Novelis Korea Limited

Financial Statements
December 31, 2019 and 2018

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Index
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	Page(s)
Independent Auditor's Report	1-3
Financial Statements	
Statements of Financial Position	4-5
Statements of Profit or Loss	6
Statements of Changes in Equity	7
Statements of Cash Flows	8-9
Notes to the Financial Statements	10-46
Report on Independent Accountants' Review of Internal Accounting Control System	47-48
Report on the Operations of the Internal Accounting Control System	49

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Independent Auditor's Report

(English Translation of a Report Originally Issued in Korean)

To the Board of Directors and Shareholders of
Novelis Korea Limited

Opinion

We have audited the accompanying financial statements of Novelis Korea Limited (the "Company"), which comprise the statements of financial position as at December 31, 2019 and 2018, and the statements of profit or loss, statements of changes in equity and statements of cash flows for the years then ended, and notes to the financial statements, including a summary of significant accounting policies and other explanatory information.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of Novelis Korea Limited as at December 31, 2019 and 2018, and its financial performance and its cash flows for the years then ended in accordance with Accounting Standards for Non-Public Entities in the Republic of Korea.

Basis for Opinion

We conducted our audits in accordance with Korean Standards on Auditing. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Company in accordance with the ethical requirements of the Republic of Korea that are relevant to our audit of the financial statements and we have fulfilled our other ethical responsibilities in accordance with the ethical requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Other Matter

Accounting principles and auditing standards and their application in practice vary among countries. The accompanying financial statements are not intended to present the financial position, financial performance and cash flows in conformity with accounting principles and practices generally accepted in countries and jurisdictions other than the Republic of Korea. In addition, the procedures and practices used in the Republic of Korea to audit such financial statements may differ from those generally accepted and applied in other countries.

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

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

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations.

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

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Korean Stan

dards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

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

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for 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 entity's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the 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 Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

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.

Samil PricewaterhouseCoopers

March 26, 2020

Seoul, Korea

This report is effective as of March 26, 2020, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying financial statements and notes thereto. Accordingly, the readers of the audit report should understand that there is a possibility that the above audit report may have to be revised to reflect the impact of such subsequent events or circumstances, if any.

Novelis Korea Limited
Statements of Financial Position
December 31, 2019 and 2018

(in millions of Korean won)		2019		2018
Assets				
Current assets				
Cash and cash equivalents (Notes 12 and 14)	₩	139,871	₩	208,911
Trade accounts and notes receivable, net (Notes 5, 14 and 30)		462,723		418,448
Other accounts receivable (Notes 14 and 30)		48,713		69,584
Prepaid expenses		2,434		2,118
Prepaid value added taxes		24,205		13,418
Short-term loans to employees		71		69
Derivative instrument assets (Note 27)		14,604		24,257
Current deferred income tax assets (Note 17)		5,431		6,269
Advance payments		10		18,567
Other current assets		5,046		3,033
Inventories, net (Notes 6 and 9)		146,760		203,477
		849,867		968,153
Non-current assets				
Long-term investment assets (Notes 3 and 4)		4		4
Investment accounted for using the equity method (Note 7)		199,952		192,190
Derivative instrument assets (Note 27)		1,191		80
Long-term loans to employees		228		240
Severance benefit assets (Note 13)		4,346		-
Property, plant and equipment, net (Notes 8 and 9)		319,292		317,620
Intangible assets, net (Note 10)		1,576		1,872
Deferred tax assets (Note 17)		-		418
Deposits provided		3,873		3,429
		530,462		515,853
Total assets	₩	1,380,329	₩	1,484,006

Novelis Korea Limited
Statements of Financial Position
December 31, 2019 and 2018

(in millions of Korean won)		2019		2018
Liabilities and Equity				
Current liabilities				
Trade accounts and notes payable (Notes 12, 14 and 30)	₩	730,886	₩	800,715
Other accounts payable (Notes 12, 14 and 30)		26,346		28,349
Advance receipts		87		117
Withholdings		1,230		1,232
Accrued expenses (Note 16)		21,769		20,978
Current portion of long-term liabilities (Note 12)		2,399		16,689
Derivative instrument liabilities (Notes 12 and 27)		17,429		23,973
Income taxes payable		9,495		11,956
Dividends payable		34		33
Carbon emission liabilities (Note 28)		714		403
Asset retirement obligation liabilities (Note 8)		8,576		-
Other current deferred liabilities		486		-
		819,452		904,445
Non-current liabilities				
Long-term borrowings (Note 12)		11,349		13,748
Asset retirement obligation liabilities (Note 8)		1,500		14,374
Derivative instrument liabilities (Notes 12 and 27)		118		1,121
Long-term accrued expenses (Note 16)		2,712		6,326
Provision for severance benefits, net (Note 13)		-		1,993
Long-term uneraned revenues		2,975		4,010
Deferred tax liabilities		1,946		-
		20,601		41,572
Total liabilities		840,053		946,017
Equity				
Share capital (Notes 1 and 18)				
Common stock		17,536		17,536
Capital Surplus				
Share premium		399,241		399,241
Accumulated other comprehensive income				
Loss on valuation of cash flow hedge (Notes 24 and 27)		564		100
Retained earnings				
Legal reserve		29,834		29,834
Unappropriated retained earnings (Note 19)		93,101		91,278
Total equity		540,276		537,989
Total liabilities and equity	₩	1,380,329	₩	1,484,006

The above statements of financial position should be read in conjunction with the accompanying notes.

Novelis Korea Limited
Statements of Profit or Loss
Years ended December 31, 2019 and 2018

(in millions of Korean won, except per share amounts)		2019		2018
Sales (Notes 20 and 30)	₩	2,173,599	₩	2,206,141
Cost of sales (Notes 21 and 23)		1,949,294		2,027,480
Gross profit		224,305		178,661
Selling and administrative expenses (Notes 22 and 23)		132,593		106,547
Operating profit		91,712		72,114
Non-operating income				
Interest income		1,794		4,476
Gain on foreign currency transactions		27,318		22,764
Gain on foreign currency translation		3,793		1,343
Gain on disposal of property, plant and equipment		58		85
Gain on disposal of investments accounted for using the equity method		-		118
Share of profit of investments accounted for using the equity method		7,762		8,763
Gain on derivative transactions		74,483		106,658
Gain on valuation of derivatives (Note 27)		10,262		19,086
Gain on valuation of firm commitments (Note 27)		-		-
Reversal of asset retirement obligation liabilities		188		4,635
Others		3,244		5,161
		128,904		173,089
Non-operating expenses				
Interest expense		944		2,725
Loss on foreign currency transactions		22,399		14,294
Loss on foreign currency translation		4,779		2,713
Loss on disposal of trade accounts and notes receivable		1,227		1,460
Loss on disposal of property, plant and equipment		498		1,383
Impairment loss on property, plant and equipment		978		-
Provision for asset retirement obligation liabilities		324		478
Depreciation of assets not in use		145		182
Loss on derivative transactions		87,314		110,659
Loss on valuation of derivatives (Note 27)		12,402		19,087
Others		12,355		17,425
		143,367		170,405
Profit before income tax expense		77,248		74,798
Income tax expense (Note 17)		20,246		14,463
Profit for the year (Note 24)	₩	57,002	₩	60,335
Basic and diluted earnings per share (Note 25)	₩	1,219	₩	1,290

The above statements of profit or loss should be read in conjunction with the accompanying notes.

Novelis Korea Limited
Statements of Changes in Equity
Years ended December 31, 2019 and 2018

(in millions of Korean won)

	Share capital	Capital surplus	Capital adjustment	Accumulated other comprehensive income	Retained earnings	Total
Balances as of January 1, 2018	₩ 17,536	₩ 399,241	₩ (232,971)	₩ (3,555)	₩ 329,287	₩ 509,539
Capital reduction by cash distribution	-	-	-	-	(35,539)	(35,539)
Loss from capital reduction	-	-	232,971	-	(232,971)	-
Loss on valuation of cash flow hedge	-	-	-	3,655	-	3,655
Profit for the year	-	-	-	-	60,335	60,335
Balances as of December 31, 2018	₩ 17,536	₩ 399,241	₩ -	₩ 100	₩ 121,112	₩ 537,989
Balances as of January 1, 2019	₩ 17,536	₩ 399,241	₩ -	₩ 100	₩ 121,112	₩ 537,989
Interim dvidends (Notes 19 and 26)	-	-	-	-	(55,179)	(55,179)
Loss on valuation of cash flow hedge	-	-	-	464	-	464
Profit for the year	-	-	-	-	57,002	57,002
Balances as of December 31, 2019	₩ 17,536	₩ 399,241	₩ -	₩ 564	₩ 122,935	₩ 540,276

The above statements of changes in equity should be read in conjunction with the accompanying notes.

