA has not been terminated and continues to be in full force and effect subject to the supplemental terms agreed by CMC and East Coast. In consideration of the new term as well as the other conditions contained in the Supplemental Agreement, CMC granted a loan of ₱1,000.0 million to East Coast and paid royalties amounting to ₱150.0 million (see Note 39a). Thereafter, CMC shall pay East Coast commission and royalties as follows:

- Commission equivalent to 3.5% on the gross sales amount of all nickel ore;
- Royalties equivalent to either 7% or 8.75% on the gross sales amount of all nickel ore depending on the monthly average LME nickel settlement price; and
- Additional royalty ranging from ₱10.0 million to ₱50.0 million depending on CMC's audited net income after tax less the additional royalty amount.

The commission expense related to East Coast that is reported under "Marketing" amounted to ₱115.3 million, ₱78.7 million and ₱74.6 million in 2018, 2017 and 2016, respectively.

BOA Exploration Agreement
On October 12, 2004, CMC executed a MOA with Norweah Metals and Minerals Company, Inc. (Norweah) for the exclusive rights to explore, develop, exploit and operate the mineral property subject of MPSA No. 241-2007 covering an area of 226.0235 hectares situated in Boa, Municipality of Cagdianao, Province of Dinagat Islands, Surigao del Norte. The MOA is effective for a ten (10) year period commencing on July 12, 2007, the date the MPSA was approved.

On October 5, 2016, CMC and Norweah entered into a Mutual Rescission of the MOA wherein the parties agreed to free each other from any and all of their respective obligations under the said MOA effective August 31, 2016. As a result, deferred mine exploration costs of ₱5.8 million (₱5.0 million of which was already provided with an allowance for impairment losses) was written off resulting in a loss of ₱0.8 million. Further, advances to claimowners related to the MOA amounting to ₱5.4 million was also written off in 2016 (see Note 31).

DMC
DMC and NiHAO Mineral Resources International Inc. (NiHAO) entered into an Operating Agreement on June 13, 2012, under which NiHAO shall have the exclusive right to explore, operate, mine, develop and process minerals found within DMC's mineral property.

Pursuant to the agreement, DMC shall pay NiHAO an amount equivalent to 90% of the invoice value of the nickel ore sold by DMC to third parties in consideration of the services to be performed by NiHAO. This agreement superseded the General Contractor Agreement entered into by NIHAO with DMC on March 5, 2012. The General Contractor Agreement was executed to appoint NiHAO as DMC's general contractor for the Isabela Nickel Project.

In connection to the acquisition of DMC by NAC, NiHAO's operating rights over the Isabela Nickel Project will be converted into preferred shares of DMC, which shares shall be entitled to dividends corresponding to 20% of operating income, net of income tax, subject to Shareholder's Agreement to be executed between NiHAO and DMC. As at December 31, 2018, the Shareholder's Agreement is not yet executed.

f. Loan Guarantee/Substitution Agreement

NAC
Under a loan guarantee/substitution agreement dated December 9, 2011 between the Parent Company and SMM, the latter agreed to substitute for the Parent Company to make loans or guarantee the repayment of THNC pursuant to the Stockholders Agreement dated September 15, 2010.

In consideration of the loans and guarantee made by SMM, the Parent Company shall pay to SMM an annual fee equal to 1% of the relevant outstanding amount, which is payable every February 21 and August 21 of each year.

On January 26, 2015, December 18 and December 3, 2013, the Parent Company and SMM entered into another loan guarantee/substitution agreement with respect to the new loan agreement made and entered by THNC and SMM on August 4, 2014, December 3 and January 31, 2013, respectively. The annual fee is also equal to 1% of the relevant outstanding amount, which is payable every March 21 and September 21 of each year.

In case of default, such loan guarantee/substitution agreements will be terminated and the Parent Company shall provide loans to THNC or guarantee the repayment of THNC's loans payable. Failure to provide such loans or guarantee shall be considered a default under the Stockholders' Agreement.

The loan guarantee service fee amounting to ₱65.1 million, ₱66.7 million and ₱100.0 million in 2018, 2017 and 2016, respectively, is recorded under "Finance expenses" in the consolidated statements of income (see Note 30).

g. Power Supply Agreements
SURNECO
On October 31, 2013, the Parent Company and SURNECO signed a fifteen (15) year PSA. Under the terms of the PSA, the Parent Company has agreed to construct, operate, and maintain a 10 MW bunker-fired diesel power station under build-operate-transfer scheme and to supply electricity to SURNECO. As defined in the PSA, SURNECO will pay to the Parent Company the monthly fees equal to the capital recovery fee of the power station plus fixed and variable operations and maintenance fee, fuel cost and any other applicable taxes.

The total estimated cost to construct the 10 MW bunker-fired diesel power station is about ₱1,000.0 million, which was appropriated from its retained earnings in 2017 (see Note 18). The power plant underwent endurance test and commissioning from September 26 to October 12, 2016 to determine its readiness to operate and dispatch power to SURNECO through the grid's 69KV power system. Minor modifications were identified and incorporated into the plant design. The impact of the earthquake in February 2017 in Surigao City partially affected the installation at the connection asset, hence, repairs were done. The power plant was finally re-connected to the grid in April 2017 and is awaiting for the Certificate of Compliance (COC) from the ERC.

However, while the application for COC is on process, ERC issued the PAO for six (6) months from July 10, 2017 to January 9, 2018 and subsequently extended for another three (3) six (6) months from January 10, 2018 to July 9, 2018, July 10, 2018 to January 9, 2019 and January 10, 2019 to July 9, 2019. Currently, the ERC is scheduling the deliberation of the Point to Point Connection Agreement between the Parent Company and SURNECO to ascertain its validity as a requirement prior to the final issuance of the COC.

The Company and SURNECO agreed to commence the commercial operations of the three (3) generating units starting on June 26, 2018 for the first generator set, December 26, 2018 for the second generator set and June 26, 2019 for the third generator set. Each generating unit has a contracted capacity of 3.33 MW. The plant operates based on the agreed schedule and in consonance with the load nominations from SURNECO.

Total income from and cost of power generation during testing and commissioning period amounted to ₱6.6 million and ₱18.2 million, respectively, in 2016 and nil in 2018 and 2017 (see Note 31).

In 2018, revenue from sale of power and rent income, which pertains to the capital recovery fee, amounted to ₱16.1 million and ₱22.4 million, respectively.

Palawan Electric Cooperative (PALECO)
Bunker Supply
In July 2015, EPI and PALECO entered into a PSA for the supply of electricity, which will be generated from modular and land-based bunker-fired power stations, collectively the "Bunker Power Stations", with a contracted capacity of 15 MW up to 25 MW.

Under the PSA, EPI shall design, develop, construct, complete, test and commission, operate and maintain the Bunker Power Stations, as well as all activities related or incidental thereto. Commencing on the completion date and continuing up to the 20th year from effective date, as defined in the PSA, PALECO shall pay EPI an amount equal to the summation of the Bunker Power Costs of the generating units plus reserve power costs, plus any VAT and any other applicable taxes, fees, and charges. PALECO shall also pay EPI a payment security, as defined in the PSA. As at December 31, 2018, construction of the sub-transmission facility has yet to be approved by the ERC.

Solar Supply
In 2015, EPI entered in a PSA with PALECO for the construction and development of a 10 MW AC Solar Photovoltaic Power Station (the "Solar PV Power Station"). Under the PSA, EPI shall design, engineer, develop, construct, complete, test, commission, finance, operate and maintain the Solar PV Power Station and all activities related or incidental thereto of PALECO. All costs in connection with the building of the Solar PV Power Station shall be borne by EPI, and shall be responsible for arranging all necessary funding including any available preferential credit. During the commissioning date, PALECO shall put up, a commissioning output at a rate equivalent to the adjusted operation and maintenance component plus any VAT and any other applicable taxes, fees, and charges. Following the commercial operation date and continuing up to the 20th year from effective date, as defined in the PSA, PALECO shall pay EPI monthly fees equal to the capital recovery fee of the Solar PV Power Station plus fixed operations and maintenance fee and any VAT and any other applicable taxes. As at December 31, 2018, construction of the sub-transmission facility has yet to be approved by the ERC.

Oriental Mindoro Electric Cooperative (ORMECO) and Occidental Mindoro Electric Cooperative (OMECO)
In February 2014, EPI entered into separate PSAs with ORMECO and OMECO. Under the terms of the PSAs, EPI is committed to sell and deliver approximately 20 MW each of geothermal power from the Montelago Geothermal Power Project to ORMECO and OMECO for a period of approximately twenty-five (25) years. The PSAs are renewable upon the agreement of the parties and approval of the ERC.

On November 3, 2014 and December 1, 2014, EPI was granted by the ERC of the Final Authorities on the PSAs with OMECO and ORMECO, respectively. On November 24, 2014, EPI and MGPC entered into a Deed of Assignment for the transfer of EPI's rights and obligations under GRESC No. 2010-02-013 to MGPC or the Montelago Geothermal Energy Project, including the said PSAs.

On December 5, 2014, EPI requested from the DOE the approval of the transfer of GRESC No. 2010-02-013 to MGPC. On February 16, 2016, the DOE approved the said transfer.

In connection with the assignment of the service contract to MGPC, the refundable deposits pertaining to compliance with the PSAs with OMECO and ORMECO were transferred by EPI to MGPC being the Project Entity.

TeaM (Philippines) Energy Corporation (TPEC)
On December 28, 2016, MEI entered into an interim supply agreement with TPEC for the supply and delivery up to the Sual Plant Gate, the interim energy requirement of 3.0 MW at 100% load factor for MEI and to its contestable customers. MEI shall pay the amount billed on a monthly basis. The contract is from February 26, 2017 until February 25, 2019. On February 6, 2017, TPEC agreed to a reduction of contract capacity from 3.0 MW to 1.5 MW, subject to the payment of unwinding costs in the amount of $53,000 or ₱2.6 million. MEI purchased power from TPEC amounting to ₱39.0 million in 2018, ₱21.4 million in 2017 and nil in 2016 which was wheeled and conveyed to the facilities of the MEI's customers (see Note 23).

h. Service Contracts

Solar Energy Service Contract No. 2015-01-099
On January 20, 2015, EPI entered into a SESC No. 2015-01-099 with the DOE which grant EPI the right to explore, develop and utilize the solar energy resources within the contract area of 324 hectares in the province of Pili, Camarines Sur.

Under the SESC, EPI assumes all the technical and financial risks without any guarantee from the Philippine Government and shall not be entitled to reimbursement for any expense incurred in connection with the SESC.

The SESC carries a non-extendible two (2) year period of pre-development stage, which involves the preliminary assessment and feasibility study. The SESC shall remain in force for the remainder of twenty-five (25) years from date of effectivity if the solar energy resources are discovered to be in commercial quantities. If EPI has not been in default of any material obligations under the SESC, the DOE may grant EPI an extension of the SESC for another twenty-five (25) years. The full recovery of the project development costs incurred in connection with the SESC is dependent upon the discovery of solar energy resources in commercial quantities from the contract area and the success of future development thereof. EPI has not yet started the exploration and pre-development activities.

