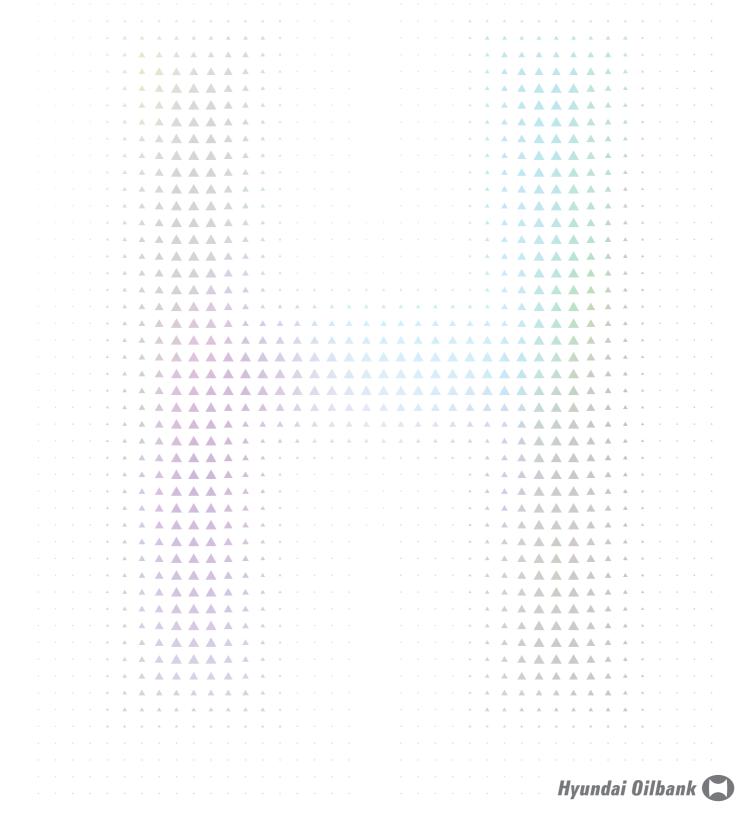
# A QUANTUM LEAP FORWARD



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# A QUANTUM LEAP FORWARD

Hyundai Oilbank was the only company in South Korea's oil refining industry to record surpluses in both the second and third quarters of 2020. This monumental event occurred despite the challenges of COVID-19 and other negative factors, allowing us to continue laying the foundations for a dramatic leap forward based on our three overriding strategies of welcoming change, embracing challenges, and making sustained investments in our operations.

Some of our signal accomplishments in 2020 include boasting the highest heavy oil upgrading (HOU) ratio in the nation, entering into a number of new businesses, and diversifying the sources of our crude oil imports.

We will prepare for an era free of COVID-19 by reaffirming our commitment to becoming an eco-friendly energy business, engaging in carbon-neutral green growth, and securing future growth engines.

# QUANTUM JUMP

ISSUE HIGHLIGHT 01

Mid-to long-term plans for becoming an eco-friendly energy business

Hyundai Oilbank is helping the world's people deal with climate change and enter an era of carbon neutrality. Its actions include promoting new and renewable energy and eco-friendly petrochemical and materials businesses and increasing the competitiveness of its existing petroleum business by maximizing its use of low-cost, extra heavy crude oil. In addition, the byproducts of its production activities will be utilized as raw materials for eco-friendly energy businesses. The byproducts will also be used as components for fuel cell power generation, low-carbon LNG power generation, and other new energy businesses, while the carbon dioxide emitted by the company's existing businesses can be used in the manufacture of basic chemical materials and cement once carbon capture has taken place.

#### **Establishing three eco-friendly future businesses**

Hyundai Oilbank plans to reduce the sales portion of its petroleum business to the 40% level of its total by 2030 by promoting three future businesses: blue hydrogen, white biotechnology, and eco-friendly chemicals and materials. It estimates that its profit portion from operating them will be 70% of its total operating profit.

## 01

#### Operating a Blue Hydrogen Business

- ① Produce 100,000 tons of blue hydrogen by 2025
- ② For use in hydrogen charging stations and fuel cell power generation

#### 72

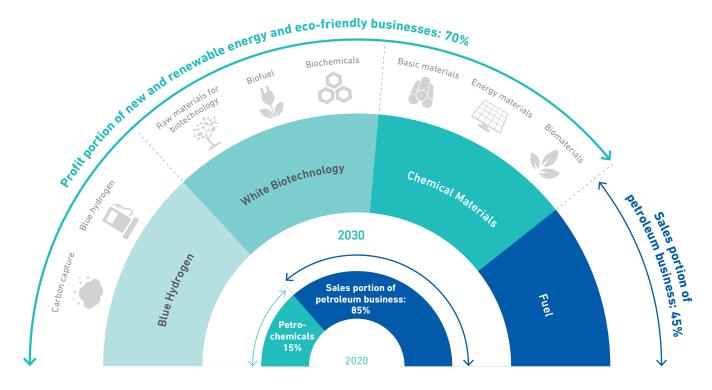
## Carrying Out a White Biotechnology Business

- Enter second- generation white biotechnology business in 2023
   Build a 1 million ton bio-ecosyste
- ② Build a 1 million ton bio-ecosystem by 2030

#### 7.3

## Growing an Eco-Friendly Chemical and Materials Business

- Begin commercial operations at the Heavy Feed Petrochemical Complex (HPC) within the year
- ② Expand chemical and materials business



# GRENGROWTH

ISSUE HIGHLIGHT 02

Announced commitment to carbon-neutral green growth

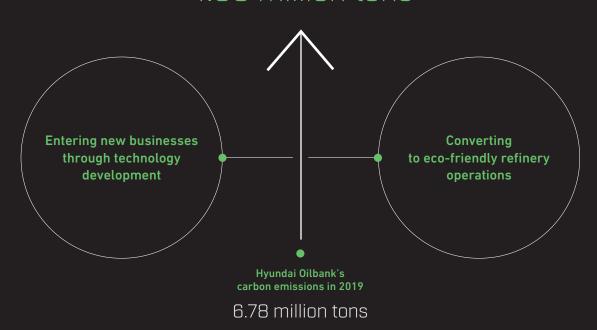
#### **Carbon emissions reduction target**

Hyundai Oilbank plans to reduce its carbon emissions in phases in accordance with its green growth strategy.

Its target for 2050 will be about 70% of what its emissions were in 2019.

Hyundai Oilbank's projected carbon emissions in 2050

Reducing to about 0/0



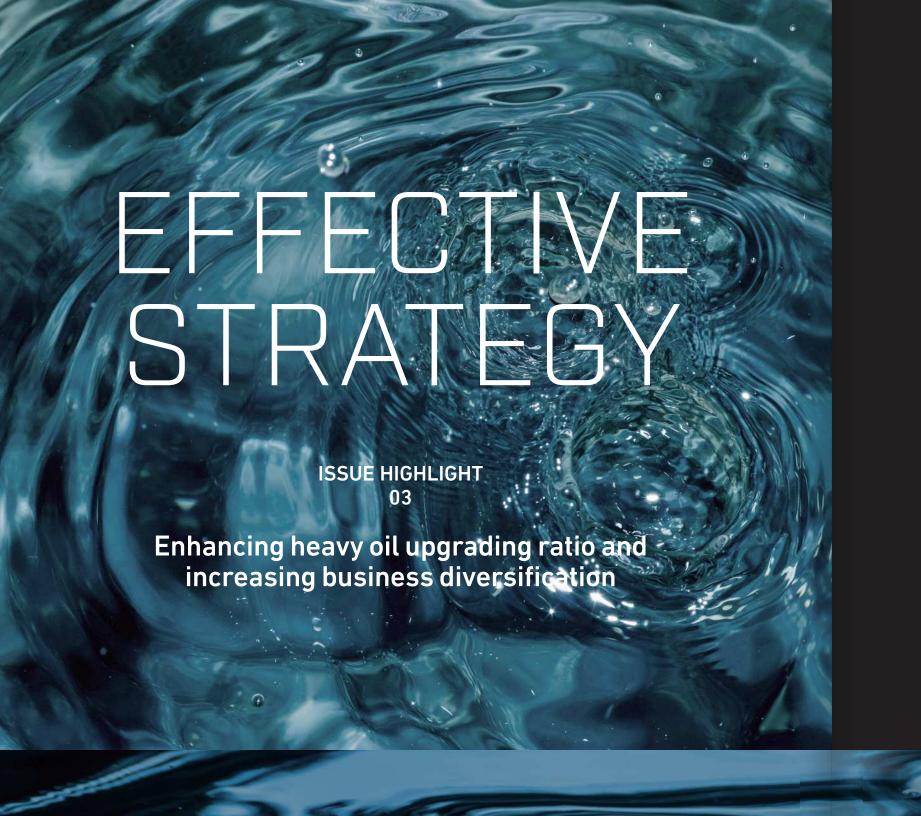
Hyundai Oilbank is committed to engaging in carbon neutral green growth to help meet ever-stricter environmental regulations around the world. "Carbon neutral" means reducing the net rate of growth of carbon emissions to zero through reduction activities at the same level as increases in carbon emissions. Hyundai Oilbank was the only player among all of South Korea's refinery and petrochemical companies to announce a strategy for significantly reducing carbon emissions from their current levels, in place of the more usual "carbon neutral". With plans already in place to advance into eco-friendly new businesses and secure future growth drivers, the company intends to transform itself into a green leader by making significant investments in the eco-friendly energy sector and developing workable technologies for reducing carbon emissions.

# Entering new businesses through technology development

Hyundai Oilbank is developing a technology that will convert carbon dioxide generated during its refinery operations into calcium carbonate and methanol. This will allow the company to reduce its volume of carbon emissions by 540,000 tons annually while generating an operating profit of over KRW 100 billion starting in 2030.

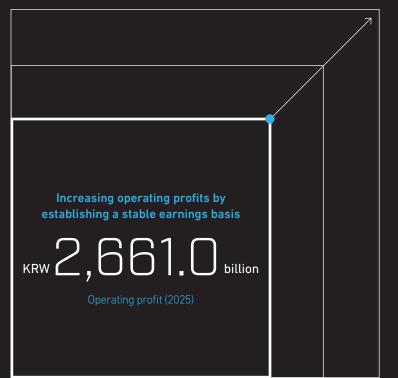
## Converting to eco-friendly refinery operations

Hyundai Oilbank is planning to replace its three fuel oil-powered boilers with LNG-powered ones by 2024. It will also reduce its annual carbon emissions by 1.08 million tons by 2050 by replacing all the power that is now supplied by KEPCO and other companies with new and renewable energy sources.



#### Laying the groundwork for achieving stable and sustainable earnings

Hyundai Oilbank exports petroleum products to a number of developed countries by producing eco-friendly, high value-added refinery products that meet strict manufacturing standards. In addition to boasting the highest-level heavy oil upgrading ratio in the industry, it is continuing to pave the way for its transition into a total energy and chemical company by diversifying its interests away from the refining business sector into the new petrochemicals business, while also strengthening its BTX, oil storage, lube base oil, and carbon black businesses.



Daily refining capacity

2020

690,000 barrels

 $\uparrow$ 

2018

650,000 barrels

Heavy oil upgrading ratio

2020

41.1%

 $\uparrow$ 

2018

40.6 %

Hyundai Oilbank minimized its operating losses in 2020, and was actually able to achieve surpluses in the second and third quarters. It did this by achieving the largest heavy oil upgrading (HOU) ratio in the industry, and increasing its profits in its non-refining sector through a strategy of wide-ranging business diversification. The company also raised its output of high value-added refined crude oil products with the completion of its #2 HOU plant in 2011, and continued to maintain a stable earnings basis in 2020 by recording a 41.1% HOU ratio.

# PROJECT **ISSUE HIGHLIGHT** Heavy Feed Petrochemical Complex (HPC) Project

#### Largest-ever investment and operating profit

Hyundai Oilbank is carrying out a heavy oil cracking facility project by making its largest-ever investment since its establishment. Once it begins operations, the company expects to enjoy an annual operating profit of more than KRW 500 billion from it.

Projected annual operating profit

KRW 5000 billion

Investment amount
KRW 3,128.5 billion

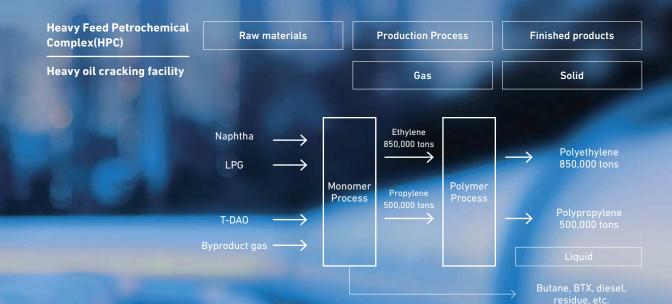
New Petrochemical
Business Project

Polyethylene

Annual production capacity

850,000 tons

Hyundai Oilbank signed an investment agreement with LOTTE Chemical in May 2018 regarding the HPC project. Scheduled for completion in 2021, it is a new ultra-large petrochemical project costing KRW 3.13 trillion. The facility will be built on a 500,000m' site within the grounds of Hyundai Oilbank's Daesan Refinery Plant. When commercial operations begin in the second half of 2021, it will be capable of producing 850,000 tons of polyethylene and 500,000 tons of polypropylene annually, contributing significantly to the improvement of profitability owing to its higher level of cost competitiveness when compared with other industry players.



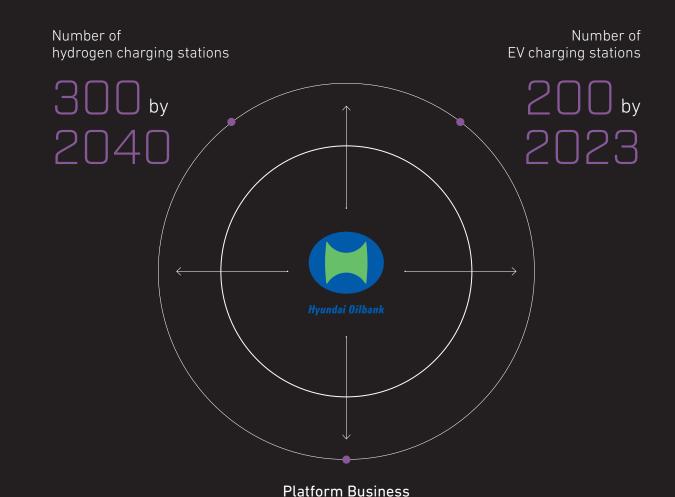
# EXPANSION BUSINESS

ISSUE HIGHLIGHT

Expanding the platform business and adding more hydrogen and EV charging stations

#### Fast-charging hydrogen and EV stations

Hyundai Oilbank is entering into the electric vehicle charging business at full speed by partnering with a startup business called CHARZIN. It has plans to install two hundred fast EV chargers at its nation-wide network of directly-run gas stations by 2023, and will also increase its number of hydrogen charging stations to 180 by 2030 and 300 by 2040, again using its existing gas station network.



Hyundai Oilbank owned the largest number of directly-run gas stations in South Korea after acquiring those owned by SK networks in 2020. Now it is also expanding the eco-friendly energy platform business by adding even more gas stations, building charging stations for hydrogen and electric vehicles nation-wide, and entering into a host of promising new enterprises.





#### **Integrated Environmental Management System**

In order to minimize the environmental impact of its manufacturing activities, Hyundai Oilbank has established an integrated environmental management system, and makes continued investments into environmental facilities. The company has established environmental policies and uses them as guidelines for environmental management activities. The company has been certified with

ISO 14001, an international standard on environmental management system, and operates its environmental management system based on international standards. Hyundai Oilbank has also built an integrated environmental information system that enables the company to efficiently and systematically manage data on the atmosphere, water quality, waste, chemicals, and training.



Prior environmental impact assessment 02 Environmental goal management and disclosure

Compliance with environmental management regulations

Prevention of environmental pollution

Ongoing training











- 01 Assess potential environmental impact from all management activities of the company and formulate corrective measures.
- 02 Inspect, review, and audit the progress with achieving environmental goals on a regular basis, and disclose goals.
- 03 Comply with environmental management regulations set forth by the International Convention on Environment, environmental laws and regulations in South Korea, and Hyundai Oilbank.
- O4 Establish environmental goals and improvement plans, and continuously improve processes and strengthen prevention and control capabilities to promote the prevention of environmental pollution.
- 05 Implement ongoing training and give motivation so that all employees fulfill their environmental protection responsibilities when conducting work.

# ENVIRONMENTAL MANAGEMENT



#Green growth #Eco-friendly energy business

Hyundai Oilbank establishes 2021 as the first year of its full-scale entry into the

green growth. Its plans include minimizing the degree of environmental pollution

eco-friendly energy business by declaring its commitment to carbon-neutral

caused by its production activities by initiating a wide range of environmental

#20 million work hours without an accident

management activities.



#### Major Environmental Management Activities

#### **Environmental Investment**

sweepers in order to reduce fine dust on the roads surrounding our facilities. We concluded a voluntary agreement on particulate reductions with the Chungc-Environment in 2019, and plan to continuously increase our investment in these activities.

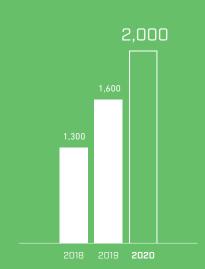
#### Responding to Climate Change

Hyundai Oilbank aims to reduce greenhouse gas emissions through energy intensity management, process improvements, waste heat recovery, and operational improvements. In addition, the company is an active participant in the South Korean government's emissions trading scheme, thus taking the lead in creating a low-carbon society.

#### Safety and Environmental Inspections and Conference

Hyundai Oilbank works hard to minimize the safety and environmental risks caused by its manufacturing activities. It conducts regular safety and environmental inspections and also operates a Safety and Environmental Conference as part of its organization.

#### **Zero-accident** Unit: 10,000 work hours



#### Safety and Environmental Inspections



Ascertain environmental risk factors through



plans following environmental inspections



laws, regulations, and guidelines





stations, logistics centers, Safety & Production Division

#### Safety and Environmental Conference





Establish measures for major pending







#### Chemical Emergency Response Programs

With an aim to promptly respond to any chemical ment, Hyundai Oilbank has established and operates the Chemical Safety Team (CST) in partnership in the Daesan Industrial Complex. In addition, the company has overhauled its incident response trol capabilities, and holds prevention and control drills for potential accident scenarios according to

#### CST

Basin Environmental Office), Hyundai Oilbank, LG Chemical, Hanwha Total Petrochemical,

#### Major roles

- Provide information on the accident location and chemicals, in the event of a chemical
- Provide control equipment from each company and assist in control outside hazard sites in the event of an accident
- industrial complex and form an emergency communications network

#### Developing an eco-friendly system for detecting oil leaks

Hyundai Oilbank developed the Hyundai Oil-leakage Monitoring Expert System (or HOMES), which detects soil pollution caused by leaks near gas stations. An eco-friendly, patented technology that works by attaching a sensor to the network of pipes connected to each gas station's underground tanks, it helps gas station operators monitor oil leaks in real time using a receiver located in their office or on a mobile device. The company is planning to install the system at all the gas stations it operates throughout the country.











# #Hyundai Heavy Industries Group 1% Nanum Foundation #Community CSR Activities #Employee Volunteer Activities

Hyundai Oilbank carries out a broad array of corporate social responsibility activities. They are led by the Hyundai Heavy Industries Group 1% Nanum Foundation, made up of the Group's employees and their family members, who volunteer their time and labor helping the less fortunate. The Foundation's goal is to go beyond simple charity initiatives to return the many benefits it has received from its relationship with the broader society.



#### Hyundai Heavy Industries Group 1% Nanum Foundation

Hyundai Oilbank established Hyundai Oilank 1% Nanum Foundation in September 2011, when its staff came to the decision to donate 1% of their salaries to help those in need. Hyundai Oilbank therefore became the first large corporation in South Korea to donate 1% of employee salaries every month. The foundation has contributed to the culture of sharing joined by other companies, gas station owners and staff families. All of our business cards carry the phrase "a company sharing 1% of salaries", which reflects the pride that our employees have in this initiative. The Foundation carries out a wide range of CSR projects designed to help people in need. They include providing heating oil and facility renovations to marginalized groups, delivering food to the elderly, helping to improve infrastructures for the disabled, and offering emergency relief and assistance as and when needed. Although the Foundation's method of raising funds by having its employees donate 1% of their pay to it was once unique to South Korea, many other businesses and corporations have since established similar plans. It was renamed the Hyundai Heavy Industries Group 1% Nanum Foundation in 2020, meaning that all the employees of all the Group's affiliates became participants in its salary sharing program. The Foundation won a Prime Minister's Citation at the National Sharing Grand Awards in 2019 for its many contributions to social betterment programs and activities both at home and abroad.

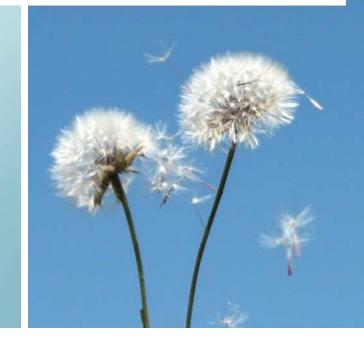
Vision of Hyundai Heavy Industries Group 1% Nanum Foundation



By adding "99% hopeful energy" to the "value of sharing 1% of salaries", we are aiming to help the underprivileged and build a more warm-hearted society.

1% + 99% value of sharing 1% of salaries 99% hopeful energy

# SOCIAL RESPONSIBILITY



#### Major CSR Activities

#### **Supporting Local Communities**

Hyundai Oilbank runs various CSR programs to build win-win relationships with residents in Seosan, where its headquarters is located. The company has operated a local rice-purchasing program since 2003 to help lift incomes of local farmers, buying an annual KRW 1 billion worth of rice produced in the region. We have also run an annual rockfish re-stocking program since 2002 with rockfish being released into nearby waters to increase the incomes of fishermen, and to promote the local economy. The rockfish re-stocking program has become a leading local festival called the "Samgilpo Rockfish Festival", and is contributing to attracting tourists to the region. Hyundai Oilbank also undertakes coastal clean-ups in the Samgilpo area as part of its efforts to protect the marine environment.

Launched in 2003, the Hyundai Oilbank Scholarship Foundation offers scholarships to junior high school, high school, and university students from low-income families. The Foundation also holds information sessions for students about to enter university and their parents in less-populated regions of the country.

In 2011, the construction of Hyundai Daejuk Park was completed on a 17,400m² site that includes a natural grass soccer field, basketball and volleyball courts, and facilities for regular exercise and relaxation. The park is open to local residents for free. In 2014, Hyundai Oilbank developed an ecological park and hiking trails at the Hwagok Reservoir Park in Seosan, giving local residents a pleasant nearby area for relaxation. We also put aside KRW 50 million every year for the park's continued maintenance including flower tree planting and coastal maintenance, thereby contributing to community development.

#### **Volunteer Activities**

The employees of Hyundai Oilbank have provided people in need with more than 5,000 hours of community service a year since 2005 through the company's Sharing Happiness Volunteer Program. In addition, the company makes financial contributions to charities its employees support in the form of a grant of up to KRW 10,000 per hour that they have spent volunteering. It also donates up to KRW 2 million worth of supplies to each charity. New employees at the company visited a nursery in 2020, and worked together to create a garden on a wall to make its residents feel happier. They also delivered Christmas gifts and trees to the needy at the end of the year, and helped to produce Braille textbooks and masks for use by the visually impaired.



Soccer classes in Vietnam



Seosan regional rice-purchasing program



Indoor nursery garden



Family invitation for disadvantaged car wash attendants

#### **Public Service and Support Programs**

Hyundai Oilbank's "One Company, One Military Unit" program supports the Yeonpyeong Unit of the Marine Corps by carrying out morale boosting activities and inviting the Unit's members to the company's events. During winter, Hyundai Oilbank provides heating oil to small-scale social welfare facilities and low-income households. In addition, scholarships are offered to the children of cargo transporter drivers in need and coast guards.

#### Hiring the Disabled

Hyundai Oilbank has been an active participant in a job creation program for the disabled, in partnership with the Korea Employment Agency for the Disabled since 2003. The company hires disabled people, including some with severe challenges, to be car wash attendants at its directly-run gas stations. A total of 17 disabled employees have been working as car wash attendants at eleven directly-run gas stations for more than ten years. The company has also supported family invitation events for these employees every year, including VR experience and outings to amusement parks and arboretums.



Donations made by 1% Nanum Foundation

Cumulative total from December 2020

KRW 17.73 billion





#### Major BOD Activities in 2020

The Board held nine meetings in 2020 to discuss and make decisions on major management issues.

**Key Board Reports and Resolutions in 2020** 

#### **AGM, BOD, Corporate Governance**

- Approval of holding an AGM and adoption of agenda for FY 2020
- Approval of revisions to regulations governing the BOD



#### 02 Investments

- Approval of acquisition of business rights for directly-run gas stations from SK networks
- Report on Daehan Oil Pipeline Corporation share buyback
- Approval of changes to joint venture agreement with Hyundai and Shell Base Oil



#### **Accounting and Finance**

- Approval of FY 2020 business report and financial statements
- Approval of corporate bond issuance
- Approval of hybrid bond issuance
- Approval of foreign-currency bond issuance



#### 04 Other

- Approval of performance guarantee governing long-term charter party
- Approval of GHG emissions trading
- Approval of sponsorship agreement with Hyundai Heavy Industries Sports
- Approval of sponsorship agreement with K League
- Approval of establishment of share purchase rewards program



# MANAGEMENT TRANSPARENCY



# **Board of Directors**

Hyundai Oilbank strives to meet stakeholders' expectations while enhancing management transparency and efficiency by strengthening the roles and stature of the Board of Directors.

With an aim to ensure transparency in corporate governance, Hyundai Oilbank has further strengthened the roles and stature of its BOD, which is at the center of its governance system.

#### Roles and Composition of BOD

The BOD at Hyundai Oilbank makes strategic decisions on business issues, and undertakes advisory and oversight functions to ensure transparency in management, with the ultimate aim of achieving greater corporate value. In order to perform these functions, the BOD elects and delegates authority to the CEO, oversees executives' performance of their duties, and provides guidance. We continue to strive to benefit shareholders, investors, and markets, by boosting management transparency and efficiency through these BOD activities.

The BOD consists of six members, including two inside directors, one non-standing director, and three outside directors, all of whom are elected at the general meeting. The BOD is chaired by the CEO. As the company's highest decision-making body on the management of its business, the BOD deliberates freely and in-depth, and then votes on major matters related to the company's business activities, including improvements to the company's financial structure, major investment projects, and other business matters.

Composition of BO	D	As of the end of 2020	
President & CEO	Kang Dal-ho	• 2018-Present: President & CEO, Hyundai Oilbank	
Inside Director	Song Myung-joon	<ul> <li>2020-Present: Head of Management Support Division, Hyundai Oilbank</li> <li>2018-Present: Head of Finance Division, Hyundai Heavy Industries Holding. Head of Finance</li> </ul>	
Non-standing Director	Ibrahim Qassim K. Al-Buainain	• 2016-Present: President & CEO, Aramco Trading	
Outside Directors	Yoon Jeung-hyun	<ul> <li>2011-Present: Director, Yoon Economic Research Institute</li> <li>2009-2011: Minister, Ministry of Strategy and Finance</li> <li>2004-2007: Governor, Financial Services Commission and Financial Supervisory Service</li> </ul>	
	Lee Kyoo-yong	<ul> <li>2008-President: Adviser, Kim &amp; Chang law firm</li> <li>2007-2008: Minister, Ministry of Environment</li> <li>2006-2007: Vice Minister, Ministry of Environment</li> </ul>	
	Kim Kap-you	<ul> <li>2019-Present: Senior Partner, Peter &amp; Kim</li> <li>2017-Present: Chairman, International Court of Arbitration of Korean Commercial Arbitration Board</li> <li>2014-Present: Vice Director, International Court of Arbitration of International Chamber of Commerce</li> </ul>	

#### Sub-committees

Hyundai Oilbank has established three sub-committees under the BOD, in order to enhance independence, expertise and efficiency of the Board. The composition and roles of the Audit Committee, Committee for Internal Transactions, and Outside Director Candidate Recommendation Committee are as follows.

#### **Composition and Roles of Sub-committees**

#### **Audit Committee**

Lee Kyoo-yong / Yoon Jeung-hyun / Kim Kap-you

- Examine the company's accounting and corporate
- Request reports on operations and review the company's financial status
- Handle legal and other situations delegated by the articles of incorporation or the Board
- the audit firm

#### **Committee for Internal Transactions**

Lee Kyoo-yong / Yoon Jeung-hyun / Kim Kap-you

• Approve and report to the Board on major internal transactions according to the Fair Trade Act

#### **Outside Director Candidate Recommendation Committee**

Kang Dal-ho / Yoon Jeung-hyun / Kim Kap-you

 Nominate outside director candidates to be appointed at the AGM







# **Ethical Management**

Hyundai Oilbank has adopted ethical management to ensure the highest levels of transparent management. In order to earn the complete trust of all stakeholders, the company is making the utmost effort to ensure that ethical management becomes part of its corporate culture.

# Goals Governing Ethical Management

Hyundai Oilbank's ethical management program was established in 2002. Its four main goals were to help it become a preferred company for conducting transactions with its customers and business partners; a preferred company for investments with its shareholders; a preferred company to work at for its employees; and a company that fulfills all its responsibilities towards its society.

# Ethical Management System

In order to practice fair and transparent management, Hyundai Oilbank operates a well-organized practical ethical management system through training, publicity and various action programs, based on ethical standards which include a Charter of Ethics, a Code of Conduct, and Business Ethics Guidelines. The company also added a Special Code of Conduct for six specific duties purchasing, personnel, sales, finance/accounting, planning, and IT that demand a stricter ethical mindset.

#### **Major Ethical Management Action Programs**

Campaign

the state of the s	
Pledge to practice ethical management	Hyundai Oilbank collects a written pledge annually from all staff and business partners which states that they understand the company's ethical management regulations, and that they commit themselves to observing all policies and systems.
Report on conflicts of interests	All of our employees and business partners are required to submit this report every year. The goal is to ensure total transparency in transactions by reporting when employees are likely to have a conflict of interest while performing their duties.
Ethical management training and publicity	We enhance the understanding and compliance of our employees through group training and customized cyber training on ethical management, using a wide range of PR activities including videos.
Self-inspection on ethical management compliance	Every year, our employees examine their own compliance with the ethical management-related regulations through a questionnaire-style checklist, allowing them to improve both their understanding of the regulations and their compliance.
Listening to field ppinions on ethical management	We gather opinions from the field, from employees and business partners, to assess how much our ethical management is being put into practice. We also collect opinions on required improvements and review whether to implement these suggestions.
Report on unethical behavior and whistleblower protection	To prevent unethical activities and establish an ethical corporate culture, we operate a reporting and rewards system. We guarantee confidentiality so that the identities of whistleblowers are not exposed and they are protected from being penalized.
Clean notice system	If an employee receives gifts or other considerations from a stakeholder, they must be returned through a designated delivery company or donated to a social welfare facility when returning them would be difficult.
Holiday Action	Hwindai Oilhank communicator with its husiness partners before the Lunar New Year and Chuseek

favoritism. All of its employees are told not to accept gifts as well.

holidays asking them to not give any gifts, as they might be interpreted as attempts at bribery or

#### Compliance Program

Hyundai Oilbank set up its Compliance Program (CP) in 2003, and applies it to all management activities.

The CP presents standards in management and em-

ployee conduct, in order to observe the requirements of the Monopoly Regulation and Fair Trade Act.

#### **Major CP Action Programs**

CEO's declaration	The CEO confirms the company's commitment to CP and its policies through electronic correspondence and the company website
ссо	Head of the Management Support Division is appointed as Chief Compliance Officer (Team in charge: Policy Cooperation Team)
CP handbook	Published and distributed in December 2003
Employee training programs	<ul> <li>Internal training: Training in fair trade practices more than once a year, as well as specialized training regarding the enactment and amendment of laws, for employees in charge of sales. Customized training for new and long-time employees, employees in charge of compliance, team leaders, gas station owners. Training at the time of compliance inspections.</li> <li>External training: Supervised by the Korea Fair Competition Federation and Fair Trade Commission</li> <li>Cyber Training Center: Online training</li> </ul>
Oversight system	Compliance regulations and company-wide work procedures Internal/external whistleblowing system, including consultation with CP managers by email and report on fair trade CP inspections/prior business review system
Personnel compliance system	<ul> <li>Deliberations and decisions by the Personnel Sanctions Committee in accordance with regulations governing employees. Punishments for violators can range up to dismissal</li> <li>Measuring degree of compliance with regulations when evaluating personnel above team leaders</li> <li>Use of a CP risk verification process when hiring experienced workers</li> </ul>
Document management system	CP operation-related online and offline document management (Team in charge: Policy Cooperation Team)
Guidelines governing compliance with international laws	Appointment of compliance officer responsible for ensuring compliance with U.S. antitrust laws, as well as an assistant (Department in charge: Legal Affairs Team)     Enactment of overseas compliance procedures





• Conducting due diligence in advance and obtaining approvals for problematical transactions

anti-corruption laws (February 2020)



# VALUE & VISION

#### **OUR PROFILE**

Hyundai Oilbank is committed to continuing its growth as one of the world's leading total energy and chemical players. We will meet this goal by posting industry-leading productivity and competitiveness through sustainable investments, technology developments, and ventures in new businesses.



# 2020 HIGHLIGHT

#### **Operating Performance and Future Goals**

Unit: KRW billion



\* 2020 results are based on Korean International Financial Reporting Standards (K-IFRS) and consolidated financial statements. Future forecasts are based on Hyundai Oilbank's mid-term management plans, which are based in turn on the combined contributions of all its affiliates.

Financial Status Unit: KF	RW billion
---------------------------	------------

	2018	2019	2020
Total Assets	11,744.8	12,855.9	14,676.2
Total Liabilities	6,620.7	7,414.3	9,405.3
Total Equity	5,124.1	5,441.6	5,270.9

In 2020, Hyundai Oilbank continued its stable performance, through its firstrate heavy oil upgrading facilities in South Korea, ongoing crude oil imports diversification, and business diversification.

Stability Indicators	Unit: %
----------------------	---------

	2018	2019	2020
Current Ratio	95.2	111.7	101.7
Liabilities-to-Equity Ratio	129.2	136.3	178.4
Long-term Borrowing Ratio	42	66	91

Einancial	Canditions	of Affiliates	in 2020
Financiai	Conditions	or Attiliates	in Zuzu

Unit: KRW billion

	Sales	Operating Profit
Hyundai Chemical	2,701.9	-46.9
Hyundai and Shell Base Oil	571.2	94.9
Hyundai Cosmo Petrochemical	1,501.6	-83.3
Hyundai OCI	163.9	38.3
Hyundai Oil Terminal	45.2	15.6

#### **Credit Ratings**

As of the end of 2020

#### **Corporate Bond**



Korea Ratings, Korea Investors Service, NICE Investors Service

#### Commercial Paper



Korea Ratings, Korea Investors Service, NICE Investors Service

# AT A GLANCE

#### Acquired directly-run gas stations from SK networks

Hyundai Oilbank acquired the operating rights to over 300 gas stations from SK networks in June 2020. The acquisition allowed the company to secure a fixed supply channel equaling about 20,000 barrels a day. It will also contribute to raising people's awareness of the company and increase its number of gas stations in the very populous capital area.



#### **Declared Commitment to Carbon-Neutral Green Growth**

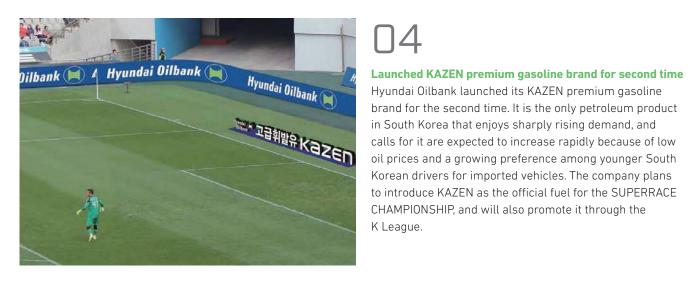
Hyundai Oilbank announced its commitment to carbonneutral green growth as part of its strategy to build sustainable growth foundations and keep in step with global environmental regulations. The company plans to limit its carbon emissions in 2050 to its 2019 level. It was the only player among all of South Korea's refinery and petrochemical companies to announce an eco-friendly growth strategy that contains a commitment to actually reduce its future carbon emissions from their current level, instead of merely adopting the more usual carbon-neutral growth strategy.