Novelis Korea Limited
Statements of Cash Flows
Years ended December 31, 2019 and 2018

(in millions of Korean won)	2019	2018
Cash flows from operating activities		
Profit for the year	₩ 57,002	₩ 60,335
Adjustments to reconcile profit for the year to net cash provided by (used in) operating activities		
Severance benefits expenses	7,411	6,316
Impairment loss on property, plant and equipment	978	-
Depreciation and amortization	43,684	41,456
Loss on foreign currency translation	4,779	2,713
Bad debt expenses (reversal)	1	(270)
Loss on disposal of property, plant and equipment	498	1,383
Loss on disposal of trade and notes receivable	1,227	1,460
Loss on valuation of derivatives	12,402	19,087
Provision for asset retirement obligation liabilities	324	478
Gain on foreign currency translation	(3,793)	(1,343)
Gain on disposal of property, plant and equipment	(58)	(85)
Gain on valuation of derivatives	(10,262)	(19,086)
Gain on valuation of firm commitments	-	-
Gain on disposal of investments accounted for using the equity method	-	(118)
Share of profit of investments accounted for using the equity method	(7,762)	(8,763)
Reversal of asset retirement obligation liabilities	-	(4,635)
	49,429	38,593
Changes in operating assets and liabilities		
Increase in trade receivables	(50,031)	(20,716)
Decrease in other accounts receivable	20,888	18,540
Increase in prepaid expenses	(316)	(4)
Increase in prepaid value added taxes	(10,787)	(1,314)
Decrease in derivative instrument assets	18,222	35,504
Decrease in firm commitment assets	-	3
Decrease (increase) in current deferred tax assets	2,635	(1,562)
Decrease (increase) in other current assets	16,544	(18,970)
Decrease (increase) in inventories	56,717	(91,010)
Decrease in non-current deferred tax assets	418	3,695
Decrease in trade payables	(66,294)	(12,492)
Increase (decrease) in other accounts payable	(3,018)	4,027
Decrease in advance receipts	(30)	(91)
Decrease in withholdings	(1)	(111)
Increase (decrease) in accrued expenses	657	(6,302)
Decrease in derivative instrument liabilities	(18,710)	(19,869)
Decrease in income taxes payable	(2,460)	(43,220)
Increase (decrease) in long-term accrued expenses	(3,613)	472
Payments of severance benefits	(2,332)	(2,898)
Increase in pension plan assets	(11,425)	(1,241)
Decrease in contributions to the National Pension Fund	6	7
Increase in carbon emission liabilities	720	295
Decrease in long-term unearned revenues	(549)	(2,463)
Decrease in asset retirement obligation liabilities	(4,621)	(161)
	(57,380)	(159,878)
Net cash inflow (outflow) from operating activities	49,052	(60,950)

Novelis Korea Limited
Statements of Cash Flows
Years ended December 31, 2019 and 2018

(in millions of Korean won)	2019	2018
Cash flows from investing activities		
Proceeds from disposal of short-term and long-term investment	₩ -	₩ 28
Proceeds from short-term loans to employees	91	69
Proceeds from guarantee deposits	2	4
Proceeds from disposal of property, plant and equipment	171	3
Repayments of loans provided to affiliates	-	69,641
Proceeds from disposal of investments accounted for using the equity method	-	701
Long-term loans provided to employees	(80)	-
Acquisition of property, plant and equipment	(46,761)	(31,656)
Acquisition of intangible assets	(871)	(683)
Payment of guarantee deposits	(446)	(35)
Increase in propery, plant and equipment disposal expenses	(260)	-
Net cash inflow (outflow) from investing activities	(48,154)	38,073
Cash flows from financing activities		
Repayments of current portion of long-term borrowings	(14,760)	(116,760)
Dividends paid	(55,179)	(35,539)
Net cash outflow from financing activities	(69,939)	(152,299)
Net decrease in cash and cash equivalents	(69,041)	(175,176)
Cash and cash equivalents		
Beginning of the year	208,911	384,087
End of the year	₩ 139,871	₩ 208,911

The above statements of cash flows should be read in conjunction with the accompanying notes.

Novelis Korea Limited
Notes to the Financial Statements
December 31, 2019 and 2018

1. General Information

Novelis Korea Limited (the "Company"), a spin-off from Taihan Electric Wire Co., Ltd., was incorporated in 1999 under the Commercial Code of the Republic of Korea to manufacture and market aluminum and related products. The Company's headquarter is located in Yeongju City, North Gyeongsang Province.

The share capital of the Company upon its establishment was ₩ 16,500 million, and after several capital increases and reduction, the share capital as at December 31, 2019, is ₩ 17,536 million.

The Company's shareholders and their respective ownership as at December 31, 2019, are as follows:

	Number of shares owned	Percentage of ownership (%)
4260848 Canada Inc.[1]	12,770,000	27.309
4260856 Canada Inc.[1]	19,052,400	40.743
8018227 Canada Inc.[1]	14,939,200	31.947
Other shareholders	400	0.001
	46,762,000	100.000

[1] Owned by Novelis Inc. which was acquired by Hindalco Industries Limited on May 15, 2007.

2. Significant Accounting Policies

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all the periods presented, unless otherwise stated.

2.1 Basis of Preparation

The Company maintains its accounting records in Korean won and prepares statutory financial statements in the Korean language (Hangul). The financial statements of the Company for the annual period beginning on January 1, 2011, have been prepared in accordance with Korean Accounting Standards for Non-Public Entities (KAS-NPEs), which apply to those companies which are subject to the Act on External Audit of Stock Companies, Etc but do not prepare their financial statements in accordance with International Financial Reporting Standards as adopted by the Republic of Korea (Korean IFRS). Certain accounting principles applied by the Company that conform with financial accounting standards and accounting principles in the Republic of Korea may not conform with generally accepted accounting principles in other countries. The accompanying financial statements have been condensed, restructured and translated into English from the Korean language financial statements.

Certain information attached to the Korean language financial statements, but not required for a fair presentation of the Company's financial position, financial performance or cash flows, is not presented in the accompanying financial statements.

2.2 Changes in Accounting Policies and Disclosures

(a) Amended standards adopted by the Company

The Company has applied the following amendments for the first time for their annual reporting period commencing January 1, 2019.

- Amendments to KAS-NPEs No. 8 Equity Method

In accordance with the amendment to KAS-NPEs No 8 Equity Method, the existence and effect of potential voting rights that are currently exercisable or convertible, including potential voting rights held by other entities, are considered when assessing whether an entity has significant influence. The amendment does not have a significant impact on the financial statements.

When an entity has, in substance, an existing ownership interest as a result of a transaction that currently gives the entity access to the returns associated with an ownership in the application of the equity method, amendments to KAS-NPEs No.8 clarify that the proportion allocated to entities is determined by taking into account the eventual exercise of related potential voting rights and the other derivative instruments, and that KAS-NPEs No.6 Financial Assets and Financial Liabilities is not applied to these financial instruments. The amendment does not have a significant impact on the financial statements.

- Amendments to KAS-NPEs No. 21 *Employee Benefits*

In accordance with the amendment to KAS-NPEs No. 21 *Employee Benefits,* it is amended that post-employment benefits and termination benefits are separately accounted by adding the definition of termination benefits and guidance of accounting for termination benefits. The amendment does not have a significant impact on the financial statements.

- Amendments to KAS-NPEs No. 22 *Income Tax Accounting*

The amendments to KAS-NPEs No. 22 *Income Tax Accounting* clarify the application of KAS-NPEs No. 22 *Income Tax Accounting* where it is uncertain for tax authority to accept an entity's tax treatment. If the tax authority is probable to accept, the entity determines income tax consistently with its tax filing, and if not, the impact of uncertainty shall be reflected. The amendment does not have a significant impact on the financial statements.

2.3 Foreign Currency Translation

(a) Functional and presentation currency

Items included in the Company's financial statements are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The financial statements are presented in Korean won, which is the Company's functional and presentation currency.

(b) Foreign currency transactions and translations

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year end exchange rates are generally recognized in profit or loss. They are recognized as other comprehensive income equity if they relate to qualifying cash flow hedges and available-for-sale debt securities denominated foreign currencies.

2.4 Cash and Cash Equivalents

Cash and cash equivalents includes cash on hand, deposits held at call with financial institutions, other short-term and highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash without significant transaction costs which are subject to an insignificant risk of changes in value.

2.5 Entity under Joint Control

In case the Company holds interests in a joint venture that involves the establishment of a corporation, partnership or other entity in which each participant has interest and joint control over the economic activity of the entity by a contractual arrangement between the participants, such interests are accounted for under the equity method as investments in jointly controlled entities.

The Company has a 50.0% interest in a joint venture, Ulsan Aluminum Limited, which supplies aluminum products. The Company applies the equity method of accounting for this investment.

2.6 Derivatives

All derivative instruments are accounted for at their fair value according to the rights and obligations associated with the related derivative contracts. Changes in fair value of derivative instruments are recognized either under the statement of profit or loss or equity, depending on whether the derivative instruments qualify as a cash flow hedge. For hedging purpose, changes in the fair value of derivatives that hedge a particular risk associated with the fair value of recognized assets or liabilities or a firm commitment are recognized in profit or loss, and changes in the fair value of derivatives that hedge cash flow risk on forecast transaction are recognized in other comprehensive income.

2.7 Allowance for Doubtful Accounts

The Company recognizes allowance for doubtful accounts for uncollectible trade receivables based on a reasonable and objective standard. When an allowance for uncollectible trade receivables is established or increased based on revised estimates, bad debt expense is charged (debited). Bad debts expense for trade receivables from commercial transactions is accounted for as selling and administrative expenses, while bad debts expense from other receivables is accounted for as non-operating expense. Uncollectible receivables are offset against allowance for doubtful accounts and in case of insufficient amount of allowance, bad debts expense is recognized.

2.8 Inventories

The quantities of inventories are determined using the perpetual method and periodic inventory count, while the costs of inventories are determined using the monthly-average method, except for inventories in-transit which is determined using the specific identification method. Inventories are stated at the lower of cost or net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less applicable variable selling expense. Replacement cost is used for the estimate of net realizable value of raw materials. If, however, the circumstances which caused the valuation loss cease to exist, the valuation loss is reversed, but not exceeding the original carrying amount before valuation. The said reversal is deducted from cost of sales.

2.9 Property, Plant and Equipment

Property, plant and equipment are stated at cost, which includes acquisition cost, production cost and other costs required to prepare the asset for its intended use. The cost of an item of property, plant and equipment should include the present value of estimated cost of dismantling and removing the asset and restoring the site, to the extent that it is recognized as a provision.