Solar Energy Service Contract No. 2013-10-039
On October 31, 2013, Jobin entered into a SESC with the DOE. The SESC covers an area of approximately 2,997 hectares in the municipalities of Morong and Hermosa, in the province of Bataan. The SESC is for a period of twenty-five (25) years, inclusive of a two (2) year pre-development stage, and renewable for another twenty-five (25) years. The government share under the SESC shall be 1% of the gross income from the sale of electricity generated from the solar energy operations.

On August 28, 2015, Jobin was granted a Certificate of Confirmation of Commerciality by the DOE for its 100.44 MW Sta. Rita Solar Power Project located in Mt. Sta Rita, SBFZ. The certificate converts the project's SESC from exploration/pre-development stage to the development/commercial stage.

On March 11, 2016, Jobin's Certificate of Confirmation of Commerciality originally rated for the 100.44 MW was amended by DOE to 7.14 MW and 92.86 MW Sta. Rita Solar Power Project Phase I and II, respectively.

Wind Energy Service Contract (WESC) No. 2013-10-062
On October 31, 2013, Jobin entered into a WESC with the DOE. The WESC covers an area of approximately 2,997 hectares in the municipalities of Morong and Hermosa, in the province of Bataan. The WESC is for a period of twenty-five (25) years, inclusive of a three (3) year pre-development stage, and renewable for another twenty-five (25) years. The government share under the WESC shall be 1% of the gross income from the sale of electricity in the wind project.

Geothermal Renewable Energy Service Contract No. 2014-02-054
GRESC No. 2010-02-013, which covers an approximate area of 3,914 hectares in the three barangays of Montelago, Montemayor and Melgar-B in Oriental Mindoro, involves the development of geothermal well clusters and a power plant. The steam extracted from the geothermal wells will power a geothermal power station with an output capacity of at least 20 MW. Once completed, the addition of geothermal power into the present mix of Mindoro's electricity sources will have a stabilizing effect on the grid where the entire island is located.

The Project is in the exploration stage as at December 31, 2018.

As RE Developer, EPI undertakes to provide financial, technical, or other forms of assistance with the DOE, and agrees to furnish the necessary services, technology, and financing for the geothermal operations. EPI shall assume all financial risks such that if no geothermal resources in commercial quantity is discovered and produced, EPI shall not be entitled to reimbursement for any expenses incurred in connection with the GRESC.

Certificate of Registration No. 2014-02-054 shall remain in force for the remainder of twenty-five (25) years from date of effectivity if geothermal resources in commercial quantity are discovered during the pre-development stage, or any extension thereof. Moreover, if EPI has not been in default in its obligations under the GRESC, the DOE may grant an additional extension of twenty-five (25) years, provided that the total term is not to exceed fifty (50) years from the date of effectivity.

On November 24, 2014, EPI and MGPC entered into a Deed of Assignment for the assignment of EPI's rights and obligations under the GRESC to MGPC. On December 5, 2014, EPI applied with the DOE to transfer the GRESC to MGPC. The DOE approved EPI's application on February 16, 2016 under Certificate of Registration No. 2016-02-060.

Geothermal Renewable Energy Service Contract No. 2010-02-010
By virtue of RA 9513 known as the Renewable Energy Act of 2008, on February 1, 2010, the DOE issued to BGI GRESC No. 2010-02-010, converting its Geothermal Services Contract (GSC-09) issued on July 10, 2008 for the exploration, development and exploitation of geothermal resources covering the geothermal field in Biliran Province (previously a municipality of Leyte). By virtue of such agreement, BGI is entitled to enjoy an income tax holiday for a period of seven (7) years from the start of its commercial operation, duty free importation of machinery for ten (10) years, and 0% VAT, among others.

Geothermal Renewable Energy Service Contract No. 2017-03-056
This GRESC is a spin-off of the above BGI GRESC, issued by the DOE, and delineates the northern area of the island province of Biliran as a separate BGI exclusive development zone with a greenfield status.

i. Sub-transmission Service Agreement (SSA) with PALECO
In 2015, EPI entered into a SSA with PALECO for the installation of 69kV sub-transmission facilities and associated components (substations), and the connection of said facilities to PALECO's distribution system for the delivery of reliable power supply to the municipalities of El Nido, Taytay, San Vicente and Roxas (the "Municipalities") in the province of Palawan. Under the SSA, EPI shall develop, design, construct, install, test and commission, and finance the sub-transmission lines and substations in the Municipalities. Commencing on the completion date and continuing up to the 20th year from effective date, as defined in the SSA, PALECO shall pay monthly fees as defined in the SSA, plus any VAT and any other applicable taxes, fees and charges. PALECO shall also pay EPI a payment security equivalent to one month fee, which shall be in the form of a thirty (30)-day revolving letter of credit from a financial institution and with a maturity of three hundred sixty five (365) days. As at December 31, 2018, ERC's approval of the sub-transmission facility has not yet been acquired.

j. Assignment of GRESC from Constellation Energy Corp. (CEC) to EPI
On January 18, 2013, EPI entered into a MOA with CEC wherein the parties agreed that the former, eventually through a Project Company, shall develop and undertake the 20 MW Geothermal Power Plant Project (Project) initially developed by CEC by virtue of the GRESC No. 2010-02-013 granted by the DOE. On the same date, the parties entered into a Deed of Assignment for the assignment of CEC's rights and obligations under the GRESC to EPI.

In compliance with provisions of the MOA and Deed of Assignment:

- On January 25, 2013, EPI applied with the DOE to officially register EPI as RE Developer and effectively recognize EPI's ownership of the GRESC. The DOE approved EPI's application on February 14, 2014.
- On February 3, 2014, EPI was awarded the bid from and has signed the PSA with ORMECO. In the same period, the amount of US$750,000 was paid to CEC.
- On November 3, 2014 and December 1, 2014, EPI was granted by the ERC Final Authority on the PSAs with OMECO and ORMECO, respectively. However, EPI filed a Motion because certain terms are not acceptable to EPI. As at December 31, 2018, the Motion is still pending with the ERC.
- On May 7, 2014, EPI incorporated MGPC as the Project Company.
- On September 21, 2015, EPI made an additional advance payment of US$350,000 to CEC and the remaining balance as at December 31, 2016 is US$1,400,000.
- On June 23, 2017, EPI, MGPC and CEC executed a MOA transferring to MGPC the obligation to pay the fees to CEC. Accordingly, of the remaining amount of US$1,400,000, MGPC paid US$525,000 to CEC in 2017 and the balance of US$875,000 was paid in 2018.

k. Participation and Shareholder's Agreement
In May 2011, the Parent Company and SMM signed a Participation and Shareholder's Agreement containing terms of SMM's expected equity participation in CExCI. Under the terms of the Agreement, SMM will invest US$1.5 million in CExCI for 25% equity. Once such funds have been exhausted, SMM has the option to invest US$2.8 million for an additional 15% equity which would bring its total equity in CExCI to 40%. SMM did not exercise its option to make the additional investment and the said agreement was terminated.

CExCI has identified a new property for exploration and development in the province of Zambales under Newminco, which is prospective for gold and copper. In relation to this, SMM will put up an additional US$2.8 million to increase its ownership from 25% to 40%. On November 24, 2015, the shareholders of CExCI agreed to enter into a new Participation and Shareholder's Agreement to set out the rights and obligations of the shareholders in relation to the conduct of the business of CExCI. The new agreement also causes CExCI to convert the existing advances from shareholders amounting to ₱37.2 million into equity, based on the initial equity proportion of shareholders, by issuing shares out of the unissued authorized capital stock of CExCI at a premium. CExCI has filed the application for the conversion of advances into equity with the SEC. As at December 31, 2018, CExCI is still waiting for the SEC's approval of the conversion of advances into equity.

On December 18, 2015, the BOD of CExCI approved the increase in authorized capital stock of the latter. Upon approval of the SEC of the application for increase in authorized capital stock of CExCI, the additional investment of SMM amounting to US$2.8 million, which is equivalent to ₱131.9 million, will be converted into equity. After the conversion, the Parent Company and SMM's equity in CExCI shall be 57% and 40%, respectively.

l. <u>Marketing Agreement with Mitsubishi</u>

RTN, TMC and HMC entered into a Marketing Agreement with Mitsubishi, wherein the latter will provide the services set forth below:

a) To use its reasonable endeavors in collecting, studying and analyzing the market information related to nickel ore, iron ore, nickel pig iron, and stainless steel;
b) To periodically report market information defined in the marketing agreement;
c) To make efforts to introduce customers to RTN, TMC and HMC and provide support to the Group in negotiating the price and terms and conditions of sales contracts of the products by and between the Group and customers; and
d) To monitor and assess trends of customers and support RTN, TMC and HMC to create an effective pricing strategy and marketing plan.

Marketing fees of 3.5% shall be charged to RTN, TMC and HMC based on the total amount of revenue on free-on-board price stated in the invoices issued by RTN, TMC and HMC to each customer.

Marketing fees charged by Mitsubishi amounted to ₱24.9 million, ₱17.8 million and ₱21.3 million in 2018, 2017 and 2016, respectively.

m. <u>Lease Agreements</u>

Lease of Project Area from SBMA

On April 29, 2015, Jobin entered into a fifty (50) year lease agreement with SBMA for the use of the 800 hectares project area of the solar and wind projects at Mt. Sta. Rita in Subic on a monthly lease payment amounting to ₱34,000 per MW installed on the leased area based on the allocation approved by the DOE.

Jobin also agreed to various investment and social commitments as follows:

- infuse an investment at around US$200.0 million on the leased areas in the form of the lessee's machineries, equipment, parts, construction, labor and supplies within three (3) years from approval of capacity by the DOE or from October 29, 2015.
- introduce developments on the leased areas based on the annual work program approved by DOE.
- install utility post for the transmission lines from the leased areas to service substation of National Commission for Indigenous Peoples (NCIP) in coordination with Subic Enerzone Corp.
- compensate the Indigenous Cultural Community of Aeta for its share amounting to 5% of the monthly rental per MW installed by the lessee.
- build an access road from the leased area to the public road and renewable energy park for education and tourism.

On June 9, 2016, the agreement was amended and additional terms were added such as upon execution of member/affidavit of waiver and quitclaim of trees planted in the leased property, Jobin shall advance the amount of ₱7.02 million as compensation for the trees planted by the farmers/members of the Mabiga Community Farmers Association Inc. (MCFAI) within the initial 256 hectares of land in the leased property affected by the wind and solar project, wherein the amount paid in advance shall be considered as advanced rental payment and shall be deducted from Jobin's rental obligation in the future.