Ranked first in gas station category in the Korean Service Quality Index (KSQI) for the twelfth consecutive year, the Korean Standard-Contact Service Quality Index (KS-CQI) for the ninth, and the Korean Standard Service Quality Index (KS-SQI) for the sixth

Hyundai Oilbank ranked first in a number of South Korean contact service quality indexes. Part of this success flows from a management edict that "Customer time is our best asset." In practice, the company's call center operates a "333 Response System", meaning that an agent must answer telephone calls within three seconds, complete the conversation within three minutes, and see that everything relating to the call is completed within a half hour.





Hyundai Oilbank launched its KAZEN premium gasoline brand for the second time. It is the only petroleum product in South Korea that enjoys sharply rising demand, and calls for it are expected to increase rapidly because of low oil prices and a growing preference among younger South Korean drivers for imported vehicles. The company plans to introduce KAZEN as the official fuel for the SUPERRACE CHAMPIONSHIP, and will also promote it through the



## **Launched Hyundai Heavy Industries Group 1% Nanum**

The Hyundai Oilbank 1% Nanum Foundation was renamed the Hyundai Heavy Industries Group 1% Nanum Foundation to mark its expansion from just Hyundai Oilbank. The Group is planning to carry out CSR activities on an equally larger scale based on salary sharing by employees at all its affiliates and special donations from each of its companies. The strategy is part of the Group's commitment to a culture of sharing and recognizing its social responsibilities.



#### Implemented New Rice Dream, a 2020 new rice presenting promotion

Hyundai Oilbank carried out a "Full of New Rice, Full of Love" promotion in 2020 to mark its fifteenth year of operations. The promotion provided new rice to customers that bought a certain amount of gas at the company's service stations.





#### Signed MOU regarding EV charging business

Hyundai Oilbank plans to increase its number of EV charging stations to 200 by 2023. To do so, it entered into a partnership in October 2020 with CHARZIN, an EV charger manufacturer, that will install 100 KW or higher chargers at gas stations in downtown areas across the country. Hyundai Oilbank also intends to gain an early edge in the electric truck market by installing charging stations in the logistics centers of distribution companies. It is also planning to install EV charging stations at drive-through stores and large convenience stores.

#### Introduced Dinosaur Mascots

Hyundai Oilbank introduced three dinosaur mascots named "Gio", "Dio", and "Kio". They got their names by combining "Gasoline", "Diesel", and "Kerosene" with "Oilbank", and represent smart benefits, friendly service, and a clean environment respectively. The company plans to use them at its service stations for enhanced customer satisfaction and services, with bonus points earned by using apps, and for many other purposes. They will be also be used as emoticons.

Gasoline - Gio

Diesel - Dio

Kerosene - Kio









# Launched South Korea's first API, ILSAC latest standard

Hyundai Oilbank launched eleven versions of its HYUNDAI XTeer Ultra eco-friendly engine lubricants. They all meet the most recent American Petroleum Institute (API) and International Lubricant Standardization and Approval Committee (ILSAC) standards—something that had never happened before in South Korea. The company plans to extend its market leadership by ensuring that all its products meet any and all international regulations. It is also planning to unfold a "4 Reduction" campaign that will focus on developing products that help reduce four major sources of pollution: particulates, fuel consumption, greenhouse gases, and exhaust gases.



#### Applying smart robot technology at Daesan Refinery

Hyundai Oilbank plans to apply IoT, robotics, and Al technologies to its plant safety management operations and introduce autonomous patrol vehicles using AI technology and intelligent CCTVs at its Daesan refinery. The vehicles, which will patrol the entire area of the refinery, will be able to transmit information regarding emergencies to the refinery's integrated control center. In addition, intelligent CCTVs will be installed in high-risk work spaces to ensure heightened work safety.

# MESSAGE FROM THE CEO



"Hyundai Oilbank managed to minimize its losses last year in spite of COVID-19. This resulted from our efforts to increase our earnings, including operating our very profitable heavy oil upgrading facilities and achieving sizable cost reductions. As we move forward, we will achieve sustainable growth that meets the expectations of all our shareholders and customers by entering into eco-friendly energy businesses."

#### Dear shareholders and customers:

I am very pleased to share our results for 2020 and our plans for 2021 with you. The whole world was ravaged by COVID-19 in 2020, and South Korea's oil refining industry was no exception to the rule. Hyundai Oilbank had sales of KRW 13,689.9 billion and an operating loss of KRW 593.3 billion on a consolidated basis. Our oil refining sector recorded an operating loss of KRW 625.8 billion, mostly due to inventory losses caused by falling oil prices and deteriorating refining margins suffering from sluggish demand. The non-refining sector did better, posting an operating profit of KRW 32.5 billion.

Although our financial performance was not what we would have liked, we minimized our losses more than our competitors. This happened by adding to our profitability in such ways as making our facilities more efficient, reducing costs by using extra heavy crude oil, and adjusting our production levels to match market conditions. We also continued our commitment to safety- and environment-first management with a record-setting 20 million accident-free work hours.

The refining industry is facing many challenges because of environmental concerns, such as a ban on internal combustion-powered locomotives and the ongoing demand for carbon neutrality. Hyundai Oilbank will deal with these threats by adding more growth businesses in the mid- to long-term. For example, our Heavy Feed Petrochemical Complex, which will make olefin petrochemical products, will start commercial operations during the fourth quarter of this year. This will allow us to strengthen our synergies even more by completing the vertical integration of our olefin petrochemical products, along with our petroleum products and aromatics. The plant will also produce solar panel materials and other products, and will accelerate the

development of other specialty products through diligent research and development.

Hyundai Oilbank declared its commitment to carbon-neutral green growth as its foundation for sustainable growth in 2020. This will involve reducing our carbon emissions to about 70% of their 2019 level by 2050. In addition, 2021 will be the first year that we will enter into eco-friendly energy businesses in earnest. We are also preparing to start a business that will convert carbon dioxide generated during our plant operations into a raw material for the manufacture of construction materials, paper, and plastics. We are also contemplating entering the biotechnology, eco-friendly power generation, and future car-related businesses, such as producing rechargeable battery materials and hydrogen fuel.

I am not idly boasting when I say that Hyundai Oilbank is reputed to have the highest level of competitiveness in the refining sector in all of Northeast Asia. When the new petrochemical project I have just talked about is completed in the second half of this year, we will be able to show an even better financial performance in 2021. As always, I look forward to your unwavering support and encouragement.

Thank you.

**Kang Dal-ho,** President & CEO



# **MESSAGE** FROM EXECUTIVES



Jung Hae-won, Vice President Head of Safety & Production Division

"We will prepare for an era free of the coronavirus by maximizing our profits through safe operations and discovering new growth engines."

A sense of crisis is growing in the refining industry, mainly due to a production oversupply owing to the building of new petrochemical plants around the world and the growing popularity of eco-friendly vehicles. Given these threatening factors, the Safety & Production Division plans to do more inspections of the company's facilities and strengthen their reliability in a bid to lessen the possibility of accidents. In addition, we will add to our competitiveness in the petroleum business by undertaking ongoing production innovations, such as the maximum operation of our high-yield processes and making improvements to the efficiency of our facilities. We will also promote the hydrogen and other eco-friendly energy businesses, take steps to discover new petrochemical businesses, and support trial runs of our new HPC project as fully as we can.

Han Hwan-gyu, Vice President Head of Sales & Marketing Division

"As part of the company's ESG management strategy, we will initiate more Blue Clean initiatives to our Sales & Marketing Division activities, strengthening the foundations for shared growth with our customers."

ESG has quickly become a requirement for sustainable corporate growth and is no longer an option. As part of the company's ESG management strategy, the Sales & Marketing Division will install Hyundai Oil-leak Monitoring Expert Systems, or HOMES, devices to detect soil contamination at more than 150 of our directly-run gas stations and some of our independently operated ones as well. In addition, our number of EV charging stations will grow to 200 by 2023, and we will continue with our eco-friendly management activities by building hydrogen charging stations and installing solar power equipment at logistics centers. We will also offer our independently managed gas stations the opportunity to generate additional revenues by allowing them to operate business models suitable for their locations and commercial areas, while also assisting them to reducing their insurance premiums, car wash soap, and tax and other operating costs.

Chu Young-Min, Vice President Head of Global Business Division

"We will maximize profits through the industry's best cost and sales competitiveness and build the foundations for the company's sustainable growth through global business diversification."

Cost reductions have become more important than ever due to low refining margins caused by COVID-19 and its lingering effects. In response, the Global Business Division increased its ratio of non-Middle East crude oil imports to a record 58% in 2020. We intend to find even more new suppliers that will add to our profitability in 2021. In addition, we will add to our sales competitiveness by targeting the high-value products market and developing high-margin niche markets, such as high-octane gasoline, aviation and high flashpoint jet fuel, and overseas sales, while also increasing our imports of special-purpose semi-finished products. We will also continue helping to strengthen the foundations for the company's sustainable growth by pursuing new global businesses, such as regional storage depots, logistics complexes, and trading in solid sulfur and petrochemicals.



Kim Jae-youl, Vice President Head of Safety Production Division

"The company's vision of becoming a total energy and chemical group will be achieved this year through the completion of its HPC project."

The Safety Production Division applied for a number of patents and made preliminary designs for heavy oil cracking units in 2018. These steps were taken so the results could be seamlessly integrated into the completion of the company's huge and highly-anticipated HPC project. We laid even more groundwork for the project by purchasing much-needed equipment and materials well in advance. Although we suffered from a lack of production shops and were sometimes slowed down by the many other large-sized domestic projects taking place simultaneously, we still expect the HPC project will begin operations in the second half of 2021, as originally planned. As always, the Division will play a pivotal role in generating stable revenue in the company's non-petroleum businesses.



Song Myung-Joon, Senior Executive Head of Management Support Division

"Our advance into the ecofriendly chemical and materials sector will add more security to our financial structure and strengthen our organizational abilities."



"We will strengthen our foundations for stable growth by completing a business value chain centering on lubricants and lube base oils."

The global energy industry is rapidly changing due to tougher environmental regulations. As a result, Hyundai Oilbank will aggressively advance into the eco-friendly energy businesses. One main task of the Management Support Division will be to ensure it has a stable financial structure so it can acquire new businesses smoothly. It will also be responsible for establishing a sound organizational culture and hiring the best human resources possible. We will assist in the company's digital transformation efforts, such as a smart work environment and process automation. The HPC project is especially important to the company's business diversification. Once it comes on line, we will begin preparing to expand the company's downstream operations so that we can enter the eco-friendly chemical and materials sector in earnest.

The Lubricants Division was launched in 2021. One of its main goals is to strengthen its partnership with Shell Petroleum and maximize the synergies between LBOs and lubricants to increase its efficiency. We will also add to our lineup of new high-value products to add to our competitiveness in the lubricant business, diversify our portfolio by entering new businesses, and respond to the energy industry's rapidly changing environment by entering into promising future growth businesses, such as lubricants for electric vehicles. In addition, we will contribute to the company's profits by making the lubricant business an integral part of its operations and generating stable and high

# **CORPORATE VISION**

#### A total energy and chemical company with global competitiveness

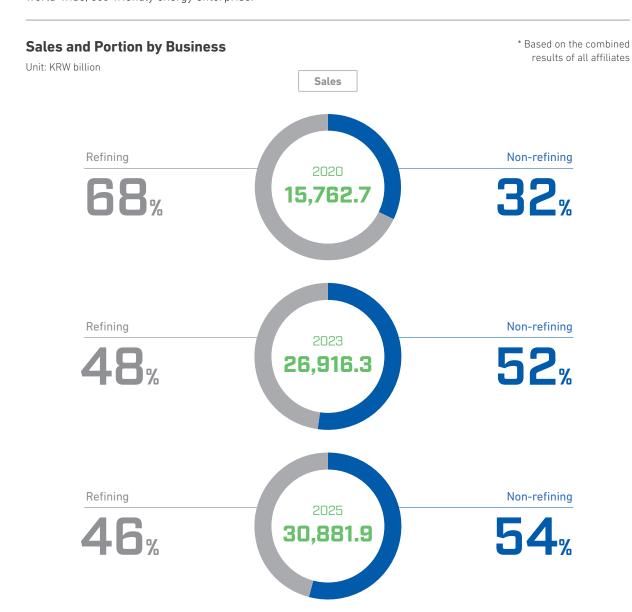
Hyundai Oilbank places such a high premium on industrial safety at all its facilities, and we are so proud to have gone approximately 20 million hours without an accident in 2020, going back all the way to October of 2013. We are continuously enhancing our profitability in the refining sector, mainly through a large-scale expansion of our refining facilities and our HOU processes. We are also increasing our competitiveness in the non-refining sector by advancing into the petrochemical business while strengthening our BTX, oil storage, lube base oil, and carbon black businesses.



Hyundai Oilbank aspires to become a future-leading total energy and chemical company through reinforced competitiveness in the refining sector and business diversification in the non-refining sector.

# Securing new growth engines, growing the petrochemical business, and entering the eco-friendly new and renewable energy business

Hyundai Oilbank will continue to strengthen its core competitiveness in the refining sector and actively promote its entry into new sectors. Its Heavy Feed Petrochemical Complex project, scheduled to begin commercial operations in the second half of this year, will have a strong competitive advantage over its competitors' naphtha cracking operations by being able to generate significant synergies between the petroleum business and the petrochemical business because of its unrivaled cost competitiveness. The company is also planning to enter the new petrochemical business based on its already-existing HPC facilities. It will also advance into such highly promising growth businesses as new and renewable energy, making 2021 a signal year for its long-planned-for transition into a world-wide, eco-friendly energy enterprise.



# MANAGEMENT PHILOSOPHY & STRATEGY

#### **Management Philosophy**

#### **Enhancing Stakeholder Value**

Hyundai Oilbank seeks to deliver greater value for its stakeholders from customers and shareholders to employees and local communities. In addition to working for the company's success, all employees at Hyundai Oilbank recognize that they are essential assets for the company and for each other, so that they show each other mutual respect at all times. Hyundai Oilbank also encourages employee's creativity in order to improve overall corporate capabilities. The company recognizes that customer satisfaction is one of the foundations of its business, which is why it is committed to honesty and sincerity. The company maximizes shareholder value through transparent and efficient management. Hyundai Oilbank also recognizes that the company is the backbone of South Korea's key industry, and it therefore does its best to contribute to national economic and social development, looking for win-win growth with local communities.

#### **Building a Trustworthy Company**

The management of Hyundai Oilbank is transparent and open, in order to establish the company as a trusted and respected company. It maintains the highest ethical standards, and ensures transparency and fairness in all management activities. Hyundai Oilbank discloses all information needed, and provides its employees with opportunities where they can freely participate in. By strengthening core capabilities, the company is able to offer the best products and services, while simultaneously meeting the interests of customers, employees, partners, shareholders and local communities. In doing so, Hyundai Oilbank is fulfilling its goals and responsibilities as a corporate entity.



Hyundai Oilbank is committed to contributing to economic and social development by achieving its business objectives and also by fulfilling its social responsibilities.

The company therefore aims to operate on behalf of all of its stakeholders, and develop strategies for mid-to long-term growth.

#### The People of Hyundai Oilbank

Hyundai Oilbank defines a model employee as a "creative doer". A creative doer, based on the "Hyundai Spirit", is a talented individual, with the ability to create and fulfill the values that Hyundai Oilbank pursues. The Hyundai Spirit is rooted in the founding spirit of a founder, Chung Ju-yung, who believed that even something that seems impossible can be accomplished through total determination and a strong driving force.

#### Hyundai Oilbank Model Employee

This person leads his/her own growth

and the company's development,

based on a passion for work and a

challenging spirit to become the best.

This person creates value for him/

herself and the company through a pi-

oneering spirit, passion for customer

satisfaction, a professional mindset

and sense of responsibility, and strong

#### A passionate talent, with a challenging spirit to become the best



An innovative talent who changes the world



A trusted talent who acts with integrity



This person brings about positive change, and shapes a better tomorrow through imagination and creative action. He/she leads innovation and prepares for a better future through extensive experience and learning, great insight, an open mindset, and the ability to lead others.

This person delivers a strong sense of trust through respect and consideration for others, open communication, and upright and honest conduct. This person embraces diversity without bias, conducts him/herself fairly at all time, and earns the trust of colleagues, local communities, and society through honesty and integrity.

#### **Management Strategy**

drive.

Hyundai Oilbank overcame a number of difficult business conditions in 2020, including an oil price crash and falling refining margins due to COVID-19. Despite these problems, it was still able to minimize its operating losses by maximizing its imports of extra heavy crude oil and reducing its operating expenses.

Although market conditions are expected to improve in 2021, following the arrival of COVID-19 vaccines, we still anticipate an uncertain operating environment due to toughening world-wide environmental regulations and the growing popularity of EVs.

Hyundai Oilbank will respond to this situation by strengthening the quality of its existing businesses, maintaining its core competitiveness in the refining sector, and accelerating its entry into the eco-friendly energy, new petrochemicals, and other promising new businesses. Another challenging task will be focusing on the successful completion and ensuing start-up of the HPC project in the second half of 2021. Last, but very far from least, we will continue to build safe and healthy workplaces with a pronounced emphasis on safety and eco-friendliness.

#### 2021 Management Goals

"A new beginning! A new leap forward!"

01

# Safety- and environment-first management

Promoting eco-friendliness and safety as key management goals

02

#### Successful completion of HPC project

Providing company-wide support for the successful completion of the project



## First year entering eco-friendly energy businesses

Advancing into blue hydrogen, white biotechnology, eco-friendly materials, and other promising new enterprises

# CORPORATE HISTORY

Nov.	1964	Established as Kukdong Oil Industrial Company, South
Jan.	1969	Korea's first privately-owned petroleum refinery company Changed company name from Kukdong Oil Industry to Kukdong Shell Petroleum
May.	1977	Changed company name from Kukdong Shell Petroleum to Kukdong Oil
Aug.	1978	Completed crude refining facility (10,000 bpd)
Aug.	1988	Launched commercial operation of Crude Distillation Unit
		(60,000 bpd)
Nov.	1988	Changed company name from Kukdong Oil to
		Kukdong Oil Refining
Jul.	1989	Completed the construction of Daesan Plant (Awarded
		Presidential Citation)
Nov.	1989	Obtained permission for expansion of 0.1 million barrels
		of crude oil processing
	1993	Changed company name to Hyundai Oil Refinery Co., Ltd.
Jun.	1994	Changed company name to Hyundai Oil Refinery Launched the Oilbank brand
May.	1996	Completed the construction of oil refining facility at
		Daesan Plant (200,000 bpd)
May.	1998	Completed the construction of #1 BTX Plant (400,000 tpa)
Apr.	1999	Acquired Hanwha Energy and merged with Hanwha
		Energy Plaza
Nov.	1999	Signed joint venture contract with IPIC of
		United Arab Emirates
	2000	Split off from Hyundai Group
Apr.	2002	Changed company name from Hyundai Oil Refinery to
Marr	2007	Hyundai Oilbank
INOV.	2004	Named Good Company for New Management Employees Culture by the Ministry of Labor
Nov	2005	Completed the Clean Fuel Project
	2005	Received a grand prize in Best Ethical Management
Mai.	2000	Company Awards from the Ministry of Commerce,
		Industry, and Energy in the manufacturing category
lan	2007	Received A rating in fair trade compliance program
	2007	Began operation of 52,000-barrel oil reservoir on Jeju-do
	2007	Obtained "A2+" credit rating for company's
Juil.		commercial paper





Established as Kukdong Oil Industrial Company, South Korea's first privately-owned petroleum refinery company

Jul. 1989 Completed the construction of Daesan Plant (Awarded Presidential Citation)

## 1964-2007 — 2008-2013 — 2008-2013

Apr.	2008	Signed an agreement on strategic alliance for oil refinery
		business with Cosmo Oil of Japan
Nov.	2008	Signed contract for construction of #2 HOU plant within
		grounds of Daesan Refinery Plant
Dec.	2008	Received the Prime Minister Award at the 15th Corporate
		Innovation Awards from Korea Chamber of Commerce
		and Industry
Mar.	2009	Received Grand Prix at the 2009 Ethical Management
	2000	Awards from the New Industry Management Academy
Jun.	2009	Finalized construction plans of BTX plant with annual
		production capacity of 910,000 tons of P-Xylene and other petrochemical products with Cosmo Oil of Japan
lul	2009	Ranked first in Oil Refinery Call Center category in
Jut.	2007	Korean Service Quality Index (KSQI) survey by Korean
		Management Association Consulting (KMAC)
Dec.	2009	Received the USD 5 Billion Export Tower on Trade Day
200.		from Korea International Trade Association (KITA)
Jun.	2010	Received the Korea Great Workplace Award from
		Hankyung Magazine
Jul.	2010	Ranked first in Oil Refinery Call Center category in
		Korean Service Quality Index (KSQI) survey by Korean
		Management Association Consulting (KMAC)
_	2010	Became an affiliate of the Hyundai Heavy Industries Group
_	2010	Kwon Oh-gap appointed as the CEO of Hyundai Oilbank
	2011	Launched the Customer Advisory Panel
Jul.	2011	Began construction of #2 BTX Plant of Hyundai Cosmo
6	2011	Petrochemical
Sep.	2011	Signed an agreement on 1% sharing, a first among large companies in South Korea
Son	2011	Began commercial operations of the #2 HOU Plant
	2011	Began construction of oil terminal at Ulsan New Port
	2011	Established Hyundai Oilbank Central Technology R&D Institute
	2012	Made all worksites smoke-free
	2012	Joint business with Shell for lube base oil business
	2012	Launched Hyundai Oilbank 1% Nanum Foundation
Apr.	2012	Established Hyundai and Shell Base Oil
Apr.	2012	Completed the construction of the Hanmaeum Hall for
		business partners
Jul.	2012	CEO Kwon Oh-gap presented with Dasan Management
		Award by Korea Economic Daily
Sep.	2012	Completed construction of advanced heat supply facility
		(8th FBC)
Oct.	2012	Received the Presidential Award at the 1st Korea
	2012	Knowledge Awards
Nov.	2012	Ranked first in KS-CQI in the entire industry category and
Na.	2012	KS-SQI in refinery category
INOV.	2012	Mechanical completion of #2 BTX Plant of Hyundai Cosmo Petrochemical
Dec	2012	CEO Kwon Oh-gap received the Silver Tower Industrial
Dec.	2012	CLO KWOIT OIT GAP received the Silver Tower IlludStriat

Medal on Trade Day

and Shell Base Oil

with LOTTE Chemical

engine oil brand

Hyundai Cosmo Petrochemical

Received the USD 8 Billion Export Tower on Trade Day

Named one of the top 10 companies at the Best Employers in South Korea by Aon Hewitt Began commercial operations of the #2 BTX Plant of

Jul. 2013 Signed an MOU for mixed-xylene manufacturing business

Launched lubricant business and XTeer automobile

Began construction of the lube base oil plant of Hyundai

## 2014-2015 ————

Jan. 2014	Directly-run service stations participated in the 1% pro sharing program
Apr. 2014	Began commercial operations of Oil Terminal
May. 2014	Obtained ISO 14001 Energy Management System
May. 2014	Certificate
May. 2014	Established Hyundai Chemical
Jun. 2014	Announced corporate vision in celebration of 50th
	anniversary
Aug. 2014	Began commercial operations of the lube base oil plant
<b>y</b>	Hyundai and Shell Base Oil
Sep. 2014	Completed construction of Daegu Logistics Center
Sep. 2014	Moon Jong-bak appointed as the President and CEO of
·	Hyundai Oilbank
Oct. 2014	Completed construction of advanced heat supply facilit
	(9th FBC)
Nov. 2014	Ranked first in the service station category at the KS-C
	surveys by Korea Standards Association
Nov. 2014	Received the Prime Minister Award at the Energy
	Conservation Promotion Rally from Ministry of Trade,
	Industry and Energy
Nov. 2014	Received Presidential Award at the Labor-Managemen
	Culture Awards from Ministry of Employment and Labo
Nov. 2014	Received the Presidential Award at the 13th Korea Safe
	Awards
Dec. 2014	Received the Presidential Award at the 2014 Corporate
	Innovation Award from Korea Chamber of Commerce a
	Industry
Feb. 2015	Received the Grand Prize at the 11th Transparent
	Management Awards
Mar. 2015	Launched Seosan 1% Nanum House Project of Hyunda
	Oilbank 1% Nanum Foundation
Jun. 2015	Established partnership with Seoul National Cemetery
Jun. 2015	Achieved 4 million zero-accident work hours
Jun. 2015	Received the Presidential Award at the 2015 Green
Sep. 2015	Management Awards Held company-wide athletics competition
Nov. 2015	Received the Presidential Award at the 2015 Korea
1404. 2013	Electrical Safety Awards
Nov. 2015	Achieved 5 million zero-accident work hours
1404. 2013	Achieved 3 Hillion Zero-accident work hours





May. 2016



Aug. 2018 Completed the construction of the solvent de-asphalting (SDA)

Completed the construction of

the Hanmaeum Hall,

## 2016-2020 ———

	Feb. 2016	Launched Hyundai OCI
	Mar. 2016	Achieved 6 million zero-accident work hours
	Mar. 2016	Sponsored K League for sixth consecutive year
	May. 2016	Completed the construction of the Hanmaeum Hall, a welfare center at an apartment complex for staff
	Aug. 2016	Achieved 7 million zero-accident work hours
	Nov. 2016	Bagan commercial operations of the MX Plant of Hyundai Chemical
f	Dec. 2016	Achieved 8 million zero-accident work hours
	Dec. 2016	President & CEO Moon Jong-bak received the Gold Tower Industrial Medal on Trade Day
	Apr. 2017	Achieved 9 million zero-accident work hours
	Jun. 2017	Signed MOU on the construction of Children's Library in National Library of Vietnam in Hanoi, Vietnam
	Sep. 2017	Achieved ten million zero-accident work hours
	Oct. 2017	Completed the construction of the Carbon Black Plant of Hyundai OCI
	Nov. 2017	Opened Children's Library in National Library of Vietnam in Hanoi, Vietnam
	Jan. 2018	Achieved 11 million zero-accident work hours
	May. 2018	Signed an agreement on investment in new olefin
		business (HPC Project) with Lotte Chemical
	May. 2018	Launched Mobile Lab service
	May. 2018	Held Dream Concert
	Jun. 2018	Opened the nation's first energy station complex
	Aug. 2018	Completed the construction of the solvent de-asphalting (SDA) process
	Sep. 2018	Achieved 13 million zero-accident work hours
	Dec. 2018	Received Grand Prize in Brand Innovation category at WE AWARD KOREA for website
	Dec. 2018	Kang Dal-ho appointed as the CEO of Hyundai Oilbank
	Aug. 2019	Completed construction of Hyundai Oil Terminal's Pyeongtaek Terminal
	Sep. 2019	Achieved 16 million zero-accident work hours
	Oct. 2019	Hyundai Oilbank 1% Nanum Foundation awarded grand prize at National Sharing Grand Awards
	Dec. 2019	Launched "HYUNDAI S-TAR" very low sulfur fuel oil brand
	May. 2020	Signed MOU for commercialization of calcium carbonate manufacturing technology
	Jun. 2020	Applied for patent for Hyundai Oil-Leakage Monitoring
		Expert System (HOMES), an environmentally-friendly oil leakage detection system
	Jul. 2020	Introduced unmanned patrol vehicles and intelligent CCT-
		Vs at Daesan Refinery

Signed MOU to install electric vehicle charging stations



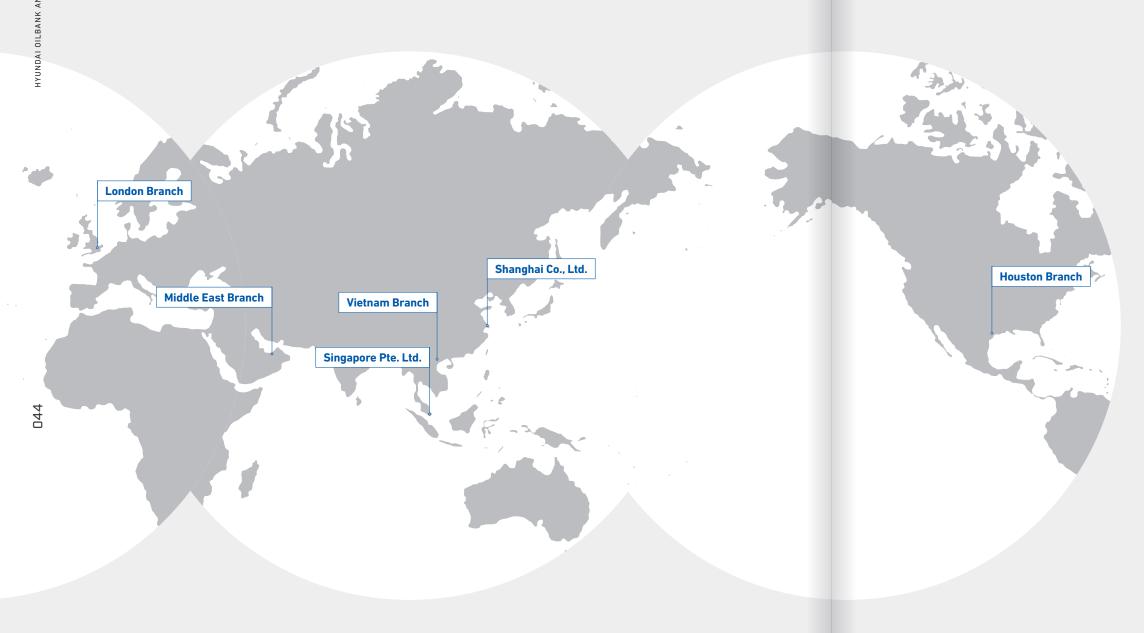


Nov. 2020 Launched premium membership

**Dec. 2020** Achieved 20 million zero-accident work hours

Completed construction of Hyundai Oil Terminal's Pyeongtaek Terminal

# **GLOBAL NETWORK**



#### **Overseas**

#### Hyundai Oil Singapore Pte. Ltd.

7 Temasek Boulevard #29-01, Suntec Tower One, Singapore 038987 Tel +65-6332-1400

#### Hyundai Oilbank (Shanghai) Co., Ltd.

Unit C, 8F, Haihang Tower, NO. 898, Puming Road, Pudong New District, Shanghai, China Tel +86-21-6881-7515

#### Hyundai Oilbank Middle East Branch

2905 Indigo Icon Bldg. JLT, Dubai, UAE (P.O. Box 25321) Tel +971-4-454-8708

#### Hyundai Oilbank Vietnam Branch

Suite 1908, Keangnam Landmark Tower, Plot E6, Cau Giay Urban Area, Me Tri Commune, Tu Liem District, Hanoi, Vietnam Tel +84-4-6252-5511

#### Hyundai Oilbank London Branch

2nd Floor, The Triangle, 5-17 Hammersmith Grove, London, W6 0LG, UK Tel +44-(0)20-8600-7154

#### Hyundai Oilbank Houston Branch

1400 Broadfield Blvd. Suite#250, Houston, USA TX 77084 Tel +1-281-578-8216

#### **Domestic**

#### **Head Office**

182, Pyeongsin 2-ro, Daesan-eup, Seosan, Chungcheongnam-do, Korea Tel +82-41-660-5114

#### Retail Support Team

19th Fl. Yonsei Foundation Bldg., 10 Tongil-ro, Jung-gu, Seoul, Korea Tel +82-2-2004-3856

#### Seoul Branch

19th Fl. Yonsei Foundation Bldg., 10 Tongil-ro, Jung-gu, Seoul, Korea Tel +82-2-2004-3874

#### North Gyeonggi Branch

15th Fl. Neo Tower Bldg., 31 Simin-ro, Uijeongbu, Gyeonggi-do, Korea Tel +82-31-837-9155

#### South Gyeonggi Branch

16th Fl. Seyoung Bldg., 199 Gwonggwang-ro, Paldal-gu, Suwon, Gyeonggi-do, Korea Tel +82-31-221-5189

#### Incheon Branch

585 Inju-daero (Citibank Korea, Guwoldong), Namdong-gu, Incheon, Korea Tel +82-32-566-5188

#### **Gangwon Branch**

3rd Fl. LX Bldg., 2 Sicheong-ro, Wonju, Gangwon-do, Korea Tel +82-33-744-4585

#### **Gangneung Mobile**

2nd Fl. Hyundai Motor Bldg., 2141 Gyeonggang-ro, Gangneung, Gangwon-do, Korea Tel +82-33-655-6531

#### Daejeon Branch

5th Fl. Hyundai Marine & Fire Insurance Bldg., 75 Dunsanseo-ro (Dunsan-dong), Seo-gu, Daejeon, Korea Tel +82-42-480-2128

#### **Chungnam Branch**

4th Fl. Osung Bldg., 1,035 Nambusunhwan-ro, Seosan, Chungcheongnam-do, Korea Tel +82-41-664-8533

#### **Chungbuk Branch**

6th Fl. BYC Bldg., 1037, 1 Sunhwan-ro (Bunpyeong-dong), Seowon-gu, Cheongju, Chungcheongbuk-do, Korea Tel: +82-43-276-4367

#### Gwangju/Jeonnam Branch

8th Fl. Hyundai Marine & Fire Insurance Bldg., 72 Sicheong-ro (Chipyeongdong), Seo-gu, Gwangju, Korea Tel +82-62-602-5145

#### Jeonnam Mobile,

#### Gwangju/Jeonnam Branch

Yeonhyangjungangsanggagil (Yeonhyang-dong), Suncheon, Jeollanam-do, Korea Tel +82-61-725-5871~2

#### Jeonbuk Branch

5th Fl. Tire Bank Bldg., 751 Baekjedaero (Inhu-dong 2-ga), Deokjin-gu, Jeonju, Jeollabuk-do, Korea Tel +82-63-242-5151

#### **Cheonan Mobile**

5th Fl. Baekseok Cultural Center, 96 Cheongsu 14-ro, Dongnam-gu, Cheonan, Chungcheongnam-do, Korea Tel +070-7403-6526

#### Mokpo Mobile

3rd Fl. Samho Hanmaum Cultural Center, 63-12 Sinhang-ro, Samho-eup, Yeongnam-gun, Jeollanam-do, Korea Tel +82-70-7403-6090

#### Busan Branch

3rd Fl. Busan Hyundai OB 107 Asiaddaero (Geoje-dong), Yeonje-gu, Busan, Korea Tel +82-51-590-5128

#### **Ulsan Mobile**

9th Fl. Wujeong Innovation Tower, 512-5 Wujeong-dong, Jung-gu, Ulsan, Korea Tel +82-52-227-9180

#### Gyeongnam Branch

1st Fl. LX Bldg., 532 Beon-gil 6, Changidaero (Sinwol-dong), Uichang-gu, Changwon, Gyeongsangnam-do, Korea Tel +82-55-289-6722

#### Jinju Mobile

6th Fl. Allianz Life Insurance Bldg., 973 Jinju-daero, Jinju, Gyeongsangnam-do, Korea Tel +82-55-761-5189

#### Daegu/Gyeongbuk Branch

5th Fl. KT Bldg., 346 Posco-daero (Daedo-dong), Nam-gu, Pohang, Gyeongsangbuk-do, Korea Tel +82-54-281-8181

#### Gyeongbuk Mobile, Daegu/Gyeongbuk Branch

16th Fl. Yeongnam Tower, 441 Dongdaegu-ro, Dong-gu, Daegu, Korea Tel +82-53-603-6665

#### Jeju Branch

7th Fl. Hyundai Motor Bldg., 83 Sammu-ro (Yeon-dong), Jeju, Jeju-do, Korea Tel +82-64-712-5189

#### Hyundai Oilbank Central Technology Research Institute

6F, Hyundai electric R&D Center, 17-10, Mabuk-ro 240beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Korea Tel +82-2-6270-8610

#### Hyundai Oilbank Lubricant R&D Institute

6F, Hyundai electric R&D Center, 17-10, Mabuk-ro 240beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Korea Tel +82-31-8025-7567

#### Pangyo Quality Supporting Center

Daehan Oil Pipeline Corporation, 201, Anyangpangyo-ro 828beon-gil, Bundang-gu, Seongnam, Gyeonggi-do, Korea Tel +82-31-704-5145

# SOLUTION & SUCCESS

#### **OUR BUSINESS**

Hyundai Oilbank is raising its business efficiency and strengthening its synergy effects through a strategy of business expansion and vertical integration, while also increasing its profitability by operating industry-leading HOU facilities.