Property, plant and equipment are stated at acquisition cost, less accumulated depreciation. Depreciation is calculated over estimated useful lives and depreciation method as follows:

Description	Estimated useful lives	Depreciation Method
Buildings	9 - 47 years	Straight-line method
Structures	8 - 40 years	Straight-line method
Machinery and equipment	8 - 22 years	Straight-line method
Vehicles	5 - 8 years	Straight-line method
Tools and furniture	4 - 10 years	Straight-line method

Expenditures incurred after the acquisition or completion of assets are capitalized only when it is probable that future economic benefits associated with the item will flow to the Company, which includes any increase in productivity, extension of the useful life of the related assets, significant reduction of cost or enhancement of the value of the related assets over their recently appraised value and the fair value for the related cost can be reliably measured. All other routine maintenance and repairs are charged to expense as incurred.

2.10 Borrowing Costs

The Company capitalizes the interest it incurs on borrowings used to finance the cost of manufacturing, acquisition, and construction of property, plant and equipment, intangible assets, investment property and inventories that require more than one year to complete from the initial date of manufacture, acquisition, and construction (qualifying assets).

2.11 Intangible Assets

Intangible assets are stated at cost, which includes acquisition cost, production cost and other costs required to prepare the asset for its intended use. Intangible assets are stated at cost less

accumulated amortization. Amortization is calculated over estimated useful lives and depreciation method as follows:

Description	Estimated useful lives	Depreciation Method
Software	4 - 8 years	Straight-line method

2.12 Finance Leases

Leases, where the Company has substantially all the risks and rewards of ownership, are classified as finance leases. Finance leases are capitalized at the commencement of the lease term at the lower of the fair value of the leased property and the present value of the minimum lease payments and recognized as finance lease assets and finance lease liabilities.

2.13 Impairment of Non-financial Assets

Intangible assets not yet available for use are tested annually for impairment. Goodwill acquired in a business combination is tested for impairment at the end of each reporting period by assessing its recoverable amount. Assets that are subject to amortization or depreciation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Property, plant and equipment are reviewed for impairment under the above circumstances and when gross estimated future cash flows expected from the use and disposal of property, plant and equipment (individual assets or cash-generating units) are less than the carrying amount. Impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell, and its value-in-use. For the purposes of assessing impairment, assets are grouped at the lowest levels (cash-generating units) for which there are separate and identifiable cash flows.

Non-financial assets, other than goodwill, that suffered impairment are reviewed for possible reversal of the impairment at each reporting date. Reversal of impairment of goodwill is not allowed.

2.14 Provisions and Contingent Liabilities

Provisions are recognized when it is probable that an outflow of resources will occur due to a present obligation resulting from a past event or transaction, and the amount can be reliably estimated. However, when such outflow is dependent upon a future event, is not certain to occur, or cannot be reliably estimated, a disclosure regarding the contingent liability is made in the notes to the financial statements.

Provisions are measured at the present value of the expenditures expected to be settled using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimate. The discount rate used in the present value measurement is the discount rate adjusted to reflect the current best estimate at the end of each reporting period.

2.15 Income Tax and Deferred Income Tax

Income tax expense includes the current income tax under the relevant income tax law and the changes in deferred tax assets or liabilities. Deferred tax assets and liabilities represent temporary differences between financial reporting and the tax bases of assets and liabilities. Deferred tax assets are recognized for temporary differences which will decrease future taxable income or operating loss to the extent that it is probable that future taxable income will be available against which the temporary differences can be utilized. Deferred tax effects applicable to items in the equity are directly reflected in the equity.

2.16 Employee Benefits

(a) Provision for severance benefits

Employees and directors with at least one year of service are entitled to receive a lump-sum payment upon termination of their employment with the Company based on their length of service and rate of pay at the time of termination. Provision for severance benefits represent the amount which would be payable assuming all eligible employees and directors were to terminate their employment as at the date of the statement of financial position.

The Company contributes a certain portion of the severance benefits to the National Pension Service according to the National Pension Law. The contribution amount is recorded as a deduction from the provision for severance benefits.

The Company has a defined benefit pension plan, and accrues severance benefits for current employees and pension payables for retired employees.

Pension plan assets are presented as a deduction from the total of provision for severance benefits and pension payables. The excess portion of pension plan assets over provision for severance benefits and pension plan liabilities is recorded as investment assets.

(b) Annual paid leave obligations

The Company recognizes expenses and liabilities related to annual paid leave during an accounting period when an employee has rendered service that gives rise to employee's entitlement to future annual paid leave.

The Company recognizes expenses and liabilities for the entire annual paid leave resulting from the rendered service as the Company compensates for unused annual leave.

2.17 Revenue Recognition

Revenue is measured as the fair value of the consideration received or receivable, and represents amounts receivable for the sale of goods and rendering of services, stated net of value-added tax, sales discounts and sales returns. The Company recognizes revenue when the amount of revenue can be reliably measured, and it is probable that future economic benefits will flow into the Company.

Revenue from the sale of goods is recognized when the significant risks and rewards of ownership of goods are transferred to the customer. Interest income is recognized using the effective interest method.

2.18 Share-based Payments

For equity-settled share-based payment, the fair value of the goods or employee services received in exchange for the grant of the options is recognized as an expense and a capital adjustment. If the fair value of goods or employee services cannot be reliably estimated, the fair value is estimated based on the fair value of the equity granted.

For cash-settled share-based payment, the fair value of the obligation the Company will assume is determined by the fair value of the goods or employee services received in exchange for the grant of the options. Until the liability is settled, the Company remeasures the fair value of the liability at each reporting date and at the date of settlement, with any changes in fair value recognized as an expense in income statement.

Share-based payment transactions with an option for the parties to choose between cash and equity settlement are accounted for based on the substance of the transaction.

2.19 Carbon Emission Rights (Allowances) and Liabilities

With Enforcement of Allocation and Trading of Carbon Emissions Allowances, allowances that are received free of charge from the government are measured at zero while allowances purchased are measured at acquisition cost and stated net of accumulated impairment loss. Emissions liabilities are measured as the sum of the carrying amount of the allocated allowances that will be submitted to the government and the best estimate of expenditure required to settle the obligation at the end of reporting period for any excess emission. The allowances and emission liabilities are classified as intangible assets and provisions, respectively, in the statement of financial position.

2.20 Measurement of Financial Assets and Financial Liabilities

(a) Initial measurement

Financial assets and financial liabilities are measured at the fair value at the initial recognition. Generally, the transaction price (that is, the fair value of the consideration paid for financial assets and received for financial liabilities) is treated as fair value. In addition, if there is any significant difference between the fair value and the nominal amount of receivable and payable from long-term lending and borrowing transactions or sales transactions with long-term deferred payment conditions, total amount of receivable and payable is carried at fair value.

If the consideration paid (or received) includes any amount other than the fair value, the fair value of the financial instrument is carried at the market price. When market price is not available, the fair value is estimated using valuation techniques (including present value based techniques). However, although the consideration consists of the amount other than the fair value, the whole amount is initially recognized if a benefit in return from using the funds is imposed or there is a

certain relationship between raising and using the funds. Also for lease deposits, the whole transaction price is recognized at the initial recognition. Trading securities and derivatives (except for derivatives designated as hedging instruments in cash flow hedges) are subsequently measured at fair value after initial recognition, and changes in fair value are recognized in profit and loss. In case of other financial assets and liabilities, any transaction costs related to acquisition of financial assets or issuance of financial liabilities are added to or deducted from initially recognized fair value.

When measuring the present value of financial instruments, the Company uses the internal interest rate of transactions that occurred in the current period. If the internal interest rate is not available or the difference from the market interest rate is significant, the market interest rate is applied. If the market interest rate cannot be calculated, then the weighted average interest rate which is calculated by reasonable and objective standards is used. If reasonable and objective standards are unavailable, the Company applies the financing costs which are reasonably estimated using the distribution rate of corporate bonds, reflecting the Company's credit rating.

(b) Subsequent measurement

Financial assets and financial liabilities other than derivatives (Note 2.6) are measured at amortized cost using the effective interest method.

3. Restricted Financial Instruments

As at December 31, 2019 and 2018, restricted financial instruments related to bank overdraft agreements amounts to ₩ 4 million.

4. Short-term and Long-term Investment Assets

Long-term investment assets as at December 31, 2019 and 2018, are as follows:

(in millions of Korean won)	**2019**	**2018**
Long-term investment assets		
Bank deposits	₩ 4	₩ 4

5. Trade Receivables

Trade receivables as at December 31, 2019 and 2018, are as follows:

(in millions of Korean won)		**2019**		**2018**
Trade receivables	₩	463,314	₩	419,038
Less: Allowance for doubtful accounts		(591)		(590)
	₩	462,723	₩	418,448

As at December 31, 2019 and 2018, trade receivables transferred through financial institutions that have not yet matured are as follows:

(in millions of Korea won and in thousands of US dollar)		**2019**		**2018**	
Forfaiting of export receivables of US$ 77,109 (2018: US$ 79,940)	₩	89,276	₩	89,381	Without recourse
Financing of domestic receivables		-		16,853	Without recourse
	₩	89,276	₩	106,234	

6. Inventories

Details of inventories as at December 31, 2019 and 2018, are as follows:

(in millions of Korean won)		**2019**		**2018**
Finished goods	₩	45,135	₩	47,474
Merchandise		20,206		22,233
Work-in-process		39,113		44,703
Raw materials		25,561		56,035
Supplies		14,158		12,924
Materials in transit		4,536		21,171
Merchandise in transit		40		-
		148,749		204,540
Less: Valuation allowance[1]		(1,989)		(1,063)
	₩	146,760	₩	203,477

[1] As at December 31, 2019, valuation allowance of inventory and work-in-process amounted to ₩ - million (2018: ₩ - million) and ₩ - million (2018: ₩ - million), respectively. In addition, valuation allowance of supplies amounted to ₩ 1,989 million (2018: ₩ 1,063 million).