On March 21, 2017, the agreement was amended and additional conditions were added such as upon execution of member/affidavit of waiver and quitclaim of trees planted in the leased property, Jobin shall advance the amount of ₱2.7 million as compensation for the trees planted by the farmers/members of the MCFAI occupying the six (6) farm lots with a total area of 71.45 hectares in the leased property affected by the solar and wind project, wherein the said amount paid shall be considered advanced rental payment and shall be deducted from its rental obligation in the future

Lease of NGCP Facility
On September 18, 2015, Jobin entered into a fifty (50) year lease agreement with SBMA for the use of a 280 sq. m. building and 2,300 sq. m. lot located near the NGCP Facility, Subic Gateway Park, SBFZ on a monthly rental of ₱0.03 million and ₱0.22 million, respectively.

The lease agreement are also subject to the following terms and condition:

- in addition to the monthly rental, Jobin shall pay 5% of the appraised value of the leased property as share of the Aeta Community for areas covered by Certificate of Ancestral Domain Title;
- Jobin is given a grace period of two (2) years (free of rent) between the period September 12, 2015 to September 11, 2017; and
- the lease agreement is subject to a 6% annual escalation beginning on the second year of the lease and imposable annually thereafter.

The future minimum rent payable under non-cancellable operating lease are as follows:

	2018	2017
One (1) year	**₱3,714**	₱3,109
After one (1) year but not more than five (5) years	**22,192**	18,578
More than five (5) years	**848,009**	759,365
	₱873,915	₱781,052

Lease Agreement with THNC
On October 31, 2013, TMC and THNC executed a lease agreement wherein TMC will lease the land within the TSEZ to the lessee. The TSEZ leased area of approximately 675 hectares is located at Barangays Taganito and Hayanggabon, Claver, Surigao del Norte. The duration of the lease agreement shall be for a period of twenty (20) years starting January 1, 2013, however, rental rate shall be annually agreed by both parties. TMC's rental income from the said lease amounted to ₱6.7 million in 2018, 2017 and 2016 (see Notes 31 and 34).

In the above lease agreement, it was agreed by TMC and THNC that the option fee of ₱83.8 million received in 2010 shall be treated as advance rental and deducted from the annual rental fee. The same shall be equally applied to each year of the lease term or ₱4.2 million each year of the twenty (20) year lease term.

As at December 31, 2018 and 2017, the carrying value of deferred income - net of current portion amounted to ₱54.5 million and ₱58.7 million, respectively.

Lease Contract with the DENR
TMC is a party to a lease contract dated April 10, 2003 with the DENR over a tract of foreshore land located at the Taganito mine comprising an area of approximately 12,000 sq. m. The foreshore lease has a term of twenty-five (25) years from the date of issue, unless terminated earlier. The DENR may renew the foreshore lease for another twenty-five (25) years, at its option. In accordance with the foreshore lease, TMC constructed permanent improvements appropriate for the wharf to facilitate the barging of mine ore to customers' vessels. Under the terms of the lease, if TMC uses or attempts to use the premises for other purposes, all rights and interests, including the improvements, will be forfeited in favor of the Government. Upon the termination of the lease or any extension, all improvements made by TMC will become the property of the Government.

n. <u>PEZA and Board of Investments (BOI) Registration</u>

Registration with PEZA - TMC
On December 21, 2009, Presidential Proclamation No. 1966 was issued creating and establishing the 680 hectare area situated in Taganito, Municipality of Claver, Province of Surigao Del Norte to be known as TSEZ. TMC is a PEZA-registered operator/developer of the economic zone as per Certificate of Registration No. EZ 10-01. The certificate of registration was signed on January 7, 2010.

Pursuant to TMC's registration with PEZA as an economic zone developer/operator, TMC is entitled to certain incentives in accordance with the provisions of RA No. 7916, otherwise known as "the Special Economic Zone Act of 1995", as amended.

Under PEZA Board Resolution No. 11-08 dated March 1, 2011, its directors approved TMC's application for extension of its existing TSEZ. On July 28, 2011, pursuant to the resolution, the Government issued Proclamation No. 211 designating parcels of land with an aggregate area of 7.5 hectares located at Barangay Taganito, municipality of Claver, Province of Surigao del Norte, for inclusion to the existing TSEZ.

On January 23, 2013, PEZA issued a Letter of Authority No. 13-0426 allowing TMC to allocate 1 hectare lot within the TSEZ located at Barangay Taganito, Claver, Surigao del Norte as relocation site for the residents along Hayanggabon River, Barangay Hayanggabon, Claver, Surigao del Norte.

On December 27, 2016, PEZA issued a certification entitling TMC qualification for the purpose of VAT zero-rating of its transactions with local suppliers of goods, properties and services and exemption from all national and local taxes and licenses except real property taxes on land owned by TMC and those required to be paid under the MPSA dated July 28, 2008. In lieu thereof, TMC shall pay 5% final tax on gross income. The certification is valid from January 1 to December 31, 2018 and renewable annually, unless otherwise revoked or suspended by PEZA prior to expiration of said period.

Registration with PEZA - RTN
On December 13, 2002, RTN registered with the PEZA as the developer/operator of Rio Tuba Processing Zone, located in Barangay Rio Tuba, Municipality of Bataraza, Palawan. The PEZA-registered activities are entitled to certain tax and nontax incentives. Starting 2003, such activities are already subject to 5% tax based on GIT in lieu of national and local taxes and licenses except those required to be paid under the MPSA dated June 4, 1998 executed by and between the DENR and RTN.

Registration with SBMA - Jobin
On January 20, 2011, Jobin was registered with the SBMA as a Subic Bay Freeport Enterprise, primarily to promote and undertake research, development, utilization, manufacture, sale, marketing, distribution and commercial application of new, renewable, non-conventional and environment-friendly energy sources and system at Mt. Sta. Rita, SBFZ. The SBMA-registered activities are entitled to certain tax and non-tax incentives. In lieu of paying the regular taxes, Jobin pays 5% final tax on gross income earned, subject to the condition that Jobin’s income from sources within the Custom Territory should not exceed 30% of its total income from all sources. Otherwise, Jobin shall be subject to the income tax laws of the Custom Territory.

BOI Certifications
TMC, RTN, HMC and CMC received BOI certifications pursuant to Revenue Memorandum Order No. 9-2000 entitled “Tax Treatment of Sales of Goods, Properties and Services made by VAT-registered Suppliers to BOI registered Manufacturers-Exporters with 100% Export Sales”. The certifications are valid from January 1 to December 31, 2018 and renewable annually, unless sooner revoked by the BOI Governing Board.

On April 29, 2014, BGI was registered with the BOI in accordance with the provision of the Omnibus Investment Code of 1987, as amended as a new RE developer of geothermal energy resources.

On August 27, 2014, MGPC was registered with the BOI as a RE developer of geothermal energy resources. The BOI has issued the certificate of registration of MGPC on October 7, 2016.

o. <u>SPA with SMM</u>
On September 15, 2016, the Parent Company and SMM executed a SPA wherein the latter agreed to purchase the Parent Company’s 511,875,000 shares in THNC, representing 12.5% of the outstanding capital stock of THNC, at a purchase price of US$42.0 million, which is equivalent to ₱2,037.2 million (see Note 10). The sale and purchase of the shares was consummated upon the written consent of Japan Bank for International Cooperation.

The SPA also provides that for a period of eighteen (18) years but no earlier than three (3) years from the execution of the SPA, the Parent Company shall have the right to repurchase from SMM such number of shares of THNC equivalent to 12.5% equity ownership therein at the time when the right is exercised. The repurchase right can only be exercised once. The Parent Company received the full payment of the purchase price on October 17, 2016.

MOA with SMM
Pursuant to the SPA with SMM, the Parent Company and SMM also agreed on September 15, 2016 that effective July 1, 2016, their responsibility to provide loans and guarantee obligations of THNC shall be 10% and 75%, respectively.

p. Retail Supply Contracts

Manta
On November 11, 2016, MEI entered into a contract with Manta for the supply of electricity to meet Manta's full power requirements for the NAC Tower. The contract is for a period of two (2) years commencing on December 26, 2016, and may be extended upon mutual consent of both parties. In each billing month throughout the term of the contract, Manta shall take and pay MEI's minimum energy quantity of 255,000 kilowatt-hour (kWh). Manta shall also pay a security deposit amounting to ₱2.9 million, which shall stand as security for the faithful and proper compliance by Manta of its obligations under the contract. MEI recognized revenue amounting to ₱27.8 million, ₱28.2 million and ₱0.2 million from this contract in 2018, 2017 and 2016, respectively (see Note 34).

Lide Management Corporation (LMC)
On January 9, 2017, MEI entered into a contract with LMC for the supply of electricity to meet its full electricity requirement. The contract is for a period of two (2) years commencing on February 26, 2017, and may be extended upon mutual consent of both parties. The contracted capacity is 2.5 MW during the term of the contract, of which 1.4 MW is under a take-or-pay basis. MEI's revenue from this contract amounted to ₱34.9 million and ₱35.0 million in 2018 and 2017, respectively.

q. Other Agreements

Joint Undertaking with NCIP
On December 8, 2009, TMC and NCIP entered into a Joint Undertaking, which confirmed that a 1% royalty on annual gross revenues of TMC is payable to the Mamanwa Tribe pursuant to a MOA dated July 18, 2006 between TMC, the NCIP and the Tribe and a Certificate of Ancestral Domain Title issued to the Tribe, within which area TMC's mining operation is located.

Agreement with Local Government Units
RTN together with RTN Foundation, Inc. and CBNC entered into Agreements with the barangay councils and community residents covered in the SDMP as required by law and as one of the conditions of ECC. The Agreement stipulated that RTN and CBNC should meet the changing needs and demands of the communities and shall submit the SDMP every five (5) years to the MGB Region IV for approval. In addition, as part of the process of securing the consent of affected communities, the program must be prepared in consultation and in partnership with the project proponent and neighboring communities. On January 7, 2014, SDMP No. MGB-IVB-2013-003 III was approved by the MGB covering the period of five (5) years from 2014 to 2018. RTN incurred royalty payments to indigenous people amounting to ₱44.0 million in 2018, ₱45.9 million in 2017 and ₱41.3 million in 2016, in accordance with the SDMP.

Suretyship Agreement with SBC
On August 4, 2015, the Parent Company entered into a Suretyship Agreement with SBC to guarantee and warrant the prompt and full payment and performance of the guaranteed obligations, including increases, renewals, roll-overs, extensions, restructuring, conversions, amendments or novations, of EPI to SBC amounting to ₱3,000.0 million. The agreement shall remain in full force and effect until full payment of the guaranteed obligations is made.
In September 2017, EPI partially repaid its loan to SBC reducing the principal from ₱3,000.0 million to ₱1,500.0 million. In 2018, EPI paid in full the remaining balance of the loan (see Note 15).