# **BUSINESS HIGHLIGHT**

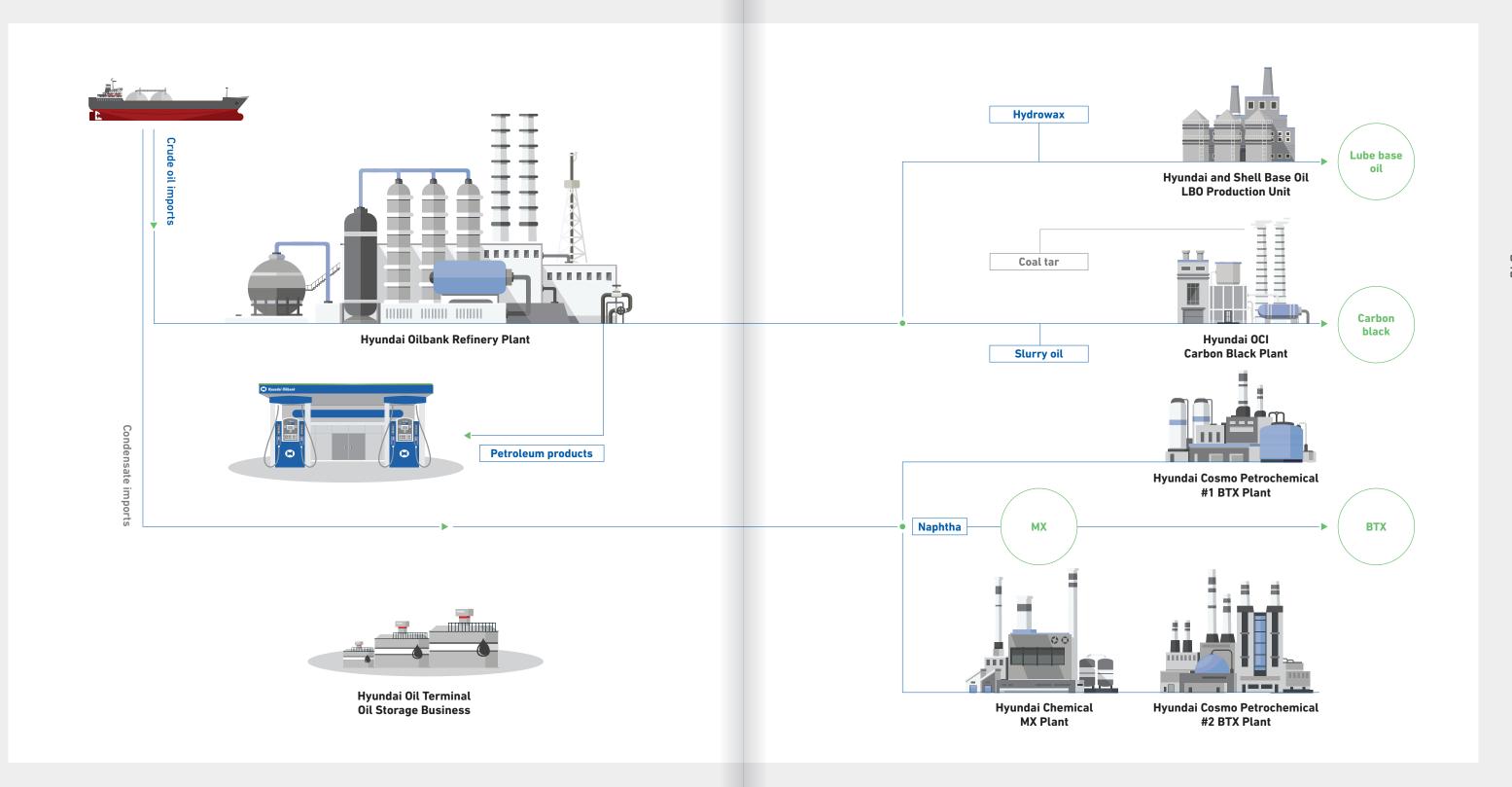
Growing through vertical integration.

Hyundai Oilbank is diversifying its businesses and creating synergies through a well-thought-out strategy of vertical integration. One example of this process is our benzene, toluene, and p-xylene (BTX) business, which took place when our Mixed-Xylene (MX) Plant began commercial operations. MX is made by using imported light crude oil and condensate, and naphtha that is produced in our crude oil refining process. Taken together, they constitute the raw materials needed to make Hyundai Cosmo Petrochemical's BTX products.

Another example of our success in vertical integration took place in the lubricant base oil business through a joint venture with Shell Petroleum Company Limited in 2014. Using

the self-produced lube base oil, we started making XTeer, a new, high-quality lubricant product. In a similar vein, we established Hyundai OCI by forming a partnership with OCI, making us the first South Korean refinery to enter the carbon black business. Hyundai OCI began commercial operations in February 2018.

Following our decision of May 2018 to enter the petrochemical business, we are now building a huge petrochemical complex. It is scheduled to be completed in 2021. This venture will allow us to significantly increase our profitability while also bringing our strategy of vertical integration for all our petroleum products to a very successful close.



# OUR BUSINESS FACILITIES

#### **Hyundai Oilbank Daesan Refinery Plant**

Hyundai Oilbank's Daesan Refinery Plant, located in Seosan, South Chungcheong-do Province and covering approximately 3.3 million square meters, is the company's key base for the refining of crude oil. With crude oil refining facilities and heavy oil cracking units, the plant is capable of refining 690,000 barrels of crude a day as of the end of 2020, of which 41.1% can be produced as high-value products. Hyundai Oilbank is continuously extending and remodeling its facilities. The company began commercial operations of the #2 BTX

Plant in 2013, the lube base oil (LBO) production unit in 2014, and the MX Plant in 2016. By building a carbon black unit and a solvent de-asphalting (SDA) process and expanding the HOU plant in 2018, the Daesan Refinery Plant continues to grow into a world-leading, cutting-edge production base.

#### Kev Facilitie

The Daesan Refinery Plant, corporate headquarters of Hyundai Oilbank, consists of #1 Plant, #2 Plant, #1 BTX Plant, #2 BTX Plant, LBO Production Unit, MX Plant, and Carbon Black

Total Capacity	Unit: thousand barrels/day

Total Capacity							
Process	1 Plant	2 Plant	1 BTX	2 BTX	MX Plant	Carbon Black	Total
Crude Distillation Unit (CDU)	160.0	360.0			170.0		690.0
Vacuum Distillation Unit (VDU)	99.0						99.0
Light End Recovery Unit (LER)	12.0	6.0			5.3		23.3
Naphtha/Mogas* Hydrotreating Unit							
Naphtha Hydro Treating (NHT)	12.0	26.0			110.0		148.0
Platforming Treating (PLT)	4.6	22.5			65.0		92.1
Mogas Hydro Treating (MHT)		41.0					41.0
Alkylation Treating (ALK)		25.0					25.0
Mogas Merox Treating (MMX)		10.0					10.0
Kerosene/Gas Oil Hydro Treating Units							
Kerosene Hydro Treating (KHT)		70.0					70.0
Gas Oil Hydro Treating (GHT)	22.0	129.0			18.0		169.0
Kerosene Merox (KMX)	30.0				31.0		61.0
Heavy Oil Cracking Units							
Hydro Cracking (HCR)	50.0						50.0
Delayed Coking Unit (DCU)	50.0						50.0
Atmospheric Residue Desulfurization (ARDS)		65.0					65.0
Mild Hydro Cracking (MHC)		27.5					27.5
Residue Fluidized Catalytic Cracking (RFCC)		86.0					86.0
LBO Production Unit (Tons/year)							
Lube Base Oil	25.0						25.0
BTX Unit (Tons/year)							
Benzene			280.0	80.0	410.0		770.0
Paraxylene			663.0	980.0			1643.0
Mixed-xylene (MX)					1,350.0		1,350.0
Carbon Black Production Unit (Thousand tons/year)							
Carbon black						150	150

 $<sup>^{\</sup>ast}$  Mogas: Short for motor gasoline, the material is used to formulate gasoline.

Hyundai Oilbank has established industry-leading refining facilities, while creating high value through the stable production and supply of petroleum products, raw materials for petrochemicals, and lube base oil. In addition, we are building eco-friendly and safe production bases by minimizing pollutant emissions through ongoing process improvements.

#### **Crude Distillation Unit (CDU)**

The CDU process separates crude oil into different petroleum fractions according to their boiling points, where the fractions are drawn off from top to bottom based on their boiling points – LPG, naphtha, kerosene, diesel, and fuel oil.

#### Vacuum Distillation Unit (VDU)

The VDU process conducts distillation at below atmospheric pressure, drawing off the different fractions from top to bottom according to their boiling points – Vacuum Light Gas Oil (VLGO), Vacuum Heavy Gas Oil (VHGO), and Vacuum Residue (VR).

#### Hydro Cracking Unit (HCR)

The HCR process breaks down the lower-quality Vacuum Heavy Gas Oil (VHGO) from the VDU process to produce high-quality light and middle distillate oils, including kerosene, diesel, LPG, and naphtha.

#### Delayed Coking Unit (DCU)

The DCU process breaks down the fuel oil from the CDU or VDU processes at its thermal cracking temperature of 490°C to produce light and middle distillate oil and byproduct coke. The coke is used as fuel for boilers.

#### Naphtha Hydro Treating (NHT)

The NHT process adds hydrogen to naphtha that is produced from the CDU process to remove impurities and convert it to low-sulfur naphtha. Low-sulfur naphtha is injected into the Platforming (PLT) process or used as a blendstock for various products.

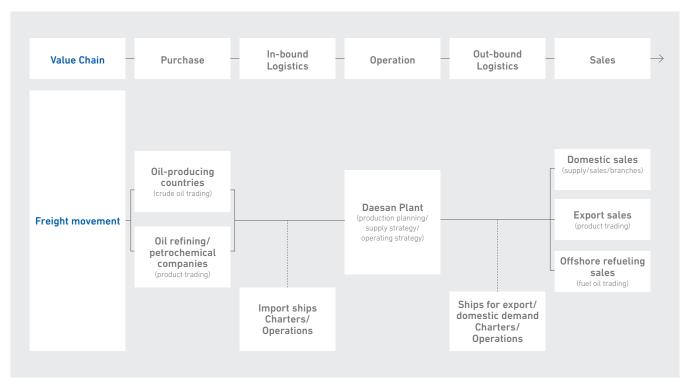
#### Kerosene Hydro Treating (KHT)

The KHT process adds hydrogen to the kerosene products produced by the CDU process to remove sulfur compounds and convert them into low-sulfur kerosene. Low-sulfur kerosene is sold as kerosene for boilers and other products.

#### Gasoil Hydro Treating (GHT)

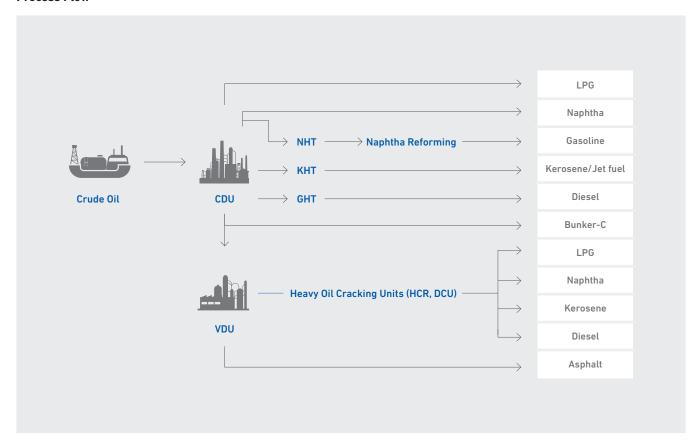
The GHT process adds hydrogen to the diesel products produced by the CDU and DCU to remove sulfur compounds. The produced low-sulfur diesel is used as a blendstock for various products.

#### Operating procedures for crude oil/products imports and exports



<sup>\*</sup> The existing Atmospheric Residue De-Sulfurization (ARDS) Unit has been rebuilt into a hydro treating facility for Mild Hydro Cracking Unit (MHC) modules and a cracking facility for MHC modules.

#### Process Flow



#### Platforming (PLT)

The PLT process converts the heavy naphtha produced by the NHT and HCR into naphtha reformate that is rich in aromatic components. The reformate is used as a gasoline blendstock or feedstock for benzene, toluene, or xylene production.

#### Atmospheric Residue De-Sulfurization (ARDS)

The ARDS process adds hydrogen to high-sulfur atmospheric residue, which has many impurities, at a high temperature and pressure to convert it to low-sulfur residue. It produces low-sulfur residue that is used as feedstock for RFCC.

#### Mild Hydro Cracking Unit (MHC)

The MHC process produces low-sulfur diesel blendstocks and raw materials for the Residue Fluidized Catalytic Cracking (RFCC) process by mild hydrocracking de-asphalted oil from the SDA process.

#### Residue Fluidized Catalytic Cracking (RFCC)

The RFCC process breaks down low-sulfur atmospheric residue from ARDS in high temperatures using a fluidized catalyst. It produces high-value gasoline products, mixed butane, propylene, and slurry oil, which become raw material for the Carbon Black Unit.

#### Lube Base Oil Unit (LBO)

The LBO process isomerizes and hydrogenates hydrowax from HCR that has not been converted into kerosene and diesel in the Hydro Cracking Unit to produce high-quality lube base oil.

#### Benzene Toluene Xylene Unit (BTX)

The BTX process converts heavy naphtha reformate that was produced from the PLT to aromatic hydrocarbons, such as benzene, toluene, and xylene, using catalytic reaction and absorption. The production of para-xylene (PX) among xylenes was increased through partial renovations to the BTX Unit and the creation of the Crystallization Unit (CRU) during the regular maintenance period in 2020

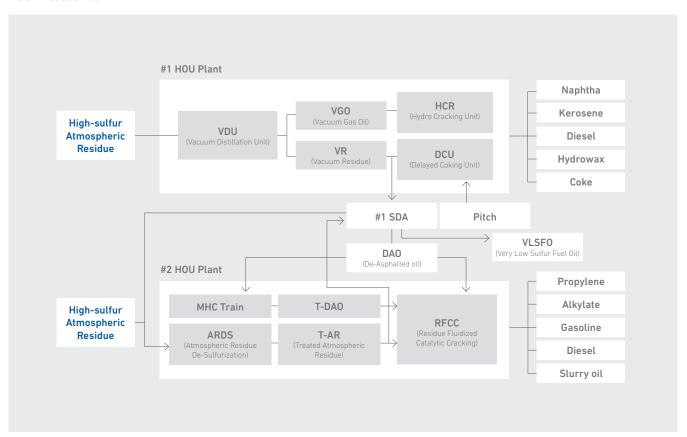
#### Carbon Black Unit

The Carbon Black process produces carbon black by the incomplete combustion of hydrocarbon (coal tar from steel mills and slurry oil from the RFCC process).

#### Solvent De-Asphaltene Unit (SDA)

This process separates de-asphalted oil and asphaltene by mixing atmospheric residue and vacuum residue with solvents.

#### **HOU Process Flow**



#### **Expansion of HOU Plants**

Hyundai Oilbank manufactures eco-friendly, high value-added products by constantly improving its upgrading facilities. In the refining industry, HOU plants are called "ground oilfields" because of their ability to take low-price high-sulfur heavy oil, which accounts for around 40 to 50% of the products from the crude oil refining process, and convert it into high value-added, eco-friendly petroleum products such as gasoline, diesel, propylene, and alkylate. In September 2011, Hyundai Oilbank completed the #2 HOU Plant, increasing its daily upgrading capacity from 78,500 to 164,500 barrels, thus laid the foundation for the next level. As of the end of 2017, Hyundai Oilbank's upgrading ratio was 41.1%, the highest in South Korea. The upgrading ratio is the percentage of high value-added product manufacturing capacity compared to total oil refining capacity, and is perceived as being a barometer of technological prowess and business profitability. The company also manufactures gasoline and diesel products that meet Californian standards of under-15 parts per million of sulfur content, the world's strictest standard, and exports them to the U.S. and other advanced markets.

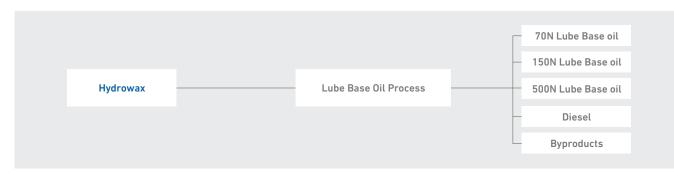
#### #1 HOU Plant

An HOU plant produces high value-added petroleum products by cracking fuel oil that is created in a CDU. Hyundai Oilbank has two HOU Plants, among which the #1 HOU Plant has mainly produced kerosene and diesel using fuel oil from the #1 CDU as its raw material since beginning operations in 1989. The #1 HOU Plant consists of the HCR unit and DCU, and its daily refining capacity is 50,000 barrels in the HCR and 50,000 barrels in the DCU.

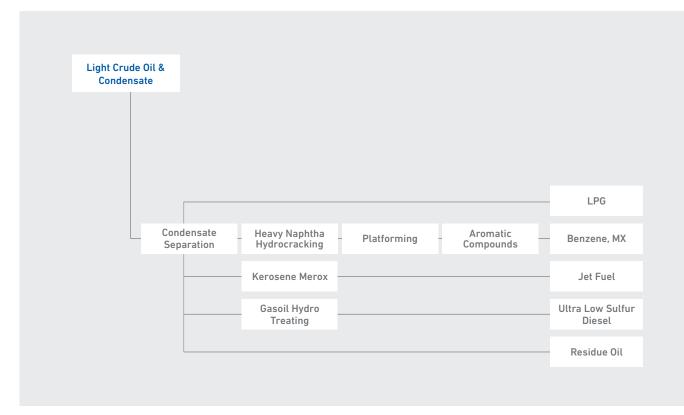
#### #2 HOU Plant

The #2 HOU Plant uses low-quality fuel oil generated during the crude oil refining process at the #2 CDU to produce petroleum products, such as LPG, gasoline and diesel, and petrochemical feedstocks, such as propylene. The #2 HOU Plant consists of the ARDS process, the MHC process and the RFCC process. It uses low-sulfur bunker-C oil, which is created through the ARDS and MHC processes, as its raw material, to produce high value-added products. Daily refining capacity of the plant is 65,000 barrels through the ARDS process, 27,500 barrels through the MHC process, and 86,000 barrels through the RFCC process.

#### LBO Process Flow at Hyundai Shell and Base Oil



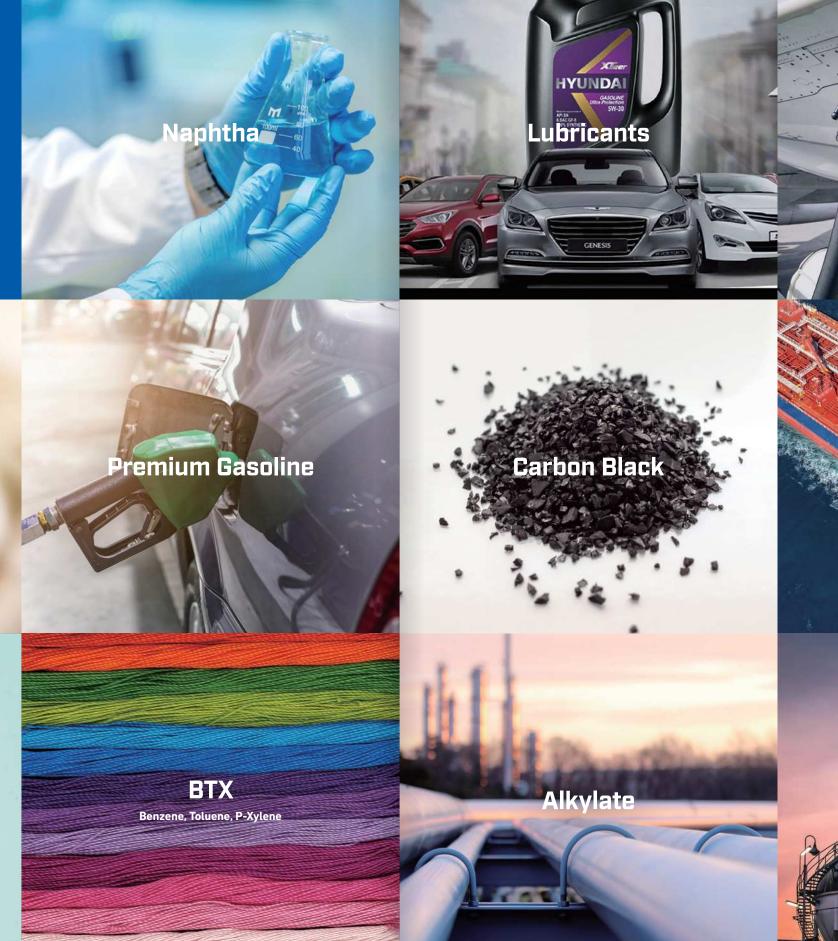
#### MX Process Flow at Hyundai Chemical





# Major Products

Lube Base Oi







**Jet Fuel** 

Fuel Oi

## **OUR BUSINESS PRODUCTS**

Hyundai Oilbank has played a key role in the modern industry and eased daily living by producing world class petroleum products and petrochemical feedstocks, including fuels for automobiles, ships and jets, and other products for a wide variety of industrial and domestic uses. The company also contributes to a better future for humankind by offering products and services that make a



#### **Petroleum Products**

#### **Premium Gasoline**

Hyundai Oilbank's high-quality, high-octane premium gasoline has an octane rating of about 100. Since it uses additives that improve its fuel efficiency, drivers using it benefit from higher power output and better fuel economy, even in difficult driving conditions over a prolonged period of time. It also reduces harmful exhaust emissions.

#### Gasoline

Because gasoline is highly volatile and flammable at room temperature, it is explosive when mixed with air. This is why it is widely used as a fuel in internal combustion engines. Hyundai Oilbank uses engine-cleaning additives for better dispersion and combustion. Also, it ensures that its high-quality gasoline product emits fewer pollutants, exceeding by far the criteria set forth in the Clean Air Conservation Act, which stipulates that gasoline should contain under 0.7% benzene by weight and under 10 mg/kg of sulfur.

#### **Ultra Low Sulfur Diesel**

Hyundai Oilbank was the first in South Korea to supply eco-friendly ultra-low sulfur diesel that significantly reduces exhaust fumes and noise compared to standard diesel grades. This diesel also contains high-quality additives that help keep engines clean. Hyundai Oilbank has mixed bio-diesel into all of its diesel products since 2006, which results in more eco-friendly products. The company also provides high-quality diesel with improved low-temperature performance, to suit customers in regions affected by severe cold.

#### Kerosene

Kerosene products of Hyundai Oilbank are Eco-Label certified. They are free from unpleasant odors, and are virtually smoke- and soot-free when burned. which makes them suitable for indoor heating fuels. They are also very economical, as they deliver excellent caloric value and combustibility.

#### Fuel Oil

Hyundai Oilbank's fuel oil products are categorized into low sulfur, marine, and classes A, B, and C, according to sulfur content, application, and viscosity. They are mostly used as fuels for internal combustion engines and boilers. Hyundai Oilbank sells marine fuel oil products that differ in viscosity according to engine size, type, and other factors. In order to cope with the IMO sulfur content standards to be tightened from 2020, we have produced and supplied the "HYUNDAI S-TAR" Very Low Sulfur Fuel Oil (VLSFO) brand, by incorporating new technologies into HOU facilities.

#### Liquefied Petroleum Gas (LPG)

Propane is used for residential and commercial cooking, and for heating. Butane is used as a vehicle fuel, fuel for portable cooking and heating, and for industrial purposes. As a vehicle fuel, Hyundai Oilbank supplies LPG products which vary in the propane-butane mix ratio according to season to help engines to start in any temperature. In addition, all LPG products contain an odorant to ensure customer safety.

#### Jet Fuel

Hyundai Oilbank's jet fuel products evaporate well even in low-temperature, low-pressure and high-altitude environments, preventing vapor lock. They do not easily freeze, and have good combustibility and caloric value. Hyundai Oilbank produces and supplies JP-8 for military use and Jet A-1 for civilian aviation use.

#### Naphtha

Widely used in the petrochemical industry, naphtha is a raw material for the production of gasoline, solvents, fertilizer, and other petrochemical products. Naphtha products of Hyundai Oilbank are high quality, with little olefin. They are sold to petrochemical companies. and are also used in Hyundai Cosmo Petrochemical's BTX process.

#### **Petrochemical Products**

#### Benzene, Toluene, P-Xvlene (BTX)

BTX is an abbreviation for Benzene, Toluene, and P-Xylene, all of which are aromatic chemicals. They are mainly used in the synthesis of chemicals. Benzene is the most important of the aromatic compounds, and is used in nylon, Styrofoam, and insulation materials. Toluene is used in thinner and other synthetic materials, and P-Xylene is used to make polyester, film, and PET.

#### Propylene

Propylene is a core petrochemical feedstock, and is used in products such as acetone, isopropyl alcohol, acrylonitrile, nylon 6, polypropylene, propylene oxide, epichlorohydrin, and polyisoprene. These materials are ultimately used to make acrylics, synthetic rubbers, plastics, detergents, and various other products.

#### Alkvlate

Hyundai Oilbank's high-octane alkylate products are ecofriendly gasoline blending stocks that emit almost no environmental pollutants, and contain neither olefin nor aromatic compounds.

#### Mixed Xylene (MX)

MX is used in the production of para xylene, ortho xylene, and meta xylene. It is also primarily used in the making of paints and agricultural chemicals.

#### **Other**

#### Asphalt

Asphalt is produced at Hyundai Oilbank's Vacuum Distillation Unit (VDU), and is a vital material in road paving. Asphalt products produced by Hyundai Oilbank meet the KS M2201 standards for road paving, and are also the only products from a South Korean company that have obtained certification for the JIS K2207 asphalt standards in Japan.

#### Lube Base Oil

Lube base oil is produced through a catalytic process, using hydrdowax produced at the Hydro Cracking Unit (HCR) as a raw material. Lube base oil is a feedstock that makes up over 80% of lubricant products. Additives are inserted into lube base oil to produce lubricants for automobiles, ships, and for other industrial purposes.

#### Lubricants

Hyundai Oilbank's lubricants include the "XTeer" lubricant brand and the "XTeer a" fuel additive.

#### Carbon Black

Carbon black is a carbon powder that is produced by the incomplete combustion of hydrocarbon (including coal tar and slurry oil). It is used primarily as a raw material for the compounding agents that reinforce tires and other rubber products.

# **PETROLEUM**

Hyundai Oilbank has a daily crude oil refining capacity of 690,000 barrels and a 21.2% share of South Korea's light and middle distillate oil market. In addition, we are enhancing our business competitiveness through oil imports diversification and export market expansion to become a global total energy and chemical company.

#### Diversifying crude oil imports

Hyundai Oilbank increased its imports of non-Middle Eastern crude oil in 2020 in response to a decrease in crude outputs in Saudi Arabia and other OPEC countries and the continuing sanctions on Iran. Following the commercial operation of our solvent de-asphalting (SDA) process, we have increased the supply of cheap South American extra heavy crude oil. We also sourced new supplies from Brazil and Nigeria, while maintaining our purchases from the United States, the United Kingdom, and Kazakhstan.

	2015	2018	2019	2020
Imports from the Middle East	82%	54%	42%	42%
Countries*	20	22	24	26
Oil Types*	39	56	62	68

<sup>\*</sup> Cumulative number of oil types and countries since 2012

#### Strengthening our brand image

Hyundai Oilbank carries out a wide variety of marketing programs aimed at strengthening its brand image. We buy radio advertisements year-round, using the theme of "promoting a safe driving culture" to stress our concerns about traffic safety. We signed an MOU with the Korea Road Traffic Authority in 2020 and used it to distribute "Smile Silver" stickers at our directly-run gas stations. They were designed to be attached to vehicles owned by seniors, so that other drivers would be considerate of them. Another of our signature programs is called "New Rice Promotion" in the autumn.

As part of our automotive marketing strategy, we have been providing the official fuel used in the "Super Race", South Korea's largest sports car racing event, since 2019. We have also added a number of new and convenient facilities at our gas stations, such as fast food outlets, logistics and delivery service centers, IoT shared parking, a premium car wash business, and convenience stores.

#### Adding to the quality and service of our gas stations

Hyundai Oilbank's gas and charging stations offer their customers a pleasant comfortable experience through a variety of services and quality enhancement programs.

We have taken a number of steps to increase people's awareness of them. They include a "Honeymoon Program" that provides clean and friendly service packages, a "Visiting Barista" program that offers customers fresh coffee, a "Service Academy" that trains station operators in customer service best practices, and hiring a "Market Designer (MD)" team of service and design consultants. Last year we developed a system that allows our customers to evaluate our gas station programs and services using our app, and soon began monitoring our gas station operations.

We also operate a quality support center that conducts quality management operations at our service stations, and practice quality control using a "Mobile Lab" inspection system. The lab was named a "Hit Product of the Year" by Digital Chosun, and won the Trade, Industry and Energy Minister's Award in the Oil Quality Management category.

#### Entering promising new high-value businesses and adding to the petrochemical business' capabilities

Hyundai Oilbank's efforts to discover promising new global markets and businesses continued apace in 2020 despite COVID-19. We added more destinations for our exports by solidifying sulfur, which we used to export to China only in liquid form, added to our presence in Indochina by building a petroleum product storage facility in Vietnam, and advanced into the kerosene and diesel markets in Japan, side-stepping the country's high entry barriers by selling our products in small quantities. We will spend much of this year awaiting the completion of our HPC petrochemical facilities, including putting a dedicated petrochemical team together to strengthen our capabilities. We will also continue developing new markets, such as the United States and Australia, which are the world's largest markets for petroleum products, and are planning to add to our profitability by strengthening our relationship with Saudi Aramco, the world's largest oil company, by signing new contracts with it.

#### Domestic Light and Middle Distillate Oil Market Share in 2020

21.2%

**Daily Crude Oil Refining Capacity** 

\* Including 170,000 barrels

690,000 barrels

#### Number of Gas Stations in Operation

2,533

#### **Expanding the lubricant business**

Hyundai Oilbank is expanding its product portfolio by launching a top-tier lubricant product group called "XTeer Top Prime". We also developed a highest-quality lubricant for use in automobiles, shipbuilding, ships, generators, construction machinery, transformers, and robots, and made it immediately available to their manufacturers and aftermarket users. This was made possible by building a state-of-the-art engine dynamometer facility and carrying out research into engine oils in conjunction with auto makers at our Lubricant Research Center. We obtained certifications from Hyundai Motor, BMW, Mercedes-Benz, Porsche, Volvo, MAN, Renault, and Hyundai Heavy Industries. In May of this year, we launched our SP/ GF-6 grade lubricant, the highest standard for gasoline recognized by the American Petroleum Association.

Sales by Product in 2020	Unit: Thousand barrels
Туре	Sales Volume
Diesel	69,112
Naphtha	42,540
Gasoline	30,632
Fuel oil	20,722
Jet fuel	10,234
Kerosene	3,499
LPG	4,050
Others	11,151
Total	191,940

#### **Crude Oil Imports by Country**

in 2020 Unit: Thousand barrels

Country	Imports Volume	Portio
Mexico	49,104	34.09
Saudi Arabia	37,415	25.99
Kuwait	14,026	9.79
USA	13,668	9.59
Brazil	9,771	6.89
Iraq	7,965	5.59
UK	2,899	2.09
Russia	2,458	1.79
Norway	2,064	1.49
Nigeria	1,556	1.19
UAE	1,038	0.79
Kazakhstan	1,029	0.79
Columbia	1,025	0.79
Brunei	580	0.49
Total	144,598	100.09

#### Crude Oil Exports by Destination in 2020

Destination	Portion
China	30.3%
Australia/New Zealand	20.8%
Malaysia	14.3%
Singapore	13.3%
USA	6.5%
Vietnam	6.1%
Hong Kong	1.3%
Japan	0.8%
Other	6.6%

# **PETROCHEMICAL**

Hyundai Oilbank, jointly with LOTTE Chemical, established Hyundai Chemical, the first joint venture between an oil refining company and a petrochemical company in South Korea, and began condensate refining and mixed-xylene (MX) manufacturing in 2016.



#### Hyundai Chemical

Hyundai Chemical is South Korea's first joint venture between petroleum and petrochemical companies, established through a 6:4 investment between Hyundai Oilbank and LOTTE Chemical. The company began commercial operations in November 2016.

With the establishment of Hyundai Chemical, Hyundai Oilbank completed vertical integration in the BTX business from crude oil to petrochemicals through linkage with existing plants. In addition, Hyundai Chemical's products and byproducts are sold to its shareholder companies (Hyundai Oilbank and LOTTE Chemical), creating business synergies such as the effects of imports replacement and export increases.

Following the revamp in 2019, Hyundai Chemical is able to refine 170 thousand barrels of condensate a day and produces approximately 3.5 million tons of petrochemical products, including MX and light naphtha, as well as about 26 million

barrels of petroleum products, including jet fuel and diesel. With the goal of beginning commercial operations in 2021, the company is carrying out the Heavy Feed Petrochemical Complex (HPC) project, worth KRW 3.1 trillion, to produce polyethylene, polypropylene and other petrochemical products by utilizing byproducts from Hyundai Oilbank's refinery plants. Through this project, it aims to become a global petrochemical company with the best-in-class competitiveness.

**MX Production Capacity** 

1,350,000 tons/year

\* MX plant of Hyundai Chemical | www.hyundaichemical.co.kr

Hyundai Oilbank began producing benzene, toluene, and xylene (BTX), which are basic chemical feedstocks used to make petrochemical products, in 2011, by establishing Hyundai Cosmo Petrochemical, a joint venture with Cosmo Oil.



#### Hyundai Cosmo Petrochemical

Hyundai Cosmo Petrochemical was established in November 2009 as a joint venture between Hyundai Oilbank and Cosmo Oil of Japan. Hyundai Cosmo Petrochemical produces and supplies petrochemical products such as benzene, toluene, and xylene (BTX), all of which are basic chemical feedstocks that are widely used to make synthetic fibers, plastics, gasoline additives, and other petrochemical products. The company completed the #2 BTX Plant in February 2013 which improved profitability and responded to the dramatically growing demand from China, India, and other Asian countries.

2020 was a difficult year for the petrochemicals business. Demand shrank precipitously due to the coronavirus crisis and a dramatic increase in supply following large-scale PX expansions in the region. Despite this, Hyundai Cosmo Petrochemical was able to successfully complete its PX-plus and crystallizer project, greatly increasing the production capacity of its major PX and BZ products. It currently boasts a BTX production capacity of 2.03 million tons a year.

Demand for PX is expected to grow beginning in 2021, when large-scale PTA extensions will come on line. The company plans to generate stable profits by adding new customers and increasing its cost competitiveness through cost reductions and improvements to its production processes.

PX & BZ Production Capacity

**2,030,000** tons/year

\* 2 BTX Plant of Hyundai Cosmo Petrochemical | www.hyundaicosmo.com

# LUBE BASE OIL

Hyundai Oilbank established Hyundai and Shell Base Oil, in partnership with Shell Petroleum Company Limited, and began to produce eco-friendly lube base oil in 2014. The LBO business has since maintained steady growth and increased profitability, and has become an exemplary model of business diversification.



#### Hyundai and Shell Base Oil

Hyundai and Shell Base Oil is a joint venture between Hyundai Oilbank and Shell Petroleum Company Limited. It built a lube base oil (LBO) unit with an annual production capacity of 800,000 tons at the Daesan Refinery Plant, and began commercial operations in 2014. The company produces American Petroleum Institute (API) standard Group II 70 Neutral, Group II 150 Neutral, and Group II 500 Neutral by processing residue oil from Hyundai Oilbank's heavy oil upgrading process. The products are supplied to industries and lubricant products manufacturing plants both at home and abroad. The company's high-quality LBO boasts various features such as superior low temperature fluidity, clear color, low volatility, thermal stability, and improved fuel economy. Thus, its LBO is widely used for automotive engines, ships and processing, and other industrial purposes. The company boasts a production capacity of 1 million tons a year.

The high-quality LBO produced by Hyundai and Shell Base Oil is supplied in response to the rapidly growing demand for lube base oil, centering on Asia, Americas, and Oceania, including China and India, in addition to South Korea. As of 2020, its LBO was supplied to more than 50 countries following its market expansion to include Africa and Europe. The company is generating additional profits by developing 100N, 2CST, 3CST, and other new products, while at the same time continuously improving sales margins by adding to its sales areas and channels.

**LBO Production Capacity** 

**1,000,000** tons/year

\* LBO Unit of Hyundai and Shell Base Oil | www.hsbaseoil.com

**OUR BUSINESS** 

# **CARBON BLACK**

Hyundai Oilbank established Hyundai OCI, in partnership with OCI Company, and became the first domestic refinery company in South Korea to enter the carbon black business, thus further diversifying its business portfolio.



#### Hyundai OCI

Hyundai OCI is a carbon black manufacturer, established in February 2016 as a joint venture with OCI Company through a 51 to 49 stake ratio. Carbon black is produced by using coal tar from steel mills and slurry oil from the residue fluidized catalytic cracking (RFCC) process. It is used primarily as a raw material for printer inks and the compounding agents that reinforce tires and other rubber products. The company's production facilities are located near the Hyundai Oilbank Daesan Refinery Plant within the Daesan Industrial Complex. After completing the construction of a carbon black unit with an annual production capacity of 100,000 tons in 2017 and then increasing this capacity by 50,000 tons in 2019, the company is now operating a carbon black plant that boasts an annual production capacity of 150,000 tons. In addition, benzene, toluene, xylene and byproducts are sold by processing crude light oil, a byproduct of steel mills.