7. Entity under Joint Control

Details of an entity under joint control as at December 31, 2019, are as follows:

				Ordinary share		
	Location	Main business	Closing month	Number of shares held by the Company	Number of shares outstanding	Percentage of ownership
Ulsan Aluminum Limited	Korea	Rolling of Aluminium	Dec 31	5,000 shares	10,000 shares	50.00%

Movements in investments accounted for using the equity method for the year ended December 31, 2019, are as follows:

(in millions of Korean won)	2019				
	Beginning balance	Acquisition (disposal)	Share of profit of investment accounted for using the equity method	Other changes	Ending balance
Investments accounted for using the equity method					
Ulsan Aluminum Limited	₩ 192,190	₩ -	₩ 7,762	₩ -	₩ 199,952

Summary of financial information of investments accounted for using the equity method as at and for the year ended December 31, 2019, is as follows:

(in millions of Korean won)	Ulsan Aluminum Limited
Current assets	₩ 272,808
Non-current assets	570,238
Total assets	₩ 843,046
Current liabilities	₩ 230,456
Non-current liabilities	11,570
Total liabilities	₩ 242,026
Sales	₩ 837,996
Profit for the year	5,613

The Company entered into an agreement with Kobe Steel Ltd. to establish a joint venture.

Under the joint venture agreement, the Company established Ulsan Aluminum Limited, wholly owned subsidiary of the Company, in April 2017. In September 2017, the Company has completed in-kind contribution of the assets of the manufacturing plant in Ulsan, which was owned by the Company, into Ulsan Aluminum Limited.

In September 2017, the Company sold its 49.9% of interests in Ulsan Aluminum Limited. to Kobe

Steel Ltd for ₩ 360,488 million. The sales resulted in gain on sale of equity method investment of ₩ 162,217 million. Furthermore, in September 2018, the Company sold additional 0.1% of interests in Ulsan Aluminum Limited to Kobe Steel Ltd.

Upon the completion of the transaction, the Company and Kobe Steel Ltd. supply aluminum metal to Ulsan Aluminum Limited under the joint venture agreement, and Ulsan Aluminum Limited manufactures and supplies products for the Company and Kobe Steel Ltd. The Company and Kobe Steel Ltd. provide technology such as intellectual property rights necessary for the production of each exclusive product.

Furthermore, the production capacity of each machine center in Ulsan Aluminum Limited is allocated between the Company and Kobe Steel Ltd. in accordance with the joint venture agreement, and such ratio would be mutually negotiated in the future.

In accordance with the joint venture agreement, the Company may make new investments in Ulsan Aluminum Limited, if needed, by the way such as increasing preferred stock with mutual agreement in the future. Investors participating in the capital increase may preferentially participate in the increased capacity due to the new investment.

Under the non-compete covenant in the agreement, the Company and Kobe Steel Ltd. cannot sell the products produced from Ulsan Aluminum Limited to certain regions for mutual business protection.

8. Property, Plant and Equipment

Changes in property, plant and equipment for the years ended December 31, 2019 and 2018, are as follows:

(in millions of Korean won)	2019							
	Land	Buildings	Structures	Machinery & Equipment	Vehicles	Tools	Construction-in-progress	Total
Balance as at January 1, 2019	₩ 14,052	₩ 56,427	₩ 9,714	₩ 217,314	₩ 681	₩ 5,180	₩ 14,252	₩ 317,620
Acquisition	-	285	205	12,763	329	1,280	31,064	45,926
Disposal	-	-	-	(348)	-	(3)	-	(351)
Transfer	-	748	275	37,178	116	296	(38,613)	-
Depreciation	-	(2,122)	(712)	(37,790)	(314)	(1,987)	-	(42,925)
Impairment loss	-	-	-	(978)	-	-	-	(978)
Balance as at December 31, 2019	₩ 14,052	₩ 55,338	₩ 9,481	₩ 228,139	₩ 812	₩ 4,766	₩ 6,703	₩ 319,291
Acquisition cost	₩ 14,052	₩ 84,631	₩ 18,432	₩ 692,321	₩ 5,102	₩ 35,484	₩ 6,703	₩ 856,725
Accumulated depreciation	-	(29,292)	(8,951)	(463,204)	(4,290)	(30,718)	-	(536,455)
Accumulated impairment	-	-	-	(978)	-	-	-	(978)

(in millions of Korean won)	2018							
	Land	Buildings	Structures	Machinery & Equipment	Vehicles	Tools	Construction-in-progress	Total
Balance as at January 1, 2018	₩ 14,052	₩ 58,401	₩ 9,517	₩ 236,689	₩ 669	₩ 5,071	₩ 3,037	₩ 327,436
Acquisition	-	131	821	9,807	306	1,104	20,702	32,871
Disposal	-	-	-	(2,270)	-	(4)	-	(2,274)
Transfer	-	-	62	8,367	-	1,058	(9,487)	-
Depreciation	-	(2,105)	(686)	(35,279)	(294)	(2,048)	-	(40,412)
Balance as at December 31, 2018	₩ 14,052	₩ 56,427	₩ 9,714	₩ 217,314	₩ 681	₩ 5,180	₩ 14,252	₩ 317,620
Acquisition cost	₩ 14,052	₩ 83,597	₩ 17,953	₩ 653,676	₩ 4,839	₩ 36,049	₩ 14,252	₩ 824,418
Accumulated depreciation	-	(27,170)	(8,239)	(436,045)	(4,158)	(30,869)	-	(506,481)
Accumulated impairment	-	-	-	(317)	-	-	-	(317)

As at December 31, 2019 and 2018, the book amount of the Company's land is recorded at ₩ 14,052 million (2018: ₩ 14,052 million). In addition, the value of the Company's land, as determined by the local government for property tax assessment purposes, amounts to approximately ₩ 34,236 million (2018: ₩ 31,913 million).

During 2019, due to the requirements such as development of new technology, the recoverable value of some machinery was below its net book value and was not expected to be recovered in the near future. The amount of its net book value exceeding the recoverable value, ₩ 978 million, was therefore recognized as an impairment loss on the machinery in 2019. The recoverable value of the machinery is calculated based on the estimated disposal value of the asset.

Investigation of the land contamination at the Ulsan factory was conducted in the course of establishing a joint venture with Kobe Steel Ltd., and land contamination was confirmed during investigation. Therefore, the present value of estimated expense, ₩ 10,031 million (2018: ₩ 14,330 million) for restoring the land was recognized as restoration liability as at December 31, 2019.

Meanwhile, in accordance with the applicable law, the Company has to dismantle and remove the assets and restore the site relating to the wastewater facilities after the end of the assets' useful lives. The present value of estimated expenses for restoration, ₩ 44 million (2018: ₩ 44 million), was therefore recognized applied in the carrying amount of property, plant and equipment.

Finance lease

Details of machinery classified as finance lease assets as at December 31, 2019 and 2018, are as follows:

(in millions of Korean won)		**2019**		**2018**
Beginning balance	₩	15,206	₩	18,132
Disposal		-		(974)
Depreciation		(1,928)		(1,952)
Ending balance	₩	13,278	₩	15,206
Acquisition cost	₩	17,629	₩	17,629
Less: Accumulated depreciation		(4,351)		(2,423)

Details of future minimum lease payments as at December 31, 2019 and 2018, are as follows:

(in millions of Korean won)	**Minimum lease payment**			
		2019		**2018**
No later than 1 year	₩	1,928	₩	1,928
Later than 1 year and no later than 5 years		5,623		5,623
Later than 5 years		5,727		7,655
	₩	13,278	₩	15,206

9. Insured Assets

The details of the insurance policies held by the Company as at December 31, 2019 and 2018, are as follows:

(in millions of Korean won and in thousands of US dollar)

Type of Insurance	Asset Insured	Amount Insured 2019	Amount Insured 2018	Insurance Company	Beneficiary
General property insurance	Inventories and property, plant and equipment, excluding land and certain construction-in-progress	US$ 1,011,281	US$ 1,021,970	AIG Insurance Co., Ltd.	The Company
General insurance for losses from product liability	-	US$ 10,000	US$ 10,000	Hyundai Marine & Fire Insurance Co., Ltd.	The Company
General insurance for losses from gas accidents	-	KR₩ 6,840,000	KR₩ 6,460,000	Hyundai Marine & Fire Insurance Co., Ltd.	The Company
Short-term Export Insurance	Trade Receivables	US$ 610,000	US$ 610,000	Korea Trade Insurance Corporation	The Company and others
Environmental contamination liability insurance	-	KR₩ 30,000,000	KR₩ 30,000,000	DB Insurance Co., Ltd.	The Company

Besides the above insurance policies, the Company has marine insurance policies for the export transactions. In addition, the Company has car liability insurance and comprehensive insurance for its vehicles, accident insurance for the benefits of its employees and directors and officers' liability insurance.

10. Intangible Assets

Details of intangible assets as at December 31, 2019 and 2018, are as follows:

(in millions of Korean won)	2019			
	Software	Carbon emission rights	Construction-in-progress intangible assets	Total
Beginning balance	₩ 1,555	₩ 14	₩ 304	₩ 1,872
Acquisition	-	395	476	871
Transfer	403	(409)	(403)	(409)
Amortization	(759)	-	-	(759)
Ending balance	₩ 1,199	₩ -	₩ 377	₩ 1,576
Acquisition cost	₩ 11,635	₩ -	₩ 378	₩ 12,013
Accumulated amortization	(10,437)	-	-	(10,437)

(in millions of Korean won)	2018			
	Software	Carbon emission rights	Construction-in-progress intangible assets	Total
Beginning balance	₩ 2,105	₩ 14	₩ 115	₩ 2,234
Acquisition	43	107	641	791
Transfer	452	(107)	(452)	(107)
Amortization	(1,045)	-	-	(1,045)
Ending balance	₩ 1,555	₩ 14	₩ 304	₩ 1,872
Acquisition cost	₩ 11,288	₩ 14	₩ 304	₩ 11,605
Accumulated amortization	(9,733)	-	-	(9,733)

For the year ended December 31, 2019, the Company classified the amortization amounting to ₩ 276 million (2018: ₩ 612 million) as cost of sales, and ₩ 483 million (2018: ₩ 433 million) as selling and administrative expenses.