MOA with DOE
On December 3, 2014, the Parent Company and DOE agreed in accordance with RA No. 9136 or the EPIRA of 2001 which requires all energy generation companies and/or energy resource developers to provide financial benefits equivalent to ₱0.01/ kWh of the total electricity sales of the generation facility to its customer/off-taker to the region, province, city or municipality and barangay that host the generation facility, and to establish the corresponding trust accounts which should be administered by the DOE. The ₱0.01 financial benefits shall be allocated as follows: ₱0.005/kWh for Electrification Fund, ₱0.0025/kWh for Development and Livelihood Fund and ₱0.0025/kWh for Reforestation, Watershed Management, Health and/or Environment Enhancement Fund.

Investment Agreement
On August 24, 2015, an Investment Agreement was executed by and among BGI, OGI, BGHI, EPI, and BHI. The said agreement sets out the principal terms and fundamental transactions pursuant to which BHI shall invest in BGI and the Biliran Geothermal Project, the respective rights and obligations of parties to the project, and the strategic arrangements for the management and operation of BGI and the project. The Investment Agreement provides that:

- BGI shall increase its authorized capital stock by 1,845,000 common shares, with par value of ₱1 per share within sixty (60) days from the signing of the agreement.
- BHI shall subscribe to the said increase in the authorized capital stock of BGI.
- BGI shall undertake to procure that all its stockholders of record at the time of the subscription shall waive any pre-emptive right, right of first refusal or preferential light of subscription to the first subscription shares in favor of BHI.
- BGHI shall then purchase from Filtech Energy Drilling Corp. (FedCo) its shares in BGI.
- BGI shall apply for quasi-reorganization in respect of its authorized capital stock prior to the subscription of BHI in order to apply all of its additional paid-in capital to its deficit and to increase its authorized capital stock, and convert all the issued and outstanding existing preferred shares of BGI into common shares.
- BHI shall further subscribe to 88,155,000 common shares of BGI as part of the second subscription. Thereupon, BGI shall convert ₱58.8 million BGHI receivables into common shares in favor of BGHI.
- BGHI shall sell and BHI shall purchase 60% of BGHI's receivables from BGI and the parties shall cause the conversion of the said receivables into redeemable preferred non-voting shares.
- BHI shall pledge all of the redeemable preferred non-voting shares it received from BGI to BGHI as security for the payment of the amount equal to the face value of the BGHI's receivables and new BGHI receivables purchased by BHI.

The Investment Agreement also states that BGHI and BHI shall each maintain their respective shareholding percentage in BGI's equity capital at 40% and 60%, respectively, unless otherwise agreed in writing. Either BGHI or BHI may freely transfer its shares, except that no transfer shall be made by a party to any person if such transfer would reduce the stock ownership of Filipino citizens in BGI to less than the required percentage of the capital stock as provided by existing applicable law.

On October 17, 2015, the BOD of BGI approved the increase in its authorized capital stock from ₱1,230,000, divided into 738,000 common shares and 492,000 preferred share each both with par value of ₱1 per share, to ₱3,075,000, divided into 2,583,000 common shares and 492,000 preferred shares both with par value of ₱1 per share. The increase in authorized capital stock was approved by the Philippine SEC on December 17, 2015.

On October 22, 2015, 1,845,000 common shares were subscribed to and paid by BHI at par value following the increase in the authorized capital stock. With the change in the ownership structure, BHI became the immediate parent of BGI.

On March 2, 2016, FedCo sold 737,997 common stock to BGHI.

On February 28, 2017, SEC approved the application of BGI for the reclassification of its preferred shares into common shares.

Distribution Wheeling Service Agreements (DWSA)
MEI entered into DWSAs with Meralco and LEYECO V on November 14, 2016 and February 3, 2017, respectively, for the conveyance of electricity through Meralco's and LEYECO V's distribution systems in order to meet the power requirements of the facilities of Manta and LMC, respectively.

Based on the agreements, MEI shall pass on all applicable distribution service and wheeling charges, transmission and ancillary charges, taxes and others charged as billed by Meralco and LEYECO V to MEI. The sale of power includes passed-on distribution and transmission charges amounting to ₱21.6 million in 2018, ₱19.5 million in 2017 and nil in 2016 (see Note 23).

Market Participation Agreement
On December 5, 2016, MEI entered into a market participation agreement with PEMC to be a member of the WESM. With this agreement, MEI will be able to purchase through the WESM in case its contracted suppliers fail to deliver sufficient capacity. MEI purchased power from the WESM amounting to ₱7.9 million, ₱9.9 million and ₱0.1 million in 2018, 2017 and 2016, respectively, which was wheeled and conveyed to the facilities of MEI's customers.

<u>*Other Matters*</u>

- With the implementation of the TRAIN Act effective January 1, 2018, the excise tax rate on all metallic minerals increased from 2% to 4% of the market value of the gross output thereof at the time of the removal.

- <u>Updates in the Philippine Mining Industry</u>
  In line with the issuance of DENR Memorandum Order No. 2016-01 mandating a comprehensive review of all operating mines and mines under suspended and/or care and maintenance status, and a moratorium on the acceptance, processing and/or approval of mining applications and/or new mining projects for all metallic and non-metallic minerals, an industry-wide audit was carried on since July 2016.

On February 2, 2017, the Secretary of the DENR ordered the closure and suspension of several mines in the country for alleged environmental violations noted during the industry-wide audit.

In light of concerns expressed by various industry stakeholders, the Mineral Industry Coordinating Council (MICC) issued a resolution on February 9, 2017, which called for the review of the audit conducted on mining companies, and the closure and suspension orders by the DENR Secretary. This mandate of the MICC covers all mining contracts in the Philippines, although the review will start with mining companies affected by the closure order. The multi-stakeholder review shall be based on the guidelines and parameters set forth in mining contracts and in other pertinent laws, and will advise the DENR on the performance of existing mining operations in consultation with local government units. Five technical review teams (TRT) will conduct the review over a three (3) month period starting in March 2017. The TRTs will check the compliance of affected mining companies with applicable agreements, and laws and regulations taking into account the technical, legal, social, environmental and economic aspects of their mining operations. The results of the review will be submitted to the multi-stakeholder Technical Working Group (TWG) of the MICC. The TWG will verify the results before the final presentation to the MICC. The MICC will then present the findings and submit its recommendations to the Office of the President, which shall make the final decision on the DENR's closure and suspension orders. As at March 14, 2019, the MICC review is still ongoing.

On February 14, 2017, the Secretary of the DENR announced the cancellation of a total of 75 MPSAs considered to be situated in watersheds. Show cause orders were issued to the concerned mining companies, which were given seven (7) days to respond.

On February 13, 2017, HMC received a letter from DENR stating that MPSA in Taganaan Island, Surigao is being cancelled due to alleged violations of RA No. 7942 or the "Philippine Mining Act of 1995" as a result of the audit conducted in July 2016. On February 17, 2017, HMC filed a Notice of Appeal with the Office of the President. It is the Parent Company's position that there are no legal and technical grounds to support the cancellation of HMC's MPSA.

The Parent Company will pursue all legal remedies to overturn the said order because of due process violations and the absence of any basis that would warrant a suspension of HMC's operations, much less the cancellation of its MPSA.

RTN, TMC and CMC were not included in the list of mining operations recommended for suspension or closure by the DENR.

40. **Events after the End of the Financial Reporting Period**

Dividend Declaration

On March 14, 2019, the Parent Company's BOD declared cash dividends amounting to ₱0.07 per share to stockholders of record as at March 28, 2019 which will be paid on April 12, 2019.

41. Supplemental Disclosure to Consolidated Statements of Cash Flows

	2018	2017
Noncash financing activity		
Issuance of 80% stock dividends	**₱3,041,171**	₱–
Noncash investing activities		
Application of 50% commission and royalties payable, net of withholding taxes and interest, against loan receivable from East Coast (see Notes 5 and 13)	**136,856**	68,715
Adjustment for capitalized cost of mine rehabilitation and decommissioning (see Notes 9 and 16)	**128,306**	69,820

Changes in Liabilities Arising from Financing Activities

	2018					
	January 1	**Cash flows**	**Foreign exchange movement**	**Reclassification**	**Others**	**December 31**
Current						
Dividends payable, gross of final withholding tax (see Note 14)	**₱712,501**	**(₱4,418,734)**	**₱–**	**₱–**	**₱4,448,266**	**₱742,033**
Interest payable, gross of final withholding tax (see Note 14)	**11,533**	**(126,195)**	**(10,303)**	**–**	**140,591**	**15,626**
Short-term debts (see Note 15)	**–**	**–**	**–**	**1,490,427**	**1,841**	**1,492,268**
Current portion of:						
Long-term debts (see Note 15)	**1,635,178**	**(108,992)**	**3,691**	**(1,414,253)**	**3,346**	**118,970**
Long-term payable (see Note 17)	**5,000**	**(5,000)**	**–**	**5,000**	**–**	**5,000**
Noncurrent						
Long-term debts (see Note 15)	**1,349,211**	**(27,273)**	**42,446**	**(76,174)**	**352**	**1,288,562**
Deferred income	**58,659**	**(4,190)**	**–**	**–**	**–**	**54,469**
Long-term payable (see Note 17)	**20,168**	**–**	**–**	**(5,000)**	**1,155**	**16,323**
Total liabilities from (used in) financing activities	**₱3,792,250**	**(₱4,690,384)**	**₱35,834**	**₱–**	**₱4,595,551**	**₱3,733,251**

	2017					
	January 1	Cash flows	Foreign exchange movement	Reclassification	Others	December 31
Current						
Dividends payable, gross of final withholding tax (see Note 14)	₱364,645	(₱1,801,238)	₱–	₱–	₱2,149,094	₱712,501
Interest payable, gross of final withholding tax (see Note 14)	30,511	(188,840)	(9,195)	–	179,057	11,533
Short-term debt (see Note 15)	180,000	(180,000)	–	–	–	–
Current portion of:						
Long-term debts (see Note 15)	148,274	(128,463)	(3,069)	1,610,615	7,821	1,635,178
Long-term payable (see Note 17)	5,000	(5,000)	–	5,000	–	5,000
Noncurrent						
Long-term debts (see Note 15)	4,468,059	(1,500,000)	(8,608)	(1,610,615)	375	1,349,211
Deferred income	62,849	(4,190)	–	–	–	58,659
Long-term payable (see Note 17)	23,846	–	–	(5,000)	1,322	20,168
Total liabilities from (used in) financing activities	₱5,283,184	(₱3,807,731)	(₱20,872)	₱–	₱2,337,669	₱3,792,250

Others include the effect of accrual of dividends, including those that were not yet paid at year-end, effect of accrued but not yet paid interest on interest-bearing loans, accretion of interest on long-term payable, amortization of debt issue cost and loss on debt extinguishment.

42. Business Segment Information

The Group's operating businesses are organized and managed separately according to the nature of the products and services provided, with each segment representing a strategic business unit that offers different products and serves different markets.