Despite difficult economic conditions like low international oil price plunges and COVID-19, Hyundai OCI achieved sales

of KRW 163.9 billion and an operating profit of KRW 38.3 billion in 2020, thanks to its stable supply of raw materials and state-of-the-art technologies. Growth in the world tire industry is expected to slow in 2021 due to a United States dumping complaint and intensifying competition in the carbon black industry. Despite the market conditions, Hyundai OCI will continue its record of growth by stabilizing the production and quality of carbon black while continuing to improve its profitability.

**Carbon Black Production Capacity** 

**150,000** tons/year

\* Carbon Black Plant of Hyundai OCI www.hyundaioci.co.ki

# **TANK TERMINAL**

Hyundai Oilbank became the first refinery player in South Korea to enter the commercial tank terminal business when it established the Hyundai Oil Terminal in 2012. It currently operates oil storage facilities in Ulsan and Pyeongtaek, and is planning to expand elsewhere.



#### Hyundai Oil Terminal

Hyundai Oil Terminal, a subsidiary of Hyundai Oilbank with 100% ownership, has been successfully operating the commercial tank terminal business since December 2013. It has built a large-scale oil storage facility for petroleum and petrochemical products, with a capacity of 280,000 kiloliters, at Ulsan New Port in South Korea. It also has dock facilities capable of handling tankers of up to 50,000 tons (DWT basis).

The company has been contracted to manage seven oil reservoirs owned by Hyundai Oilbank in different regions of the country since 2014, growing into a terminal company with a nationwide network. It serves as a base to supply domestic demand, including the gas stations that Hyundai Oilbank acquired this year. Hyundai Oil Terminal expanded its operations by acquiring an additional oil storage facility near Pyeongtaek (Approximately 40,000m'), capable of storing 103,000kl of petroleum and petrochemical products. This acquisition helped the company to post its best-ever results in 2020, recording sales of KRW 45.2 billion, an operating profit of KRW 15.6 billion, and net income of KRW 10.9 billion.

Hyundai Oil Terminal is planning to expand its storage facilities through additional acquisitions and/or extensions of other facilities both at home and abroad. It will also enter into related business operations as part of its bid to become the nation's leading oil logistics player.

**Oil Storage Capacity** 

**383,000** kiloliters

\* Facilities of Hyundai Oil Terminal | www.oilterminal.co.kr

**OUR BUSINESS** 

# **NEW BUSINESS**

Equipped with the industry's best refining facilities, Hyundai Oilbank will continue to sustain facility investments and expand new businesses in the non-refining sector in order to realize a stable earnings structure even in the midst of sudden changes in business environment.



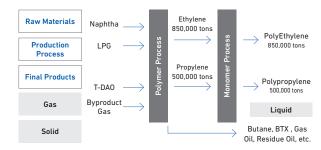
#### Heavy Feed Petrochemical Complex (HPC) Project

Hyundai Oilbank has been carrying out successful business diversification with competitive partners through the BTX business (Hyundai Cosmo Petrochemical), the MX business (Hyundai Chemical), the lube base oil business (Hyundai and Shell Base Oil) and the carbon black business (Hyundai OCI). A joint venture with LOTTE Chemical, Hyundai Chemical is constructing a petrochemical plant to produce polyethylene and other products on the premises of the Daesan Refinery Plant. The production process will involve the use of more than 60% of refinery byproducts, such as LPG, byproduct gas and desulfurized heavy oil, all of which are cheaper than naphtha. The HPC project is a KRW 3.13 trillion, ultra-large new petrochemical business scheduled for operations at the end of 2021. When finished, it will be capable of producing 850,000 tons of polyethylene and 500,000 tons of polypropylene a year. Its high level of profitability will be made possible by its use of refinery byproducts, leading to superior cost competitiveness compared to its competitors.

The business environment in which South Korea's energy industry operates has undergone substantial changes recently,

including the expansion of eco-friendly energy sources and the overwhelming effects of the Fourth Industrial Revolution. As a total energy and chemical company, Hyundai Oilbank is planning to enter the new and renewable energy business, the electric vehicle and hydrogen vehicle business, and other eco-friendly new businesses. It will also establish a presence in new types of enterprises arising from the Fourth Industrial Revolution by enhancing its manufacturing competitiveness through dramatic digital transformations.

#### **Heavy Oil Cracking Units**



# TOGETHER & TOMORROW

#### **OUR MANAGEMENT**

Hyundai Oilbank conducts systematic risk analysis operations in response to rapidly changing market conditions and enhances its sales competitiveness through a wide range of highly-professional quality and brand management activities.



OUR MANAGEMENT

# **RISK MANAGEMENT**

Hyundai Oilbank has established a risk management system that reflects the specific risk of the oil refinery market, such as oil price and exchange rate fluctuations. The company also conducts detailed risk analysis to minimize losses amid market volatility.

#### Risk Management Organization

Hyundai Oilbank operates the Risk Management Committee chaired by the CEO. The Committee engages in integrated management of various risks, including exchange rate, oil price, and refining margin risks.

#### Oil Price Risk

The price of most of the crude oil that Hyundai Oilbank imports is set during the month of its loading. This means that price fluctuations may occur during the one- or two-month shipping period, presenting the company with the risk of price fluctuations. Hyundai Oilbank determines the portion of its monthly imports that will be exposed to this risk, and manages its degree of exposure by adjusting the oil's base price. Addi-

tional measures are taken if necessary such as hedging through swap transactions and adjusting the base price of product sales. In order to reduce its losses due to price fluctuations, the company hedges the price of oil imports whenever it deems it necessary. It also makes fixed price hids



#### **Diversification of Crude Oil Imports**

Hyundai Oilbank has adopted a strategy of diversifying its crude oil imports. Instead of only importing oil from the Middle East, it is now dealing with companies located in Latin America and the North Sea, reducing its level of geopolitical risk. Hyundai Oilbank strives to maximize the economic efficiency of crude oil imports, changing sources according to market conditions. The company will continue to expand the sources of its crude oil imports, in a seamless connection with its plants. This will enable the company to minimize risk while maximizing revenue.

#### **Exchange Rate Risk**

Hyundai Oilbank is exposed to risk from exchange rate fluctuations because the company pays for imports of crude oil and sells refined petroleum products in foreign currencies. To cope with this risk, the company establishes optimal hedging strategies through the Risk Management Committee. The Exchange Risk Management Team minimizes risk by actively hedging exposures, based on these hedging strategies.



**OUR MANAGEMENT** 

# **QUALITY MANAGEMENT**

In order to improve its post-sales service, Hyundai Oilbank has established thorough, phased quality inspections and a detailed quality complaint management system. In addition, the company maximizes customer satisfaction through its ongoing R&D efforts, which are led by the Hyundai Oilbank Central Technology R&D department.

#### Managing for Quality

At all stages from production to sales, Hyundai Oilbank undertakes quality tests in accordance with regulations stipulated in relevant laws and ordinances. The company also carries out quality inspections throughout the year to ensure top quality right through to the end distribution of its products. In addition, it is enhancing the satisfaction of end consumers through its quality management service and on-site support by using the Mobile Lab.

#### **Certification of Quality Management**

Thanks to its strict quality management, Hyundai Oilbank passed all regular fuel quality tests administered to gas stations by the Ministry of Trade, Industry and Energy and the Ministry of Environment in 2015. The objective reliability of its quality tests has been also confirmed for all fuel types and categories each year from 2014 to the present by the Korea Petroleum Quality & Distribution Authority. The company won international recognition for its quality management processes in 2020 for faithfully following the requirements of the ISO 9001 quality management system.

#### **Quality Complaint Management System**

Sampling

The Sales Support Team is in charge of issues relating to quality complaints. The team discusses customer complaints with the relevant departments, takes necessary measures, and informs customers about the results. If there are delays in the complaint handling process, the company finds and removes the cause of

the delay. Located in Pangyo, Gunsan and Busan, the Technical Support Center and the Mobile Lab use cutting-edge testing and analysis equipment to respond immediately to customer requests. Even when the cause of a problem is not clear, representatives visit customers within 72 hours of receiving the complaint to consult. They collect samples for quality testing, and the results are shared promptly both with the relevant departments and the customer. The Mobile Lab immediately checks the quality of products and provides the results on the spot.

Quality training to the entire sales force and service station operators is offered on a regular basis. In addition, a handbook is published every year to help all employees to promptly address customers' quality concerns. Furthermore, information on any hazardous substances in products and services is provided, and all regulations regarding health and safety are strictly followed

STEP. 4

#### **Quality Complaint Handling Procedure**

Complaint received

STEP. 1

STEP. 2

STEP. 3

Quality test



Notification of results to a customer and a relevant department within 72 hours

#### Research & **Development**

In November 2011, Hyundai Oilbank established the Hyundai Oilbank Central Technology R&D Institute in Pangyo Techno-valley as part of its efforts to diversify business and lead its future growth. In November 2017, the Institute was relocated to the Hyundai Electric Research Institute in Yongin. It then began adding to its core capabilities through aggressive investments in R&D, including the acquisition of the Yongin R&D facility in September 2019 and its expansion in 2020.

#### **Roles and Activities of the Institute**

The institute has been the center of next-generation R&D of Hyundai Oilbank since its establishment in 1989. It has brought together the technology development functions and research personnel who were previously scattered over the country. The institute is in charge of developing technologies and training leading technical experts in oil refining, catalyst technology, lube base oil, next-generation fuels, and petrochemical products.

The Institute actively pursues cooperation with domestic universities, government-run research institutes, and overseas companies for petroleum and petrochemical technologies. It has signed a MOU with Cosmo Oil of Japan, a BTX partner of Hyundai Oilbank, to engage in technological cooperation across all fields of energy businesses. The Institute succeeded in commercializing the production of HYUNDAI S-TAR, an independently developed Very Low Sulfur Fuel Oil (VLSFO) product, in December 2019. It also became the first refinery player in South Korea to develop its own hydro treating catalyst technology. The technology was successfully applied to the company's process in 2020, saving catalyst expenses by 10%. The Institute is currently studying the efficiency of various hydro cracking processes. This is being done by increasing the scope of its catalyst development and mass production processes, optimizing its refining operations, and developing new technologies. It is also working to improve the performance of hydro- treating catalysts and developing hydro cracking catalysts.

#### Vision and Goals of the Institute

The Hyundai Oilbank Central Technology R&D Institute aims to achieve the following:

First, the institute will undertake its R&D in order to improve the company's technological competitiveness and production technology strategies. Its research on the impact of process changes will use pilot plants to optimize the capabilities of process catalysts. Research into catalyst manufacturing and waste catalyst recycling technologies will boost technological competitiveness, and research cooperation between industry and academia will further maximize production efficiency.

Second, the institute is leading research into technologies that will support business diversification. Its capacity is focused on pursuing promising areas including technologies for lubricants and carbon materials manufacturing; adding value to petroleum pitch; developing high-value solvents; modified asphalt; and the new petrochemical business.

Third, the institute strives to recruit outstanding talent that can lead the intensifying global race for technology. The Institute is therefore focused on finding and fostering talented people who help to establish excellent technological competitiveness.



OUR MANAGEMENT

# **BRAND MANAGEMENT**

Hyundai Oilbank is enhancing customer satisfaction while increasing its sales competitiveness by strengthening brand value, establishing various communication channels, improving service quality, and undertaking distinctive marketing activities centered on customers.

#### **Branding Activities**

Hyundai Oilbank makes its best effort to create a friendly corporate image, and to enhance the brand value of the company and its products.

#### **Enhancing Brand Value**

Hyundai Oilbank is diversifying its fuel charging business by building an energy station complex where electric and hydrogen vehicles can be charged, for the first time in South Korea. We strive to improve customer convenience by more effectively using gas station spaces, and we are committed to fulfilling our corporate social responsibilities. These efforts include expanding the development of gas station complexes and implementing a safety delivery service for women.

The company has taken steps to enhancing the brand value of its products. This mainly involved launching a top-tier lubricant brand called "XTeer Top Prime", while ensuring the best quality in our products and services in collaboration with Hyundai Motor. We obtained certifications from auto manufacturers such as Hyundai Motor, BMW, Mercedes-Benz, Porsche, Volvo, MAN to promote XTeer as a global brand. vWe are also continuing with our program of enhancing our customers' buying preferences through a series of ongoing marketing activities, such as our signature programs, "Sesame Oil Promotion (Spring)" and "New Rice Promotion (Autumn)".

Last, but not least, we launched a product called HYUNDAI S-TAR, the world's first eco-friendly marine fuel oil brand, in December 2019. Its brand name stands for "Supercritical Solvent Extracted Treated Atmospheric Residue". It is an ultra-low-sulfur marine fuel that is produced through a new technology that uses supercritical solvents for residue. We are increasing the public's awareness of 'HYUNDAI S-TAR' through advertisements in media catering to the global shipping industry as well as on uniforms of the Ulsan Hyundai Football Club. Going forward, we are planning to carry out a wide variety of other branding activities, such as road shows targeting shipbuilding and shipping industry leaders.

Furthermore, Hyundai Oilbank uses standardized designs for the exterior of its gas stations, attendant uniforms, advertising materials, offices, and other areas with a view to brand management. Other efforts to enhance brand awareness and customer preference include continuously improving and managing gas station PR material designs.

#### Making ourselves better known

One way that Hyundai Oilbank connects with consumers is through sports sponsorships. This includes sponsoring both the K League (Korea Professional Football League) and the Ulsan Hyundai Football Club. We are also hoping to increase sales of our "Hyundai XTeer" product and our KAZEN premium gasoline brand by airing 3-D commercials in K League 1 football stadiums across the country and A-board/LED board and billboard ads in the Munsu Football Stadium in Ulsan. Last year we repeated our 2017 success by hosting a friendly match between the Ulsan Hyundai Football Club and the Vietnamese national team in Hanoi. This year, we have already hosted a friendly match between the Ulsan Hyundai Football Club and the Ho Chi Minh City Football Club in the southern Ho Chi Minh area where our logistics base is located. All of these events have helped us immeasurably in gaining publicity for the company and its "Hyundai XTeer" product in Vietnam.

We have also been sponsoring the Directors Guild of Korea since October of 2019. Our first step in this relationship was to hold a signing ceremony for the making of barrier-free movies for the visually impaired in November. In December, we held a career experience program targeting middle school students in the city of Seosan. They visited the set of a new movie called "Hero", directed by Yoon Jae-kyun. We plan to continue enhancing our brand value by means of product placements in every film made by DGK directors.

We are also improving our corporate image by communicating better with the younger generations: in May 2018, we produced six commercials with the theme of "Oh ~ Bang!", our brand slogan, and placed them on SPOTV, YouTube and other



new media outlets. In addition, we have renewed our official Facebook and Instagram pages to actively communicate with younger audiences, and are encouraging the hopes and dreams of youth as the main sponsor of the Dream Concert. Going forward, Hyundai Oilbank will continue its efforts to connect better with its consumers.

#### **Ensuring Friendliness and Cleanliness**

Hyundai Oilbank bases its service quality improvements on its slogan "Good Service Bank!" The goal is to offer the company's customers the finest in clean and friendly gas and charging stations. This includes assigning customer service specialists, known as Market Designers, around the nation while operating service-dedicated teams for the first time in the domestic industry. The company provides a wide range of customer satisfaction services through its "Blue Clean" program for providing clean and safe gas and charging stations. All its employees participate voluntarily in addressing customer complaints through the program.

The company also carries out campaigns to encourage its gas and charging station operators and their workers to improve their customer service levels. It has also created a "Gas Station Evaluation" app that allows customers to rate station service levels and make suggestions on how they can be improved. One very positive result of these many Customer eXperience Management (CXM) efforts was that Hyundai Oilbank ranked first in the gas station category in the 2020 Korea Standard-Service Quality Index (KS-SQI) survey carried out by the Korean Standards Association (KSA) for the sixth consecutive year. It also ranked first in the refining industry in the Korean Standard Contact Service Quality Index (KS-CQI) survey for the ninth straight year. In addition, its call center earned the twelfth straight top rating in the call center category in the Korean Service Quality Index (KSQI) carried out by the Korean Management Association Consulting (KMAC).

#### **Marketing Activities**

Hyundai Oilbank responds to a constantly altering market environment by identifying the ever-changing needs of its consumers and undertaking marketing activities that reflect their needs.

#### Online Platform Business

Hyundai Oilbank is responding to a changing consumer environment by trying to understand the various needs of its customers and carrying out marketing activities that reflect them. One example of this is the Hyundai Oilbank Bonus Card, which provides customized services when a customer takes out a premium-level membership. Some of the card's many benefits include car wash coupons, discounts for refueling after making a reservation, discounts for additives, and vehicle-related affiliated benefits, as well as more usual services like bonus points. In line with the need to social distance due to COVID-19, the company has also adopted a refueling service for people who want to choose a specific time to fill their



vehicles up safely. Going forward, Hyundai Oilbank expand its operations into an online platform business model, providing its customers with fully-integrated advertising channels and affiliate services based on its BLUE bonus card app.

#### **Managing Customer Relations**

Hyundai Oilbank analyzes its customers' needs and carries out a wide range of customer relationship management (CRM) programs. They include providing benefits associated with its credit cards, promotions to attract new customers, customer retention promotions for premium card users, and promotions targeting the customers of its partner companies.

#### **Expanding Partnership Marketing**

Hyundai Oilbank is expanding the number of locations where its customer can accumulate and use bonus card points through partnerships with leading companies in different industries, including department stores, online shopping, automobiles, food and beverage, and restaurants. As such, Hyundai Oilbank carries out marketing activities which truly benefit its consumers.

The company has also taken a number of steps to make its customer payments processes more convenient. They include a simple payment service using Zero Pay, Kakao Pay, and similar operators. Customers can also pay for their gas using their smartphones, without needing to use a credit card or cash.

#### **Building Partnerships with Affiliate Service Stations**

Hyundai Oilbank is strengthening its partnerships with affiliate service stations through the Partner Relationship Management (PRM) program, targeting gas and charging station owners. Our operator care programs include discounts on health check-ups at major hospitals and items for congratulatory and consolatory occasions. There is the "Visiting Barista" program that provides free coffee to customers to increase the popularity and visibility of our gas and charging stations. We also operate a group buying program so that they can purchase high-quality promotional items at a low price. We have also been carrying out a "Honeymoon Program" since 2018. It is designed to assist newly-opened gas station operators with promotional items for their customers. We also provide our operators with instructional manuals stocked with helpful information about safety management, marketing, and business management.

# FINANCIAL REVIEW



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# MANAGEMENT DISCUSSION & ANALYSIS

#### **Disclaimer on Forward-Looking Statements**

This report contains forward-looking statements related to future activities, events, and developments that reflect the company's expectations regarding its financial results and business conditions at the time of this publication. These forward-looking statements are based on multiple predictions regarding the future business environment and may prove to be incorrect. Actual results may differ materially due to various risks and uncertainties underlying the company's assumptions. Such risks and uncertainties include, but are not limited to, changes in the company's internal management and in the external environment. Hyundai Oilbank undertakes no obligation to publicly update or revise any forward-looking statements to reflect risks or uncertainties that have occurred after the publication of this report. Consequently, the company can give no assurance that the circumstances or events presented in these forward-looking statements will take place as forecast, as they are based on expectations at the time of writing. The company will not provide an update on any changes to its risk factors or forward-looking statements after the publication date.

#### I. Economic & Market Overview

#### 1. 2020 Economic Overview

Although the entire global economy was ravaged by the spread of COVID-19 early in 2020, it started showing signs of a modest recovery with news of the possibility of vaccine developments toward the end of the year. The shock the virus engendered was partially mitigated by massive governmental stimulus packages and increases in the liquidity supply. The real economy is expected to improve gradually as vaccinations in each country are developed and used.

#### 2. Market Overview

#### 1) International Crude Oil Prices and Foreign Exchange Rates

The international crude oil market is characterized by limited availability, concentrated regional production, uncertain supply and demand, and price volatility. It is a seller's market, with production and sales being controlled by a small number of major sellers. Although OPEC member countries, which account for 35% of the world's annual production, have an outsized influence in the markets, non-OPEC producers, such as North American shale gas companies, are increasing their market share rapidly, increasing their influence over prices.

Oil prices plummeted in 2020 until April as major oil producing countries intensified their production and transportation and industrial demand fell due to the spread of COVID-19. Prices rose gradually until the end of the year as this oversupply was partially relieved following the signing of an agreement on production cuts. This good news was followed in turn by expectations of an economic recovery as more vaccine developments occurred.

International oil prices are expected to rise in 2021 as demand for petroleum products recovers with the spread of vaccines to counter COVID-19. However, the refining industry remains threatened by the possibility of production increases

in oil producing countries and the increasing popularity of electric vehicles and new and renewable energy sources.

The won/dollar exchange rate in 2020 was greatly influenced by the COVID-19 pandemic and countermeasures taken by every country's government and central bank. The exchange rate was maintained at the KRW 1,150 level at the beginning of the year largely due to the signing of a US-China trade agreement, but it surged to KRW 1,296 in March as the focus on safe assets increased following the spread of the coronavirus and a global economic blockade. This brief respite ended when a credit crunch and an accompanying aversion to hedging guickly weakened due to the responses of governments and their central banks. It eventually bottomed out at the KRW 1,200 level. The basic exchange rate ended the year at KRW 1,088.0, as the won strengthened due to expectations of an economic recovery arising from the development of more vaccines, the country's linkage with a stronger Chinese yuan, and improving supply and demand conditions following increased outside purchases in the domestic stock market in the second half of the year.

Most forecasters believe that the won/dollar exchange rate in 2021 will feature a weaker dollar. This will happen because coronavirus vaccines will be readily available, because the preference for risk-based assets will appreciate following expectations for a stronger global economy, and because the dollar's liquidity will grow due to large-scale fiscal stimulus measures enacted by the Biden administration. Economic experts are still concerned that increased inflation caused by this abundant liquidity will lead to greater volatility in the financial market, limiting declines in the won/dollar rate. As a result, the exchange rate is expected to range between KRW 1,070 and KRW 1,150 throughout the year.



#### 2) Overview of the Domestic Oil Refining Industry

The South Korean oil refining industry boasts the world's fifth-largest capacity. Its state-of-the-art facilities, including a large number of huge operations that have come on line only recently, enable tremendous economies of scale and give the industry a strong competitive advantage in terms of exports. This is so much the case that exports now account for more than half of its production.

Despite this fact, the industry as a whole posted large operating losses in 2020 due to a sharp decline in oil prices following the spread of COVID-19 and increasing competition among oil producing countries. Although prices rose gradually since then because of the signing of production reduction agreements, the industry's operating profits still fell compared to the previous year as demand fell due to the coronavirus.

A modest upward trend is anticipated in 2021 as vaccinations begin in earnest. This is expected to result in the recovery of the transportation and other industries, with refining margins forecast to rise accordingly. Hyundai Oilbank will take advantage of this brighter outlook to reduce its costs and increase its profitability. It will do this by using as much extra heavy crude oil as it can, selling as many high-margin products as the market will bear, and adding to its competitiveness by making upgrades to and investing in increases in its production capacity.

# MANAGEMENT DISCUSSION & ANALYSIS

#### II. Business Results

#### 1. Operating Performance

Unit: KRW billion

	2020	2020 2019		Change		
1. Sales	13,689.9	21,116.8	-7,426.9	-35.2%		
2. Cost of Goods Sold	13,808.9	20,181.8	-6,372.9	-31.6%		
3. Gross Profit	-119.0	935.1	-1,054.1	-112.7%		
4. Selling and Administrative Expenses	474.4	413.1	61.3	14.8%		
5. Operating Profit	-593.3	522.0	-1,115.3	-213.7%		
6. Non-Operating Income (Expenses)	22.4	-118.5	140.9	-118.9%		
7. Current Income	-571.0	403.5	-974.5	-241.5%		
8. Income Tax Expense	-211.2	90.6	-301.8	-333.1%		
9. Net Income	-359.8	312.9	-672.7	-215.0%		
Operating Margin	-4.3%	2.5%	-6.8%p	-272.0%		
Net Margin	-2.6%	1.5%	-4.1%p	-273.3%		

<sup>\*</sup> Based on consolidated financial statements

To respond to the challenges of international oil price fluctuations and the economic uncertainties at home and abroad, Hyundai Oilbank has focused on improving profitability across the range of its businesses, from importing crude oil to production and sales, with the goal to achieve the best possible efficiency. The company also strived to diversify its business portfolio through the early settlement of new businesses. On-site, Hyundai Oilbank has carefully managed its refining margins by flexibly adjusting its plant operating capacity, and focusing on maintaining the most efficient product inventories throughout the year. We will continue our efforts to improve profitability through the stable operation of our highly profitable upgrading facilities and continuous cost reductions. Hyundai Oilbank has built its competitive edge through continued commitment to management improvement.

First, productivity was enhanced thanks to the energy savings from the installation of fluidized bed combustion (FBC) boilers, waste heat recovery, and energy consulting, as well as process automation and increased efficiency in upgrading processes.

Second, Hyundai Oilbank has solidified the cost competitiveness of its crude oil imports. The company reduced cost by maximizing its inputs of highly competitive, extra heavy crude oil, and plans to continue expanding its imports going forward.

Third, Hyundai Oilbank has made continual investments to ensure to establish best upgrading facilities in South Korea. Furthermore, the company has operated its facilities safely, achieving 20 million work hours with no accidents. Based on its accumulated expertise, Hyundai Oilbank now has the ability to maximize its revenues through the stable operation of its state-of-the-art facilities.

#### 2. Sales Analysis

#### 1) Sales

COVID-19 has reduced demand for petroleum products, resulting in low oil prices since its outbreak. Hyundai Oilbank has focused on balanced market management of domestic consumption and exports, while responding flexibly to market conditions. The company has therefore enhanced its sales competitiveness by diversifying sales channels and developing new channels, improved profitability by building competitive sales networks, and created new revenue models by reinforcing its ability to incorporate new businesses.

#### 2) Sales by Channel

The company manages its product sales in flexible manner. This allows it to react immediately to market changes while building portfolios that are based on economic feasibility by oil type to maximize profitability.

#### **Retail Sales**

Hyundai Oilbank's retail sales channels include gas stations, agencies, the National Agricultural Cooperative Federation, convenience stores, service centers on expressways, and LPG filling stations. It will strengthen its market dominance in the retail sales sector by opening new gas stations in high-demand regions and carrying out a variety of advertising and promotional campaigns. It will also consolidate its brand value at the more than 300 directly-run gas stations it acquired in July 2020, and add to its profits from its international businesses by entering into a variety of promising new businesses.

#### **Direct Sales**

Direct sales channels include industrial firms, the military and government, and tender sales. The company provides corporate customers with a variety of products, such as light and middle distillate oil, marine fuel oil, jet fuel, asphalt and naphtha. In addition, we strive to create new revenue sources by developing special products and finding new clients.

#### **Exports**

Exports have increased steadily thanks to the increasing operating capacity ratio and a more diverse range of export products since the expansion of heavy oil upgrading (HOU) facilities. Given the increasingly close interconnection between the domestic and overseas marketplaces, Hyundai Oilbank focuses on maximizing profits by optimizing its domestic sales and exports portfolio. The company is also aiming to grow by exporting gasoline to Vietnam, and starting a bunkering business in Singapore.

#### 3) Sales by Product

With the beginning of operations at the HOU plants, Hyundai Oilbank's upgrading ratio rose from 36.7% in 2014 to 41.1% in 2020, the highest in South Korea. As a result, the percent-

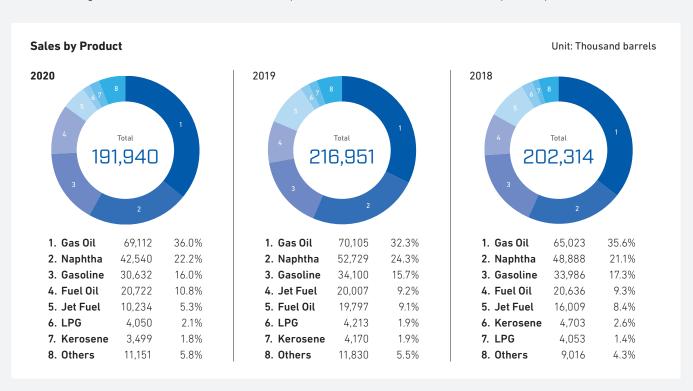
age of sales from light and middle distillate oil products, including gasoline, jet fuel, kerosene, and light oil has remained stable. In terms of product sales by volume, gas oil led with 36.0% of the total, followed by naphtha, gasoline, and fuel oil. The HOU plants have allowed the company to produce more high-value-added products, which in turn has improved competitiveness and profitability.

#### 3. Profitability Analysis

The company has achieved strong operating profit margins thanks to its industry leading upgrading ratio, a considerable domestic market share for its refining capacity, and management strategies that focus on profitability. It recorded an operating profit in 2014 despite a rapidly worsening business environment, and then went on to record a profit-making winning streak that lasted for 25 consecutive quarters until 3Q 2018. Despite rapidly deteriorating market conditions in 2020, the company was able to minimize its operating losses, and even achieved surpluses in the second and third quarters.

Its combined refining margins for the first half of 2021 are expected to be higher than those recorded for the same period of the previous year, mainly due to an expected economic recovery as the country gradually escapes from COVID-19. Sales of the company's main products, including gasoline, jet fuel, and diesel, are forecast to rise as a result of steady growth in demand for airline travel once international restrictions have been relaxed

In reaction to this situation, Hyundai Oilbank will focus on maximizing revenues, and will also pursue improvements in productivity, energy savings, high-margin overseas market development, and earnings improvements in each business division. The company expects to maintain outstanding profitability in 2021 by increasing efficiency across all areas of its business, from crude oil imports to production and sales.



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# MANAGEMENT DISCUSSION & ANALYSIS

#### 4. Future Investment Analysis

Established in November 2011, the Hyundai Oilbank Central Technology R&D Institute pursues technological innovation and R&D with the aim of reinforcing the company's capabilities in its refining and petrochemical businesses, and to create future value by establishing new businesses.

Consisting of Refining Technology Research Team, Petrochemical Research Team, and Research Planning & Coordination Department, the institute develops catalysts, provides technological assistance to the Daesan Refinery Plant, and carries out research in the use of desulfurization gypsum, in its efforts to boost the competitiveness of existing businesses. In addition, it is creating drivers of new growth by developing synthetic lube base oil and functional specialty products.

The institute is also involved in national projects, including carbon materials manufacturing technology development, using heavy oil, and the slurry hydro cracker process and catalyst development. By undertaking research projects jointly with the industrial, academic, and research sectors, and by engaging in technology exchanges with overseas research institutes, the Hyundai Oilbank Central Technology R&D Institute is both strengthening the competitiveness of existing businesses and developing engines for future growth.

#### 5. Financial Status

1) Summary of Financial Position

The company's total assets as of the end of 2020 were KRW 14.676 trillion, up 14.2% from the previous year. Current assets fell by 27.9% year-on-year to KRW 3.295 trillion. This was mainly attributable to declines in receivables and inventory due to lower oil prices. Non-current assets rose by 37.3% YoY to KRW 11.384 trillion.

Current liabilities were reduced by 20.8% to KRW 3.238 trillion, due primarily to a drop in trade payables. Non-current liabilities ballooned by 85.4% to KRW 6.168 trillion, reflecting a rise in long-term borrowings, while total liabilities climbed by 26.9% to KRW 9.405 trillion. Total shareholders' equity declined by 3.1% to KRW 5.271 trillion, while the liabilities-to-equity ratio rose by 42.1% points to 178.4%.

#### **Key Financial Indicators**

Unit: KRW billion

	2020	2019	Change		
Current Assets	3,292.7	4,565.4	-1,270.8	-27.9%	
Non-current Assets	11,383.6	8,290.5	3,093.1	37.3%	
Total Assets	14,676.2	12,855.9	1,822.2	14.2%	
Current Liabilities	3,237.5	4,086.7	-847.3	-20.8%	
Non-current Liabilities	6,167.8	3,327.6	2,840.2	85.4%	
Total Liabilities	9,405.3	7,414.3	1,992.9	26.9%	
Capital Stock	1,225.4	1,225.4	0	0.0%	
Hybrid Bonds	428.9	224.3	204.6	91.2%	
Capital Surplus	-176.0	-0.4	-175.6	43,900%	
Accumulated Other Comprehensive Income	454.2	219.8	234.4	106.6%	
Retained Earnings	2,535.0	3,110.1	-575.1	-18.5%	
Non-controlling Interest	803.4	662.4	141.0	21.3%	
Total Shareholders' Equity	5,270.9	5,441.6	-170.7	-3.1%	
Liabilities-to-Equity Ratio	178.4%	136.3%	42.1%p	31.0%	

<sup>\*</sup> Based on consolidated -financial statements

#### 2) CAPEX

Hyundai Oilbank continues to make the investments needed to improve its position in the refining and petrochemical industry, and to create new value by building new businesses. The company is increasing the value of its existing businesses by expanding its crude refining and upgrading capacity. It is also operating new businesses, including establishing the solvent de-asphalting (SDA) process, constructing new boilers, and the lubricants business. In addition, the company is

enhancing the efficiency of its investments, ensuring safe operations at its plants, making additional investments into its network, and continuing to invest into subsidiaries in order to diversify business. These investments are boosting Hyundai Oilbank's global competitiveness by developing engines for its mid- to long-term growth and by establishing sustainable revenues

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	2020	2019	Ch	ange
New Investment	313.1	293.7	19.4	+6.6%
Additional Investment	2066	118.3	88.3	+74.6%
Capital investment	50.0	444.0	-394.0	-88.7%
Total	569.7	856.0	-286.3	-33.4%

<sup>\*</sup> Based on Hyundai Oilbank

# 6. Liquidity and Financing

#### 1) Liquidity

Consisting of cash and cash equivalents and short-term financial assets, the company's liquidity stood at KRW 306.5 billion at the end of 2020. The company continuously monitors its liquidity in order to maintain it at an appropriate level and to satisfy capital requirements, including working capital requirements.

#### 2) Financing

Hyundai Oilbank maintains a stable long-term financial structure through the issuance of corporate bonds and loans for facility investment.

Total borrowings at the end of 2020 were KRW 5.209 trillion, a year-on-year increase of KRW 1.761 trillion. This was caused by new and additional investments to upgrade refining facilities and increase daily refining capacity. Total liabilities moved up by 26.9% over the year to stand at KRW 9.405 trillion at the end of 2020, and the liabilities-to-equity ratio rose by 42.1% points to 178.4%.

# INDEPENDENT AUDITOR'S REPORT

(English Translation of a Report Originally Issued in Korean)

# To the Board of Directors and Shareholders of Hyundai Oilbank Co., Ltd.

#### Opinio

We have audited the accompanying consolidated financial statements of Hyundai Oilbank Co., Ltd. and its subsidiaries (collectively referred to as the "Group") which comprise the consolidated statements of financial position as at December 31, 2020 and 2019, and the consolidated statements of profit or loss, consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for the years then ended, 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, 2020 and 2019, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards as adopted by the Republic of Korea (Korean IFRS).

#### **Basis for Opinion**

We conducted our audit 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 Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the ethical requirements of the Republic of Korea that are relevant to our audit of the consolidated 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.

#### **Emphasis of Matter**

Without modifying our opinion, we draw attention to Note 3 to the consolidated financial statements of the Group. As discussed in Note 3 to the consolidated financial statements, all countries including Korea have uncertainty for the global economy recession that is difficult and prolonged, due to concerns over the spread of Coronavirus disease 2019 ("COVID-19") at the beginning of 2020. In particular, for crude oil refining and petrochemical business which is the operation basis of the Group, there may be great uncertainty about future revenue and cash flows caused by a decrease in refining margins due to falling oil prices and a decrease in demand for the petrochemical products due to global economic recession. However, the ultimate effect of the recession on the financial position of the Group cannot presently be determined and, accordingly, no adjustments related to such uncertainties have been reflected in the accompanying consolidated financial statements.

#### **Other Matter**

Auditing standards and their application in practice vary among countries. The procedures and practices used in the Republic of Korea to audit such consolidated financial statements may differ from those generally accepted and applied in other countries.

#### 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 Korean IFRS, 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.

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 Korean Standards 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 consolidated 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 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 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 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 Group 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.

Seoul, Korea March 12, 2021

This report is effective as of March 12, 2021, 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 consolidated 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.