11. Capitalization of Borrowing Costs

For the year ended December 31, 2019, the Company has borrowings amounting to ₩ 48 million (2018: ₩ 8 million) used to finance the cost of acquiring the Company's property, plant and equipment.

Effects on the statements of financial position and the statements of profit or loss as at and for the years ended December 31, 2019 and 2018, are as follows:

(in millions of Korean won)	2019		2018	
	Capitalized	Expensed	Capitalized	Expensed
Acquisition cost	₩ 856,726	₩ 852,706	₩ 824,418	₩ 820,436
Accumulated depreciation	(537,434)	(535,510)	(506,798)	(505,181)
Net book amounts	319,292	317,196	317,620	315,255
Equity	540,276	538,820	537,989	535,624

(in millions of Korean won)	2019		2018	
	Capitalized	Expensed	Capitalized	Expensed
Depreciation	₩ 42,925	₩ 42,613	₩ 40,412	₩ 40,098
Interest expense	944	992	2,724	2,732
Profit for the year	57,002	57,266	60,335	60,642

12. Borrowings

Long-term borrowings as at December 31, 2019 and 2018, are as follows:

(in millions of Korean won)	Lender	Interest rate (%) as at December 31, 2019	2019	2018
Facility loans	Bank of China	2.90	₩ -	₩ 14,000
Facility loans	KEB Hana Bank	1.75	200	600
Facility loans	KEB Hana Bank	1.75	270	630
Finance lease liabilities	-	-	13,278	15,207
			13,748	30,437
Less: Current portion of long-term liabilities			(2,399)	(16,689)
			₩ 11,349	₩ 13,748

Liquidity risk is defined as the risk that the Company is unable to meet its short-term payment obligations on time due to deterioration of its business performance or inability to access financing. The Company forecasts its cash flow and liquidity status such as sufficient cash level to meet operational needs and sets action plans on a monthly basis to manage liquidity risk proactively.

In addition, the Company copes with potential financial distress by maintaining adequate amount of cash and committed credit facilities. The balance of cash and cash equivalents, and current-financial deposits at December 31, 2019, is ₩ 139,871 million (2018: ₩ 208,911 million). The Company maintains total committed credit lines of ₩ 619,470 million and US$ 211,100 thousand in Citibank in Korea, Shinhan Bank and other financial institutions at December 31, 2019 (2018: ₩ 708,730 million and US$ 208,100 thousand).

The Company forfaits its trade receivables to financial institutions to meet short-term liquidity needs. Thus, it secures financing and manages credit risk of the receivables.

Details of the Company's maturity analysis as at December 31, 2019, are as follows:

(in millions of Korean won)	2019					
	Less than 6 months	**Between 6 months and 1 year**	**Between 1 and 2 years**	**Between 2 and 5 years**	**Over 5 years**	**Total**
Trade payables	₩ 730,886	₩ -	₩ -	₩ -	₩ -	₩ 730,886
Other accounts payable	26,346	-	-	-	-	26,346
Derivative liabilities	15,394	2,035	118	-	-	17,547
Borrowings	1,347	1,052	1,277	3,636	6,440	13,752
	₩ 773,973	₩ 3,087	₩ 1,395	₩ 3,636	₩ 6,440	₩ 788,531

The table above analyses the Company's non-derivative financial liabilities and net-settled derivative financial liabilities into relevant maturity based on the remaining period at the date of the statement of financial position to the contractual maturity date. Derivative financial liabilities are included in the analysis if their contractual maturities are essential for an understanding of the timing of the cash flows. The amounts disclosed in the table are the contractual undiscounted cash flows.

13. Provision for Severance Benefits (Severance Benefit Assets)

Changes in provision for severance benefits (severance benefit assets) for the years ended December 31, 2019 and 2018, are as follows:

(in millions of Korean won)	**2019**	**2018**
Beginning balance	₩ 47,706	₩ 44,287
Increase	7,411	6,316
Payment	(2,332)	(2,898)
Ending balance	52,785	47,706
Less: Cumulative contribution to the National Pension Fund	(54)	(61)
Less: Pension Plan assets	(57,077)	(45,652)
Provision for severance benefits (severance benefit assets)	₩ (4,346)	₩ 1,993

As at December 31, 2019, the Company estimates severance payable to all employees to be ₩ 52,785 million (2018: ₩ 47,706 million) and records the corresponding amount as provision for severance benefits. Also, the Company funded 108% of severance payable through severance insurance deposits with Korea Investment & Securities and other financial institutions. For the year ended December 31, 2019, the Company recognized the amount of ₩ 131 million (2018: ₩ 112 million) as severance benefits expenses under the defined contribution plan.

Changes in the fair value of plan assets for the years ended December 31, 2019 and 2018, are as follows:

(in millions of Korean won)		**2019**		**2018**
Beginning balance	₩	45,652	₩	44,411
Employer contributions		13,616		3,868
Benefits paid		(2,191)		(2,627)
Ending balance	₩	57,077	₩	45,652

Plan assets as at December 31, 2019 and 2018, are as follows:

(in millions of Korean won)		**2019**		**2018**
Cash	₩	15	₩	107
Time deposits		4,601		7,282
Securities combined with derivatives (guaranteed)		52,461		38,263
	₩	57,077	₩	45,652

14. Foreign Currency Denominated Assets and Liabilities

Significant monetary assets and liabilities denominated in foreign currencies as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won and in thousands of foreign currencies)

	2019				**2018**			
	Foreign currencies		**Won equivalents**		**Foreign currencies**		**Won equivalents**	
Foreign currency deposits	US$	225	₩	261	US$	45	₩	50
	HK$	124		18	HK$	458		65
Trade receivables	US$	244,801	₩	283,431	US$	235,768	₩	263,612
	JP¥	39,034		415	JP¥	90,607		918
Other receivables	US$	720	₩	834	US$	5,320	₩	5,949
	EUR	75		97	EUR	75		96
Trade payables	US$	144,257	₩	167,021	US$	139,041	₩	155,462
	EUR	4		5	EUR	11		14
	JP¥	19,912		212	JP¥	4,968		50
	CAD$	-		-	CAD$	-		-
Other payables	US$	12,511	₩	14,485	US$	13,806	₩	15,437
	EUR	287		373	EUR	66		85
	AUD	27		22	AUD	26		20

15. Contingencies and Commitments

The Company has bank overdraft agreements with Citibank Korea amounting to ₩ 5.5 billion (2018: US$ 5,000 thousand) as at December 31, 2019. The Company also has entered into agreements with Kookmin Bank and Shinhan Bank in relation to the opening of letters of credit of up to ₩ 22 billion and US$ 6,000 thousand (2018: ₩ 22 billion and US$ 10,000 thousand) as at December 31, 2019.

The Company has bank loan agreements with Shinhan Bank, Korea Development Bank, KEB Hana Bank, NongHyup Bank, and others amounting to ₩ 120,470 million (2018: ₩ 135,230 million) as at December 31, 2019.

The Company has agreements with Shinhan Bank and other financial institutions regarding a purchase card program of up to ₩ 587.3 billion and US$ 105,100 thousand (2018: ₩ 626.5 billion and US$ 104,100 thousand) as at December 31, 2019. The excercised amounts are ₩ 319.7 billion and US$ 54,152 thousand (2018: ₩ 456.8 billion and US$ 55,280 thousand), and the amounts are presented as trade payables and and other payables as the nature of the purchases occurred during the normal course of business.

The Company has provided a payment guarantee to Korean National Tax Service amounting up to ₩ 22 billion as at December 31, 2019 in relation to the mutual agreed procedure between Korean Tax Authority and Canadian Tax Authority.

As at December 31, 2019, the Company has accounts receivable factoring and foreign receivable forfaiting agreements with the Export-Import Bank of Korea and six other financial institutions amounting to ₩ 118.9 billion (2018: ₩ 125.1 billion) as at December 31, 2019. The details of the discounted amounts of unmatured accounts receivable are described in Notes 5.

As at December 31, 2019, the Company has a technical assistance agreement with Novelis Inc. for the manufacture of aluminum products and accordingly, the Company recognized royalty fee amounting to ₩ 16,877 million (2018: ₩ 11,420 million) which was included in research expenses and royalties (Notes 22 and 30).

As at December 31, 2019, the Company has a “Novelis” brand license agreement with Novelis Limited UK and accordingly, royalty expense amounting ₩ 4,901 million (2018: ₩ 4,753 million) was recognized (Notes 22 and 30).

A management fee refers to a type of commission received in return for the services Novelis Inc. provides to its subsidiaries, which include managerial and strategic consulting services, sales and marketing support, IT and public relations services, and others. Novelis Inc. annually imposes such management fee to its subsidiaries pursuant to the Strategic Management Services Agreement that specifically stipulates the above mentioned services (Notes 22 and 30).

The Company has entered into the Shared Service Agreement with Ulsan Aluminum Limited and provides HR, logistics, communication, non-metal purchasing, internal audit, customs and trade and IT related services to Ulsan Aluminum Limited. The commission income recognized during

the year is ₩ 3,348 million (2018: ₩ 3,200 million).

The Company has signed long-term sales contract with several customers and supplies aluminum coil products. In response, the Company also entered into long-term contracts for the purchase of aluminum raw materials with several suppliers in order to supply stable raw materials for aluminum.