The mining segment is engaged in the mining and exploration of nickel saprolite and limonite ore and limestone.

The services segment is engaged in the chartering out of LCT, construction and rendering of services to CBNC, THNC and other parties.

The power segment is engaged in power generation and exploration for geothermal resources.

The Group’s identified reportable segments below are consistent with the segments reported to the BOD, which is the Chief Operating Decision Maker of the Group.

Financial information on the operation of the various business segments are as follows:

	December 31, 2018											
	Mining					Power		Services				
	HMC	CMC	TMC	RTN	DMC	EPI	NAC	RTN/TMC	HMC	Others	Eliminations	Total
External customers	₱2,181,053	₱3,300,103	₱7,862,910	₱4,397,494	₱–	₱239,934	₱38,473	₱627,705	₱–	₱–	₱–	₱18,647,672
Inter-segment revenues	–	–	–	–	–	–	–	–	1,537	649,996	(651,533)	–
Total revenues (see Notes 34 and 39)	2,181,053	3,300,103	7,862,910	4,397,494	–	239,934	38,473	627,705	1,537	649,996	(651,533)	18,647,672
Cost of sale of ore	1,010,158	1,093,753	2,526,732	2,140,310	–	–	–	–	–	–	–	6,770,953
Cost of services	–	–	–	–	–	–	–	369,175	716	–	–	369,891
Cost of power generation	–	–	–	–	–	299,399	61,223	–	–	–	–	360,622
Shipping and loading costs	412,027	437,154	792,766	307,542	–	–	–	–	–	–	–	1,949,489
Excise taxes and royalties	196,295	601,568	786,291	219,875	–	–	–	–	–	–	–	1,804,029
Marketing	8,836	115,340	16,034	–	–	–	–	–	–	–	–	140,210
Segment operating earnings (loss)	₱553,737	₱1,052,288	₱3,741,087	₱1,729,767	₱–	(₱59,465)	(₱22,750)	₱258,530	₱821	₱649,996	(₱651,533)	₱7,252,478
General and administrative	₱96,840	₱59,550	₱157,286	₱103,751	₱124,825	₱129,164	₱21,358	₱–	₱–	₱520,267	₱–	₱1,213,041
Finance income	₱2,464	₱30,855	₱43,390	₱35,571	₱42	₱158	₱932	₱–	₱–	₱241,391	₱–	₱354,803
Finance expenses	₱1,557	₱3,986	₱13,394	₱10,636	₱1,996	₱94,360	₱7,363	₱–	₱–	₱60,700	₱–	₱193,992
Provision for (benefit from) income tax	₱111,470	₱273,625	₱1,075,478	₱504,516	(₱19,091)	₱948	₱–	₱–	(₱2,854)	₱164,383	₱–	₱2,108,475
Net income (loss) attributable to equity holders of the parent	₱361,939	₱741,589	₱1,925,292	₱885,420	(₱112,659)	(₱715,206)	(₱50,539)	₱–	₱–	(₱27,779)	₱–	₱3,008,057
Segment assets	₱1,416,556	₱2,544,814	₱10,337,287	₱4,595,027	₱1,225,473	₱11,117,239	₱933,496	₱–	₱48,091	₱13,478,573	₱–	₱45,696,556
Deferred income tax assets	42,796	35,662	75,235	80,182	55,076	–	–	–	–	47,000	–	335,951
Total assets	₱1,459,352	₱2,580,476	₱10,412,522	₱4,675,209	₱1,280,549	₱11,117,239	₱933,496	₱–	₱48,091	₱13,525,573	₱–	₱46,032,507
Segment liabilities	₱235,508	₱337,815	₱2,412,939	₱1,092,732	₱89,563	₱7,265,872	₱4,599	₱–	₱–	₱388,548	₱–	₱11,827,576
Deferred income tax liabilities - net	5,125	5,051	60,429	156,285	177,556	113,652	–	–	17,561	218,442	–	754,101
Total liabilities	₱240,633	₱342,866	₱2,473,368	₱1,249,017	₱267,119	₱7,379,524	₱4,599	₱–	₱17,561	₱606,990	₱–	₱12,581,677
Capital expenditures	₱133,335	₱241,995	₱377,934	₱249,129	₱74,197	₱28,462	₱5,644	₱–	₱–	₱33,573	₱–	₱1,144,269
Depreciation, amortization and depletion	₱226,172	₱175,878	₱568,202	₱149,981	₱24,609	₱157,610	₱30,858	₱–	₱–	₱19,295	₱–	₱1,352,605

	December 31, 2017											
	Mining					Power		Services				
	HMC	CMC	TMC	RTN	DMC	EPI	NAC	RTN/TMC	HMC	Others	Eliminations	Total
External customers	₱2,326,086	₱2,248,439	₱5,728,026	₱4,594,530	₱–	₱212,152	₱–	₱630,063	₱–	₱–	₱–	₱15,739,296
Inter-segment revenues	–	–	–	–	–	–	–	–	3,976	550,635	(554,611)	–
Total revenues (see Notes 34 and 39)	2,326,086	2,248,439	5,728,026	4,594,530	–	212,152	–	630,063	3,976	550,635	(554,611)	15,739,296
Cost of sale of ore	931,522	846,174	2,184,112	2,071,433	–	–	–	–	–	–	–	6,033,241
Cost of services	–	–	–	–	–	–	–	351,339	–	–	–	351,339
Cost of power generation	–	–	–	–	–	257,276	–	–	–	–	–	257,276
Shipping and loading costs	499,431	425,524	551,437	283,205	–	–	–	–	9,513	–	–	1,769,110
Excise taxes and royalties	162,826	344,781	458,242	137,837	–	–	–	–	–	–	–	1,103,686
Marketing	4,272	78,695	8,748	4,749	–	–	–	–	–	–	–	96,464
Segment operating earnings (loss)	₱728,035	₱553,265	₱2,525,487	₱2,097,306	₱–	(₱45,124)	₱–	₱278,724	(₱5,537)	₱550,635	(₱554,611)	₱6,128,180
General and administrative	₱87,442	₱36,480	₱125,379	₱59,073	₱69,898	₱117,647	₱27,400	₱–	₱–	₱339,834	₱–	₱863,153
Finance income	₱5,978	₱30,574	₱34,594	₱31,398	₱85	₱903	₱–	₱–	₱–	₱198,435	₱–	₱301,967
Finance expenses	₱2,757	₱5,531	₱13,014	₱9,956	₱1,067	₱143,142	₱–	₱–	₱–	₱71,148	₱–	₱246,615
Provision for (benefit from) income tax	₱146,220	₱140,563	₱721,040	₱611,662	₱15,258	(₱11,646)	₱–	₱–	(₱2,854)	₱116,613	₱–	₱1,736,856
Net income (loss) attributable to equity holders of the parent	₱500,093	₱416,018	₱1,328,377	₱1,019,140	(₱86,635)	(₱193,171)	(₱27,398)	₱–	₱–	(₱185,656)	₱–	₱2,770,768
Segment assets	₱1,615,725	₱2,278,744	₱9,305,400	₱4,760,082	₱1,209,246	₱11,816,229	₱836,478	₱–	₱33,592	₱13,548,509	₱–	₱45,404,005
Deferred income tax assets	47,738	32,692	85,256	63,429	52,108	–	–	–	–	51,871	–	333,094
Total assets	₱1,663,463	₱2,311,436	₱9,390,656	₱4,823,511	₱1,261,354	₱11,816,229	₱836,478	₱–	₱33,592	₱13,600,380	₱–	₱45,737,099
Segment liabilities	₱264,974	₱386,564	₱2,221,117	₱1,004,573	₱121,480	₱7,340,591	₱7,790	₱–	₱–	₱404,948	₱–	₱11,752,037
Deferred income tax liabilities - net	3,839	5,542	15,412	218,451	193,679	112,826	–	–	20,415	196,710	–	766,874
Total liabilities	₱268,813	₱392,106	₱2,236,529	₱1,223,024	₱315,159	₱7,453,417	₱7,790	₱–	₱20,415	₱601,658	₱–	₱12,518,911
Capital expenditures	₱80,245	₱210,998	₱341,973	₱86,517	₱81,642	₱637,543	₱27,607	₱–	₱–	₱27,933	₱–	₱1,494,458
Depreciation, amortization and depletion	₱265,899	₱150,875	₱549,083	₱310,915	₱7,866	₱161,027	₱2,472	₱–	₱9,513	₱22,395	₱–	₱1,480,045

	December 31, 2016											
	Mining					Power		Services				
	HMC	CMC	TMC	RTN	DMC	EPI	NAC	RTN/TMC	HMC	Others	Eliminations	Total
External customers	₱2,280,144	₱2,131,692	₱5,035,283	₱4,127,264	₱–	₱18,010	₱–	₱530,274	₱–	₱–	₱–	₱14,122,667
Inter-segment revenues	–	–	–	–	–	–	–	–	2,243	510,192	(512,435)	–
Total revenues (see Notes 34 and 39)	2,280,144	2,131,692	5,035,283	4,127,264	–	18,010	–	530,274	2,243	510,192	(512,435)	14,122,667
Cost of sale of ore	930,548	764,478	2,051,128	2,161,095	–	–	–	–	–	–	–	5,907,249
Cost of services	–	–	–	–	–	–	–	328,457	–	–	–	328,457
Cost of power generation	–	–	–	–	–	38,295	–	–	–	–	–	38,295
Shipping and loading costs	594,479	401,794	640,950	293,297	–	–	–	–	–	–	–	1,930,520
Excise taxes and royalties	151,634	328,437	402,823	123,818	–	–	–	–	–	–	–	1,006,712
Marketing	8,380	74,574	12,915	–	–	–	–	–	–	–	–	95,869
Segment operating earnings (loss)	₱595,103	₱562,409	₱1,927,467	₱1,549,054	₱–	(₱20,285)	₱–	₱201,817	₱2,243	₱510,192	(₱512,435)	₱4,815,565
General and administrative	₱97,164	₱29,505	₱107,478	₱67,041	₱86,479	₱148,510	₱–	₱–	₱–	₱314,074	₱–	₱850,251
Finance income	₱2,551	₱31,573	₱25,056	₱14,333	₱98	₱1,873	₱–	₱–	₱–	₱152,946	₱–	₱228,430
Finance expenses	₱2,682	₱5,707	₱9,219	₱5,542	₱–	₱81,344	₱–	₱–	₱–	₱103,724	₱–	₱208,218
Provision for (benefit from) income tax	₱125,509	₱157,175	₱586,400	₱447,992	(₱29,208)	₱32,930	₱–	₱–	(₱2,854)	₱131,534	₱–	₱1,449,478
Net income (loss) attributable to equity holders of the parent	₱431,102	₱444,639	₱1,051,393	₱769,697	(₱57,839)	(₱193,634)	(₱11,671)	₱–	₱–	(₱467,580)	₱–	₱1,966,107
Segment assets	₱1,642,678	₱2,025,461	₱9,316,316	₱5,078,962	₱1,056,496	₱11,972,765	₱795,102	₱–	₱19,239	₱13,074,445	₱–	₱44,981,464
Deferred income tax assets	51,645	45,301	91,647	80,721	44,994	–	–	–	–	55,744	–	370,052
Total assets	₱1,694,323	₱2,070,762	₱9,407,963	₱5,159,683	₱1,101,490	₱11,972,765	₱795,102	₱–	₱19,239	₱13,130,189	₱–	₱45,351,516
Segment liabilities	₱263,564	₱376,084	₱2,121,770	₱999,023	₱68,006	₱9,099,296	₱1,111	₱–	₱–	₱346,542	₱–	₱13,275,396
Deferred income tax liabilities - net	13,165	18,608	56,071	287,323	171,342	124,801	–	–	23,268	181,889	–	876,467
Total liabilities	₱276,729	₱394,692	₱2,177,841	₱1,286,346	₱239,348	₱9,224,097	₱1,111	₱–	₱23,268	₱528,431	₱–	₱14,151,863
Capital expenditures	₱79,707	₱65,344	₱459,023	₱155,350	₱42,301	₱2,418,621	₱109,439	₱–	₱–	₱19,965	₱–	₱3,349,750
Depreciation, amortization and depletion	₱283,703	₱132,653	₱593,872	₱415,237	₱3,502	₱64,337	₱73	₱–	₱–	₱21,892	₱–	₱1,515,269

Inter-segment revenues are eliminated upon consolidation.