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# CONSOLIDATED FINANCIAL STATEMENTS

Hyundai Oilbank Co., Ltd. and Subsidiaries Consolidated Statements of Financial Position December 31, 2020 and 2019

in thousands of Korean won

	Notes	2020	2019
Assets			
Current assets			
Cash and cash equivalents	4,6	301,664,830	480,435,944
Short-term financial assets	4,6	4,800,000	5,300,000
Financial assets at fair value through profit or loss	4,5,6,9,22	8,933	-
Derivative financial instruments	4,5,6,22	53,283,930	14,238,091
Trade and other receivables	4,6,11,34	1,030,589,900	1,472,184,143
Inventories	12	1,774,262,454	2,494,508,809
Current tax asset	31	16,072,350	-
Other current assets		111,998,006	98,782,191
		3,292,680,403	4,565,449,178
Non-current assets			
Investments in joint ventures and associates	13	284,154,635	415,929,840
Long-term financial assets	4,6,8	523,000	523,000
Financial assets at fair value through profit or loss	4,5,6,9	3,000,000	3,000,000
Financial assets at fair value through other comprehensive income	4,5,6,10	32,089,512	-
Derivative financial instruments	4,5,6,22	-	477,267
Trade and other receivables	4,6,11,34	278,610,496	181,486,694
Investment properties	14	9,819,838	9,819,838
Property, plant and equipment	15	9,335,753,764	7,182,579,916
Right-of-use assets	17	1,217,538,052	397,241,985
Intangible assets	16	210,675,410	95,567,832
Deferred tax assets	31	9,864,018	2,251,928
Other non-current assets		1,531,525	1,534,168
		11,383,560,250	8,290,412,468
Total assets		14,676,240,653	12,855,861,646

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

#### Hyundai Oilbank Co., Ltd. and Subsidiaries **Consolidated Statements of Financial Position** December 31, 2020 and 2019

in thousands of Korean won

	Notes	2020	2019
Liabilities			
Current liabilities			
Short-term financial liabilities	4,6,19	643,970,222	1,125,012,875
Financial liabilities at fair value through profit or loss	4,5,6,22	405,739	-
Derivative financial instruments	4,5,6,22	61,880,252	18,022,403
Trade and other payables	4,6,18,34	2,149,548,199	2,697,724,809
Lease liabilities	4,17	187,565,724	111,069,700
Current tax liabilities	31	21,231,942	48,850,564
Provisions	21	12,919,945	1,857,000
Deferred income		29,271,486	-
Other current liabilities		130,715,955	84,137,977
		3,237,509,464	4,086,675,328
Non-current liabilities			
Long-term financial liabilities	4,6,19	4,870,996,498	2,808,407,732
Derivative financial instruments	4,5,6,22	14,179,059	906,752
Trade and other payables	4,6,18,34	183,550,986	7,907,576
Lease liabilities	4,17	982,035,758	307,071,160
Long-term provisions	21	37,601,738	1,761,783
Net defined benefit liabilities	20	3,612,682	16,532,502
Deferred income		-	28,713,907
Deferred tax liabilities	31	67,701,341	148,732,052
Other non-current liabilities		8,150,667	7,559,526
		6,167,828,729	3,327,592,990
Total liabilities		9,405,338,193	7,414,268,318
Equity attributable to owners of the Parent Company			
Share capital	23	1,225,412,110	1,225,412,110
Hybrid equity securities	24	428,923,640	224,272,850
Share premium		(176,015,729)	(432,929)
Accumulated other comprehensive income	25	454,199,271	219,766,600
Retained earnings	26	2,535,018,858	3,110,143,847
Non-controlling interest		803,364,310	662,430,850
Total equity		5,270,902,460	5,441,593,328
Total liabilities and equity		14,676,240,653	12,855,861,646

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

# CONSOLIDATED FINANCIAL STATEMENTS

Hyundai Oilbank Co., Ltd. and Subsidiaries Consolidated Statements of Financial Position December 31, 2020 and 2019

in thousands of Korean won

	Notes	2020	2019
Revenue	7,34	13,689,914,469	21,116,843,968
Cost of sales	28,34	13,808,865,159	20,181,785,026
Gross profit (loss)		(118,950,690)	935,058,942
Selling and administrative expenses	27,28	474,393,463	413,082,185
Operating profit (loss)		(593,344,153)	521,976,757
Finance income	29	176,031,082	61,571,484
Finance costs	29	182,912,399	218,423,198
Non-operating income	30	391,037,141	304,559,959
Non-operating expenses	30	362,952,983	306,625,161
Share of profit of associates and joint ventures	13	1,169,472	40,465,830
Profit (loss) before income tax		(570,971,840)	403,525,671
Income tax expense (benefit)	31	(211,200,501)	90,607,056
Profit (loss) for the year		(359,771,339)	312,918,615
Profit (loss) is attributable to:			
Owners of the Parent Company		(366,658,999)	276,371,699
Non-controlling interest	-	6,887,660	36,546,916
Basic earnings (losses) per share (in Korean won)	32	(1,575)	1,084

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

#### Hyundai Oilbank Co., Ltd. and Subsidiaries **Consolidated Statements of Financial Position** December 31, 2020 and 2019

in thousands of Korean won

	2020	2019
Profit (loss) for the year	(359,771,339)	312,918,615
Other comprehensive income		
Items that may be subsequently reclassified to profit or loss:		
Cash flow hedges	(3,783)	(11,682,087)
Share of other comprehensive income of associates and joint ventures	-	38,347
Exchange differences	(4,473,444)	1,591,983
Items that will not be reclassified to profit or loss:		
Remeasurements of net defined benefit liability	10,801,927	(18,816,862)
Share of other comprehensive income of associates and joint ventures	1,230,130	(53,356)
Gain on revaluation of land	226,333,223	-
Gain on valuation of financial assets at fair value through other comprehensive income	17,471,325	-
Other comprehensive income (loss) for the year	251,359,378	(28,921,975)
Total comprehensive income (loss) for the year	(108,411,961)	283,996,640
Total comprehensive income (loss) for the year is attributable to:		
Owners of the Parent Company	(117,970,159)	250,341,362
Non-controlling interest	9,558,198	33,655,278

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

# CONSOLIDATED FINANCIAL STATEMENTS

Hyundai Oilbank Co., Ltd. and Subsidiaries Consolidated Statements of Financial Position December 31, 2020 and 2019

in thousands of Korean won

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		Attributable to	owners of the F	Parent Company	,	Non-	
	Share capital	Hybrid Equity securities	Share premium	Accumulated Other Income	Retained Earnings	controlling Interest	Total
Balance at January 1, 2019	1,225,412,110	224,272,850	1,698,271	228,615,084	3,109,867,157	334,196,371	5,124,061,843
Changes in accounting policy	-	-	-	-	(3,063,232)	-	(3,063,232)
Total comprehensive income for the year							
Profit for the year	-	-	-	-	276,371,699	36,546,916	312,918,615
Cash flow hedges	-	-	-	(9,560,715)	-	(2,121,372)	(11,682,087)
Gain (loss) on revaluation of land		-	-	(864,742)	864,742	-	-
Remeasurements of net defined benefit liability	-	-	-	-	(18,046,597)	(770,265)	(18,816,862)
Share of other comprehensive income of associates and joint ventures	-	-	-	(15,010)	-	-	(15,010)
Exchange differences	-	-	-	1,591,983	-	-	1,591,983
Transactions with shareholders							
Issue of ordinary shares of subsidiaries	-	-	(2,131,200)	-	-	294,579,200	292,448,000
Dividends paid	-	-	-	-	(245,082,422)	-	(245,082,422)
Dividends of hybrid equity securities	-	-	-	-	(10,767,500)	-	(10,767,500)
Balance at December 31, 2019	1,225,412,110	224,272,850	(432,929)	219,766,600	3,110,143,847	662,430,850	5,441,593,328
Balance at January 1, 2020	1,225,412,110	224,272,850	(432,929)	219,766,600	3,110,143,847	662,430,850	5,441,593,328
Total comprehensive income for the year							
Profit (loss) for the year	-	-	-	-	(366,658,999)	6,887,660	(359,771,339)
Cash flow hedges	-	-	-	(671,044)	-	667,261	(3,783)
Gain on revaluation of land	-	-	-	223,670,422	949,249	1,713,552	226,333,223
Remeasurements of net defined benefit liability	-	-	-	-	10,512,202	289,725	10,801,927
Share of other comprehensive income of associates and joint ventures	-	-	-	1,230,130	-	-	1,230,130
Gain on valuation of financial assets at fair value through other comprehensive income	-	-	-	15,663,730	1,807,595	-	17,471,325
Exchange differences	-	-	-	(4,473,444)	-	-	(4,473,444)
Transactions with shareholders recognized directly in equity							
Dividends paid	-	-	-	-	-	(3,690,962)	(3,690,962)
Changes in the consolidation	-	-	(175,582,800)	(987,123)	987,124	135,066,224	(40,516,575)
Transactions with shareholders							
Dividends paid					(203,418,410)	-	(203,418,410)
Dividends of hybrid equity securities	-	-	-	-	(19,303,750)	-	(19,303,750)
Proceeds from hybrid equity securities	-	428,923,640	-	-	-	-	428,923,640
Repayments of hybrid equity securities	-	(224,272,850)	-	-	-	-	(224,272,850)
Balance at December 31, 2020	1,225,412,110	428,923,640	(176,015,729)	454,199,271	2,535,018,858	803,364,310	5,270,902,460

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

#### Hyundai Oilbank Co., Ltd. and Subsidiaries **Consolidated Statements of Financial Position** December 31, 2020 and 2019

in thousands of Korean won

	Notes	2020	2019
Cash flows from operating activities			
Cash generated from operations			
Profit (loss) for the year		(359,771,339)	312,918,615
Adjustments	33	474,448,454	583,326,744
Changes in operating assets and liabilities	33	746,238,702	87,275,978
		860,915,817	983,521,337
Interest received		5,100,753	7,686,249
Interest paid		(153,454,963)	(125,195,376)
Dividends received		10,536,443	81,600,000
Income tax paid		(37,745,999)	(91,537,486)
Net cash inflow from operating activities		685,352,051	856,074,724
Cash flows from investing activities		_	
Increase in short-term financial assets		(4,800,000)	(3,200,000)
Decrease in short-term financial assets		5,300,000	4,200,000
Increase in financial assets at fair value through profit or loss		(124,818,772)	(10,919,735)
Decrease in financial assets at fair value through profit or loss		47,088,179	
Decrease in long-term financial assets		-	500,000
Payment for acquisition of investments in associates		(50,000,000)	
Payment for acquisition of investments in subsidiaries (dedcution of cash on hand)		134,157,518	-
Payment for acquisition of property, plant and equipment		(2,023,825,927)	(882,960,160)
Proceeds from disposal of property, plant and equipment		8,482,125	6,685,183
Payment for acquisition of intangible assets		(13,615)	(80,039)
Proceeds from disposal of intangible assets		13,615	-
Proceeds from disposal of investment properties		2,746,152	4,003,530
Collection on lease receivables		8,422,276	5,295,638
Increase in loans and receivables		(155,469,383)	(71,790,978)
Decrease in loans and receivables		27,681,391	39,081,498
Decrease from business transfer			(37,357,875)
Increase in financial assets at fair value through other comprehensive income		(14,386,000)	
Decrease in financial assets at fair value through other comprehensive income		6,394,835	
Net cash outflow from investing activities	_	(2,133,027,606)	(946,542,938

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

# HEBAIN ANNOAL NETON 202

# CONSOLIDATED FINANCIAL STATEMENTS

Hyundai Oilbank Co., Ltd. and Subsidiaries Consolidated Statements of Financial Position December 31, 2020 and 2019

in thousands of Korean won

	Notes	2020	2019
Cash flows from financing activities			
Proceeds from short-term borrowings		8,810,151,348	18,321,745,171
Repayments of short-term borrowings		(9,388,581,265)	(18,722,841,709)
Repayments of current portion of long-term liabilities		(162,440,724)	(62,218,610)
Repayments of current portion of debentures		(190,000,000)	(310,000,000)
Proceeds from long-term borrowings		2,200,000,000	227,961,730
Repayments of long-term borrowings		(804,037,500)	-
Proceeds from issuance of debentures		1,018,704,809	1,046,416,300
Repayments of lease liabilities		(184,824,481)	(130,467,363)
Issuance of hybrid equity securities		428,923,640	-
Repayments of hybrid equity securities		(224,272,850)	-
Dividends of hybrid capital securities		(19,303,750)	(10,767,500)
Dividends paid		(212,645,815)	(245,082,422)
Capital paid of non-controlling interests		-	292,448,000
Net cash inflow from financing activities		1,271,673,412	407,193,597
Net increase (derease) in cash and cash equivalents		(176,002,143)	316,725,383
Cash and cash equivalents at the beginning of the year		480,435,944	162,638,021
Effects of exchange rate changes on cash and cash equivalents		(2,768,971)	1,072,540
Cash and cash equivalents at the end of the year		301,664,830	480,435,944

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

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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Hyundai Oilbank Co., Ltd. and Subsidiaries

#### 1. General Information

Hyundai Oilbank Co., Ltd. (the Company) was established on November 19, 1964 to engage in the production and sale of petroleum products. The Company and its production facilities are located in Daesan, South Chungcheong Province. The Company and its subsidiaries (collectively referred to as the "Group") have a production capacity of 520,000 barrels per stream day (BPSD) in petroleum and 170,000 barrels per stream day (BPSD) in condensate processing.

As at December 31, 2020, Hyundai Heavy Industries Holdings Co., Ltd. owns 74.13% and Aramco Overseas Company B.V owns 17.0% of the Group's total outstanding shares.

#### 1.1 Consolidated Subsidiaries

The consolidated subsidiaries as at December 31, 2020 and 2019, are as follows:

Subsidiaries	Location	Ownership interest held by the Group (%)		Closing month	Business	
	_	2020	2019			
HDO Singapore Pte. Ltd.	Singapore	100	100	December	Petroleum trading	
MS Dandy Ltd.	Marshall Islands	100	100	December	Ships leasing	
Hyundai Oil Terminal Co., Ltd	Korea	100	100	December	Oil storage industry	
Hyundai Oilbank (Shanghai) Co., Ltd.	China	100	100	December	Petroleum trading	
Hyundai Chemical Co., Ltd.	Korea	60	60	December	Crude petroleum refining	
Grande Ltd.	Marshall Islands	100	100	December	Ships leasing	
HYUNDAI OCI Co., Ltd.	Korea	51	51	December	Carbon black production	
Hyundai and Shell Base Oil Co. Ltd. <sup>1</sup>	Korea	60	-	December	Lube base oil production	

<sup>&</sup>lt;sup>1</sup> The entity has been changed from a joint venture to a subsidiary due to changes in certain decisions in accordance with shareholders agreement for the year ended December 31, 2020.

#### 1.2 Summarized Financial Information

Summarized financial information for consolidated subsidiaries as at December 31, 2020 and 2019 and for the years ended December 31, 2020 and 2019, are as follows:

#### (1) 2020

Subsidiaries	Assets	Liabilities	Sales	Profit (loss) for the year
HDO Singapore Pte. Ltd.	828,377,314	758,370,327	3,957,045,377	(5,242,747)
MS Dandy Ltd.	13,923,144	1,306	1,390,571	402,496
Hyundai Oil Terminal Co., Ltd	179,309,596	38,220,001	45,195,996	10,937,048
Hyundai Oilbank (Shanghai) Co., Ltd.	35,276,144	26,268,940	253,148,145	3,335,771
Hyundai Chemical Co., Ltd.	3,467,453,259	2,006,847,977	2,701,866,215	(34,735,484)
Grande Ltd.	20,938,080	13,101,640	2,131,176	267,938
HYUNDAI OCI Co., Ltd.	309,172,668	143,032,520	163,873,765	28,475,488
Hyundai and Shell Base Oil Co. Ltd. <sup>1</sup>	461,698,671	155,329,220	93,742,497	16,592,618

<sup>&</sup>lt;sup>1</sup> Financial information after acquisition of control in November 2020.

December 31, 2020 and 2019

(2) 2019

in thousands of Korean won

Subsidiaries	Assets Liabilities		Sales	Profit for the year	
HDO Singapore Pte. Ltd.	606,207,437	527,762,232	7,932,333,266	27,192,923	
MS Dandy Ltd.	14,421,468	1,389	1,373,602	358,612	
Hyundai Oil Terminal Co., Ltd	161,400,561	40,225,734	42,433,453	9,418,297	
Hyundai Oilbank (Shanghai) Co., Ltd.	28,056,347	22,350,394	234,967,443	3,033,047	
Hyundai Chemical Co., Ltd.	2,806,405,968	1,317,748,750	3,653,908,635	62,365,095	
Grande Ltd.	23,779,621	15,703,324	2,381,708	234,653	
HYUNDAI OCI Co., Ltd.	304,124,442	166,399,067	180,545,493	23,911,743	

#### 2. Significant Accounting Policies

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

#### 2.1 Basis of Preparation

The Group maintains its accounting records in Korean won and prepares statutory financial statements in the Korean language (Hangul) in accordance with International Financial Reporting Standards as adopted by the Republic of Korea (Korean IFRS). The accompanying consolidated 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 Group's financial position, financial performance or cash flows, is not presented in the accompanying consolidated financial statements.

The consolidated financial statements of the Group have been prepared in accordance with Korean IFRS. These are the standards, subsequent amendments and related interpretations issued by the International Accounting Standards Board (IASB) that have been adopted by the Republic of Korea.

The financial statements have been prepared on a historical cost basis, except for the following:

- Certain financial assets and liabilities (including derivative instruments), certain classes of property, plant and equipment and investment property – measured at fair value
- assets held for sale measured at fair value less costs to sell, and
- defined benefit pension plans plan assets measured at fair value.

The preparation of financial statements requires the use of critical accounting estimates. Management also needs to exercise judgement in applying the Group's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 3.

#### 2.2 Changes in Accounting Policies and Disclosures

#### 2.2.1 New and amended standards adopted by the Group

The Group has applied the following standards and amendments for the first time for their annual reporting period commencing January 1. 2020

(a) Amendments to Korean IFRS 1001 Presentation of Financial Statements and Korean IFRS 1008 Accounting policies, changes in accounting estimates and errors - Definition of Material

The amendments clarify the definition of material. Information is material if omitting, misstating or obscuring it could reasonably be expected to influence the decisions that the primary users of general-purpose financial statements make on the basis of those financial statements. The amendments do not have a significant impact on the financial statements.

(b) Amendments to Korean IFRS 1103 Business Combination – Definition of a Business

The amended definition of a business requires an acquisition to include an input and a substantive process that together significantly contribute to the ability to create outputs and the definition of output excludes the returns in the form of lower costs and other economic benefits. If substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets, an entity may elect to apply an optional concentration test that permits a simplified assessment of whether an acquired set of activities and assets is not a business. The amendments do not have a significant impact on the financial statements.

(c) Amendments to Korean IFRS 1109 Financial Instruments, Korean IFRS 1039 Financial Instruments: Recognition and Measurement and Korean IFRS 1107 Financial Instruments: Disclosure – Interest Rate Benchmark Reform

The amendments allow to apply the exceptions in relation the application of hedge accounting while uncertainties arising from interest rate benchmark reform exist. The exceptions require the Group assumes that the interest rate benchmark on which the hedged items and the hedging instruments are based on is not altered as a result of interest rate benchmark reform, when determining whether the expected cash flows are highly probable, whether an economic relationship between the hedged item and the hedging instrument exists, and when assessing the hedging relationship is highly effective. The amendments do not have a significant impact on the financial statements.

#### 2.2.2 New standards and interpretations not yet adopted by the Group

The following new accounting standards and interpretations have been published that are not mandatory for December 31, 2020 reporting periods and have not been early adopted by the Group.

(a) Amendments to Korean IFRS 1116 Lease – Practical expedient for COVID-19 - Related Rent Exemption, Concessions, Suspension

As a practical expedient, a lessee may elect not to assess whether a rent concession occurring as a direct consequence of the COVID-19 pandemic is a lease modification, and the amounts recognized in profit or loss as a result of applying this exemption should be disclosed. The amendments should be applied for annual periods beginning on or after June 1, 2020, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the financial statements.

(b) Amendments to Korean IFRS 1109 Financial Instruments, Korean IFRS 1039 Financial Instruments: Recognition and Measurement, Korean IFRS 1107 Financial Instruments: Disclosure, Korean IFRS 1104 Insurance Contracts and Korean IFRS 1116 Lease - Interest Rate Benchmark Reform

In relation to interest rate benchmark reform, the amendments provide exceptions including adjust effective interest rate instead of book amounts when interest rate benchmark of financial instruments at amortized costs is replaced, and apply hedge accounting without discontinuance although the interest rate benchmark is replaced in hedging relationship. The amendments should be applied for annual periods beginning on or after January 1, 2021, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the financial statements.

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(c) Amendments to Korean IFRS 1103 Business Combination – Reference to the Conceptual Framework

The amendments update a reference of definition of assets and liabilities qualify for recognition in revised Conceptual Framework for Financial Reporting. However, the amendments add an exception for the recognition of liabilities and contingent liabilities within the scope of Korea IFRS 1037 Provisions, Contingent Liabilities and Contingent Assets, and Korean IFRS 2121 Levies. The amendments also confirm that contingent assets should not be recognized at the acquisition date. The amendments should be applied for annual periods beginning on or after January 1, 2022, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the financial statements.

(d) Amendments to Korean IFRS 1016 Property, Plant and Equipment - Proceeds before intended use

The amendments prohibit an entity from deducting from the cost of an iteam of property, plant and equipment any proceeds from selling items produced while the entity is preparing the asset for its intended use. Instead, the entity will recognize the proceeds from selling such items, and the costs of producing those items, in profit or loss. The amendments should be applied for annual periods beginning on or after January 1, 2022, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the financial statements.

(e) Amendments to Korean IFRS 1037 Provisions, Contingent Liabilities and Contingent Assets - Onerous Contracts: Cost of Fulfilling a Contract

The amendments clarify that the direct costs of fulfilling a contract include both the incremental costs of fulfilling the contract and an allocation of other costs directly related to fulfilling contracts when assessing whether the contract is onerous. The amendments should be applied for annual periods beginning on or after January 1, 2022, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the financial statements.

(f) Annual improvements to Korean IFRS 2018-2020

Annual improvements of Korean IFRS 2018-2020 Cycle should be applied for annual periods beginning on or after January 1, 2022, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the financial statements.

- Korean IFRS 1101 First time Adoption of Korean International Financial Reporting Standards Subsidiaries that are first-time
- Korean IFRS 1109 Financial Instruments Fees related to the 10% test for derecognition of financial liabilities
- Korean IFRS 1116 Leases Lease incentives
- Korean IFRS 1041 Agriculture Measuring fair value

(g) Amendments to Korean IFRS 1001 Presentation of Financial Statements - Classification of Liabilities as Current or Non-current

The amendments clarify that liabilities are classified as either current or non-current, depending on the substantive rights that exist at the end of the reporting period. Classification is unaffected by the likelihood that an entity will exercise right to defer settlement of the liability or the expectations of management. Also, the settlement of liability include the transfer of the entity's own equity instruments, however, it would be excluded if an option to settle them by the entity's own equity instruments if compound financial instruments is met the definition of equity instruments and recognized separately from the liability. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the financial statements.

#### 2.3 Consolidation

The Group has prepared the consolidated financial statements in accordance with Korean IFRS 1110 Consolidated Financial Statements.

#### (a) Subsidiaries

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the activities of the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

The acquisition method of accounting is used to account for business combinations by the Group. The consideration transferred is measured at the fair values of the assets transferred, and identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. The Group recognizes any non-controlling interest in the acquired entity on an acquisition-by-acquisition basis either at fair value or at the non-controlling interest's proportionate share of the acquired entity's net identifiable assets. All other non-controlling interests are measured at fair values, unless otherwise required by other standards. Acquisition-related costs are expensed as incurred.

The excess of consideration transferred, amount of any non-controlling interest in the acquired entity and acquisition-date fair value of any previous equity interest in the acquired entity over the fair value of the net identifiable assets acquired is recoded as goodwill. If those amounts are less than the fair value of the net identifiable assets of the business acquired, the difference is recognized directly in the profit or loss as a bargain purchase.

Intercompany transactions, balances and unrealized gains on transactions between group companies are eliminated. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

The Group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the Group. A changed in ownership interest results in an adjustment between the carrying amounts of the controlling and non-controlling interest to reflect their relative interest in the subsidiary. Any difference between the amount of the adjustment to non- controlling interest and any consideration paid or received is recognized in a separate reserve within equity attributable to owners of the Parent Company.

When the Group ceases to consolidate for a subsidiary because of a loss of control, any retained interest in the subsidiary is remeasured to its fair value with the changed in carrying amount recognized in profit or loss.

#### (b) Associates

Associates are entities over which the Group has significant influence but not control or joint control. Investments in associates are accounted for using the equity method of accounting, after initially being recognized at cost. Unrealized gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in the associates. If the Group's share of losses of an associate equals or exceeds its interest in the associate (including long-term interests that, in substance, form part of the Group's net investment in the associate), the Group discontinues recognizing its share of further losses. After the Group's interest is reduced to zero, additional losses are provided for, and a liability is recognized, only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate. If there is an objective evidence of impairment for the investment in the associate, the Group recognizes the difference between the recoverable amount of the associate and its book amount as impairment loss. If an associate uses accounting policies other than those of the Group for like transactions and events in similar circumstances, if necessary, adjustments shall be made to make the associate's accounting policies conform to those of the Group when the associate's financial statements are used by the Group in applying the equity method.

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#### (c) Joint Arrangements

A joint arrangement, wherein two or more parties have joint control, is classified as either a joint operation or a joint venture. A joint operator recognizes its direct right to the assets, liabilities, revenues and expenses of joint operations and its share of any jointly held or incurred assets, liabilities, revenues and expenses. Interests in joint ventures are accounted for using the equity method, after initially being recognized at cost in the consolidated statement of financial position.

#### 2.4 Foreign Currency Translation

#### (a) Functional and presentation currency

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

#### (b) Transactions and balances

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 deferred in other comprehensive income if they relate to qualifying cash flow hedges and qualifying effective portion of net investment hedges, or are attributable to monetary part of the net investment in a foreign operation.

Foreign exchange gains and losses that relate to borrowings are presented in the statement of profit or loss, within finance costs. All other foreign exchange gains and losses are presented in the statement of profit or loss within 'other income or other expenses'.

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Translation differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss. For example, translation differences on non-monetary assets and liabilities such as equities held at fair value through profit or loss are recognized in profit or loss as part of the fair value gain or loss and translation differences on non-monetary assets such as equities held at fair value through other comprehensive income are recognized in other comprehensive income.

#### 2.5 Cash and cash equivalents

Cash and cash equivalents are composed of cash on hand, demand deposits and short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

#### 2.6 Financial Assets

#### (a) Classification

The Group classifies its financial assets in the following measurement categories:

- those to be measured at fair value through profit or loss
- those to be measured at fair value through other comprehensive income, and
- those to be measured at amortized cost.

The classification depends on the Group's business model for managing the financial assets and the contractual terms of the cash flows.

For financial assets measured at fair value, gains and losses will either be recorded in profit or loss or other comprehensive income. For investments in debt instruments, this will depend on the business model in which the investment is held. The Group reclassifies debt investments when, and only when its business model for managing those assets changes.

For investments in equity instruments that are not held for trading, this will depend on whether the Group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income. Changes in fair value of non- designated equity investment are recognized in profit or loss.

#### (b) Measurement

At initial recognition, the Group measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at fair value through profit or loss are expensed in profit or loss.

Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

#### A. Debt instruments

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the asset. The Group classifies its debt instruments into one of the following three measurement categories:

- Amortized cost: Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortized cost. A gain or loss on a debt investment that is subsequently measured at amortized cost and is not part of a hedging relationship is recognized in profit or loss when the asset is derecognized or impaired. Interest income from these financial assets is included in 'finance income' using the effective interest rate method.
- Fair value through other comprehensive income: Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at fair value through other comprehensive income. Movements in the carrying amount are taken through other comprehensive income, except for the recognition of impairment loss (reversal of impairment loss), interest income and foreign exchange gains and losses which are recognized in profit or loss. When the financial asset is derecognized, the cumulative gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss. Interest income from these financial assets is included in 'finance income' using the effective interest rate method. Foreign exchange gains and losses are presented in 'other income or expenses' and impairment losses are presented in 'other expenses'.
- Fair value through profit or loss: Assets that do not meet the criteria for amortized cost or fair value through other comprehensive income are measured at fair value through profit or loss. A gain or loss on a debt investment that is subsequently measured at fair value through profit or loss and is not part of a hedging relationship is recognized in profit or loss and presented net in the statement of profit or loss within 'other income or expenses' in the year in which it arises.

#### **B. Equity instruments**

The Group subsequently measures all equity investments at fair value. Where the Group's management has elected to present fair value gains and losses on equity investments, which held for long-term investment or strategic purpose, in other comprehensive income, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividend income from such investments continue to be recognized in profit or loss as 'finance income' when the right to receive payments is established.

Changes in the fair value of financial assets at fair value through profit or loss are recognized in 'other income and expenses' in the statement of profit or loss as applicable. Impairment loss (reversal of impairment loss) on equity investments measured at fair value through other comprehensive income are not reported separately from other changes in fair value.

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#### (c) Impairment

The Group assesses on a forward-looking basis the expected credit losses associated with its debt instruments carried at amortized cost and fair value through other comprehensive income. The impairment methodology applied depends on whether there has been a significant increase in credit risk. For trade receivables and lease receivables, the Group applies the simplified approach, which requires expected lifetime credit losses to be recognized from initial recognition of the receivables.

#### (d) Recognition and Derecognition

Regular way purchases and sales of financial assets are recognized or derecognized on trade-date, the date on which the Group commits to purchase or sell the asset. Financial assets are derecognized when the rights to receive cash flows from the financial assets have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership.

If a transfer does not result in derecognition because the Group has retained substantially all the risks and rewards of ownership of the transferred asset, the Group continues to recognize the transferred asset in its entirety and recognizes a financial liability for the consideration received. The Group classified the financial liability as "borrowings" in the statement of financial position.

#### (e) Offsetting of financial instruments

Financial assets and liabilities are offset and the net amount reported in the statement of financial position where there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis or realize the assets and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Group or the counterparty.

#### 2.7 Derivative Instruments

Derivatives are initially recognized at fair value on the date when a derivative contract is entered into and are subsequently remeasured at their fair value at the end of each reporting period. Changes in the fair value of any derivative instrument that does not qualify for hedge accounting are recognized immediately in profit or loss within 'other non-operating income (expenses)' or 'finance income(costs)' based on the nature of transactions.

The Group applies hedge accounting associated with highly probable forecast transactions.

The effective portion of changes in the fair value of derivatives that are designated as hedging instruments and qualify for cash flow hedge accounting is recognized in equity, and the ineffective portion is recognized on profit or loss. When a hedging instrument expires, or is sold, terminated, exercised, or when a hedge no longer meets the criteria for cash flow hedge accounting, cash flow hedge accounting is discontinued. At the time of discontinuation of cash flow hedge accounting, the amount that has been accumulated in the cash flow hedge reserve recognized in profit or loss over the reporting period during the expected transaction occurs. However, if the forecast transaction is no longer expected to occur the cash flow hedge reserve that were reported in equity are immediately reclassified to profit or loss.

#### 2.8 Trade Receivables

Trade receivables are recognized initially at the amount of consideration that is unconditional, unless they contain significant financing components when they are recognized at fair value. Trade receivables are subsequently measured at amortized cost using the effective interest method, less loss allowance.

#### 2.9 Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined using the moving average method (monthly average method) except materials-in-transit.

#### 2.10 Non-current Assets (or Disposal Group) Held for sale

Non-current assets (or disposal group) are classified as held for sale when their carrying amount will be recovered principally through a sale transaction rather than through continuing use and a sale is considered highly probable. The assets are measured at the lower amount between their carrying amount and the fair value less costs to sell.

#### 2.11 Property, Plant and Equipment

Property, plant and equipment are stated at historical cost less accumulated depreciation and accumulated impairment losses. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Depreciation of all property, plant and equipment, except for land, is calculated using the straight- line method to allocate their cost or revalued amounts, net of their residual values, over their estimated useful lives. Subsequent to initial recognition, land is carried at revalued amount, being its fair value at the date of the revaluation. Revaluations are performed with sufficient regularity to ensure that the fair value of a revalued asset does not differ materially from its carrying amount.

When revalued assets are sold, the amounts included in revaluation reserves are transferred to retained earnings.

The estimated useful lives of property, plant and equipment are as follows:

	Useful lives
Buildings	25 - 50 years
Structures	25 - 50
Machinery	2 - 36
Vessels	20
Tools and fixtures	3 - 5
Vehicles	4 - 5
Others	2 - 10
Tools and fixtures  Vehicles	3 - 5 4 - 5

The assets' depreciation method, residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

#### 2.12 Borrowing Costs

General and specific borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalized during the period of time that is required to complete and prepare the asset for its intended use or sale. Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization. Other borrowing costs are expensed in the period in which they are incurred.



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# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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#### 2.13 Government Grants

Grants from the government are recognized at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions. Government grants related to assets are presented in the statement of financial position by deducting the grant in arriving at the carrying amount of the asset, and government grants related to income are deferred and later deducted from the related expense.

#### 2.14 Intangible Assets

Goodwill is measured as described in Note 3 (a), and carried at cost less accumulated impairment losses.

Intangible assets, except for goodwill, are initially recognized at its historical cost, and carried at cost less accumulated amortization and accumulated impairment losses.

Software that are directly attributable to internally generated by the Group are recognized when the criteria; such as, technically feasible, generate probable future economic benefits and other, are met. Membership rights that have an indefinite useful life are not subject to amortization because there is no foreseeable limit to the period over which the assets are expected to be utilized. The Group amortizes intangible assets with a limited useful life using the straight-line method over the following periods:

	Useful lives
Software and other intangible assets	3 - 50 years

#### 2.15 Investment Property

Investment property is property held to earn rentals or for capital appreciation or both. An investment property is measured initially at its cost. An investment property is measured after initial measurement at depreciated cost (less any accumulated impairment losses). After recognition as an asset, investment property is carried at cost less accumulated depreciation and impairment losses. The Group depreciates investment properties, except for land, using the straight-line method over their useful lives of  $25 \sim 50$  years.

#### 2.16 Impairment of Non-financial Assets

Goodwill and intangible assets that have an indefinite useful life are not subject to amortization and are tested annually for impairment, or more frequently if events or changes in circumstances indicate that they might be impaired. Other assets are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An 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 of disposal and value in use. Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period.

#### 2.17 Trade and Other Payables

These amounts represent liabilities for goods and services provided to the Group prior to the end of reporting period which are unpaid. The amounts are unsecured and are usually paid within 30 days of recognition. Trade and other payables are presented as current liabilities, unless payment is not due within 12 months after the reporting period. They are recognized initially at their fair value and subsequently measured at amortized cost using the effective interest method.

#### 2.18 Financial Liabilities

#### (a) Classification and measurement

The Group's financial liabilities at fair value through profit or loss are financial instruments held for trading. A financial liability is held for trading if it is incurred principally for the purpose of repurchasing in the near term. A derivative that is not a designated as hedging instruments and an embedded derivative that is separated are also classified as held for trading.

The Group classifies non-derivative financial liabilities, except for financial liabilities at fair value through profit or loss, financial guarantee contracts and financial liabilities that arise when a transfer of financial assets does not qualify for derecognition, as financial liabilities carried at amortized cost and present as 'trade payables', 'borrowings', and 'other financial liabilities' in the statement of financial position.

Preferred shares that require mandatory redemption at a particular date are classified as liabilities. Interest expenses on these preferred shares using the effective interest method are recognized in the statement of profit or loss as 'finance costs', together with interest expenses recognized from other financial liabilities.

#### (b) Derecognition

Financial liabilities are removed from the statement of financial position when it is extinguished; for example, when the obligation specified in the contract is discharged or cancelled or expired or when the terms of an existing financial liability are substantially modified. The difference between the carrying amount 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 profit or loss.

#### 2.19 Financial Guarantee Contracts

Financial guarantee contracts are recognized as a financial liability at the time the guarantee is issued. The liability is initially measured at fair value, subsequently at the higher of following and recognized in the statement of financial position within 'other financial liabilities'.

- the amount determined in accordance with the expected credit loss model under Korean IFRS 1109 Financial Instruments and
- the amount initially recognized less, where appropriate, the cumulative amount of income recognized in accordance with Korean IFRS 1115 Revenue from Contracts with Customers

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#### 2.20 Provisions and contingent liabilities

Provisions for service warranties, make good obligation, and legal claims are recognized when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated.

Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the end of the reporting period, and the increase in the provision due to the passage of time is recognized as interest expense.