16. Share-Based Payments

As at December 31, 2019, the Company's parent company, Novelis Inc., has granted cash-settled share-based payments based on the share of the parent company, Novelis Inc., and restricted stock units ("RSU") based on the share of the ultimate parent company, Hindalco Industries Limited, to the employees and directors of the Company. The Company introduced a new performance-based compensation unit ("Performance Unit") to give an option for employees to choose between Performance Unit and RSU. The Company is responsible for the compensation cost of said grants.

As at December 31, 2019, details of cash-settled share-based payments and restricted stock unit for employees and directors are as follows:

- Hindalco Industries Limited

		Cash-settled share-based payment						
Grant years		**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Remaining number of grants		36,349	181,900	224,292	132,734	173,452	183,885	256,130
Maturity years		2020	2021	2022	2023	2024	2025	2026
Exercise price		INR 104.88	INR 145.50	INR 134.58	INR 91.05	INR 187.70	INR 230.98	INR 198.88
Vesting conditions	Service period	1 ~ 4 yrs	1 ~ 4 yrs	1 ~ 4 yrs	1 ~ 3 yrs	1 ~ 3 yrs	1 ~ 3 yrs	1 ~ 3 yrs
	Non-market conditions	Achievement of target EBITDA for one year of individual service period						
Cap (maximum share price at the exercise gain calculation)		INR 255.81	INR 341.19	INR 308.38	INR 223.23	INR 453.94	INR 524.08	INR 440.83

		Restricted Stock Unit		
Grant years		**2017**	**2018**	**2019**
Remaining number of grants		67,053	117,308	218,223
Maturity years		2020	2021	2022
Exercise price		INR 187.70	INR 230.98	INR 198.88
Vesting conditions	Service period	3 yrs	3 yrs	3 yrs
	Non-market conditions		-	
Cap (maximum share price at the exercise gain calculation)		INR 453.94	INR 524.08	INR 440.83

- Novelis Inc.

		Cash-settled share-based payment		
Grant years		**2013**	**2014**	**2015**
Remaining number of grants		5,573	5,597	1,141
Maturity years		2020	2021	2022
Exercise price		USD 91.87	USD 94.40	USD 65.35
Vesting conditions	Service period	1 ~ 4 yrs	1 ~ 4 yrs	1 ~ 4 yrs
	Non-market conditions	Achievement of target EBITDA for one year of individual service period		
Cap (maximum share price at the exercise gain calculation)		$174.82	$164.93	$112.40

The number of grants are subject to change as transfer of executives and employees to and from affiliated companies.

In May, 2013, upon approval of the Company's executives and employees, Novelis Inc. decided to cancel and pay certain cash-settled share-based payments that were based on shares of Hindalco Industries Limited and then exchange the remaining share based payments to the share based payment based on shares of Novelis Inc. In May 2016, upon approval of Novelis Inc., the Company provided an option for the executives and employees of the Company to cancel Novelis Inc.'s share-based payments for selecting the new Performance Units. These changes are reflected in the information described above.

Changes in the number of grants and weighted average exercised price of grants period ended December 31, 2019, are as follows:

(*In Indian rupee and US dollar*)	Hindalco Industries Limited		Novelis Inc.	
	Number of grants	**Weighted average exercised price of grants**	**Number of grants**	**Weighted average exercised price of grants**
Beginning balance	1,031,476	INR 155.30	21,651	$ 73.51
Vested	265,448	200.00	-	-
Cancelled	-	-	-	-
Transferred	-	-	-	-
Exercised	(108,182)	136.43	(9,340)	96.81
Ending balance	1,188,742	167.00	12,311	90.56
Exercisable balance as at December 31, 2019	750,845	144.05	12,311	90.56

The Company calculated the fair value of the grant, whose service period requirement has not been met using the Monte Carlo method, as follows:

	2017	2018		2019		
	Tranche3	Tranche2	Tranche3	Tranche1	Tranche2	Tranche3
Hindalco	INR 58.26	INR 52.77	INR 55.87	INR 60.46	INR 64.81	INR 64.85

The assumptions used for determination of fair value are as follows:

- Hindalco Industries Limited

	2018 Grant	2019 Grant
Stock price [1]	INR 197.95	INR 197.95
Expected share price volatility [2]	37%	38%
Risk-free interest rate	6.52%	6.64%
Expected dividend rate	0.61%	0.61%

[1] The stock price of Hindalco Industries Limited as at December 31, 2019.
[2] The expected exercise period and historical share price as at December 31, 2019, were considered in the calculation of volatility.

The difference between the stock price of underlying shares at the reporting period end date and the exercise price is used for the fair value for the 2013 Tranche 1, Tranche 2, Tranche 3 and Tranche 4; 2014 Tranche 1 and Tranche 2, Tranche 3 and Tranche 4; 2015 Tranche 1, Tranche 2, Tranche 3 and Tranche 4; 2016 Tranche 1, Tranche 2 and Tranche 3; 2017 Tranche 1 and Tranche 2; 2018 Tranche 1.

The restricted stock unit vested to the employees and directors is calculated based on the fair value of the underlying shares as at December 31, 2019.

For the year ended December 31, 2019, the Company recognized the compensation cost on cash-settled share-based payments and restricted stock unit amounting to ₩ 1,313 million as selling and administrative expense, and related liabilities amounting to ₩ 2,085 million as accrued expense.

17. Income Taxes

Income tax expense for the years ended December 31, 2019 and 2018, consists of:

(in millions of Korean won)	2019	2018
Current income taxes	₩ 17,193	₩ 19,958
Deferred income tax due to temporary differences	3,201	3,301
Total tax effect	20,394	23,259
Expected income tax return on unappropriated earnings	-	(7,629)
Deferred income tax charged to equity	(148)	(1,167)
Income tax expense	₩ 20,246	₩ 14,463

Deferred income taxes charged directly to the equity as at December 31, 2019 and 2018, are as follows:

(in millions of Korean won)	2019	2018
Gain (loss) on valuation of derivative instruments	₩ (148)	₩ (1,167)

Reconciliation between profit before tax and income tax expense for the years ended December 31, 2019 and 2018, is as follows:

(in millions of Korean won)	2019	2018
Profit before tax	₩ 77,248	₩ 74,798
Income tax based on statutory rate	₩ 18,694	₩ 18,101
Add (deduct):		
Non-deductible expense	365	452
Income tax on unappropriated earnings	1,733	(4,872)
Others	(546)	782
Income tax expense	₩ 20,246	₩ 14,463
Effective tax rate (Income tax expense/profit before tax)	26.83%	19.34%

Changes in the temporary differences and related deferred tax assets and liabilities for the years ended December 31, 2019 and 2018, are as follows:

(in millions of Korean won)	2019					
	Temporary differences			Deferred tax assets (liabilities)		
	Beginning balance	Increase (Decrease)	Ending balance	Beginning balance	Increase (Decrease)	Ending balance
Derivatives	₩ (1,839)	₩ (845)	₩ (2,684)	₩ 445	₩ 204	₩ 649
Allowance for carbon emission rights	(403)	(311)	(714)	97	76	173
Accrued expenses	(25,265)	3,551	(21,714)	6,114	(859)	5,255
Property, plant and equipment	(8,703)	(1,843)	(10,546)	2,106	446	2,552
Loss on valuation of inventories	(1,063)	(926)	(1,989)	257	224	481
Gain or loss on foreign currency translation	(24)	-	(24)	6	-	6
Accrued revenue	2,490	2,174	4,664	(603)	(526)	(1,129)
Interest receivables	198	(180)	18	(48)	44	(4)
Asset retirement obligation liabilities	(698)	(1)	(699)	169	-	169
Provision for severance benefits	(46)	(73)	(119)	11	18	29
Investment in kind	(2,377)	4,678	2,301	575	(1,132)	(557)
Gain or loss on equity method	11,167	7,762	18,929	(2,443)	(1,696)	(4,139)
	(26,563)	13,986	(12,577)	6,686	(3,201)	3,485
Tax credits	-	-	-	-	-	-
	₩ (26,563)	₩ 13,986	₩ (12,577)	₩ 6,686	₩ (3,201)	₩ 3,485

(in millions of Korean won)	2018					
	Temporary differences			Deferred tax assets (liabilities)		
	Beginning balance	Increase (Decrease)	Ending balance	Beginning balance	Increase (Decrease)	Ending balance
Derivatives	₩ 5,912	₩ (7,751)	₩ (1,839)	₩ (1,431)	₩ 1,876	₩ 445
Allowance for carbon emission rights	(107)	(296)	(403)	26	71	97
Accrued expenses	(31,133)	5,868	(25,265)	7,534	(1,420)	6,114
Property, plant and equipment	(6,242)	(2,461)	(8,703)	1,511	595	2,106
Loss on valuation of inventories	(700)	(363)	(1,063)	169	88	257
Gain or loss on foreign currency translation	(24)	-	(24)	6	-	6
Accrued revenue	1,467	1,023	2,490	(355)	(248)	(603)
Interest receivables	312	(114)	198	(76)	28	(48)
Asset retirement obligation liabilities	(698)	-	(698)	169	-	169
Provision for severance benefits	(38)	(8)	(46)	9	2	11
Investment in kind	(7,027)	4,650	(2,377)	1,700	(1,125)	575
Gain or loss on equity method	2,404	8,763	11,167	(407)	(2,036)	(2,443)
	(35,874)	9,311	(26,563)	8,855	(2,169)	6,686
Tax credits	(1,414)	1,414	-	1,131	(1,131)	-
	₩ (37,288)	₩ 10,725	₩ (26,563)	₩ 9,986	₩ (3,300)	₩ 6,686

Realization of the future tax benefits related to the deferred tax assets is dependent on many factors, including the Company's ability to generate taxable income within the period during which the temporary differences reverse, the outlook of the Korean economic environment, and the overall future industry outlook. Management periodically considers these factors in reaching its conclusion and recognized the deferred income tax asset since all the future deductible tax benefits are determined to be realizable as at December 31, 2019.