The Group has revenues from external customers as follows:

Country of Domicile	**2018**	2017	2016
China	**₱10,899,779**	₱9,391,331	₱9,084,745
Local	**5,449,781**	3,867,539	2,635,127
Japan	**2,298,112**	2,480,426	2,333,894
Australia	**–**	–	68,901
	₱18,647,672	₱15,739,296	₱14,122,667

The revenue information above is based on the location of the customer. The local customers pertain to CBNC and THNC, which are PEZA-registered entities.

Revenue from two key customers for the sale of ores amounted to ₱10,817.3 million, ₱8,059.0 million and ₱7,248.4 million in 2018, 2017 and 2016, respectively.

SGV
Building a better working world

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BOA/PRC Reg. No. 0001,
October 4, 2018, valid until August 24, 2021
SEC Accreditation No. 0012-FR-5 (Group A),
November 6, 2018, valid until November 5, 2021

INDEPENDENT AUDITOR'S REPORT ON SUPPLEMENTARY SCHEDULES

The Board of Directors and Stockholders
Nickel Asia Corporation and Subsidiaries
28th Floor NAC Tower, 32nd Street
Bonifacio Global City, Taguig City

We have audited in accordance with Philippine Standards on Auditing, the consolidated financial statements of Nickel Asia Corporation and its subsidiaries as at December 31, 2018 and 2017, and for each of the three years in the period ended December 31, 2018 included in this Form 17-A, and have issued our report thereon dated March 14, 2019. Our audits were made for the purpose of forming an opinion on the basic consolidated financial statements taken as a whole. The schedules listed in the Index to the Consolidated Financial Statements and Supplementary Schedules are the responsibility of the Parent Company's management. These schedules are presented for purposes of complying with Securities Regulation Code Rule 68, As Amended (2011) and are not part of the basic consolidated financial statements. These schedules have been subjected to the auditing procedures applied in the audit of the basic consolidated financial statements and, in our opinion, fairly state, in all material respects, the information required to be set forth therein in relation to the basic consolidated financial statements taken as a whole.

SYCIP GORRES VELAYO & CO.

Jaime F. del Rosario
Partner
CPA Certificate No. 56915
SEC Accreditation No. 0076-AR-4 (Group A),
May 1, 2016, valid until May 1, 2019
Tax Identification No. 102-096-009
BIR Accreditation No. 08-001998-72-2018,
February 14, 2018, valid until February 13, 2021
PTR No. 7332543, January 3, 2019, Makati City

March 14, 2019

NICKEL ASIA CORPORATION AND SUBSIDIARIES

INDEX TO THE CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY SCHEDULES

FOR THE YEAR ENDED DECEMBER 31, 2018

SCHEDULE I

NICKEL ASIA CORPORATION
RECONCILIATION OF RETAINED EARNINGS AVAILABLE FOR DIVIDEND DECLARATION
PURSUANT TO SEC MEMORANDUM CIRCULAR NO.11
DECEMBER 31, 2018

Unappropriated retained earnings as at December 31, 2017, as reflected in audited financial statements	₱14,314,468,253
Unrealized foreign exchange gains - net, except those attributable to cash and cash equivalents	(130,804,795)
Amount of recognized deferred income tax asset that reduced the amount of income tax expense and increased the net income and retained earnings, until realized	(47,529,056)
Unappropriated retained earnings, *as adjusted to available for dividend distribution,* as at December 31, 2017	14,136,134,402
Add: Net income actually earned/realized during the period	
Net income during the period closed to retained earnings	2,416,180,853
Less: Non-actual/unrealized income net of tax	
Unrealized foreign exchange gains - net, except those attributable to cash and cash equivalents	(63,008,671)
Fair value adjustments	196,576,494
Net income actually earned during the period	2,549,748,676
Less:	
Dividend declarations during the period	(6,234,905,742)
Appropriation of retained earnings during the period	(1,500,000,000)
Reversal of appropriation	1,000,000,000
Treasury stock	(20,366,081)
TOTAL RETAINED EARNINGS AVAILABLE FOR DIVIDEND DISTRIBUTION AS AT DECEMBER 31, 2018	**₱9,930,611,255**

SCHEDULE II

NICKEL ASIA CORPORATION AND SUBSIDIARIES
TABULAR SCHEDULE OF EFFECTIVE STANDARDS AND INTERPRETATIONS UNDER THE PFRS PURSUANT TO SRC RULE 68, AS AMENDED
DECEMBER 31, 2018

List of Philippine Financial Reporting Standards (PFRSs) [which consist of PFRSs, Philippine Accounting Standards (PASs) and Philippine Interpretations] effective as at December 31, 2018:

PHILIPPINE FINANCIAL REPORTING STANDARDS AND INTERPRETATIONS Effective as of December 31, 2018		Adopted	Not Adopted	Not Applicable
Philippine Financial Reporting Standards				
PFRS 1	First-time Adoption of Philippine Financial Reporting Standards			✓
PFRS 2	Share-based Payment	✓		
	Amendments to PFRS 2, Classification and Measurement of Share-based Payment Transactions			✓
PFRS 3	Business Combinations			✓
PFRS 4	Insurance Contracts			✓
	Amendments to PFRS 4, Applying PFRS 9, *Financial Instruments* with PFRS 4, *Insurance Contracts*			✓
PFRS 5	Non-current Assets Held for Sale and Discontinued Operations			✓
PFRS 6	Exploration for and Evaluation of Mineral Resources	✓		
PFRS 7	Financial Instruments: Disclosures	✓		
PFRS 8	Operating Segments	✓		
PFRS 9	Financial Instruments	✓		
PFRS 10	Consolidated Financial Statements	✓		
PFRS 11	Joint Arrangements			✓
PFRS 12	Disclosure of Interests in Other Entities	✓		
PFRS 13	Fair Value Measurement	✓		
PFRS 14	Regulatory Deferral Accounts			✓
PFRS 15	Revenue from Contracts with Customers	✓		
Philippine Accounting Standards				
PAS 1	Presentation of Financial Statements	✓		
PAS 2	Inventories	✓		
PAS 7	Statement of Cash Flows	✓		
PAS 8	Accounting Policies, Changes in Accounting Estimates and Errors	✓		

PHILIPPINE FINANCIAL REPORTING STANDARDS AND INTERPRETATIONS Effective as of December 31, 2018		Adopted	Not Adopted	Not Applicable
PAS 10	Events after the Reporting Period	✓		
PAS 12	Income Taxes	✓		
PAS 16	Property, Plant and Equipment	✓		
PAS 17	Leases	✓		
PAS 19	Employee Benefits	✓		
PAS 20	Accounting for Government Grants and Disclosure of Government Assistance			✓
PAS 21	The Effects of Changes in Foreign Exchange Rates	✓		
PAS 23	Borrowing Costs	✓		
PAS 24	Related Party Disclosures	✓		
PAS 26	Accounting and Reporting by Retirement Benefit Plans			✓
PAS 27	Separate Financial Statements	✓		
PAS 28	Investments in Associates and Joint Ventures	✓		
	Amendments to PAS 28, Measuring an Associate or Joint Venture at Fair Value (Part of Annual Improvements to PFRSs 2014 - 2016 Cycle)			✓
PAS 29	Financial Reporting in Hyperinflationary Economies			✓
PAS 32	Financial Instruments: Presentation	✓		
PAS 33	Earnings per Share	✓		
PAS 34	Interim Financial Reporting			✓
PAS 36	Impairment of Assets	✓		
PAS 37	Provisions, Contingent Liabilities and Contingent Assets	✓		
PAS 38	Intangible Assets	✓		
PAS 39	Financial Instruments: Recognition and Measurement	✓		
PAS 40	Investment Property	✓		
	Amendments to PAS 40, Transfers of Investment Property			✓
PAS 41	Agriculture			✓
Philippine Interpretations				
Philippine Interpretation IFRIC 1	Changes in Existing Decommissioning, Restoration and Similar Liabilities	✓		
Philippine Interpretation IFRIC 2	Members' Shares in Co-operative Entities and Similar Instruments			✓

PHILIPPINE FINANCIAL REPORTING STANDARDS AND INTERPRETATIONS Effective as of December 31, 2018		Adopted	Not Adopted	Not Applicable
Philippine Interpretation IFRIC 4	Determining whether an Arrangement contains a Lease	✓		
Philippine Interpretation IFRIC 5	Rights to Interests arising from Decommissioning, Restoration and Environmental Rehabilitation Funds	✓		
Philippine Interpretation IFRIC 6	Liabilities arising from Participating in a Specific Market-Waste Electrical and Electronic Equipment			✓
Philippine Interpretation IFRIC 7	Applying the Restatement Approach under PAS 29 Financial Reporting in Hyperinflationary Economies			✓
Philippine Interpretation IFRIC 10	Interim Financial Reporting and Impairment			✓
Philippine Interpretation IFRIC 12	Service Concession Arrangements			✓
Philippine Interpretation IFRIC 14	PAS 19 - The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction			✓
Philippine Interpretation IFRIC 16	Hedges of a Net Investment in a Foreign Operation			✓
Philippine Interpretation IFRIC 17	Distributions of Non-cash Assets to Owners			✓
Philippine Interpretation IFRIC 19	Extinguishing Financial Liabilities with Equity Instruments			✓
Philippine Interpretation IFRIC 20	Stripping Costs in the Production Phase of a Surface Mine	✓		
Philippine Interpretation IFRIC 21	Levies			✓
Philippine Interpretation IFRIC 22	Foreign Currency Transactions and Advance Consideration	✓		
Philippine Interpretation SIC 7	Introduction of the Euro			✓
Philippine Interpretation SIC 10	Government Assistance - No Specific Relation to Operating Activities			✓

PHILIPPINE FINANCIAL REPORTING STANDARDS AND INTERPRETATIONS **Effective as of December 31, 2018**		**Adopted**	**Not Adopted**	**Not Applicable**
Philippine Interpretation SIC 15	Operating Leases - Incentives			✓
Philippine Interpretation SIC 25	Income Taxes - Changes in the Tax Status of an Entity or its Shareholders			✓
Philippine Interpretation SIC 27	Evaluating the Substance of Transactions Involving the Legal Form of a Lease			✓
Philippine Interpretation SIC 29	Service Concession Arrangements: Disclosures			✓
Philippine Interpretation SIC 32	Intangible Assets - Web Site Costs			✓

The Group has not early adopted any PFRSs, PAS and Philippine Interpretations effective January 1, 2019 onwards.