In addition, it is presented as contingent liability in case past events have occurred but if there is a potential obligation to confirm the existence by the occurrence of uncertain future events or in case there is a current obligation as a result of a past event or transaction but the possibility of the outflow of resources is not high or if the amount cannot be estimated reliably.

With enforcement of The Act on the Allocation and Trading of Greenhouse Gas Emission Permits, the allocation received from the government for free of charge are measured at zero while purchased emission permits are measured at acquisition cost and presented net of accumulated impairment loss. Emissions obligations 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. Emission permits and emission obligations are classified as intangible assets and provisions, respectively, in the statement of financial position.

#### 2.21 Current and Deferred Tax

The tax expense for the period consists of current and deferred tax. Current and deferred tax is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively.

The current income tax expense is measured at the amount expected to be paid to the taxation authorities, using the tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation, and considers whether it is probable that a taxation authority will accept an uncertain tax treatment. The Group measures its tax balances either based on the most likely amount or the expected value, depending on which method provides a better prediction of the resolution of the uncertainty.

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting profit nor taxable profit or loss.

Deferred tax assets are recognized only if it is probable that future taxable amounts will be available to utilize those temporary differences and losses.

The Group recognizes a deferred tax liability all taxable temporary differences associated with investments in subsidiaries, associates, and interests in joint arrangements, except to the extent that the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. In addition, The Group recognizes a deferred tax asset for all deductible temporary differences arising from such investments to the extent that it is probable the temporary difference will reverse in the foreseeable future and taxable profit will be available against which the temporary difference can be utilized.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset when the Group has a legally enforceable right to offset and intends either to settle on a net basis, or to realize the assets and settle the liability simultaneously.

#### 2.22 Employee Benefits

The Group operates a defined benefit plan.

A defined benefit plan is a pension plan that is not a defined contribution plan. Generally, post- employment benefits are payable after the completion of employment, and the benefit amount depended on the employee's age, periods of service or salary levels. The liability recognized in the statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms approximating to the terms of the related obligation. Re-measurement gains and losses arising from experience adjustments and changes in actuarial assumptions are recognized in the period in which they occur, directly in other comprehensive income.

Changes in the present value of the defined benefit obligation resulting from plan amendments or curtailments are recognized immediately in profit or loss as past service costs.

The asset recognized in the statement of financial position in respect of defined benefit pension plans is excess reserve which is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets and the asset is less than asset recognition limit.

Other long-term employee benefits that are not payable within twelve months from the end of periods in which the service is provided are the discounted present value of the future salary for the service provided in the period and the past. Re-measurement gains and losses are recognized in the period in which they occur, directly in profit and loss.

#### 2.23 Contributed Equity

#### (a) Equity Investments

Ordinary stocks are classified as equity and incremental cost occurred directly from equity transactions are deducted from equity as net amount including tax effect.

#### (b) Hybrid Equity Securities

The Group classifies equity securities to financial liabilities or equity investments in accordance with its contract conditions. Hybrid equity securities which the Group has unconditional right to avoid transfer of financial assets, such as cash, to settle contractual liabilities are classified as equity investments and presented as a part of equity.

#### 2.24 Earnings per Share

Basic earnings per share is profit or loss attributed to ordinary shareholder of the Group divided by the weighted average number of ordinary shares outstanding during the period.

Diluted earnings per share is profit or loss attributed to ordinary shareholder of the Group divided by the weighted average number of ordinary shares outstanding and weighted average number of dilutive potential ordinary shares of the Group during the period. Dilutive potential ordinary shares affect diluted earnings per share only when dilution occurs.

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# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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#### 2.25 Revenue Recognition

#### (a) Identifying Performance Obligation

The Group engages in the production and sale of petroleum products and identify performance obligation from contracts with customers such as supply of goods in accordance with Korean IFRS 1115 'Revenue from Contracts with Customers'.

#### (b) Variable Consideration and Allocating Transaction Price

The Group determines and allocates transaction prices to various performance obligations identified from a single contract based on relative individual sales price. Contracts with customers do not provide form of variable consideration.

#### 2.26 Leases

#### (a) Lessor

Lease income from operating leases where the Group is a lessor is recognized in income on a straight-line basis over the lease term. Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying asset and recognized as expense over the lease term on the same basis as lease income. The respective leased assets are included in the statement of financial position based on their nature.

#### (b) Lessee

The Group leases various land, buildings, gas stations, structures, machineries, vehicles, vessels and others. Lease contracts are typically made for fixed period, but may have extension options. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes.

The Group determines the lease term as the non-cancellable period of a lease, together with both (a) periods covered by an option to extend the lease if the lessee is reasonably certain to exercise that option; and (b) periods covered by an option to terminate the lease if the lessee is reasonably certain not to exercise that option. When the lessee and the lessor each has the right to terminate the lease without permission from the other party, the Group should consider a termination penalty in determining the period for which the contract is enforceable.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- Fixed payments (including in-substance fixed payments), less any lease incentives receivable
- Variable lease payment that are based on an index or a rate, initially measured using the index or rate as at the commencement date
- Amounts expected to be payable by the Group (the lessee) under residual value guarantees
- The exercise price of a purchase option if the Group (the lessee) is reasonably certain to exercise that option, and
- Payments of penalties for terminating the lease, if the lease term reflects the Group (the lessee) exercising that option

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, the lessee's incremental borrowing rate is used, being the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions.

To determine the incremental borrowing rate, the Group:

- where possible, uses recent third-party financing received by the individual lessee as a starting point, adjusted to reflect changes in financing conditions since third party financing was received.

If a readily observable amortizing loan rate is available to the individual lessee (through recent financing or market data) which has a similar payment profile to the lease, then the Group uses that rate as a starting point to determine the incremental borrowing rate.

The Group is exposed to potential future increases in variable lease payments based on an index or rate, which are not included in the lease liability until they take effect. When adjustments to lease payments based on an index or rate take effect, the lease liability is reassessed and adjusted against the right-of-use asset.

Each lease payment is allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability
- any lease payments made at or before the commencement date less any lease incentives received
- any initial direct costs, and
- restoration costs

The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Group is reasonably certain to exercise a purchase option, the right-of- use asset is depreciated over the underlying asset's useful life. Although the Group elected to apply the revaluation model to its land and buildings that are presented in property, plant and equipment, the Group elected not to apply that revaluation model to buildings held by the Group that are presented in the right-of-use assets.

#### (a) Extension and termination options

Extension and termination options are included in a number of property, gas station and vessel contracts across the Group. These terms are used to maximize operational flexibility in terms of managing contracts.

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#### 2.27 Segment Reporting

Information of each operating segment is reported in a manner consistent with the internal business segment reporting provided to the chief operating decision-maker (Note 7). The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the steering committee that makes strategic decisions.

#### 2.28 Approval of Issuance of the Financial Statements

The consolidated financial statements 2020 were approved for issue by the Board of Directors on January 29, 2021 and are subject to change with the approval of shareholders at their Annual General Meeting.

The Group determines the estimated useful lives and related depreciation expenses of property, plant and equipment such as machinery. The estimation is based on the expected cycles of the products and it can vary depending on the behavior of the competitors to respond to changes in the technical and industrial cycles. When there is a reduction in useful lives the management will increase depreciation expense accordingly. Also, when assets are abandoned, disposed or obsolete, its value can be reduced or removed from the book.

(c) Income taxes

The Group's taxable income generated from these operations are subject to income taxes based on tax laws and interpretations of tax authorities in numerous jurisdictions. There are many transactions and calculations for which the ultimate tax determination is uncertain (Note 31).

If certain portion of the taxable income is not used for investments or increase in wages or dividends in accordance with the Tax System for Recirculation of Corporate Income, the Group is liable to pay additional income tax calculated based on the tax laws. The new tax system is effective for three years from 2015. Accordingly, the measurement of current and deferred income tax is affected by the tax effects from the new tax system. As the Group's income tax is dependent on the investments, increase in wages and dividends, there is an uncertainty measuring the final tax effects.

(d) Provisions

As at December 31, 2020, the Group recognizes provisions for environmental restoration and emissions rights as explained in Note 21. These provisions are estimated based on past experience and expenses for emissions expected in the future.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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#### 3. Critical Accounting Estimates and Assumptions

The preparation of financial statements requires the Group to make estimates and assumptions concerning the future. Management also needs to exercise judgement in applying the Group's accounting policies. Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The resulting accounting estimates will, by definition, seldom equal the related actual results, it can contain a significant risk of causing a material adjustment.

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below. Additional information of significant judgement and assumptions of certain items are included in relevant notes.

All countries including Korea have uncertainty for the global economy recession that is difficult and prolonged, due to concerns over the spread of Coronavirus disease 2019 ("COVID-19") at the beginning of 2020. In particular, for crude oil refining and petrochemical business which is the operation basis of the Group, there may be great uncertainty about future revenue and cash flows caused by a decrease in refining margins due to falling oil prices and a decrease in demand for the petrochemical products due to global economic recession. However, the ultimate effect of the recession on the financial position of the Group cannot presently be determined and, accordingly, no adjustments related to such uncertainties have been reflected in the accompanying consolidated financial statements.

#### (a) Estimated goodwill impairment

The Group tests whether goodwill has suffered any impairment on an annual basis. The recoverable amount of a cash generating unit (CGU) is determined based on value-in-use calculations (Note 16).

ing unit (CGU) is determined based on value-in-use calculations (Note 16).

(b) Useful Lives of Property, Plant and Equipment

### (e) Customer Loyalty Programme

The Group operates a customer loyalty programme and the granted reward to the customer from the program is a separately identifiable component of the initial sale transaction that grants the reward. The allocation of the reward portion is estimated based on the past experience.

#### (f) Net defined benefit liability

The present value of net defined benefit liability depends on a number of factors that are determined on an actuarial basis using a number of assumptions including the discount rate (Note 20).

#### (g) Fair value of financial instruments

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Group uses its judgment to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each reporting period (Note 5).

#### (h) Lease

In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated).

For leases of property and vessels, the following factors are normally the most relevant:

- If there are significant penalties to terminate (or not extend), the Group is typically reasonably certain to extend (or not terminate).
- If any leasehold improvements are expected to have a significant remaining value, the Group is typically reasonably certain to extend (or not terminate).

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- Otherwise, the Group considers other factors including historical lease durations and the costs and business disruption required to replace the leased asset.

The lease term is reassessed if an option is actually exercised (or not exercised) or the Group becomes obliged to exercise (or not exercise) it. The assessment of reasonable certainty is only revised if a significant event or a significant change in circumstances occurs, which affects this assessment, and that is within the control of the lessee.

#### 4. Financial Risk Management

#### 4.1 Financial Risk Factors

Due to the Group's activities, the Group is exposed to a variety of financial risks: market risk (including currency risk, fair value interest rate risk, cash flow interest rate risk and price risk), credit risk and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize any adverse effects on the financial performance of the Group. The Group uses derivative financial instruments to hedge certain risk exposures.

Risk management is carried out under policies approved by the Board of Directors. The Board reviews and approves written principles for overall risk management, as well as written policies covering specific areas, such as foreign exchange risk, interest rate risk, credit risk, use of derivative financial instruments and non-derivative financial instruments and investment of excess liquidity.

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#### 4.1.1 Market Risk

#### (a) Foreign exchange risk

The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar. Foreign exchange risk arises from future commercial transactions and recognized assets and liabilities. The Group's risk management policy is to hedge the risk of changes in currency from foreign currency assets and liabilities through derivatives such as forward exchange contracts, and others.

The Group's financial assets and liabilities exposed to foreign currency risk as at December 31, 2020 and 2019, expressed in Korean won, are as follows:

#### (1) 2020

#### in thousands of Korean won

	USD	EUR	JPY	Others	Total
Cash and cash equivalents	23,733,287	-	-	234	23,733,521
Trade receivables	409,748,799	-	-	181	409,748,980
Other receivables	2,472,183	-	-	-	2,472,183
	435,954,269	-	-	415	435,954,684
Trade payables	(621,763,511)	(63,444)	(40,069)	-	(621,867,024)
Other payables	(557,851,593)	(21,329)	-	(274)	(557,873,196)
Financial liabilities	(108,274,136)	-	-	-	(108,274,136)
Lease liabilities	(560,401,177)	-	-	(1,028,771)	(561,429,948)
	(1,848,290,417)	(84,773)	(40,069)	(1,029,045)	(1,849,444,304)

#### (2) 2019

#### in thousands of Korean won

	USD	EUR		Others	Total
Cash and cash equivalents	17,229,018	-	-	-	17,229,018
Trade receivables	711,726,531	-	-	-	711,726,531
Other receivables	4,528,790	-	-	-	4,528,790
	733,484,339	-	-	-	733,484,339
Trade payables	(1,293,686,629)	(113,797)	(18,028)	-	(1,293,818,454)
Other payables	(310,624,416)	(1,614,408)	(1,227,458)	(1,200,985)	(314,667,267)
Financial liabilities	(475,394,933)	-	-	-	(475,394,933)
Lease liabilities	(252,008,438)	-	-	(10,363,346)	(262,371,784)
	(2,331,714,416)	(1,728,205)	(1,245,486)	(11,564,331)	(2,346,252,438)

The effect of foreign currency risk to profit is a sum of net foreign currency fluctuations of Korean won against other foreign currency fluctuations. Hedge effectiveness on derivative instruments has not been reflected. As at December 31, 2020 and 2019, if the foreign exchange rate of the Korean won (KRW / Foreign Currency) fluctuated by 5% while other variables held constant, the effects on profit would be as follows:

in thousands of Korean won

	2020		2019	
	5% Increase	5% Decrease	5% Increase	5% Decrease
Foreign currency assets	21,797,734	(21,797,734)	36,674,217	(36,674,217)
Foreign currency liabilities	(92,472,215)	92,472,215	(117,312,622)	(117,312,622)
Net effect	(70,674,481)	70,674,481	(80,638,405)	80,638,405

#### (b) Price risk

The Group is exposed to price risk of financial instruments because of investments held by the Group and classified on the statement of financial position as financial assets at fair value through profit or loss.

#### (c) Interest rate risk

The Group's main interest risk arises from savings and borrowings with variable rates. The Group properly hedges the risk that arises from borrowings with floating interest rates through interest rate swap contracts.

As at December 31, 2020, if interest rates on Korean won-denominated borrowings were 0.1%(10 basis points) higher/lower with all other variables held constant, comprehensive income for the period would be ₩ 1,959 million (2019: ₩ 474 million) lower/higher, mainly as a result of higher/lower interest expense on long-term floating rate borrowings.

#### 4.1.2 Credit Risk

Credit risk is managed on a Group basis. Credit risk arises from cash and cash equivalents, derivative financial instruments and deposits with banks and financial institutions, as well as credit exposures to wholesale and retail customers, including outstanding receivables and committed transactions. For banks and financial institutions, only independently rated parties with a minimum rating of 'A' are accepted. If wholesale customers are independently rated, these ratings are used. If there is no independent rating, the Group assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. Individual risk limits are set based on internal or external ratings in accordance with limits set by the board. The utilization of credit limits is regularly monitored.

The maximum exposure to credit risk as at December 31, 2020 and 2019, are as follows:

#### (a) Book amount

	2020	2019
Cash and cash equivalents	301,238,939	480,265,956
Short-term financial assets	4,800,000	5,300,000
Financial asset at fair value through profit or loss (current)	8,933	-
Financial asset at fair value through profit or loss (non-current)	3,000,000	3,000,000
Financial assets at fair value through other comprehensive income	32,089,512	-
Derivative assets	53,283,930	14,715,358
Trade and other receivables	1,030,589,900	1,472,184,143
Long-term financial assets	523,000	523,000
Long-term trade and other receivables	278,610,496	181,486,694
	1,704,144,710	2,157,475,151

December 31, 2020 and 2019

The maximum credit exposure amount is equivalent to total financial assets, less cash and equity securities. The Group is exposed to credit risk up to the maximum amount of payment guarantee provided to subsidiaries.

#### (b) Maximum exposure to credit risk by Region

in thousands of Korean won

	2020	2019
Korea	1,398,777,554	1,676,578,912
North America	3,585,869	6,291,846
Asia	272,074,983	432,773,246
Europe	10,740,888	12,061,050
Others	18,965,416	29,770,097
	1,704,144,710	2,157,475,151

#### 4.1.3 Liquidity Risk

The Group monitors rolling forecasts of the Group's liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining sufficient headroom on its undrawn committed borrowing facilities at all times so that the Group does not breach borrowing limits or covenants (where applicable) on any of its borrowing facilities. The Group's liquidity management policy involves the financing plans of the group, compliance with agreements, internal target financial ratios and external regulatory requirements, such as limitations on currencies.

The analyses of the Group's liquidity risk as at December 31, 2020 and 2019, are as follows:

#### (1) 2020

in thousands of Korean won

		Maturity Maturity				
	Book amount	Contractual – cash flow <sup>1</sup>	Less than 6 months	Between 6 months and 1 year	Between 1 and 3 years	Over 3 years
Short-term financial liabilities	643,970,222	679,152,785	209,254,484	469,898,301		-
Financial liabilities at fair value through profit or loss	405,739	405,739	405,739	-	-	-
Trade and other payables	2,149,548,199	2,149,548,199	2,149,548,199	-	-	-
Lease liabilities	187,565,724	1,333,742,271	1,232,935,805	100,806,466	-	-
Long-term financial liabilities	4,870,996,498	5,375,507,908	43,200,297	41,408,109	1,952,401,748	3,338,497,754
Long-term trade and other payables	183,550,986	183,550,986	-	-	-	183,550,986
Derivative liabilities	76,059,311	76,059,311	56,508,820	5,371,433	14,179,058	-
Long-term lease liabilities	982,035,758	1,216,559,267	-	-	368,204,400	848,354,867

<sup>&</sup>lt;sup>1</sup> Includes interest amount to be paid and does not include present value discount.

#### (2) 2019

in thousands of Korean won

		Control			Maturity		
	Book amount	Contractual - cash flow <sup>1</sup>	Less than 6 months	Between 6 months and 1 year	Between 1 and 3 years	Over 3 years	
Short-term financial liabilities	1,125,012,875	1,149,271,647	1,060,056,910	89,214,737	-	-	
Trade and other payables	2,697,724,809	2,697,724,809	2,694,474,495	3,250,314	-	-	
Lease liabilities	111,069,700	115,011,512	64,034,547	50,976,965		-	
Long-term financial liabilities	2,808,407,732	3,127,437,599	23,540,548	23,825,032	1,025,414,252	2,054,657,767	
Long-term trade and other payables	7,907,576	7,907,576	-	-	-	7,907,576	
Derivative liabilities	18,929,155	18,929,155	16,018,229	2,004,174	906,752	-	
Long-term lease liabilities	307,071,160	372,474,363	-		237,024,806	135,449,557	

<sup>&</sup>lt;sup>1</sup>Includes interest amount to be paid and does not include present value discount.

#### 4.2 Capital Risk Management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern, so the Group can continue to provide returns for shareholders and benefits for other stakeholders, and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

The Group monitors capital on the basis of the gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is total borrowings (including 'short and long-term borrowings' and less 'lease liabilities' as shown in the consolidated statement of financial position) less cash and cash equivalents. Total capital is 'equity' as shown in the consolidated statement of financial position plus net debt.

The gearing ratios as at December 31, 2020 and 2019, are as follows:

	2020	2019
Total borrowings	5,514,966,720	3,933,420,607
Less: cash and cash equivalents	(301,664,830)	(480,435,94)
Net debt	5,213,301,890	3,452,984,663
Total equity	5,270,902,460	5,441,593,328
Total capital	10,484,204,350	8,894,577,991
Gearing ratio	50%	39%

December 31, 2020 and 2019

#### 4.3 Offsetting Financial Assets and Financial Liabilities

The following table presents the recognized financial assets that are offset, or subject to enforceable master netting arrangements and other similar agreements but not offset, as at December 31, 2020 and 2019.

(1) 2020

in thousands of Korean won

			Net amounts presented	Amounts	not offset	
	Gross liabilities	Gross assets set off	•	Cash collateral	Net amount	
Other payables	21,772,956	(3,186,549)	18,586,407	-	-	18,586,407

#### (2) 2019

in thousands of Korean won

Gross liabilities			Net amounts presented	Amounts	not offset	
		Gross assets set off	in the statement of financial position	Financial instruments	Cash collateral	Net amount
Other payables	42,640,966	(2,959,652)	39,681,314	-	-	39,681,314

#### 5. Fair Value

#### 5.1 Fair Value of Financial Instruments

Carrying amount and fair value of financial instruments by category as at December 31, 2020 and 2019, are as follows:

in thousands of Korean won

	2020		2019		
-	Carrying amount	Fair value	Carrying amount	Fair value	
Financial assets <sup>1</sup>					
Financial assets at fair value through profit or loss (current)	8,933	8,933	-	-	
Financial assets at fair value through profit or loss (non-current)	3,000,000	3,000,000	3,000,000	3,000,000	
Financial assets at fair value through other comprehensive income	32,089,512	32,089,512	-	-	
Derivative assets (current)	53,283,930	53,283,930	14,238,091	14,238,091	
Derivative assets (non-current)	-	-	477,267	477,267	
	88,382,375	88,382,375	17,715,358	17,715,358	
Financial liabilities¹					
Financial liabilities at fair value through profit or loss	405,739	405,739	-	-	
Derivative liabilities (current)	61,880,252	61,880,252	18,022,403	18,022,403	
Derivative liabilities (non-current)	14,179,059	14,179,059	906,752	906,752	
	76,465,050	76,465,050	18,929,155	18,929,155	

<sup>&</sup>lt;sup>1</sup> Trade receivables and payables whose carrying amount is a reasonable approximation of fair value are excluded from the fair value disclosures.

#### 5.2 Fair Value Hierarchy

Items that are measured at fair value are categorized by the fair value hierarchy levels, and the defined levels are as follows:

- Quoted prices (unadjusted) in active markets for identical assets or liabilities that an entity can access at the measurement date (Level 1).
- All inputs other than quoted prices included in level 1 that are observable (either directly that is, prices, or indirectly that is, derived from prices) for the asset or liability (Level 2).
- Unobservable inputs for the asset or liability (Level 3).

Fair value hierarchy classifications of the financial instruments that are measured at fair value as at December 31, 2020 and 2019, are as follows:

#### (1) 2020

in thousands of Korean won

Level 1	Level 2	Level 3	Total
	8,933	3,000,000	3,008,933
-	405,739	-	405,739
-	-	32,089,512	32,089,512
	53,283,930		53,283,930
	76,059,311		76,059,311
	- - -	- 8,933 - 405,739 53,283,930	- 8,933 3,000,000 - 405,739 - 32,089,512 - 53,283,930 -

#### (2) 2019

	Level 1	Level 2	Level 3	Total
Financial assets/liabilities that are measured at fair value				
Financial assets at fair value through profit or loss	-	-	3,000,000	3,000,000
Derivative assets	-	14,715,358		14,715,358
Derivative liabilities		18,929,155		18,929,155

December 31, 2020 and 2019

#### 5.3 Valuation Techniques

Valuation techniques used for the financial instruments categorized within Level 2 and Level 3 of the fair value hierarchy as at December 31, 2020 and 2019, are as follows:

#### (1) 2020

in thousands of Korean won

	Fair value	Level	Valuation techniques
Financial assets at fair value through profit or loss			
Debt instruments	3,000,000	3	Others
Currency forward contracts	8,933	2	Present value technique
Financial assets at fair value through other comprehensive income			
Equity instruments	32,089,512	3	Discounted free cash flows to firm model
Derivative assets			
Currency forward contracts	280,935	2	Present value technique
Commodity forward contracts	53,002,995	2	Present value technique
Financial liabilities at fair value through profit or loss			
Currency forward contracts	405,739	2	Present value technique
Derivative liabilities			
Interest rate swap contracts	405,564	2	Present value technique
Currency swap contracts	18,771,050	2	Present value technique
Currency forward contracts	3,778,886	2	Present value technique
Commodity forward contracts	53,103,811	2	Present value technique

#### (2) 2019

in thousands of Korean won

	Fair value	Level	Valuation techniques
Financial assets at fair value through profit or loss			
Debt instruments	3,000,000	3	Others
Derivative assets			
Currency forward contracts	59,140	2	Present value technique
Commodity forward contracts	14,178,952	2	Present value technique
Interest rate swap contracts	477,266	2	Present value technique
Derivative liabilities			
Currency forward contracts	3,212,961	2	Present value technique
Commodity forward contracts	15,716,194	2	Present value technique

#### 6. Financial Instruments by Category

#### 6.1 Carrying Amounts of Financial Instruments by Category

Carrying amounts of financial assets and liabilities by category as at December 31, 2020 and 2019, are as follows:

#### (1) 2020

in thousands of Korean won

	Amortized cost	Financial assets at fair value through profit or loss	Financial assets at fair value through other comprehensive income	Cash flow hedging instrument	Total	
Cash and cash equivalents	301,664,830	-	-		301,664,830	
Short-term financial assets	4,800,000	-	-		4,800,000	
Financial assets at fair value through profit or loss (current)	-	8,933	-	-	8,933	
Financial assets at fair value through profit or loss (noncurrent)	-	3,000,000	-	-	3,000,000	
Financial assets at fair value through other comprehensive income	-	-	32,089,512	-	32,089,512	
Derivative assets	-	-		53,283,930	53,283,930	
Trade and other receivables <sup>1</sup>	1,107,197,916	-	-		1,107,197,916	
Long-term financial assets	523,000	-			523,000	
	1,414,185,746	3,008,933	32,089,512	53,283,930	1,502,568,121	

<sup>&</sup>lt;sup>1</sup> Assets that are not based on contracts are excluded.

Amortized cost	Financial liabilities at fair value through profit or loss	Cash flow hedging instrument	Total	
643,970,222		-	643,970,222	
-	405,739	-	405,739	
-	13,995,000	62,064,311	76,059,311	
1,635,510,457	-	-	1,635,510,457	
4,870,996,498	-	-	4,870,996,498	
7,150,477,177	14,400,739	62,064,311	7,226,942,227	
	643,970,222 - - 1,635,510,457 4,870,996,498	Amortized cost         fair value through profit or loss           643,970,222         -           -         405,739           -         13,995,000           1,635,510,457         -           4,870,996,498         -	Amortized cost         fair value through profit or loss         hedging instrument           643,970,222         -         -           -         405,739         -           -         13,995,000         62,064,311           1,635,510,457         -         -           4,870,996,498         -         -	

<sup>&</sup>lt;sup>1</sup> Liabilities that are not based on contracts are excluded.

December 31, 2020 and 2019

(2) 2019

in thousands of Korean won

	Amortized cost	Financial assets at fair value through profit or loss	Cash flow hedging instrument	Total
Cash and cash equivalents	480,435,944	-		480,435,944
Short-term financial assets	5,300,000		-	5,300,000
Financial assets at fair value through profit or loss	-	3,000,000	-	3,000,000
Derivative assets	-		14,715,358	14,715,358
Trade and other receivables <sup>1</sup>	1,368,641,154		-	1,368,641,154
Long-term financial assets	523,000	-	-	523,000
	1,854,900,098	3,000,000	14,715,358	1,872,615,456

<sup>&</sup>lt;sup>1</sup> Assets that are not based on contracts are excluded.

in thousands of Korean won

	Amortized cost	Financial liabilities at fair value through profit or loss	Cash flow hedging instrument	Total
Short-term financial liabilities	1,125,012,875	-	-	1,125,012,875
Derivative liabilities	-	-	18,929,155	18,929,155
Trade and other payables <sup>1</sup>	1,883,914,983	-	-	1,883,914,983
Long-term financial liabilities	2,808,407,732	-	-	2,808,407,732
	5,817,335,590		18,929,155	5,836,264,745

<sup>&</sup>lt;sup>1</sup> Liabilities that are not based on contracts are excluded.

#### 6.2 Net Gains or Losses by Category of Financial Instruments

Net gains or net losses on each category of financial instruments for the years ended December 31, 2020 and 2019, are as follows:

#### (1) 2020

in thousands of Korean won

	Amortized cost	Financial assets at fair value through profit or loss	Financial liabilities at fair value through profit or loss	Derivative instruments	Total	
Interest income	9,804,472	-		-	9,804,472	
Gain on valuation of financial assets at fair value through profit or loss	-	8,933	-	-	8,933	
Gain on disposal of financial assets at fair value through profit or loss		41,085,642	-	6,002,537	47,088,179	
Gain on foreign currency translation	38,749,534			-	38,749,534	
Gain on foreign currency transactions	305,702,846	-	-	-	305,702,846	
Interest expense	(81,996,775)	-		-	(81,996,775)	
Loss on sales of trade receivables	(2,547,476)	-			(2,547,476)	
Loss on valuation of financial liabilities at fair value through profit or loss	-	-	(405,739)	-	(405,739)	
Loss on disposal of financial liabilities at fair value through profit or loss	-	-	(124,818,772)	-	(124,818,772)	
Gain on valuation of derivative instruments	-	-	-	(18,537,000)	(18,537,000)	
Loss on foreign currency translation	(4,970,699)	-		-	(4,970,699)	
Loss on foreign currency transactions	(250,743,489)	-		-	(250,743,489)	
Provision for impairment	(931,518)	-	-	-	(931,518)	

#### (2) 2019

	Amortized cost	Financial assets at fair value through profit or loss	Financial liabilities at fair value through profit or loss	Total
Interest income	9,322,179	-	-	9,322,179
Gain on disposal of financial assets at fair value through profit or loss	-	20,623,752	-	20,623,752
Gain on foreign currency translation	27,676,504	-	-	27,676,504
Gain on foreign currency transactions	260,496,259	-		260,496,259
Interest expense	(113,146,891)	-	-	(113,146,891)
Loss on sales of trade receivables	(12,148,796)	-	-	(12,148,796)
Loss on disposal of financial liabilities at fair value through profit or loss	-	-	(28,729,599)	(28,729,599)
Loss on foreign currency translation	(25,872,330)	-	-	(25,872,330)
Loss on foreign currency transactions	(305,354,431)	-	-	(305,354,431)
Provision for impairment	(237,216)	-		(237,216)

December 31, 2020 and 2019

#### 7. Segment Information

Management as a strategic decision-maker determines the operating segments of the Group. The management has determined that the Group has only one reportable segment.

Breakdown of the Group's segment revenue for the years ended December 31, 2020 and 2019, are as follows:

in thousands of Korean won

	2020	2019
Sale of goods	13,411,065,058	20,984,364,023
Others	278,849,411	132,479,945
	13,689,914,469	21,116,843,968

Major customer information

There are no external customers who contribute more than 10% of the Group's revenue for the year ended December 31, 2020.

#### 8. Restricted Financial Instruments

As at December 31, 2020, deposit for current accounts which is classified as long-term financial assets, amounting to ₩ 23 million (2019: ₩ 23 million) is restricted.

#### 9. Financial Assets at Fair Value through Profit or Loss

Financial assets at fair value through profit or loss as at December 31, 2020 and 2019, are as follows:

in thousands of Korean won

	2020	2019
Debt instruments	3,000,000	3,000,000
Others	8,933	-

Changes in financial assets at fair value through profit or loss for the years ended December 31, 2020 and 2019, are as follows: in thousands of Korean won

	2020	2019
Beginning balance	3,000,000	
Acquisition	8,933	3,000,000
Valuation		
Disposal	-	-
Ending balance	3,008,933	3,000,000

#### 10. Financial Assets at Fair Value through Other Comprehensive Income

Financial assets at fair value through other comprehensive income as at December 31, 2020 and 2019, are as follows:

in thousands of Korean won

	2020	2019
Equity instruments	32,089,512	

Changes in financial assets at fair value through other comprehensive income for the years ended December 31, 2020 and 2019, are as follows:

in thousands of Korean won

	2020	2019
Beginning balance	-	-
Acquisition	14,386,000	-
Valuation	24,098,380	-
Disposal	(6,394,868)	-
Ending balance	32,089,512	-

#### 11. Trade and Other Receivables

Trade and other receivables as at December 31, 2020 and 2019, are as follows:

	2020	2019
Trade receivables <sup>1</sup>	808,571,692	1,159,683,386
Other receivables	213,809,452	304,575,667
Accrued income	233,138	133,025
Deposits	505,663	650,127
Lease receivables	7,469,955	7,141,938
	1,030,589,900	1,472,184,143

¹As at December 31, 2020, trade receivables that were transferred but have not matured yet amount to ₩ 1,351,951 million (2019: ₩ 525,241 million). The Group transferred the receivables to ING bank and substantially all the risks and rewards were transferred. As a result, the transaction has been accounted for disposal of trade receivables (Note 21).



December 31, 2020 and 2019

The aging analysis of trade and other receivables as at December 31, 2020 and 2019, are as follows:

in thousands of Korean won

	2020	2019
Receivables not past due	1,028,237,340	1,443,451,868
Receivables past due but not impaired <sup>1</sup>		
Less than 6 month	2,153,286	25,736,375
Over 6 months	199,274	2,522,641
	2,352,560	28,259,016
Receivables impaired <sup>2</sup>		
Up to 1 year	1,398,108	377,339
Over 1 year	12,586	95,920
	1,410,694	473,259
	1,032,000,594	1,472,184,143

 $<sup>^{\</sup>rm 1}{\rm Trade}$  receivables that are temporarily overdue.

Details of long-term trade and other receivables of the Group as at December 31, 2020 and 2019, are as follows:

thousands of Korean won

	2020	2019
Long-term loans	62,022,303	66,131,955
Deposits	186,701,992	80,853,033
Lease receivables	29,886,201	34,501,706
	278,610,496	181,486,694

Movements in provisions for impairment of trade and other receivables for the years ended December 31, 2020 and 2019, are as follows:

in thousands of Korean won

	2020	2019
Beginning balance	574,760	715,799
Impairment loss on receivables	931,518	237,216
Receivables written off during the year as uncollectible	(69,084)	(378,255)
Ending balance	1,437,194	574,760

#### 12. Inventories

Inventories as at December 31, 2020 and 2019, are as follows:

in thousands of Korean won

2020	2019
73,021,272	36,787,415
299,719,797	373,887,781
124,515,866	180,131,344
413,127,794	622,963,408
76,507,725	43,419,827
787,370,000	1,237,319,034
1,774,262,454	2,494,508,809
	73,021,272 299,719,797 124,515,866 413,127,794 76,507,725 787,370,000

Details of cost of inventories recognized for the years ended December 31, 2020 and 2019, are as follows:

in thousands of Korean won

	2020	2020
Cost of inventories	12,575,766,581	19,035,689,556
Loss on valuation of inventories (reversal)	4,308,460	(140,315,275)

#### 13. Investments in Joint Ventures and Associates

Investments in joint ventures and associates as at December 31, 2020 and 2019, are as follows:

		Ownership —	20	20	2019	
	Country	(%)	Acquisition cost	Book amount	Acquisition cost	Book amount
Joint Ventures						
Hyundai Cosmo Petrochemical Co., Ltd.	Korea	50	316,100,000	233,810,744	316,100,000	270,482,315
Hyundai and Shell Base Oil Co. Ltd. <sup>1</sup>	Korea	60			78,000,000	145,447,525
Associates						
KORAMCO ENERGY PLUS REIT <sup>2</sup>	Korea	11.5	40,000,000	40,728,671		_
KORAMCO Ocheon PFV Co., Ltd. 2	Korea	13.5	4,050,000	3,936,417		-
KORAMCO Banpo PFV Co., Ltd. <sup>2</sup>	Korea	13.5	3,780,000	3,649,424		_
KORAMCO Amsa PFV Co., Ltd. <sup>2</sup>	Korea	14.2	920,000	856,937		_
KORAMCO Dongjak PFV Co., Ltd. <sup>2</sup>	Korea	13.2	1,250,000	1,172,442		
			366,100,000	284,154,635	394,100,000	415,929,840

Although the Group holds 60% ownership interest of Hyundai and Shell Base Oil Co. Ltd. until 2019, the Group classifies the entity as a joint venture since the Group should obtain a consent from other shareholders for certain decisions in accordance with shareholders agreement. The entity has been changed from a joint venture to a subsidiary due to changes in certain decisions in accordance with shareholders agreement for the year ended December 31, 2020.

<sup>&</sup>lt;sup>2</sup> Account receivables impaired is the balance in which the allowance was set less the recoverable amount (receivables pledged as collateral) among the account receivables in arrears.

<sup>&</sup>lt;sup>2</sup> Although the Group holds less than 20% ownership interest of the entities, the Group classifies the entities as associates since it is determined that the Group has significant influence due to the right to appoint its Board of Directors.