The gross balances of deferred tax assets and liabilities as at December 31, 2019 and 2018, are as follows:

(in millions of Korean won)	2019		2018	
	Deferred tax Assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Current	₩ 6,564	₩ (1,133)	₩ 6,474	₩ (206)
Non-current	2,750	(4,696)	2,286	(1,868)
	₩ 9,314	₩ (5,829)	₩ 8,760	₩ (2,074)

18. Share Capital

The Company is authorized to issue 80,000,000 shares with the par value per share of ₩ 375. The Company has issued and outstanding 46,762,000 shares of common stock.

Changes in share capital, share premium and capital adjustments for the years ended December 31, 2019 and 2018, are as follows:

(in millions of Korean won)			Share premium
	Number of shares (in thousands)	**Share capital**	**Paid-in capital in excess of par value**
December 31, 2018	46,762,000	₩ 17,536	₩ 399,241
December 31, 2019	46,762,000	17,536	399,241

19. Retained Earnings

Appropriation of Retained Earnings

Date of Appropriation: March 27, 2020 and March 28, 2019 for the years ended December 31, 2019 and 2018, respectively.

Retained earnings as at December 31, 2019 and 2018, consist of:

(in millions of Korean won)	**2019**	**2018**
Retained earnings before appropriation		
Unappropriated retained earnings carried over from prior year	₩ 91,278	₩ 30,942
Interim dividends	(55,179)	-
Dividends (ratio) per share common stock:		
46,762,000 shares, ₩ 1,180 (315%) in 2019		
46,762,000 shares, ₩ - (-%) in 2018		
Profit for the year	57,002	60,335
	93,101	91,277
Appropriation of retained earnings		
Loss on capital reduction	-	-
Earned profit reserves	-	-
Cash dividends	-	-
	-	-
Unappropriated retained earnings carried forward to subsequent year	₩ 93,101	₩ 91,227

20. Sales

Sales for the years ended December 31, 2019 and 2018, consist of:

(in millions of Korean won)		**2019**		**2018**
Domestic sales of finished goods	₩	218,481	₩	304,616
Export sales of finished goods		1,120,077		1,049,325
Sales of merchandise		806,234		822,551
Other sales		28,808		29,649
	₩	2,173,600	₩	2,206,141

21. Cost of Sales

Cost of sales for the years ended December 31, 2019 and 2018, consists of:

(in millions of Korean won)		**2019**		**2018**
Cost of finished goods sold				
Finished goods, beginning	₩	47,474	₩	29,040
Manufacturing cost		1,245,293		1,260,355
Finished goods, ending		(45,135)		(47,474)
Transfer to other accounts		(76,734)		(37,602)
Refunded customs duties		(5,196)		(702)
		1,165,702		1,203,617
Cost of merchandise sold				
Merchandise, beginning		22,233		6,714
Purchases		741,818		797,686
Merchandise, ending		(20,206)		(22,233)
Transfer from other accounts		21,035		21,039
		764,880		803,206
Other cost of sales		18,712		20,657
	₩	1,949,294	₩	2,027,480

22. Selling and Administrative Expenses

Selling and administrative expenses for the years ended December 31, 2019 and 2018, are as follows:

(in millions of Korean won)		**2019**		**2018**
Personnel expenses	₩	17,036	₩	18,119
Severance benefits		1,143		1,123
Welfare expenses		4,538		3,006
Travel expenses		1,828		1,654
Communication expenses		546		1,021
Fees		6,807		4,611
Rental charges		1,432		1,376
Freight costs		4,265		4,572
Depreciation and amortization		1,013		1,052
Export expenses		39,839		28,171
Overseas offices expenses		622		801
Research expenses and royalties		18,752		13,866
Claim expenses		5,201		5,705
Brand fees		4,901		4,753
Management service fees		17,434		12,927
Computer expenses		3,191		2,993
Others		4,045		796
	₩	132,593	₩	106,547

23. Value Added Information

Value added information for the years ended December 31, 2019 and 2018, follows:

(in millions of Korean won)	2019			2018		
	Manufacturing costs	Selling and administrative expenses	Total	Manufacturing costs	Selling and administrative expenses	Total
Personnel expenses	₩ 59,063	₩ 17,036	₩ 76,190	₩ 59,728	₩ 18,119	₩ 77,847
Severance benefits	6,399	1,143	7,542	5,198	1,123	6,321
Welfare expenses	8,570	4,538	13,108	9,170	3,006	12,176
Depreciation and amortization[1]	42,526	1,013	43,539	40,222	1,052	41,274
Tax and dues	712	1,518	2,230	710	214	924
Rental charges	129	1,432	1,561	69	1,376	1,445
	₩ 117,490	₩ 26,680	₩ 144,170	₩ 115,098	₩ 24,891	₩ 139,987

[1] Including amortization expense and depreciation expense transferred to other accounts, excluding depreciation expense for idle assets, ₩ 145 million. (2018: ₩ 182 million).

24. Comprehensive Income

Comprehensive income for the years ended December 31, 2019 and 2018, consists of:

(in millions of Korean won)	2019	2018
Profit for the year	₩ 57,002	₩ 60,335
Other comprehensive income		
Cash flow hedge, net of tax of ₩ (148) million (2018: ₩ (1,167) million)	464	3,655
Comprehensive income	₩ 57,466	₩ 63,990

25. Earnings per Share

Basic ordinary income per share and earnings per share for the years ended December 31, 2019 and 2018, are calculated as follows:

	2019	2018
Profit for the year	₩ 57,002,374,240	₩ 60,335,038,711
Ordinary income and net income allocated to common stock (A)	57,002,374,240	60,335,038,711
Weighted-average number of common shares outstanding during the year[1] (B)	46,762,000 shares	46,762,000 shares
Basic earnings per share ((A)/(B))	₩ 1,219	₩ 1,290

[1] Since the Company has not issued any convertible securities such as convertible bonds, diluted ordinary income per share and diluted earnings per share are identical to basic ordinary income per share and basic earnings per share, respectively.

26. Dividends

(a) Interim dividend

(*In Korean won)*	2019	2018
Shares to be paid (par value ₩ 375)	46,762,000 shares	46,762,000 shares
Dividend per share (rate)	₩ 1,180 (315%)	₩ - (-%)
Amount of dividend ((1)x(2))	55,179,160,000	-

(b) Dividend payout ratio

The dividend payout ratio of the Company is as follows:

(*In Korean won)*	2019	2018
Amount of dividend	₩ 55,179,160,000	₩ -
Net income	57,002,374,240	60,335,038,711
Dividend payout ratio ((1)÷(2))	97%	-%

27. Derivatives

In order to hedge against price fluctuation in sales contracts with fixed-prices, the Company enters into futures contracts. Also to hedge against price fluctuation in inventories, the Company has futures contracts. The Company entered into derivative instrument contracts including currency forward to hedge the exposure to changes in foreign exchange rates for assets and liabilities and future cash flows denominated in foreign currencies.

The gains and losses on valuation of derivatives mentioned above for the years ended December 31, 2019 and 2018, are as follows:

(in millions of Korean won)	2019					
	Statement of profit or loss				Other comprehensive income (loss)[1]	
	Valuation Gain		Valuation Loss			
Commodity futures	₩	4,131	₩	7,382	₩	(5,012)
Currency forward		6,131		5,020		5,624
	₩	10,262	₩	12,402	₩	612

[1] ₩ 464 million, net of tax, was recorded in other comprehensive income or loss.

(in millions of Korean won)	2018					
	Statement of profit or loss				Other comprehensive income (loss)[1]	
	Valuation Gain		Valuation Loss			
Commodity futures	₩	16,499	₩	17,159	₩	16,485
Currency forward		2,587		1,928		(11,686)
Interest rate swap		-		-		23
	₩	19,086	₩	19,087	₩	4,821

[1] ₩ 3,655 million, net of tax, was recorded in other comprehensive income or loss.

There is no gain or loss on valuation of derivatives, which is the ineffective portion of derivatives of the hedging instrument but meets the hedge effectiveness for the application of fair-value hedge accounting criteria as at December 31, 2019.

The Company recognized gain and loss on valuation of derivatives amounting ₩ 319 million and ₩ 133 million, respectively, which are the ineffective portion of derivatives as hedging instrument but meet the hedge effectiveness criteria for the application of cash-flow hedge accounting as at December 31, 2019. The Company applies cash flow hedge accounting and is exposed to fluctuations in cash flows up to March 31, 2021.

Total accumulated other comprehensive income and loss recognized amount to ₩ 5,625 million and ₩ 4,881 million, respectively, of which ₩ 4,485 million and ₩ 4,763 million are expected to be recognized as gain and loss, respectively, within 12 months from December 31, 2020.

Also, the realized gain and loss on derivative transactions recognized upon the expiration of contracts for the year ended December 31, 2019, which were reflected in sales, amounted to ₩ 2,095 million and ₩ 25,229 million, respectively, while gain and loss reflected as cost of sales amounted to ₩ 4,781 million and ₩ 80 million, respectively.