SCHEDULE III

NICKEL ASIA CORPORATION AND SUBSIDIARIES

Schedule A. Financial Assets
December 31, 2018

Name of Issuing Entity and Description of Each Issue	Number of Shares or Principal Amount of Bonds and Notes	Amount Shown in the Statement of Financial Position	Value Based on Market Quotations at End of Reporting Date	Income Received and Accrued
		In Thousands		
Cash on hand and with banks	N/A	₱835,643	₱835,643	
Cash under managed funds	N/A	106,954	106,954	₱188,136
Short-term cash investments	N/A	9,841,772	9,841,772	
Cash and cash equivalents		10,784,369	10,784,369	188,136
Trade	N/A	716,813	716,813	–
Current portion of loan receivable	N/A	146,158	146,158	4,950
Interest receivable	N/A	53,315	53,315	–
Receivable from CBNC	N/A	41,835	41,835	–
Amounts owed by related parties	N/A	5,027	5,027	–
Others	N/A	55,534	55,534	–
Trade and other receivables		1,018,682	1,018,682	4,950
BPI Asset Management - debt securities	various	775,508	775,508	28,173
BDO Unibank, Inc. - debt securities	various	569,820	569,820	16,909
Credit Suisse AG - debt securities	various	523,641	523,641	17,351
Maybank ATR Kim Eng Capital Partners, Inc. - debt securities	various	343,277	343,277	10,585
DBS Private Bank - debt securities	various	314,747	314,747	13,758
Security Bank Corporation - debt securities	various	81,308	81,308	11,947
Financial assets at FVOCI		2,608,301	2,608,301	98,723

(Forward)

NICKEL ASIA CORPORATION AND SUBSIDIARIES
Schedule A. Financial Assets
December 31, 2018

Name of Issuing Entity and Description of Each Issue	Number of Shares or Principal Amount of Bonds and Notes	Amount Shown in the Statement of Financial Position	Value Based on Market Quotations at End of Reporting Date	Income Received and Accrued
		In Thousands		
Manila Golf and Country Club	1 share	₱50,000	₱50,000	₱–
Wack-Wack Golf and Country Club	1 share	35,000	35,000	–
Keyland Ayala Properties Inc. (formerly Security Land Corporation)	3,056,198 shares	382,854	382,854	15,281
NiHao Mineral Resources International, Inc.	101,000,000 shares	109,080	109,080	–
Eurasian Consolidated Minerals Pty. Ltd.	15,949,298 shares	86,241	86,241	–
PLDT Inc.	25,000 shares	28,125	28,125	1,600
Security Bank Corporation	58,027 shares	8,994	8,994	100
ATR Kim Eng Capital Partners, Inc. - Equity Opportunity Fund	25,479,005 units	99,445	99,445	–
Security Bank Corporation - Money Market Fund	39,796,443 units	53,054	53,054	–
ATR Kim Eng Capital Partners, Inc. - Alpha Opportunity Fund	14,541,224 units	20,951	20,951	–
BPI Asset Management - Money Market Fund	50,599 units	12,300	12,300	–
BDO Institutional Cash Reserve Fund	9,264 units	1,079	1,079	–
Credit Suisse AG - debt and equity securities	various	598,308	598,308	12,728
DBS Private Bank - debt and equity securities	various	228,256	228,256	9,293
Security Bank Corporation - equity securities	various	116,832	116,832	1,594
Maybank ATR Kim Eng Capital Partners, Inc. - debt and equity securities	various	93,742	93,742	1,056
Philam Asset Management Inc. - equity securities	various	65,607	65,607	1,125
BPI Asset Management - debt securities	various	13,727	13,727	–
BDO Unibank, Inc. - debt and equity securities	various	3,051	3,051	125
BNP Paribas Wealth Management - debt and equity securities	various	–	–	308
Financial assets at FVTPL		2,006,646	2,006,646	43,210

(Forward)

NICKEL ASIA CORPORATION AND SUBSIDIARIES
Schedule A. Financial Assets
December 31, 2018

Name of Issuing Entity and Description of Each Issue	Number of Shares or Principal Amount of Bonds and Notes	Amount Shown in the Statement of Financial Position	Value Based on Market Quotations at End of Reporting Date	Income Received and Accrued
			In Thousands	
Ayala Land, Inc.	₱115,000	₱115,000	₱115,000	₱4,782
Aboitiz Equity Ventures, Inc.	₱50,000	50,000	50,000	1,765
Retail Treasury Bond	₱130,000	130,000	130,000	3,640
SM Prime Holdings, Inc.	₱25,000	25,000	25,000	1,034
PLDT Inc.	₱20,000	20,000	20,000	836
ABS-CBN Corporation	₱20,000	20,000	20,000	854
JG Summit Corporation	₱20,000	20,000	20,000	837
Globe Telecom Inc.	₱10,000	10,000	10,000	391
DoubleDragon Properties Corporation	₱10,000	10,000	10,000	488
Security Bank Corporation - Tier II Funds	₱40,000	40,000	40,000	1,720
Philam Asset Management Inc. - debt securities	various	91,770	91,770	14,235
Financial assets at amortized cost		531,770	531,770	30,582
Short-term cash investments	N/A	679,206	679,206	944
Current portion of long-term negotiable instruments	N/A	30,000	30,000	1,260
Prepayments and other current assets		709,206	709,206	2,204
Loan receivable - net of current portion	N/A	576,946	576,946	19,540
Long-term negotiable instruments	N/A	40,000	40,000	1,024
Other noncurrent assets		616,946	616,946	20,564
Total		₱18,275,920	₱18,275,920	₱388,369

NICKEL ASIA CORPORATION AND SUBSIDIARIES

Schedule B. Amounts Receivable from Directors, Officers, Employees, Related Parties and Principal Stockholders (Other than Affiliates)
December 31, 2018

Name and Designation of Debtor	Beginning Balance	Additions	Deductions: Amount Collected	Deductions: Amount Written-Off	Current	Noncurrent	Ending Balance

There are no receivables from Directors, Officers, Employees, Related Parties and Principal Stockholders other than subject to usual terms, for ordinary travel and expense advances, and for other such items arising in the ordinary course of business, and eliminated in consolidation.

NICKEL ASIA CORPORATION
Schedule C. Amounts Receivable from Related Parties which are Eliminated in the Consolidated Financial Statements
December 31, 2018

Name of Subsidiary	Balance At January 1, 2018	Additions	Amounts collected	Reclassification	Amounts Written Off	Current	Noncurrent	Amount Eliminated
	In Thousands							
Dinapigue Mining Corporation	₱555,572	₱183,361	(₱131)	₱–	₱–	₱738,802	₱–	₱738,802
Cordillera Exploration Co., Inc.	47,909	36,822	–	–	–	84,731	–	84,731
Rio Tuba Nickel Mining Corporation	2,948	5,448	(3,826)	–	–	4,570	–	4,570
Taganito Mining Corporation	409	5,653	(3,970)	–	–	2,092	–	2,092
Cagdianao Mining Corporation	350	4,665	(3,089)	–	–	1,926	–	1,926
Hinatuan Mining Corporation	(2,557)	6,394	(4,761)	–	–	(924)	–	(924)
Emerging Power Inc.	–	850	(816)	–	–	34	–	34
	₱604,631	₱243,193	(₱16,593)	₱–	₱–	₱831,231	₱–	₱831,231

NICKEL ASIA CORPORATION AND SUBSIDIARIES

Schedule D. Intangible Assets - Other Assets
December 31, 2018

Description	January 1, 2018	Additions At Cost	Deductions: Charged to Costs and Expenses	Deductions: Charged to Other Accounts	Other Changes - Additions (Deductions)	December 31, 2018
	In Thousands					
Geothermal exploration and evaluation assets [(a)]	₱1,784,183	₱9,261	₱–	₱–	₱–	₱1,793,444
Other Noncurrent Assets [(b)]						
Deferred mine exploration costs	1,229,432	15,410	(15)	–	–	1,244,827
Project development costs	112,670	962	–	(59,994)	(26,289)	27,349
	₱3,126,285	₱25,633	(₱15)	(₱59,994)	(₱26,289)	₱3,065,620

(a) Disclosed in Note 11 to the Consolidated Financial Statements
(b) Disclosed in Note 13 to the Consolidated Financial Statements

NICKEL ASIA CORPORATION AND SUBSIDIARIES

Schedule E. Long-term Debts
December 31, 2018

Name of Issuer and Type of Obligation	Amount Authorized by Indenture	Amount Shown as Current	Amount Shown as Long-term	Remarks
		In Thousands		
Long-term Debts				
Taganito HPAL Nickel Corporation	₱–	₱92,015	₱1,058,172	A
Land Bank of the Philippines	–	26,955	230,390	B
Deferred Income				
Taganito HPAL Nickel Corporation	–	4,477	54,469	C
Total	₱–	₱123,447	₱1,343,031	

Remarks:

A. Interest rate is based on prevailing 180-day LIBOR plus 2% spread; principal is payable in semi-annual installments of US$875,000, payable in April and October until April 10, 2031.

B. Annual floating interest rate is at least 4.75%; payable in forty-four equal quarterly payments starting at the end of the fifth quarter from the date of the initial loan.