December 31, 2020 and 2019

Details of valuation of investments in associates and joint ventures that are accounted for using the equity method for the years ended December 31, 2020 and 2019, are as follows:

#### (1) 2020

in thousands of Korean won

Beginning	Acquisition	Share of profit or loss of joint ventures	Share of other comprehensive income of joint ventures	Dividends received	Disposals of investments accounted for using the equity method	Ending
270,482,315	_	(33,245,074)	1,573,503	(5,000,000)	-	233,810,744
145,447,525	_	33,322,217	-	-	(178,769,742)	-
	40,000,000	1,153,321	(19,585)	-	(405,065)	40,728,671
-	4,050,000	14,164	(127,747)	-	-	3,936,417
_	3,780,000	(11,287)	(119,289)	-	-	3,649,424
-	920,000	(30,471)	(32,592)	-		856,937
	1,250,000	(33,398)	(44,160)	-		1,172,442
415,929,840	50,000,000	1,169,472	1,230,130	(5,000,000)	(179,174,807)	284,154,635
	270,482,315 145,447,525	270,482,315 - 145,447,525 -  40,000,000 - 4,050,000 - 3,780,000 - 920,000 - 1,250,000	Beginning         Acquisition ventures           270,482,315         - (33,245,074)           145,447,525         - 33,322,217           - 40,000,000         1,153,321           - 4,050,000         14,164           - 920,000         (30,471)           - 1,250,000         (33,398)	Beginning         Acquisition         Share of profit or loss of joint ventures         comprehensive income of joint ventures           270,482,315         -         (33,245,074)         1,573,503           145,447,525         -         33,322,217         -           -         40,000,000         1,153,321         (19,585)           -         4,050,000         14,164         (127,747)           -         3,780,000         (11,287)         (119,289)           -         920,000         (30,471)         (32,592)           -         1,250,000         (33,398)         (44,160)	Share of profit or loss of joint ventures	Reginning   Acquisition   Share of profit or loss of joint ventures   Dividends investments accounted for using the equity method

<sup>&</sup>lt;sup>1</sup> In November 2020, investments accounted for using the equity method were disposed of and investments in subsidiaries were acquired.

#### (2) 2019

in thousands of Korean won

	Beginning	Share of profit or loss of joint ventures	Share of other comprehensive income of joint ventures	Dividends received	Ending
Joint Ventures					
Hyundai Cosmo Petrochemical Co., Ltd.	258,351,940	42,119,874	10,501	(30,000,000)	270,482,315
Hyundai and Shell Base Oil Co. Ltd.	198,727,079	(1,654,044)	(25,510)	(51,600,000)	145,447,525
	457,079,019	40,465,830	(15,009)	(81,600,000)	415,929,840

Elimination of unrealized gains and losses for the years ended December 31, 2020 and 2019, is as follows:

#### (1) 2020

in thousands of Korean won					
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	Transaction	Beginning unrealized gain	Amount accrued	Amount realized	Ending unrealized gain
Joint Ventures					
Hyundai Cosmo	Disposal of PP&E	(87,067,502)		240,317	(86,827,185)
Petrochemical Co., Ltd.	Sale of inventories	(380,048)	(178,749)	380,048	(178,749)
Hyundai and Shell Base	Disposal of PP&E	(113,003)		113,003	-
Oil Co. Ltd. <sup>1</sup>	Sale of inventories	(861,624)	(342,478)	1,204,102	-
		(88,422,177)	(521,227)	1,937,470	(87,005,934)

<sup>&</sup>lt;sup>1</sup> In November 2020, investments accounted for using the equity method were disposed of and investments in subsidiaries were acquired.

#### (2) 2019

in thousands of Korean won

	Transaction	Beginning unrealized gain	Amount accrued	Amount realized	Ending unrealized gain
Joint Ventures					
Hyundai Cosmo	Disposal of PP&E	(112,012,704)		24,945,202	(87,067,502)
Petrochemical Co., Ltd.	Sale of inventories	(1,517,198)	(380,048)	1,517,198	(380,048)
Hyundai and Shell Base	Disposal of PP&E	(113,003)			(113,003)
Oil Co. Ltd.	Sale of inventories	(939,635)	(861,624)	939,635	(861,624)
		(114,582,540)	(1,241,672)	27,402,035	(88,422,177)

Financial information of the investees as at and for the year ended December 31, 2020, is as follows:

#### (1) 2020

in thousands of Korean won

	Assets	Liabilities	Sales	Profit (loss) for the year
Joint Ventures		_		
Hyundai Cosmo Petrochemical Co., Ltd.	1,106,915,790	465,282,434	1,501,599,350	(67,373,379)
Associates				
KORAMCO ENERGY PLUS REIT	1,040,629,167	686,187,911	28,553,665	8,921,290
KORAMCO Ocheon PFV Co., Ltd.	87,988,453	58,829,804	2,303,124	104,921
KORAMCO Banpo PFV Co., Ltd.	83,128,514	56,095,745	1,636,266	(83,607)
KORAMCO Amsa PFV Co., Ltd.	17,848,174	11,793,729	307,419	(215,284)
KORAMCO Dongjak PFV Co., Ltd.	25,638,598	16,728,038	377,764	(253,828)

#### 14. Investment Property

Investment property as at December 31, 2020 and 2019, are as follows:

	2020	2019
Land	9,819,838	9,819,838

 $<sup>^{2}</sup>$  The percentage of ownership decreased from 16.7% to 11.5% due to the public offering in August 2020.

December 31, 2020 and 2019

#### 15. Property, Plant and Equipment

Changes in property, plant and equipment for the years ended December 31, 2020 and 2019, are as follows:

(1) 2020

in thousands of Korean won

	Land	Buildings	Structures	Machinery and equipment	Vessels	Vehicles	Tools	Construction- in-progress	Others	Total
Opening acquisition cost	1,305,625,269	384,883,066	1,699,217,765	5,199,580,761	47,254,319	13,898,808	198,803,872	778,381,431	468,101,179	10,095,746,470
Opening accumulated depreciation	-	(92,033,214)	(582,138,105)	(1,745,279,326)	(11,880,806)	(10,835,639)	(150,840,117)	-	(320,159,347)	(2,913,166,554)
Opening net book amount	1,305,625,269	292,849,852	1,117,079,660	3,454,301,435	35,373,513	3,063,169	47,963,755	778,381,431	147,941,832	7,182,579,916
Acquisitions	127,516	358,169	690,953	1,025,289	-	167,918	7,905,423	1,995,514,158	56,470	2,005,845,896
Business combination (Note 35)	11,682,939	3,146,370	40,377,992	169,967,687	-	15,251	12,462	34,712	39,720,362	264,957,775
Disposals	(5,457,329)	(1,052,088)	(175,225)	(1,802,381)	-	(33,676)	(181,106)		(11,758,489)	(20,460,294)
Transfer	18,065,426	12,486,051	75,256,323	477,542,596		1,092,895	15,143,861	(746,195,703)	142,742,102	(3,866,449)
Gain on Revaluation	311,779,439									311,779,439
Depreciation		(9,653,263)	(43,977,921)	(241,215,461)	(2,408,246)	(1,577,143)	(20,974,537)		(83,313,500)	(403,120,071)
Exchange differences		-	-	-	(1,944,699)	-	(26,941)	9,192	-	(1,962,448)
Closing acquisition cost	1,641,823,260	400,030,918	1,828,507,110	5,923,035,216	44,405,509	14,706,556	219,139,887	2,027,743,790	416,558,686	12,515,950,932
Closing accumulated depreciation	-	(101,895,827)	(639,255,328)	(2,063,216,051)	(13,384,941)	(11,978,142)	(169,296,970)	-	(181,169,909)	(3,180,197,168)
Closing net book amount	1,641,823,260	298,135,091	1,189,251,782	3,859,819,165	31,020,568	2,728,414	49,842,917	2,027,743,790	235,388,777	9,335,753,764
-	1,641,823,260	298,135,091	1,189,251,782	3,859,819,165	31,020,568	2,728,414	49,842,917	2,027,743,790	235,388,777	9,335,753,764

(2) 2019

in thousands of Korean won

	Land	Buildings	Structures	Machinery and equipment	Vessels	Vehicles	Tools	Construction- in-progress	Others	Total
Opening acquisition cost	1,234,254,279	361,882,545	1,688,542,549	4,982,759,088	45,634,007	13,889,418	184,254,916	274,694,307	425,912,660	9,211,823,769
Opening accumulated depreciation	-	(85,079,518)	(542,025,899)	(1,490,534,642)	(9,191,604)	(12,201,805)	(135,510,318)		(259,300,704)	(2,533,844,490)
Opening net book amount	1,234,254,279	276,803,027	1,146,516,650	3,492,224,446	36,442,403	1,687,613	48,744,598	274,694,307	166,611,956	6,677,979,279
Acquisitions	1,990,336	259,404	650,488	4,751,160		244,388	13,639,307	862,238,294	92,759	883,866,136
Business transfer	29,828,238	529,646	6,331,756	128,172	-	29,500	130,000	-	-	36,977,312
Disposals	(4,825,001)	(2,389,414)	(470,641)	(3,802,868)	-	(4,854)	(117,427)	-	(413,046)	(12,023,251)
Transfer	44,377,417	26,768,967	7,551,374	222,929,996	-	1,804,381	4,603,126	(358,547,927)	42,295,271	(8,217,395)
Depreciation	-	(9,121,778)	(43,499,967)	(261,929,471)	(2,378,859)	(697,859)	(19,036,427)	-	(60,645,108)	(397,309,469)
Exchange differences	-	-	-	-	1,309,969	-	578	(3,243)	-	1,307,304
Closing acquisition cost	1,305,625,269	384,883,066	1,699,217,765	5,199,580,761	47,254,319	13,898,808	198,803,872	778,381,431	468,101,179	10,095,746,470
Closing accumulated depreciation		(92,033,214)	(582,138,105)	(1,745,279,326)	(11,880,806)	(10,835,639)	(150,840,117)	-	(320,159,347)	(2,913,166,554)
Closing net book amount	1,305,625,269	292,849,852	1,117,079,660	3,454,301,435	35,373,513	3,063,169	47,963,755	778,381,431	147,941,832	7,182,579,916

Line items including depreciation in the statements of income for the years ended December 31, 2020 and 2019, are as follows:

in thousands of Korean won

	2020	2019
Cost of sales	377,970,741	377,217,970
Selling and administrative expenses	25,149,330	20,091,499
	403,120,071	397,309,469

During the year, the Group has capitalized borrowing costs amounting to  $\mbox{$\mbox{$$\seta$}}$  43,390 million (2019:  $\mbox{$\mbox{$$\mbox{$$\seta$}}$}$  4,030 million) on property, plant and equipment that are qualifying assets. The capitalization rate of borrowings used to determine the amount of borrowing costs to be capitalized is 3.75% (2019: 2.66%).

The Group has investment plans for the establishment of new process and the amounts agreed or to be agreed are  $\mbox{$W$}$  335,843 million as at December 31, 2020. Hyundai Chemical Co., Ltd., a subsidiary of the Group, has investment plans for the construction of HPC and others (expected investment:  $\mbox{$W$}$  2,730,000 million), and the acquired or agreed amount for the acquisition is  $\mbox{$W$}$  2,384,900 million.

Details of property, plant and equipment provided as collaterals as at December 31, 2020, are as follows:

(1) 2020

in thousands of Korean won, thousands of USD

	Book amount	Secured amount	Related line item	Related amount	Secured party
Land / Building of subsidiaries	2,816,706,198	3,138,000,000		1,245,833,000	Korea Development bank and other financial institutions
Land / Building of subsidiaries	198,297,480	120,000,000		100,000,000	Hana bank and other financial institutions
Land / Building of subsidiaries	248,061,365	192,000,000	Borrowings (Note 19)	121,700,000	Korea Development bank and other financial institutions
Land / Building of subsidiaries	37,024,596	36,000,000		24,375,000	Korea Development bank and other financial institutions
Vessel of subsidiaries	19,772,212	USD 12,033		USD 12,033	HIHD Co., Ltd.

In addition, Hyundai Chemical Co., Ltd., a subsidiary of the Group, has Erection All Risks (EAR) Insurance in relation to the new HPC project amounting to  $\mbox{$W$}$  27,300,000 million, and provides the rights to receive insurance benefits as collaterals to Korea Development bank and other financial institutions (pledged amount:  $\mbox{$W$}$  2,280 billion).

Land was revalued by an external independent valuer as at December 31, 2020. The valuation is based on the officially assessed reference land price method, adjusted to the current state of the land, and the price is calculated based on the official market price. The price is evaluated based on recent market transactions based on the conditions of the transaction with an independent third party. If an asset's carrying amount is increased as a result of a revaluation, the increase is recognized in other comprehensive income and accumulated in equity under the heading of revaluation surplus, net of deferred income tax. However, the increase is recognized in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognized in profit or loss.

December 31, 2020 and 2019

The following table analyzes the book amount of land measured under revaluation model and cost model as at December 31, 2020.

in thousands of Korean won

	Revaluation model	Cost model	
Land	1,641,823,260	1,029,996,957	

Gain on revaluation increased as a result of revaluation is  $\forall$  227,047 million (after income tax effect). Gain on revaluation of  $\forall$  226,333 million and  $\forall$  714 million was recognized as other comprehensive income and other income, respectively.

The following table analyzes the property, plant and equipment carried at fair value, by valuation method. For further specific description of fair value hierarchy, see Note 5.2.

The breakdown of the fair value hierarchy level for the fair value measurement of land is as follows:

#### (1) 2020

in thousands of Korean won

	Level 1	Level 2	Level 3	Total
Land	-	-	1,641,823,260	1,641,823,260

Valuation techniques and inputs used in land are as follows:

	Level	Valuation technique	Level 3 inputs	Relationship between fair value and inputs
			Fixed point of view (land price change rate)	When land price change rate rises (falls), fair value increases (decreases)
		Officially assessed	Local factors	When the regional factor increases (decreases), fair value increases (decreases)
Land	3	reference land price method	Individual factors	When the correction value such as the ground condition increases (decreases), fair value increases (decreases)
			Other factors	The correction for land price level etc. increases (decrease), fair value increases (decreases)

#### 16. Intangible Assets

Changes in intangible assets for the years ended December 31, 2020 and 2019, are as follows:

#### (1) 2020

in thousands of Korean won

	Goodwill	Software	Membership rights	Customer relationships <sup>1</sup>	Others	Total
Book amount at January 1, 2020	59,052,163	9,010,995	13,218,909	-	14,285,765	95,567,832
Business combination (Note 35)	66,310,864	53,990	-	51,093,000	30,868	117,488,722
Amortization		(3,642,431)	-	(745,276)	(1,841,306)	(6,229,013)
Transfer		2,814,254	-	-	1,052,182	3,866,436
Exchange differences	-	-	(18,663)	-	96	(18,567)
Book amount at December 31, 2020	125,363,027	8,236,808	13,200,246	50,347,724	13,527,605	210,675,410

<sup>&</sup>lt;sup>1</sup> Customer relationships are intangible assets identified in acquiring Hyundai and Shell Base Oil Co. Ltd. for the year ended December 31, 2020.

#### (2) 2019

in thousands of Korean won

	Goodwill	Software	Membership rights	Others	Total
Book amount at January 1, 2019	56,629,475	9,394,012	13,209,483	16,456,968	95,689,938
Additions	_	287,000	14,399	-	301,399
Business transfer	2,422,688	-		-	2,422,688
Disposals	-	-	(15,000)	(1,972)	(16,972)
Amortization	-	(3,881,032)		(1,918,551)	(5,799,583)
Transfer	-	3,211,015		(250,862)	2,960,153
Exchange differences		-	10,027	182	10,209
Book amount at December 31, 2019	59,052,163	9,010,995	13,218,909	14,285,765	95,567,832

Line items including amortization in the statements of income for the years ended December 31, 2020 and 2019, are as follows:

in thousands of Korean won

	2020	2019
Cost of sales	1,178,195	1,324,522
Selling and administrative expenses	5,050,818	4,475,061
	6,229,013	5,799,583

#### Impairment of Intangible Assets

The Group's goodwill as at December 31, 2020 and 2019, represents the goodwill arising from acquisition and business combination. Goodwill is distributed based on the cash-generating units, by which the executives manage the goodwill.

	Goodwill allocation amount		
	2020	2019	
Goodwill			
Domestic refined oil	122,940,340	56,629,475	
Tank terminal	2,422,687	2,422,688	
	125,363,027	59,052,163	

Key Assumptions	Domestic refined oil	Tank terminal
Sales growth rate	11.55%	5.36%
Operating profit margin compared to sales volume	2.78%	-
Growth rate beyond 5 years	1.00%	0.00%
Pre-tax discount rate	10.29%	10.69%

December 31, 2020 and 2019

The recoverable amount of all CGUs has been determined based on value-in-use calculations. These calculations use post-tax cash flow projections based on financial budgets approved by management covering a five-year period. The key assumptions used in calculating value-in-use are as follows:

- Cash flows are estimated based on historical experience, actual operating results and five-year business plans.
- The depreciation and amortization tax saving effect are estimated by considering possibility of the amortization of each asset, amortization period under tax law and the corporate tax rate.
- Weighted average cost of capital for goodwill impairment tests was estimated using the national credit rating implied risk free rate, cost of equity capital using the beta of similar companies, and interest rates of corporate bonds considering the corporate credit rating.

The impairment test on goodwill suggests that the carrying amount of cash-generating units does not exceed the recoverable amount.

#### 17. Lease

Set out below is information for leases when the Group is a lessee.

(a) Amounts recognized in the consolidated statement of financial position

in thousands of Korean won

		in thousands of Korean won
	2020	2019
Right-of-use assets		
Land	17,465,001	2,205,513
Buildings	13,623,628	19,517,156
Gas stations	549,485,520	91,513,892
Structures	23,109,995	26,906,400
Machinery and equipment	104,966	94,947
Vehicles	1,293,226	962,782
Vessel	612,455,716	256,041,295
	1,217,538,052	397,241,985
	2020	2019
Lease liabilities		
Current	187,565,724	111,069,700
Non-current	982,035,758	307,071,160
	1,169,601,482	418,140,860

Additions to the right-of-use assets during the 2020 financial year were \to 1,018,695 million.

#### (b) Amounts recognized in the consolidated statement of profit or loss

The consolidated statement of profit or loss shows the following amounts relating to leases:

in thousands of Korean won

	2020	2019
Depreciation of right-of-use assets		
Land	4,058,615	2,828,476
Buildings	8,627,701	9,115,279
Gas stations	44,101,643	12,139,144
Structures	20,93 ,662	13,964,801
Machinery and equipment	58,506	72,276
Vehicles	810,824	729,519
Vessel	119,807,676	85,073,291
	198,398,627	123,922,786
Interest expense relating to lease liabilities (included in finance cost)	24,650,234	12,049,443
Interest income relating to lease receivables (included in finance income)	(1,098,747)	(529,810)
Expense relating to short-term lease and low- value assets (included in cost of sales and selling and administrative expenses)	4,261,567	2,370,979
Expense relating to variable lease payments and other leases (included in cost of sales and selling and administrative expenses)	816,189	1,761,204
Gain (loss) on foreign currency translation relating to lease liabilities	(45,180,236)	8,436,978

The total cash outflow for leases in 2020 was ₩ 214,552 million.

#### (c) Sub-lease

The Group has a sub-lease in relation to the operation of gas station and the revenue from the sub-lease amounts to ₩ 4,486 million.

#### (d) Lessor accounting

Gross investment in the lease and the present value of minimum lease payments of finance lease as at December 31, 2020 and 2019, are as follows:

in thousands of Korean won

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	2020		2019	
	Gross investment in the lease	Present value of minimum lease payments	Gross investment in the lease	Present value of minimum lease payments
Within one year	8,363,240	7,469,955	8,199,800	7,141,938
Later than one year but not later than five years	25,171,060	23,446,167	29,898,800	27,603,971
Later than five years	6,245,400	6,440,034	7,281,625	6,897,735
	39,779,700	37,356,156	45,380,225	41,643,644

December 31, 2020 and 2019

Details of unearned finance income of finance lease as at December 31, 2020 and 2019, are as follows:

in thousands of Korean won

	2020	2019
Gross investment in the lease	39,779,700	45,380,225
Net investment in the lease	37,356,156	41,643,644
Unearned finance income	2,423,544	3,736,581

#### 18. Trade and Other Payables

in thousands of Korean won

	2020	2019	
Current			
Trade payables	1,117,675,350	1,551,726,164	
Other payables	1,005,840,436	1,126,770,723	
Accrued expenses	26,032,413	19,227,922	
	2,149,548,199	2,697,724,809	
Non-current			
Long-term other payables	175,582,800	-	
Long-term withholdings	7,968,186	7,907,576	
	183,550,986	7,907,576	

#### 19. Short and Long-term Financial Liabilities

Details of short-term financial liabilities as at December 31, 2020 and 2019, are as follows:

in thousands of Korean won

	2020	2019
Short-term borrowings	204,117,979	797,944,933
Current portion of long-term borrowings	309,947,487	137,107,075
Current portion of bonds	129,904,756	189,960,867
	643,970,222	1,125,012,875

Details of long-term financial liabilities as at December 31, 2020 and 2019, are as follows:

in thousands of Korean won

	2020	2019
Long-term borrowings	2,119,321,163	933,430,423
Bonds	2,751,675,335	1,874,977,309
	4,870,996,498	2,808,407,732

Details of short-term borrowings as at December 31, 2020 and 2019, are as follows:

in thousands of Korean won

Type of borrowings	Creditor	Interest (%)	2020	2019
General borrowings	The Export-Import Bank of Korea	1.88%	50,000,000	320,000,000
General borrowings in foreign currency	Kookmin Bank	2.03%	32,640,000	-
Borrowing for operating funds	Shinhan Bank	2.39%	10,000,000	2,550,000
Usance L/C	Korea Development Bank	1.06%	5,549,888	-
Invoice Loan	China Construction Bank and others	0.89%~1.24%	105,928,091	475,394,933
			204,117,979	797,944,933

Details of long-term borrowings as at December 31, 2020 and 2019, are as follows:

	·				
Type of borrowings	Creditor	Interest (%)	Maximum Maturity	2020	2019
Commercial paper	Shinhan Bank and others	CD3M + 0.29%, CD3M + 0.85%	2023-10-07	320,000,000	150,000,000
General borrowings	NongHyup Bank and others	CD3M + 1.61%, CD3M + 1.70%, 1.45%~1.88%	2024-09-25	200,000,000	-
Facility loan	Korea Development Bank and others	2.13%~2.29%, Bank Bonds 6M + 1.618%	2026-09-17	280,000,000	-
Facility loan	Korea Development Bank	2.48%	2024-07-31	24,375,000	30,000,000
Facility loan	Hana Bank and others	2.48%	2027-12-28	99,379,709	-
Facility loan	Korea Development Bank and others	2.45%~3.52%	2029-12-17	1,222,355,508	736,193,930
Borrowing for operating funds	The Export-Import Bank of Korea and others	1.97%~2.73%	2023-11-25	150,000,000	-
Facility loan	Korea Development Bank and others	2.35~2.59%	2026-05-29	120,066,019	138,658,550
Shipbuilding loan	HIHD Co., Ltd.	-	2028-05-17	13,092,414	15,685,018
				2,429,268,650	1,070,537,498
Less: Current maturiti	ies			(309,947,487)	(137,107,075)
				2,119,321,163	933,430,423

December 31, 2020 and 2019

Details of bonds as at December 31, 2020 and 2019, are as follows:

				in thou	isands of Korean won
Series	Issuance date	Maturity date	Interest (%)	2020	2019
Hyundai Oilbank Co	o., Ltd.				
114-3 <sup>rd</sup>	2014-11-21	2021-11-21	2.94%	59,966,594	59,930,151
115-2 <sup>nd</sup>	2015-03-27	2020-03-27	2.20%	-	189,960,867
115-3 <sup>rd</sup>	2015-03-27	2022-03-27	2.53%	139,897,315	139,815,167
116-1 <sup>st</sup>	2017-07-07	2022-07-07	2.58%	179,801,397	179,675,963
116-2 <sup>nd</sup>	2017-07-07	2024-07-07	2.85%	99,811,050	99,758,319
117 <sup>th</sup>	2018-01-26	2023-01-26	2.89%	149,764,285	149,651,142
118-1 <sup>st</sup>	2018-08-28	2021-08-28	2.21%	69,938,163	69,845,406
118-2 <sup>nd</sup>	2018-08-28	2023-08-28	2.44%	89,827,505	89,762,820
118-3 <sup>rd</sup>	2018-08-28	2025-08-28	2.63%	39,895,516	39,873,126
119-1 <sup>st</sup>	2019-01-28	2024-01-26	2.14%	119,710,193	119,604,309
119-2 <sup>nd</sup>	2019-01-28	2026-01-28	2.41%	79,783,967	79,733,706
120-1 <sup>st</sup>	2019-07-09	2024-07-09	1.66%	59,824,360	59,769,440
120-2 <sup>nd</sup>	2019-07-09	2026-07-09	1.81%	119,677,060	119,607,615
120-3 <sup>rd</sup>	2019-07-09	2029-07-09	2.14%	119,661,596	119,610,706
121-1 <sup>st</sup>	2019-10-14	2024-10-14	1.68%	159,590,232	159,467,637
121-2 <sup>nd</sup>	2019-10-14	2026-10-14	1.88%	99,720,311	99,662,707
121-3 <sup>rd</sup>	2019-10-14	2029-10-14	2.11%	139,585,957	139,525,719
122-1 <sup>st</sup>	2020-02-26	2023-02-26	1.49%	79,752,588	-
122-2 <sup>nd</sup>	2020-02-26	2025-02-26	1.60%	199,399,692	-
122-3 <sup>rd</sup>	2020-02-26	2027-02-26	1.83%	79,727,107	-
122-4 <sup>th</sup>	2020-02-26	2030-02-26	2.11%	139,537,936	-
123-1 <sup>st</sup>	2020-07-06	2023-07-06	1.66%	189,435,697	-
123-2 <sup>nd</sup>	2020-07-06	2025-07-06	1.88%	49,795,748	-
123-3 <sup>rd</sup>	2020-07-06	2030-07-06	2.43%	59,763,177	-
124-1 <sup>st</sup>	2020-10-16	2025-10-16	1.83%	69,830,331	-
124-2 <sup>nd</sup>	2020-10-16	2030-10-16	2.46%	29,925,935	-
FRN	2020-05-06	2023-05-08	1.54%	108,205,155	-
Hyundai Chemical (	Co., Ltd.				
1-1 <sup>st</sup>	2019-08-13	2024-08-13	2.48%	129,784,483	129,725,706
1-2 <sup>nd</sup>	2019-08-14	2024-08-13	2.48%	19,966,741	19,957,670
				2,881,580,091	2,064,938,176
Less: Current matu	rities			(129,904,756)	(189,960,867)
				2,751,675,335	1,874,977,309

#### 20. Net Defined Benefit Liability

Details of net defined benefit liabilities recognized in the statements of financial position as at December 31, 2020 and 2019, are as follows:

		in thousands of Korean won
	2020	2019
Present value of funded defined benefit obligations	264,030,898	256,891,006
Fair value of plan assets	(260,150,608)	(240,067,555)
Contribution to National Pension Fund	(267,608)	(290,950)
Net defined benefit liabilities in the statement of financial position	3,612,682	16.532.501

Movements in the defined benefit obligations for the years ended December 31, 2020 and 2019, are as follows:

n thousands of Korean won

	2020	2019
Beginning balance	256,891,006	216,798,107
Current service cost	31,825,460	25,725,301
Interest expense	5,732,069	5,383,809
Remeasurements:	(15,815,450)	24,297,694
Actuarial loss from change in demographic assumptions	-	2,759,801
Actuarial loss (gain) from change in financial assumptions	(14,133,016)	12,363,235
Actuarial loss (gain) from experience adjustments	(1,682,434)	9,174,658
Benefits payments	(27,659,030)	(18,210,711)
Effect of transference	13,056,843	2,896,806
Ending balance	264,030,898	256,891,006

Movements in the fair value of plan assets for the years ended December 31, 2020 and 2019, are as follows:

	2020	2019
Beginning balance	240,067,555	226,043,108
Expected return on plan assets	5,101,393	5,482,358
Remeasurements:		
Return on plan assets (excluding amounts included in interest income)	(972,889)	(1,476,435)
Contributions:		
Employers	32,184,171	20,696,863
Payments from plans:		
Benefit payments	(16,229,622)	(10,678,339)
Ending balance	260,150,608	240,067,555

December 31, 2020 and 2019

Plan assets as at December 31, 2020 and 2019, consist of as follows:

At the end of the reporting period, plan assets are invested in principal-guaranteed products.

Expected contributions to post-employment benefit plans for the financial year following the reporting period are ₩ 30,465 million.

The significant actuarial assumptions as at December 31, 2020 and 2019, are as follows:

in percentage, %

	2020	2019
Discount rate	2.41% ~ 2.71%	2.35% ~ 2.56%
Salary growth rate	1.19% ~ 3.36%	1.50% ~ 3.50%

The sensitivity of the defined benefit obligations to changes in the principal assumptions is as follows:

in percentage, %

	Effect on defined benefit obligations			
	Changes in principal assumption	Increase in principal assumption	Decrease in principal assumption	
Discount rate	1%	9.81% decrease	11.65% increase	
Salary growth rate	1%	11.45% increase	9.85% decrease	

The weighted average maturity of the defined benefit obligations at the end of the reporting period is 11.83 years.

Expected maturity analysis of undiscounted pension benefits as at December 31, 2020, is as follows:

in thousands of Korean won

	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years	Total
Pension benefits	10,033,310	21,857,627	39,065,899	947,913,755	1,018,870,591

#### 21. Provisions, Contingent Liabilities and Commitments

#### 21.1 Provisions

Changes in provisions for the years ended December 31, 2020 and 2019, are as follows:

#### (1) 2020

in thousands of Korean won

	Beginning balance	Increase	Decrease	Ending balance
Provision for environmental restoration costs	3,618,783	46,536,773	(1,401,473)	48,754,083
Other provisions	-	1,767,600	-	1,767,600
	3,618,783	48,304,373	(1,401,473)	50,521,683

#### (2) 2019

in thousands of Korean won

	Beginning balance	Increase	Decrease	Ending balance
Provision for environmental restoration costs	3,817,742	381,071	(580,030)	3,618,783
Other provisions <sup>1</sup>	95,038,500	-	(95,038,500)	-
	98,856,242	381,071	(95,618,530)	3,618,783

<sup>&</sup>lt;sup>1</sup> In 2020, the Group has fully paid the penalty imposed by the U.S. Department of Justice as a result of its inspection on alleged collusion in tender process for supplying fuel to the U.S Army bases in Korea.

In regards to Carbon gas emissions, the Group sets provision for expected expenses due to emissions exceeding the emission rights capacity in a given year. As at December 31, 2020, the given amount of emission rights for each year are as follows:

in thousand Tor

	2018	2019	2020	Total
Emission allowances allocated free of charge	3,595	3,447	3,491	10,533

At the end of the reporting period, there are no estimated expenses to be spent by the Group in the future.

#### 21.2 Contingent Liabilities

in billions of Korean won

	Description	Amount	Outcome and expectation
Lawsuit as the defendant	Damage claim suit (The Fair Trade Commission)	- Pending at Seoul Central District - Unable to expect the outcome	
	Damage claim suit (THE HANKOOK SHELL OIL CO.,LTD)	14.2	<ul><li>Pending at Seoul High Court</li><li>Partially in favor of the company at Seoul Central District Court</li></ul>

#### 21.3 Commitments

Details of borrowing agreements the Group has entered with financial institutions are as follows:

Type of borrowings	Creditor	Currency	Limit	Exercised amount
Short-term borrowings	The Export-Import Bank of Korea and others	KRW	110,000,000	60,000,000
Long-term borrowings (facility loans)	Korea Development Bank and others	KRW	3,255,000,000	1,771,908,000
Long-term borrowings (general loans)	NH Bank and others	KRW	500,000,000	350,000,000
Long-term borrowings (Commercial papers)	Shinhan Bank and others	KRW	320,000,000	320,000,000

December 31, 2020 and 2019

Details of other commitments the Group has entered with financial institutions are as follows:

in thousands of Korean won, USD

	Creditor	Currency	Limit	Exercised amount
Trade financings	Korea Development Bank and others	USD	4,163,000,000	497,428,180
Factorings USD	ING Bank and others	USD	513,308,591	135,702,177
Factorings KRW	ING Bank and others	KRW	590,000,000	78,900,000
Bank overdraft	Hana Bank and others	KRW	30,000,000	-
Corporate purchase loans	UOB Bank	KRW	150,000,000	-

Details of guarantees provided by others as at December 31, 2020, are as follows:

in thousands of Korean won, USD

Providers	Description	Currency	Amount
The Export-Import Bank of Korea and others	Foreign-currency payment guarantees	USD	170,000,000
Seoul Guarantee Insurance	Contract, payment guarantees	KRW	48,790,179
Lotte Chemical Corp.	Cash deficiency support agreement on borrowings	KRW	1,046,000,000
OCI Co., Ltd	Cash deficiency support agreement on borrowings	KRW	160,000,000

The Group entered in a long-term purchase agreement of crude oil and a product supply agreement of refined oil with Saudi Aramco as follows:

	Long-term purchase a	greement of crude oil	Product supply agreement of refined oil
Contracting party	Saudi arabian Oil Company	Aramco Trading Company	Aramco Trading Singapore Pte Ltd
Contract period	January 1, 2020 ~ December 31, 2039		February 1, 2020 ~ December 31, 2039
Contract product	Saudi crude oil	Other crude oil	Gasoline, diesel, aviation fuel

During the year ended December 31, 2020, the Group has entered into a lease contract with KORAMCO ENERGY PLUS REIT, and the contract period is 10 years from the commencement date of the contract, June 1, 2020. The Group has an option to extend the contract period by 5 years if requested by the Group before two and a half years from the closing date of the contract.

The Group has entered into a share option agreement with Shell Petroleum Company Limited ("Shell"), a joint venture partner of Hyundai and Shell Base Oil Co., Ltd. ("HSB").

According to the agreement, Shell holds a put option to sell 40% stake to Hyundai Oilbank Co., Ltd. (the "Company") at the estimated value of the independent external valuation institution (from August 2014 to August 2021: if the amount of raw materials supplied from the Company to HSB is below a certain level, after August 2021: no condition).

In addition, the Company has a call option to acquire 40% stake from Shell at the estimated value of the independent external valuation institution (from August 2021 to August 2029: if the amount of products Shell purchased from HSB is below a certain level, after August 2029: no condition).

The Group provides one blank check to Korea National Oil Corporation as collaterals in relation to the emergency lease of petroleum reserve. In addition, the Group provides a payment guarantee issued by Kookmin Bank to NTS Seosan District Office in relation to the delay in payment of the transportation tax. In this regard, the guaranteed amount is  $\mbox{$W$}$  308 billion and the guarantee period is from November 30, 2020 to April 30, 2021.

#### 22. Derivative Financial Instruments

Details of derivative financial instruments as at December 31, 2020, are as follows:

in thousands of Korean won, USD, JPY and EUR

				Sell	Buy	
Purpose	Type of contract	Details of contract			Биу	
			Contract unit	Contract value	Contract unit	Contract value
			KRW	76,866,321	USD	67,443
Cash flow hedge .	Currency forward contracts	Foreign exchange risk hedge	KRW	52,277,080	EUR	39,170
	contracts	nok neage	KRW	5,372,816	JPY	510,656
	Currency swap contracts	Fixed variable interest rates	KRW	159,977,000	USD	130,000
	Interest rate swap contracts	Fluctuation in interest rate	KRW	187,182,000	KRW	150,030,000
	Commodity forward contracts	Refining margin risk hedge	USD	306,695	USD	298,533
Trading purposes hedge	Currency forward	Selling at maturity at a	USD	26,000	KRW	28,288,000
	contracts contra	contracted exchange rate	KRW	59,153,625	USD	54,000

Derivative financial instruments as at December 31, 2020 and 2019, are as follows:

#### (1) 2020

	Type of contract	Financial assets at fair value through profit or loss	Financial liabilities at fair value through profit or loss	Derivative financial assets	Derivative financial liabilities
	Currency forward contracts	-	-	280,935	3,778,886
Cash flow hedge	Currency swap contracts	-	-	-	4,776,050
	Interest rate swap contracts	-	-	-	405,564
	Commodity forward contracts			53,002,995	53,103,811
Trading purposes hedge	Currency forward contracts	8,933	405,739	-	13,995,000
		8,933	405,739	53,283,930	76,059,311

December 31, 2020 and 2019

(2) 2019

in thousands of Korean won

	Type of contract	Financial assets at fair value through profit or loss	Financial liabilities at fair value through profit or loss	Derivative financial assets	Derivative financial liabilities
Cash flow hedge	Currency forward contracts	-	-	59,140	3,212,961
	Interest rate swap contracts	-		477,266	
	Commodity forward contracts	-		14,178,951	15,716,194
		-		14,715,357	18,929,155

Expected transactions with high possibility of occurrence of hedged items, regarding cash flow hedge, are estimated to occur within varying periods of 12 month, and will further effect gain or loss in 12 month to come. No expected transaction, under hedge accounting that requires amendment due to less likelihood of occurrence, exists in above financial statements. The effective portion of changes in fair value of derivatives that are recognized as other comprehensive income, as at the end of the reporting period, amounts to  $\mbox{$W$}$  2,499 million (2019:  $\mbox{$W$}$  1,828 million), and the associated gains or losses that are reclassified from equity to profit or loss, as at December 31, 2020, amounts to  $\mbox{$W$}$  77,574 million (2019:  $\mbox{$W$}$  17,250 million).