28. Carbon Emission Rights (Allowances) and Liabilities

Details of emission rights in 2018 and 2019, are as follows:

(in millions of Korean won, except quantities for ton)	2018		2019		Total	
	Quantity	Amount	Quantity	Amount	Quantity	Amount
At January 1	261,971	₩ -	261,971	₩ -	523,942	₩ -
Adjustments	-	-	-	-	-	-
Free assignment	316	-	-	-	316	-
Purchase (Offset)	-	-	-	-	-	-
Purchase	13,941	395	-	-	13,941	395
Sale	-	-	-	-	-	-
Carryforward (Allocations)	811	-	-	-	811	-
Carryforward (Offset)	738	14	-	-	738	14
Submitted to the government	(277,777)	(409)	-	-	(277,777)	(409)
At December 31	-	₩ -	261,971	₩ -	261,971	₩ -

Details of emission liabilities for the years ended December 31, 2019 and 2018, are as follows:

(in millions of Korean won)	2019	2018
At January 1	₩ 403	₩ 107
Additional addition (excess emissions)	720	403
Used (submitted to the government)	(409)	(107)
At December 31	₩ 714	₩ 403

29. Significant Transactions Not Affecting Cash Flows

Significant transactions not affecting cash flows for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Reclassification of construction-in-progress to property, plant and equipment	₩ 38,613	₩ 9,487
Increase (decrease) in other accounts payable related to acquisition of property, plant and equipment and intangible assets	(835)	1,214
Reclassification of long-term borrowings to current portion of long-term borrowings	14,280	14,570
Decrease in finance lease assets	-	(2,926)
Decrease in finance lease liabilities	-	(2,926)
Offset of loss from capital reduction with retained earnings	-	232,971
Reclassification of long-term asset retirement obligations to current portion of asset retirement obligations	8,576	

30. Related Party Transactions

The Company's parent company, Novelis Inc., is a foreign registrant and there is no intermediate domestic company which prepares financial statements for external users.

Details of related parties that have sales and other transactions with the Company or have receivables and payables balances as at December 31, 2019 and 2018, are as follows:

	2019	2018
Ultimate parent company	Hindalco Industries Limited	Hindalco Industries Limited
Parent company	Novelis Inc.	Novelis Inc.
Other related parties	Novelis Switzerland-SA,Novelis AG, Novelis Deutschland GMBH, Novelis UK Ltd., Novelis Corporation (Texas), Novelis MEA Ltd., Novelis Services Limited, ALUMINUM COMPANY OF MALAYSIA BERHAD, Novelis Vietnam Company Limited, Novelis Madeira, Unipessoal Lda,Novelis Shanghai Aluminum Trading Company, Novelis (China) Aluminum Products Co., Ltd., Novelis Italia SpA, Novelis do Brazil Ltda., Novelis PAE SAS	Novelis Switzerland-SA,Novelis AG, Novelis Deutschland GMBH, Novelis UK Ltd., Novelis Corporation (Texas), Novelis MEA Ltd., Novelis Services Limited, ALUMINUM COMPANY OF MALAYSIA BERHAD, Novelis Vietnam Company Limited, Novelis Madeira, Unipessoal Lda,Novelis Shanghai Aluminum Trading Company, Novelis (China) Aluminum Products Co., Ltd., Novelis Italia SpA, Novelis do Brazil Ltda., Novelis PAE SAS
Entity under joint control	Ulsan Aluminum Limited	Ulsan Aluminum Limited

Sales and purchases with related parties for the years ended December 31, 2019 and 2018, are as follows:

(in millions of Korean won)	Counter party	Sales[1]	Purchase[2]	Acquisition of property, plant and equipment	Acquisition of intangibles	Other income (expense)
Ultimate parent company	Hindalco Industries Limited	₩ -	₩ 305	₩ -	₩ -	₩ -
Parent company	Novelis Inc.	-	37,242	-	-	(598)
Other related parties	Novelis AG	-	56,793	-	-	(486)
	Novelis Deutschland GMBH	5,953	-	-	-	(17)
	Novelis Corporation	9,851	80	551	-	(1,805)
	Novelis MEA Ltd.	481,157	13,988	-	-	(972)
	Novelis Services Limited	-	4,901	-	-	-
	Novelis Vietnam Company Limited	-	-	-	-	7
	Novelis Shanghai Aluminum Trading Company	-	-	-	-	(271)
	Novelis (China) Aluminum Products Co., Ltd.	125,056	8,798	-	-	(4,411)
	Novelis Italia SpA	-	-	-	-	-
	Novelis do Brazil Ltda.	1,902	-	-	-	(125)
	Novelis PAE SAS	-	224	498	-	-
Entity under joint control	Ulsan Aluminum Limited	569,178	730,839	-	-	2,773
	2019	₩ 1,193,097	₩ 853,170	₩ 1,049	₩ -	₩ (5,905)
	2018	₩ 1,266,564	₩ 846,066	₩ 246	₩ 83	₩ (4,917)

[1] Sales of goods and rendering of services are included in sales.

[2] Purchases of goods and services (management services) are included in purchases (Note 15).

[3] Sales of raw materials to UAL are reported on a gross basis due to Novelis Korea purchasing as an agent

Year-end balances of receivables and payables arising from sales and purchases of goods and services as at December 31, 2019 and 2018, are as follows:

(in millions of Korean won)	Counter party	Receivables		Payables	
		Trade receivables	Other receivables	Trade payables	Other payables
Ultimate parent company	Hindalco Industries Limited	₩ -	₩ -	₩ 40	₩ -
Parent company	Novelis Inc.	-	112	-	1,718
Other related parties	Novelis Deutschland GMBH	1,419		-	-
	Novelis Corporation	7,127	159	49	352
	Novelis MEA Ltd.	57,209	-	3,465	59
	Novelis Vietnam Company Limited	1,231	113	1,384	-
	Novelis AG	-	97	-	59
	Novelis Shanghai Aluminum Trading Company	-	-	-	-
	Novelis (China) Aluminum Products Co., Ltd.	48,302	163	3,834	2,342
	Novelis do Brazil Ltda.	-	1	-	3
Entity under joint control	Ulsan Aluminum Limited	101,904	45,952	171,173	1,606
	2019	₩ 217,192	₩ 46,597	₩ 179,945	₩ 6,139
	2018	₩ 231,347	₩ 46,738	₩ 135,775	₩ 11,586

Details of payment guarantees provided by the Company for the related parties as at December 31, 2019, are stated in Note 15.

Details of loan transactions and contribution between the Company and the related parties for the year ended December 31, 2018, are as follows:

(in millions of Korean won)		2019					
		Beginning balance	Loans	Collection	Foreign exchange	Contribution in kind	Ending balance
Other related parties	Novelis Corporation	₩ 69,641	₩ -	₩ (69,322)	₩ (319)	₩ -	₩ -

31. Events after the Reporting Year

(a) Approval of financial statements

The financial statements for the 2019 reporting period of the Company were approved by the Board of Directors on March 24, 2020, and may be modified and approved by a general shareholders' meeting.

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RESPECTED TRUSTED PROFESSIONAL SAMIL

Report on Independent Accountants'
Review of Internal Accounting Control System

To the President of
Novelis Korea Limited

We have reviewed the accompanying management's report on the operations of the Internal Accounting Control System ("IACS") of Novelis Korea Limited (the "Company") as at December 31, 2019. The Company's management is responsible for designing and operating IACS and for its assessment of the effectiveness of IACS. Our responsibility is to review the management's report on the operations of the IACS and issue a report based on our review. The management's report on the operations of the IACS of the Company states that "based on its assessment of the operations of the IACS as at December 31, 2019, no material weaknesses are identified as at December 31, 2019, in all material respects, in accordance with the IACS standards established by the Internal Accounting Control System Operations Committee (IACSOC) of the Korea Listed Companies Association."

Our review was conducted in accordance with the IACS review standards established by the Korean Institute of Certified Public Accountants. Those standards require that we plan and perform, in all material respects, the review of management's report on the operations of the IACS to obtain a lower level of assurance than an audit. A review is to obtain an understanding of a company's IACS and consists principally of inquiries of management and, when deemed necessary, a limited inspection of underlying documents, which is substantially less in scope than an audit. However, in accordance with Chapter 5, Application for small- and medium-sized companies of the IACS standards, the design, operation and assessment of its IACS are limited compared with those of public large-sized companies as the Company is a non-public large- sized company. As such, we performed our review in accordance with Chapter 14, Review standards for small- and medium-sized companies.

A company's IACS is a system to monitor and operate those policies and procedures designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with Accounting Standards for Non-Public Entities in the Republic of Korea. Because of its inherent limitations, IACS may not prevent or detect a material misstatement of the financial statements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Based on our review, nothing has come to our attention that causes us to believe that management's report on the operations of the IACS, referred to above, is not presented fairly, in all material respects, in accordance with Chapter 5, Application for small- and medium-sized companies', of the IACS standards established by IACSOC.

Our review is based on the Company's IACS as at December 31, 2019, and we did not review management's assessment of its IACS subsequent to December 31, 2019. This report has been prepared pursuant to the Acts on External Audit for Stock Companies in Korea and may not be appropriate for other purposes or for other users.

Samil PricewaterhouseCoopers

March 26, 2020

Report on the Operations of the Internal Accounting Control System

To the Board of Directors and Auditor of
Novelis Korea Limited

I, as the CEO and the Internal Accounting Control Officer ("IACO") of Novelis Korea Limited ("the Company"), assessed the status of the design and operations of the Company's internal accounting control system ("IACS") for the year ended December 31, 2019.

The Company's management including IACO is responsible for designing and operating IACS. I, as the IACO, assessed whether the IACS has been effectively designed and is operating to prevent and detect any error or fraud which may cause any misstatement of the financial statements, for the purpose of establishing the reliability of financial reporting and the preparation of financial statements for external purposes. I, as the IACO, applied Chapter 5, Application to small & medium sized companies of the IACS standards for the assessment of design and operations of the IACS.

Based on the assessment on the operation of the IACS, no material weakness has been identified as at December 31, 2019, in all material respect, in accordance with the IACS standards.

We certify that this report does not contain any untrue statement of a fact, or omit to state a fact necessary to be presented herein. We also certify that this report does not contain or present any statements which might cause material misunderstandings of the readers, and we have reviewed and verified this report with sufficient care.

March 6, 2020

Alejandro Bisogno

Internal Accounting Control Officer

Sachin Satpute

Chief Executive Officer