C. The obligation is covered by a Lease Agreement with THNC.

NICKEL ASIA CORPORATION AND SUBSIDIARIES

Schedule F. Indebtedness to Affiliates and Related Parties (Short-term and Long-term Debts with Related Companies)
December 31, 2018

Name of Affiliate	January 1, 2018	December 31, 2018
	In Thousands	
Long-term Debts		
Taganito HPAL Nickel Corporation	₱1,179,596	₱1,150,188
Sumitomo Metal Mining Co. Ltd.	22,369	–
	1,201,965	1,150,188
Deferred Income		
Taganito HPAL Nickel Corporation	63,142	58,946
	₱1,265,107	₱1,209,134

NICKEL ASIA CORPORATION AND SUBSIDIARIES
Schedule G. Guarantees of Securities of Other Issuers
December 31, 2018

Name of Issuing Entity of Securities Guaranteed by the Company for which Statement is Filed	Title of Issue of Each Class of Securities Guaranteed	Total Amount Guaranteed and Outstanding	Amount Owned by the Company for which Statement is Filed	Nature of Guarantee

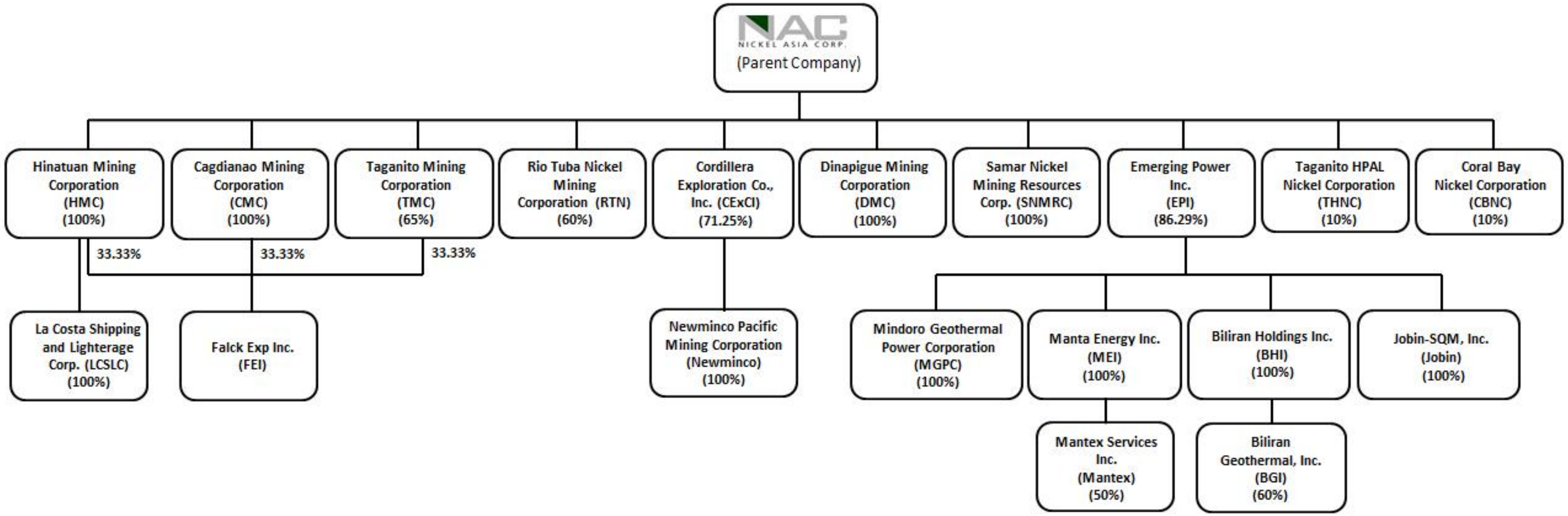
- Not applicable-

NICKEL ASIA CORPORATION AND SUBSIDIARIES
Schedule H. Capital Stock
December 31, 2018

Title of Issue	Number of Shares Authorized	Number of Shares Issued and Outstanding	Number of Shares Reserved for Options, Warrants, Conversions and Other Rights	Number of Shares Held By: Affiliates	Directors, Officers and Employees	Others
Common Stock	19,265,000,000	13,685,272,117	395,349,442	8,974,087,114	76,326,738	4,625,501,265
Preferred Stock	720,000,000	720,000,000	–	720,000,000	–	–

<u>**SCHEDULE IV**</u>

NICKEL ASIA CORPORATION AND SUBSIDIARIES
A MAP SHOWING THE RELATIONSHIPS BETWEEN AND AMONG THE COMPANY AND ITS ULTIMATE PARENT COMPANY, MIDDLE PARENT, SUBSIDIARIES, CO-SUBSIDIARIES AND ASSOCIATES PURSUANT TO SRC RULE 68, AS AMENDED
DECEMBER 31, 2018



Note: There is no pyramid ownership structure and/or cross holding structure.

SCHEDULE V

NICKEL ASIA CORPORATION AND SUBSIDIARIES
SCHEDULE SHOWING FINANCIAL SOUNDNESS
PURSUANT TO SRC RULE 68, AS AMENDED
DECEMBER 31, 2018

	2018	2017
A. *Liquidity ratios*		
Current ratio	**2.13**	2.17
Quick ratio	**1.63**	1.71
Solvency ratio	**3.66**	3.65
B. *Financial leverage ratios*		
Debt ratio	**0.27**	0.27
Debt-to-equity ratio	**0.38**	0.38
Asset-to-equity ratios	**1.38**	1.38
Interest coverage	**38.97**	28.54
C. *Profitability ratios*		
Net profit margin analysis	**0.23**	0.24
Return on assets	**0.09**	0.08
Return on equity	**0.13**	0.12
Gross profit margin	**0.60**	0.58
Price/earnings ratio	**10.00**	17.58

CERTIFICATION

The Nickel Asia Corporation (NAC) Properties are: Rio Tuba Nickel Mining Corporation (RTN) located at Brgy. Rio Tuba, Bataraza, Palawan; Taganito Mining Corporation (TMC) located at Brgy. Taganito, Claver, Surigao del Norte; Cagdianao Mining Corporation (CMC) located at Brgy. Valencia, Cagdianao, Surigao del Norte; Hinatuan Mining Corporation (HMC) located at Hinatuan Island, Taganaan, Surigao del Norte and Dinapigue Mining Corporation (DMC) located at Dinapigue, Isabela.

As of December 31, 2018, the Company's Total Ore Reserves in accordance with the Philippine Mineral Reporting Code (PMRC) are as follows:

Ore	Class	Tonnes (kWMT)	Tonnes (kDMT)	% Ni	% Fe	Contained Ni (kt)
Ore Reserves						
Saprolite	Proved and Probable	99,630	67,586	1.50	13.06	1,015
Limonite	Proved and Probable	231,527	155,105	1.13	40.68	1,754

The undersigned is issuing this certification in his capacity as PMRC Competent Person accredited by the Philippine Society of Mining Engineers for the ore reserves declared by the Company for its properties. The undersigned is fully aware that, being under the employ of Nickel Asia Corporation, his certification may be subjected to review or scrutiny by other independent Competent Persons whom the concerned government institution(s) of financing bodies might choose to employ.

ROLANDO R. CRUZ
Mining Engineer, License No. 1803
PMRC Competent Person for Ni and Au
PTR No. A-4285550 Issued: 16 January 2019, Taguig City

CERTIFICATION

The Nickel Asia Corporation (NAC) Properties are: Rio Tuba Nickel Mining Corporation (RTN) located at Brgy. Rio Tuba, Bataraza, Palawan; Taganito Mining Corporation (TMC) located at Brgy. Taganito, Claver, Surigao del Norte; Cagdianao Mining Corporation (CMC) located at Brgy. Valencia, Cagdianao, Surigao del Norte; Hinatuan Mining Corporation (HMC) located at Hinatuan Island, Taganaan, Surigao del Norte and Geogen Corporation (Geogen) located at Dinapigue, Isabela.

As of December 31, 2018, the Company's Total Mineral Resources in accordance with the Philippine Mineral Reporting Code (PMRC) are as follows:

Ore	Class	Tonnes (kWMT)	Tonnes (kDMT)	% Ni	% Fe	Contained Ni (kt)
Mineral Resources						
Saprolite	Measured and Indicated	162,114	107,439	1.45	12.24	1,557
Limonite	Measured and Indicated	255,440	170,601	1.12	41.80	1,913
Saprolite	Inferred	49,750	32,136	1.33	13.08	428
Limonite	Inferred	11,165	7,259	1.08	40.83	78

Cut-off applied: Saprolite: ≥1.00% Ni, <20.00% Fe
Limonite: ≥20.00%

Note: The *'Contained Ni in kt'* is the mathematical estimation of the Nickel content of the deposits derived from simple multiplication of the average Nickel grade and the estimated tonnage (in DMT) of the resource, and did not include considerations of the effect of dilution during the mining operations and (loss of) metal recoveries during the extraction of the metals from the ore. Discrepancies may appear due to rounding off of figures in the table.

The undersigned is issuing this certification in his capacity as Competent Person accredited by the PMRC and as an active member of the Geological Society of the Philippines for the resource declared by the Company for its properties.

RAMON N. SANTOS
Geologist, License No. 834
Competent Person for Nickel, PMRC No. 14-05-02
PTR No. 1001999 Issued: 2019-01-16 San Pedro, Laguna

CERTIFICATE ON THE COMPILATION SERVICES FOR THE PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS AND NOTES TO THE FINANCIAL STATEMENTS

I hereby certify that I am the Certified Public Accountant (CPA) who performed the compilation services related to the preparation and presentation of financial information of an entity in accordance with an applicable financial reporting framework and reports as required by accounting and auditing standards for **Nickel Asia Corporation and Subsidiaries** for the period ended **December 31, 2018**.

In discharging this responsibility, I hereby declare that:

__✓__ I am the **Assistant Vice President - Finance** of **Nickel Asia Corporation**.

______ I am the (position) of (name of organization/person) and was contracted to perform this service.

Furthermore, in my compilation services for preparation of the Consolidated Financial Statements and Notes to the Financial Statements, I was not assisted by or did not avail of the services of Sycip Gorres Velayo & Co., which is the external auditor who rendered the audit opinion for the said Consolidated Financial Statements and Notes to the Financial Statements.

I hereby declare, under penalties of perjury and violation of Republic Act No. 9298, that my statements are true and correct.

Iryan h Padillo

IRYAN JEAN U. PADILLO
Professional License No. 0108376
Valid until December 16, 2020

BOA Accreditation No. 1205
Valid until December 16, 2019

SUBSCRIBED and **SWORN** to before me, this APR 08 2019, at TAGUIG CITY, affiant who exhibited to me her competent evidence of identity specified below:

Name	Competent Evidence of Identity	Date and Place Issued
IRYAN JEAN U. PADILLO	Passport No. EC1477706	25 June 2014 / DFA Manila

avowed under penalty of law as to the truth of the contents of this instrument.

Doc. No.: 217
Page No.: 45
Book No.: 1
Series of 2019.

CHRISTINE JOANNE F. DE CLARO-NAVARRO
Appointment No. 95 (2018-2019)
Notary Public for and in the City of Taguig
Until December 31, 2019
Roll No. 55216
PTR No. A-4285551 / 16 January 2019 / Taguig City
IBP Life Member Roll No. 018905 / OR No. 032319 / 05 Feb 2018
MCLE Compliance No. VI-0019624, until 14 April 2022
28F NAC Tower, 32nd St., BGC, Taguig City