For the years ended December 31, 2020 and 2019, realized and unrealized gain (loss) from derivative instruments transactions are as follows:

(1) 2020

in thousands of Korean won

	Disposal of financial instruments at fair value through profit or loss					
			Valuation of financia at fair value through	Valuation of derivative instruments		
	Gain	Loss	Gain	Loss	Loss	
Cash flow hedge						
Currency swap contracts		-	-	-	4,542,000	
Trading purposes						
Currency swap contracts		-	-	-	13,995,000	
Currency forward contracts	20,611,292	89,818,014	8,933	405,739	-	
Commodity forward contracts	26,476,887	35,000,758	-	_	-	
	47,088,179	124,818,772	8,933	405,739	18,537,000	

(2) 2019

in thousands of Korean won

	Disposal of financial instruments at fair value through profit or loss		Valuation of financial instruments at fair value through profit or loss		
	Gain	Loss	Gain	Loss	
Trading purposes					
Currency forward contracts	15,985,300	23,679,832	-	-	
Commodity forward contracts	4,638,452	5,049,767	-	-	
	20,623,752	28,729,599	-	-	

#### 23. Equity

The Group's total number of authorized shares is 500,000,000 shares. The total number of ordinary shares issued is 245,082,422 shares with a par value of  $\mbox{$W$}$  5,000 per share.

#### 24. Hybrid Equity Securities

Details of bond-type hybrid equity securities classified as equity as at December 31, 2020 and 2019, are as follows:

in thousands of Koroan won

	Issue date	Maturity date	Interest rate	2020	2019
1-1 <sup>st</sup> Private hybrid equity securities <sup>1</sup>	2015-12-11	2045-12-11	4.80%	-	160,000,000
1-2 <sup>nd</sup> Private hybrid equity securities <sup>1</sup>	2015-12-11	2045-12-11	4.75%	-	65,000,000
2 <sup>nd</sup> Private hybrid equity securities	2020-03-30	2050-03-30	3.50%	280,000,000	-
3 <sup>rd</sup> Private hybrid equity securities	2020-09-24	2050-09-24	3.65%	130,000,000	-
4 <sup>th</sup> Private hybrid equity securities	2020-10-26	2050-10-26	3.65%	20,000,000	-
				430,000,000	225,000,000
Less: issuance expenses				(1,076,360)	(727,150)
				428,923,640	224,272,850

<sup>&</sup>lt;sup>1</sup> 1-1<sup>st</sup>, 1-2<sup>nd</sup> Private hybrid equity have been repaid during the year ended December 31, 2020.

The condition of hybrid equity securities issued for the year ended December 31, 2020, is as follows:

in thousands of Korean won

	-nd	· <del> </del>			
	2 <sup>nd</sup> Private hybrid equity securities	3 <sup>rd</sup> Private hybrid equity securities	4 <sup>th</sup> Private hybrid equity securities		
Issued amount	280,000,000	130,000,000	20,000,000		
Maturity	30 years (At maturity, the Company may decide whether to extend the maturity.)				
Rate	From issue date to March 30, 2025: Fixed rate 3.50% per year Recalculated as below and applied every 5 year; Yield rate of government bond with 5-year maturity+ annual 2.215%+ annual 2.00% (step-up clause)	From issue date to September 24, 2025: Fixed rate 3.65% per year Recalculated as below and applied every 5 year; Yield rate of government bond with 5-year maturity+ annual 2.473% + annual 2.00% (step-up clause)	From issue date to October 26, 2025: Fixed rate 3.65% per year Recalculated as below and applied every 5 year; Yield rate of government bond with 5-year maturity+ annual 2.441%+ annual 2.00% (step-up clause)		
Condition for interest paid	Three months deferred payment and it is possible to selectively extend the payment date.				
Others	Prepayment is allowed after 5 years from the issuance date and every interest payment date afterwards, depending on the Group's decision.				

The Group has the right to extend the maturity date of hybrid equity securities. In addition, payment of interest on bonds can be postponed on the Group's discretion, which in that case the Group cannot resolve and pay the dividend of common stocks until the interest is fully paid. Hybrid equity securities, where the Group has an unconditional right to avoid delivering cash or another financial asset to settle a contractual obligation, are therefore classified as equity instruments.

## 4

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2020 and 2019

### 25. Accumulated Other Comprehensive Income

Accumulated other comprehensive income as at December 31, 2020 and 2019, are as follows:

in thousands of Korean won

	2020	2019
Gain on revaluation of land	441,601,866	217,931,445
Exchange differences	(3,146,251)	1,327,192
Gain on valuation of financial assets at fair value through other comprehensive income	15,663,730	-
Share of other comprehensive income of associates	2,579,299	2,336,293
Cash flow hedge	(2,499,373)	(1,828,330)
	454,199,271	219,766,600

### 26. Retained Earnings

Retained earnings as at December 31, 2020 and 2019, consist of:

in thousands of Korean won

	2020	2019
Legal reserves <sup>1</sup>	164,970,839	144,328,608
Unappropriated retained earnings	2,370,048,019	2,965,815,239
	2,535,018,858	3,110,143,847

<sup>&</sup>lt;sup>1</sup> The Commercial Code of the Republic of Korea requires the Group to appropriate for each financial period, as a legal reserve, an amount equal to a minimum of 10% of cash dividends paid until such reserve equals 50% of its issued share capital. The reserve is not available for cash dividends payment, but may be transferred to share capital or used to reduce accumulated deficit. When the accumulated legal reserves (the sum of capital reserves and earned profit reserves) are greater than 1.5 times the paid-in capital amount, the excess legal reserves may be distributed.

### 27. Selling and Administrative Expenses

Selling and administrative expenses for the years ended December 31, 2020 and 2019, are as follows:

in	thous	ande	of K	orean	wor

	2020	2019
Salaries	93,449,714	96,103,005
Employee benefit	15,116,923	18,514,128
Promotional expenses	8,200,318	10,990,781
Advertising expenses	26,621,201	28,901,629
Service costs	79,114,759	55,764,514
Commission expenses	26,234,397	25,643,467
Freight expenses	97,710,446	96,789,248
Depreciation	25,149,330	20,091,499
Amortization	5,050,818	4,475,061
Depreciation of right-of-use assets	58,471,265	20,816,395
Lease payments	4,845,786	4,132,183
Others	34,428,506	30,860,275
	474,393,463	413,082,185

### 28. Expenses by Nature

Expenses by nature for the years ended December 31, 2020 and 2019, are as follows:

in thousands of Korean won

	2020	2019	
Changes in inventories	720,246,356	245,717,304	
Purchase of inventories	11,855,520,226	18,789,972,252	
Depreciation	403,120,071	397,309,469	
Amortization	6,229,013	5,799,583	
Depreciation of right-of-use assets	198,398,627	123,922,784	
Salaries	270,699,734	292,444,236	
Others	829,044,595	739,701,583	
	14,283,258,622	20,594,867,211	

The sum of total expenses by nature equals to the sum of cost of sales and selling and administrative expenses in the statements of comprehensive income.

December 31, 2020 and 2019

### 29. Finance Income and Costs

Finance income and costs for the years ended December 31, 2020 and 2019, are as follows:

in thousands of Korean won

		in thousands of Norean won
	2020	2019
Finance income		
Interest income	9,804,472	9,851,989
Gain on foreign currency translation	74,358,606	2,626,075
Gain on foreign currency transactions	91,868,004	49,093,420
	176,031,082	61,571,484
Finance costs		
Interest expense	82,014,763	113,146,891
Interest expense relating to lease liabilities	24,632,246	12,049,443
Loss on sales of trade receivables	2,547,476	12,148,796
Loss on valuation of derivative instruments	18,537,000	-
Loss on foreign currency translation	159,173	11,055
Loss on foreign currency transactions	55,021,741	81,067,013
	182,912,399	218,423,198
	<u> </u>	

### 30. Non-operating Income and Expenses

non-operating income and expenses of the Group for the years ended December 31, 2020 and 2019, are as follows:

		in thousands of Korean won
	2020	2020
non-operating income		
Gain on disposal of financial assets at fair value through profit or loss	47,088,179	20,623,752
Gain on valuation of financial assets at fair value through profit or loss	8,933	-
Gain on foreign currency translation	9,571,164	25,050,429
Gain on foreign currency transactions	214,854,862	211,402,838
Gain on disposal of property, plant, and equipment	1,177,893	1,195,804
Gain on disposal of investment properties	-	438,395
Gain on disposal of right-of-use assets	7,596,408	3,356,722
Gain on disposal of investments accounted for using the equity method	84,491,454	-
Miscellaneous income	26,248,248	42,492,019
	391,037,141	304,559,959
non-operating expenses		
Loss on disposal of financial assets at fair value through profit or loss	124,818,772	28,729,599
Loss on valuation of financial assets at fair value through profit or loss	405,739	-
Loss on foreign currency translation	4,811,525	25,861,275
Loss on foreign currency transactions	197,967,730	224,287,419
Loss on disposal of property, plant, and equipment	12,442,303	6,366,951
Loss on disposal of intangible assets	-	16,972
Loss on disposal of right-of-use assets	4,120,105	4,738,034
Loss on disposal of investments accounted for using the equity method	405,065	-
Other impairment loss	-	104,000
Donations	5,650,638	6,550,485
Miscellaneous expenses	12,331,106	9,970,426
	362,952,983	306,625,161

December 31, 2020 and 2019

### 31. Income Tax Expense

Income tax expense for the years ended December 31, 2020 and 2019, are as follows:

in thousands of Korean won

	2020	2019
Current tax:		
Current tax on profits for the year	18,840,182	60,164,894
Adjustments in respect of prior years	(29,914,632)	9,024,800
Total current tax	(11,074,450)	69,189,694
Deferred tax:		
Origination and reversal of temporary differences	(105,026,379)	11,870,618
Deferred tax charged or credited directly to equity	(95,099,672)	8,384,790
Effects of changes in accounting policies	-	1,161,954
Total deferred tax	(200,126,051)	21,417,362
Income tax expense (benefits)	(211,200,501)	90,607,056

### Significant Estimates

The deferred tax assets include an amount of  $\ensuremath{\mbox{$W$}}$  215,043 million which relates to carried-forward tax losses of the Group. The Group has concluded that the deferred assets will be recoverable using the estimated future taxable income based on the approved business plans and budgets for the Group. The losses can be carried forward for 15 years.

Reconciliation between profit (loss) before income tax and income tax expense for the years ended December 31, 2020 and 2019, is as follows:

in thousands of Korean won

2020	2019
(570,971,841)	403,525,671
(179,023,792)	92,684,317
(6,488,543)	(17,023,052)
2,453,518	4,831,527
(1,163,867)	(3,516,515)
(29,914,632)	9,024,80
2,936,815	4,605,979
(211,200,501)	90,607,056
-	22.45%
	(570,971,841) (179,023,792) (6,488,543) 2,453,518 (1,163,867) (29,914,632) 2,936,815

<sup>&</sup>lt;sup>1</sup>The weighted average tax rate for the year ended December 31, 2020, was not calculated due to income tax benefits.

The tax effect relating to components of other comprehensive income (expenses) for the years ended December 31, 2020 and 2019, is as follows:

in thousands of Korean won

	2020		2019			
	Before tax	Tax effect	After tax	Before tax	Tax effect	After tax
Remeasurements of land	310,810,667	(84,627,537)	226,183,130	(1,192,748)	328,006	(864,742)
Gain (loss) on valuation of equity instruments at fair value through other comprehensive income	21,605,145	(5,941,415)	15,663,730	-	-	-
Cash flow hedges	(1,756,331)	555,615	(1,200,716)	(5,843,656)	1,376,117	(4,467,539)
	330,659,481	(90,013,337)	240,646,144	(7,036,404)	1,704,123	(5,332,281)

The aggregate tax relating to items that are charged or credited directly to equity for the years ended December 31, 2020 and 2019, is as follows:

in thousands of Korean won

2020	2019
(4,040,635)	7,008,673
(360,060)	(328,006)
(685,640)	-
-	1,161,954
(84,627,538)	328,006
(5,941,415)	-
555,616	1,376,117
(95,099,672)	9,546,744
	(4,040,635) (360,060) (685,640) - (84,627,538) (5,941,415) 555,616

The analysis of deferred tax assets and liabilities as at December 31, 2020 and 2019, is as follows:

	2020	2019
Deferred tax assets		
Deferred tax asset to be recovered within 12 months	34,644,961	26,976,062
Deferred tax asset to be recovered after more than 12 months	310,685,964	111,005,492
	345,330,925	137,981,554
Deferred tax liabilities		
Deferred tax liability to be recovered within 12 months	(59,273)	(35,897)
Deferred tax liability to be recovered after more than 12 months	(403,108,976)	(284,425,781)
	(403,168,249)	(284,461,678)
Deferred tax liabilities, net	(57,837,324)	(146,480,124)

December 31, 2020 and 2019

Changes in deferred tax assets and liabilities for the years ended December 31, 2020 and 2019, without offsetting, are as follows:

(1) 2020

in thousands of Korean won

						iii tiiousuiius	or noreall won
	Beginning balance	Changes in n the scope of consolidation <sup>1</sup>	Profit or loss	Other comprehensive income	Equity	Gain (loss) on foreign currency translation	Ending balance
Deferred tax liabilities							
Valuation of financial assets at fair value through other comprehensive income	-	-	1,286,685	(5,941,415)	(685,640)	-	(5,340,370)
Investments in subsidiaries and associates	729,031		(1,414,036)	-	-		(685,005)
Accrued income	(35,897)	(21,571)	(1,805)	-	-	-	(59,273)
Plan assets	(63,971,342)		(3,287,152)	-	263,068	-	(66,995,426)
Revaluation of assets	(175,781,712)	(525,250)	1,269,229	(84,627,538)	(360,060)	-	(260,025,330)
Property, plant and equipment	(9,014)	(352,995)	(1,075)	-	-	-	(363,084)
Lease assets and liabilities	(5,543,780)	55,257	(12,915,814)				(18,404,337)
Advanced depreciation provision	(25,260,978)						(25,260,978)
Loss on valuation of financial assets at fair value through profit or loss	-	-	(436)	-	-	-	(436)
Others	(14,587,986)	(12,081,468)	630,096	-		5,348	(26,034,010)
	(284,461,678)	(12,926,027)	(14,434,308)	(90,568,953)	(782,632)	5,348	(403,168,250)
Deferred tax assets							
Depreciation	32,289,686	(3,711,824)	(16,607,701)				11,970,161
Construction-inprogress	8,464,452	-	(314,227)	-	-	-	8,150,225
Contingent liabilities	137,500						137,500
Donations		-	1,418,369	-	-	-	1,418,369
Impairment loss	1,995,546		(278,112)				1,717,434
Incentives payables		-	2,943,590		-		2,943,590
Provisions	9,071,640	-	(231,883)				8,839,757
Loss on valuation of Inventories	1,481,790		1,052,921				2,534,711
Loss (gain) on disposal of property, plant, and equipment	291,352	-	(21,304)	-	-	-	270,048
Defined benefit liabilities	65,905,037	207,402	5,516,509		(4,303,703)		67,325,245
Loss (gain) on valuation of derivative instruments	646,197	-	(6,576)	555,616	-	-	1,195,237
Promotion expense	1,375,526	-	(86,994)	-		-	1,288,532
Accrued expenses	2,772,404	36,581	992,617				3,801,602
Other payables	9,632,959		2,691,140				12,324,099
Other long-term employee benefits	1,921,079	12,256	109,232	-			2,042,567
Present value discount	1,996,386	(7,315)	2,339,614	-	-	-	4,328,685
Tax loss	-	-	215,043,164	-	-	-	215,043,164
	137,981,554	(3,462,900)	214,560,359	555,616	(4,303,703)	-	345,330,926
Net amount	(146,480,124)	(16,388,927)	200,126,051	(90,013,337)	(5,086,335)	5,348	(57,837,324)

<sup>&</sup>lt;sup>1</sup> The Group obtained control over Hyundai and Shell Base Oil Co. Ltd. for the year ended December 31, 2020.

(2) 2019

	Beginning balance	Profit or loss	Other comprehensive income	Equity	Gain (loss) on foreign currency translation	Ending balance
Deferred tax liabilities						
Investments in subsidiaries and associates		729,031		-		729,031
Accrued income	(57,062)	21,165		_		(35,897)
Transportation tax	(2,969,542)	2,969,542		-		-
Plan assets	(57,501,447)	(6,883,750)	-	413,855	-	(63,971,342)
Revaluation of assets	(180,086,221)	4,304,509	328,006	(328,006)		(175,781,712)
Property, plant and equipment	(9,014)	-	-			(9,014)
Lease assets and liabilities		(6,705,734)	-	1,161,954		(5,543,780)
Advanced depreciation provision	(25,260,978)					(25,260,978)
Government subsidy	67,001	(67,001)		_		-
Others	(22,940,162)	8,312,837			39,339	(14,587,986)
	(288,757,425)	2,680,599	328,006	1,247,803	39,339	(284,461,678)
Deferred tax assets						
Depreciation	25,823,813	6,465,873	-	-		32,289,686
Construction in progress	8,651,258	(186,806)		-		8,464,452
Contingent liabilities	137,500					137,500
Impairment loss	2,231,392	(235,846)		-		1,995,546
Incentives payables	2,933,023	(2,933,023)				-
Provisions	9,423,350	(351,710)		-		9,071,640
Loss on valuation of Inventories	39,559,474	(38,077,684)		-		1,481,790
Loss (gain) on disposal of property, plant, and equipment	312,732	(21,380)		-		291,352
Defined benefit liabilities	54,779,262	4,530,957		6,594,818	-	65,905,037
Loss (gain) on valuation of derivative instruments	(729,920)	_	1,376,117	-	_	646,197
Promotion expense	892,795	482,731	-	-	_	1,375,526
Accrued expenses	2,868,700	(96,296)	-	-		2,772,404
Other payables	8,160,109	1,472,850	-	-		9,632,959
Other long-term employee benefits	1,780,012	141,067	-	-		1,921,079
Present value discount	(2,714,921)	4,711,307		-		1,996,386
	154,108,579	(24,097,960)	1,376,117	6,594,818		137,981,554
	(134,648,846)	(21,417,361)	1,704,123	7,842,621	39,339	(146,480,124)

December 31, 2020 and 2019

Details of unrecognized deductible (taxable) temporary differences as deferred tax liabilities as at December 31, 2020 and 2019, are as follows:

in thousands of Korean won

	2020	2019	Remarks	
Interests in subsidiary	310,953,461	317,260,242	No plans for disposal	

The maturity of unused losses as at December 31, 2020 and 2019, is as follows:

in thousands of Korean won

	2020	2019
2035	788,209,854	

### 32. Earnings (loss) per Share

Basic earnings per ordinary share for the years ended December 31, 2020 and 2019, is as follows:

in thousands of Korean won, except per share amount

	2020	2019
Profit (loss) attributable to the ordinary equity holders of the Parent Company	(366,658,999)	276,371,699
Dividends of hybrid equity securities	(19,303,750)	(10,767,500)
Weighted average number of ordinary shares outstanding (in shares)	245,082,422	245,082,422
Basic earnings (losses) per share (in Korean won)	(1,575)	1,084

The Group does not have any potential ordinary shares with diluting effect. Therefore, diluted earnings per share are identical to basic earnings per share for the years ended December 31, 2020 and 2019.

### 33. Cash Generated from Operations

Cash generated from operations for the years ended December 31, 2020 and 2019, are as follows:

		in thousands of Korean won	
	2020	2019	
Adjustments for:			
Post-employment benefits	32,456,136	25,626,752	
Depreciation	403,120,071	397,309,469	
Amortization	6,229,013	5,799,583	
Depreciation of right-of-use assets	198,398,627	123,922,784	
Impairment loss	1,006,518	237,216	
Reversal of impairment loss	(75,000)	-	
Loss on valuation of inventories (reversal)	4,308,460	(140,315,275)	
Interest expense	82,014,763	113,146,891	
Interest expense relating to lease liabilities	24,632,246	12,049,443	
Loss on sales of trade receivables	2,547,476	12,148,796	
Loss on foreign currency translation	4,970,698	25,872,330	
Loss on valuation of financial assets at fair value through profit or loss	405,739	-	
Loss on disposal of financial assets at fair value through profit or loss	124,818,772	28,729,599	
Loss on valuation of derivative instruments	18,537,000	-	
Loss on disposal of property, plant, and equipment	12,442,303	6,366,951	
Loss on disposal of intangible assets	-	16,972	
Loss on disposal of right-of-use assets	4,120,105	4,738,034	
Loss on disposal of investments accounted for using the equity method	405,065	-	
Income tax expense (benefits)	(211,200,501)	90,607,056	
Miscellaneous expenses (income)	40,771	(19,320,861)	
Interest income	(9,804,472)	(9,851,989)	
Gain on foreign currency translation	(83,929,770)	(27,676,504)	
Gain on valuation of financial assets at fair value through profit or loss	(8,933)	-	
Gain on disposal of financial assets at fair value through profit or loss	(47,088,179)	(20,623,752)	
Gain on disposal of property, plant, and equipment	(1,177,893)	(1,195,804)	
Gain on disposal right-of-use assets	(7,596,408)	(3,356,722)	
Gain on disposal of investment properties	-	(438,395)	
Gain on disposal of investments accounted for using the equity method	(84,491,454)	-	
Share of profit of investments accounted for using the equity method	(1,169,472)	(40,465,830)	
Reversal of provision for restoration costs	536,773	-	
	474,448,454	583,326,744	

## <u>.</u>

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2020 and 2019

in thousands of Korean won

	2020	2019
Changes in operating assets and liabilities:		
Trade receivables	372,425,820	(138,816,971)
Other receivables	95,960,979	9,588,837
Inventories	724,541,921	385,055,656
Derivative instruments (hedging)	(534,814)	-
Other current assets	(12,792,879)	(13,455,778)
Other non-current assets	2,643	2,490
Trade payables	(448,162,882)	(188,028,621)
Other payables	(43,003,752)	53,280,433
Other current liabilities	43,628,549	7,041,623
Long-term trade and other payables	(133,059)	(616,480)
Net defined benefit liability	(31,390,427)	(25,443,590)
Provisions	44,598,527	(198,959)
Deferred income	557,579	(1,735,077)
Other non-current liabilities	540,497	602,415
	746,238,702	87,275,978

Significant non-cash investing and financing activities for the years ended December 31, 2020 and 2019, are as follows:

in thousands of Korean won

	2020	2019
Transferred from construction-in-progress to other property, plant and equipment and intangible assets accounts	746,195,703	358,547,927
Other payables related to the acquisition of property, plant and equipment	(60,305,633)	82,994,767
Bonds transferred to current portion	129,904,756	189,830,424

Changes in liabilities arising from financing activities for the year ended December 31, 2020 are as follows.

(1) 2020

in thousands of Korean won

	Changes in the		Cook flows from	Non-cash		
	Beginning balance	scope of consolidation <sup>1</sup>	Cash flows from financing activities	Other nonfinancial changes <sup>2</sup>	Foreign currency conversion effect	Ending balance
Short-term borrowings	797,944,933	-	(578,429,917)		(15,397,037)	204,117,979
Long-term borrowings	1,070,537,498	119,960,046	1,233,521,776	6,055,584	(806,254)	2,429,268,650
Bonds	2,064,938,176	_	828,704,809	1,840,902	(13,903,795)	2,881,580,092
Lease liabilities	418,140,861	5,295,637	(184,824,481)	976,169,701	(45,180,236)	1,169,601,482
	4,351,561,468	125,255,683	1,298,972,187	984,066,187	(75,287,322)	6,684,568,203

<sup>&</sup>lt;sup>1</sup> The Group obtained control over Hyundai and Shell Base Oil Co. Ltd. for the year ended December 31, 2020.

(2) 2019

in thousands of Korean won

		Non-cash activities		activities	
Beginning balance		Cash flows from financing activities	Other non- financial changes <sup>1</sup>	Foreign currency conversion effect	Ending balance
Short-term borrowings	1,201,667,546	(401,096,538)		(2,626,075)	797,944,933
Long-term borrowings	900,787,325	165,743,120	3,402,204	604,849	1,070,537,498
Bonds	1,327,328,498	736,416,300	1,193,378	-	2,064,938,176
Lease liabilities	460,273,962	(130,467,363)	79,897,284	8,436,978	418,140,861
	3,890,057,331	370,595,519	84,492,866	6,415,752	4,351,561,468

<sup>1</sup> Other changes include non-cash movements and interest expenses which are presented as operating cash flows in the statement of cash flows.

### 34. Related Party Transactions

As at December 31, 2020, the Parent company is Hyundai Heavy Industries Holdings Co., Ltd. (percentage of ownership: 74.13%), a newly established entity through equity spin-off from Hyundai Heavy Industries Co., Ltd. on April 1, 2017. Hyundai Heavy Industries Holdings Co., Ltd. is also the ultimate parent company of the Group.

Details of joint ventures, associates and other related parties that have sales and other transactions with the Group or have outstanding balances as at December 31, 2020 and 2019, are as follows:

	2020	2019		
Entity with significant influence	Aramco Overseas Company B.V	Aramco Overseas Company B.V		
Joint ventures	Illumedai Caarra Bataraharriaal Ca I tal	Hyundai Cosmo Petrochemical Co., Ltd.		
Joint ventures	Hyundai Cosmo Petrochemical Co., Ltd.	Hyundai and Shell Base Oil Co., Ltd. <sup>1</sup>		
Associates	KORAMCO ENERGY PLUS REIT and others			
Other related parties	The subsidiaries of Hyundai Heavy Industries Holdings Co.,Ltd. and others	The subsidiaries of Hyundai Heavy Industries Holdings Co.,Ltd. and others		
	KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO.,LTD.	KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO.,LTD.		
	The subsidiaries of KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO.,LTD. and others	The subsidiaries of KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO.,LTD. and others		
	The subsidiaries of Aramco Overseas Company B.V and others	The subsidiaries of Aramco Overseas Company B.V and others		

<sup>&</sup>lt;sup>1</sup>The entity has been changed from a joint venture to a subsidiary due to changes in certain decisions in accordance with shareholders agreement for the year ended December 31, 2020.

<sup>&</sup>lt;sup>2</sup> Other changes include non-cash movements and interest expenses which are presented as operating cash flows in the statement of cash flows.

December 31, 2020 and 2019

Sales and purchases with related parties for the years ended December 31, 2020 and 2019, are as follows:

(1) 2020

in thousands of Korean won

	Sales	Other Sales	Purchases	Other purchases	Acquisition of right-of-use assets	Interest expense
Parent Company						
Hyundai Heavy Industries Holdings Co., Ltd.		249,947				-
Joint venture						
Hyundai Cosmo Petrochemical Co., Ltd.	1,219,084,355	32,771,227	635,879,382	6,614,064	3,807,469	392,758
Hyundai and Shell Base Oil Co.Ltd. <sup>1</sup>	343,356,588	21,192,792	70,480,324	300,000	-	-
Associates						
KORAMCO ENERGY PLUS REIT		-		9,401	349,725,743	4,718,287
Others				36,380	43,228,298	613,494
Other related parties						
KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO.,LTD. <sup>2</sup>	20,745		28,500	17,716,025	-	-
Hyundai Heavy Industries Co., Ltd	44,000,493			134,362	46,683	1,520
Hyundai Robotics Co., Ltd		594,360				-
Hyundai Construction Equipment Co., Ltd.	4,324,070	352,031	37,055			-
Hyundai Heavy Industries Power Systems Co., LTD	-	-		2,191,200	-	-
Hyundai Electric & Energy Systems Co., Ltd.	2,455,636	563,485		5,118,718		-
Hyundai Mipo Dockyard Co., Ltd.	7,191,084		-	-	-	-
Hyundai Samho Heavy Industries Co., Ltd.	20,447,074	-		139	7,140	53
Hyundai Global Service Co., Ltd.	172,217,061					-
S-Oil Corporation <sup>3</sup>	_	266,850,006	12,270,089	268,940,257	1,634	4
Aramco Trading Singapore Pte Ltd. <sup>4</sup>	416,302,350		123,042,109			-
Saudi arabian Oil Company <sup>4</sup>			1,659,915,595			-
Aramco Trading Limited <sup>4</sup>			1,498,897,909			-
Aramco Trading Company <sup>4</sup>	-	-	899,063,958	823,060	-	-
Aramco Trading Fujaifah FZE <sup>4</sup>	-	-	27,723,107	-		
Others	5,949,319	44,487	-	16,742,424	-	-
	2,235,348,775	322,618,335	4,927,338,028	318,626,030	396,816,967	5,726,116

<sup>&</sup>lt;sup>1</sup> The transaction amounts until October 2020, before changes in the agreement between shareholders and acquiring a control are disclosed.

(2) 2019

	Sales	Other Sales	Purchases	Other purchases	Acquisition of property, plant, and equipment	Acquisition of right-ofuse assets	Interest expense
Parent Company					_	-	-
Hyundai Heavy Industries Holdings Co., Ltd.	-	207,733			-	-	-
Joint venture							
Hyundai Cosmo Petrochemical Co., Ltd.	2,110,184,167	29,484,522	1,224,765,489	5,158,302	-	10,161,906	371,579
Hyundai and Shell Base Oil Co., Ltd.	742,239,471	14,814,282	154,057,373	-	-	-	-
Other related parties							
KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO.,LTD.	20,478,003			2,782,654	-	-	-
Hyundai Heavy Industries Co., Ltd	27,205,026	_		186,952	-	152,219	1,540
Hyundai Construction Equipment Co., Ltd.	5,739,092	121,065	-	-	-	-	-
Hyundai Heavy Industries Power Systems Co., LTD <sup>1</sup>	-	-	24,958,800	-	-	-	-
Hyundai Electric & Energy Systems Co., Ltd.	2,309,988	361,638	4,513,900	831,800	56,016,971	1,476,762	18,623
Hyundai Mipo Dockyard Co., Ltd.	9,026,298	_	-	-	-	-	-
Hyundai Samho Heavy Industries Co., Ltd.	19,474,991				-	5,059	73
Hyundai Global Service Co., Ltd.	166,346,993				-	-	-
S-Oil Corporation		11,571,103		11,034,918			-
Aramco Trading Singapore Pte Ltd	1,188,082	-	-	-	-	-	-
Aramco Trading Company	_	-	164,040,541	132,384	-		-
Others	7,364,693	4,391	83,600	15,833,788	-	-	-
	3,111,556,804	56,564,734	1,572,419,703	35,960,798	56,016,971	11,795,946	391,815

<sup>&</sup>lt;sup>2</sup> The Group purchased Daehan Oil Pipeline Corporation's shares from KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO.,LTD, and the purchase amount of ₩ 14,386 million is included.

 $<sup>^3</sup>$  Amounts resulting from inventory exchange between S-OIL Corporation and Hyundai Oilbank Co., Ltd. are included.

<sup>&</sup>lt;sup>4</sup> The entities are Aramco Overseas Company B.Vs affiliates and have entered into a long-term purchase agreement of crude oil and a product supply agreement of refined oil with the Group (Note 21).

# IAL REVIEW

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2020 and 2019

Outstanding balances arising from sales/purchases of goods and services as at December 31, 2020 and 2019, are as follows:

(1) 2020

in thousands of Korean won

	Receivables			Payables		
	Trade receivables	Other receivables	Trade payables	Lease liabilities	Other payables	
Joint venture <sup>1</sup>						
Hyundai Cosmo Petrochemical Co.,Ltd.	40,663,397	1,120,216	22,664,543	12,858,598	378,448	
Associates						
KORAMCO ENERGY PLUS REIT		92,097,000		309,129,329	-	
Others		3,137,000		40,184,257	3,190	
Other related parties						
KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD.	1,996	213,492			150,595	
Hyundai Heavy Industries Co., Ltd	16,498,119			43,372	158,819	
Hyundai Construction Equipment Co., Ltd.	1,081,647				-	
Hyundai Electric & Energy Systems Co., Ltd.	784,955				1,145,036	
Hyundai Robotics Co., Ltd	82,400				-	
Hyundai Mipo Dockyard Co., Ltd.	2,703,222				192,642	
Hyundai Samho Heavy Industries Co.,Ltd.	6,185,240	10,319		5,177	352	
Hyundai Global Service Co., Ltd.	17,319,400	5,837			-	
S-Oil Corporation <sup>2</sup>		15,598,488	1,550,007		-	
Aramco Trading Singapore Pte Ltd. <sup>3</sup>	2,003,985		2,870,721		-	
Saudi arabian Oil Company <sup>3</sup>			200,548,392		-	
Aramco Trading Limited <sup>3</sup>			53,741,448		-	
Aramco Trading Company <sup>3</sup>	-	_	58,470,038		-	
Others	908,182	3,090,909			-	
	88,232,543	115,273,261	339,845,149	362,220,733	2,029,082	

<sup>&</sup>lt;sup>1</sup> As at December 31, 2020, it is excluded from joint ventures due to acquisition of control over Hyundai and Shell Base Oil Co., Ltd..

### (2) 2019

	Receivables			Payables		
	Trade receivables	Other receivables	Trade payables	Lease liabilities	Other payables	
Parent Company						
Hyundai Heavy Industries Holdings Co., Ltd.				-	-	
Joint venture						
Hyundai Cosmo Petrochemical Co., Ltd.	33,706,681	2,986,798	127,135,268	9,613,213	810,689	
Hyundai and Shell Base Oil Co., Ltd.	10,276,743	29,095	23,315,472		91,099	
Other related parties						
KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO.,LTD.	2,806	-			451,148	
Hyundai Heavy Industries Co., Ltd	17,995,367			181,220	156,983	
Hyundai Construction Equipment Co., Ltd.	1,341,317				-	
Hyundai Electric & Energy Systems Co., Ltd.	392,462	-			1,390,053	
Hyundai Mipo Dockyard Co., Ltd.	930,703	-	-		66,799	
Hyundai Samho Heavy Industries Co., Ltd.	6,928,824	10,319		1,592	294	
Hyundai Global Service Co., Ltd.	14,916,011	-			-	
Hyundai Heavy Industries Power Systems Co., LTD	-	-	-	-	1,533,840	
S-Oil Corporation		20,286,044			-	
Saudi arabian Oil Company			80,360,155		-	
Aramco Trading Company	_	_	131,709		-	
Others	820,458	2,835,566	-		4,613	
	87,311,372	26,147,822	230,942,604	9,796,025	4,505,518	



 $<sup>^2</sup> Amounts\ resulting\ from\ inventory\ exchange\ between\ S-OIL\ Corporation\ and\ Hyundai\ Oilbank\ Co.,\ Ltd.\ are\ included.$ 

<sup>&</sup>lt;sup>3</sup>The entities are Aramco Overseas Company B.Vs affiliates and have entered into a long-term purchase agreement of crude oil and a product supply agreement of refined oil with the Group (Note 21).

December 31, 2020 and 2019

Fund transactions with related parties for the years ended December 31, 2020 and 2019, are as follows:

### (1) 2020

in thousands of Korean won

	Contributions in cash	Lease liabilities borrowings	Lease liabilities repayments	Dividend
Parent Company				
Hyundai Heavy Industries Holdings Co., Ltd.	-	-	-	(150,784,039)
Entity with significant influence				
Aramco Overseas Company B.V	-	-	-	(34,581,130)
Joint venture				
Hyundai Cosmo Petrochemical Co., Ltd.	-	3,807,469	954,842	5,000,000
Associates				
KORAMCO ENERGY PLUS REIT	40,000,000	326,228,298	21,817,257	-
Others	10,000,000	42,427,929	2,857,166	-
Other related parties				
Hyundai Heavy Industries Co., Ltd.	-	46,683	185,343	-
Hyundai Samho Heavy Industries Co., Ltd.		6,856	3,323	-
S-Oil Corporation		1,634	1,639	-

### (2) 2019

in thousands of Korean won

	Contributions in cash	Lease liabilities borrowings	Lease liabilities repayments	Dividend
Parent Company				
Hyundai Heavy Industries Holdings Co., Ltd.				(223,331,529)
Joint venture				
Hyundai Cosmo Petrochemical Co., Ltd.		12,079,796	2,838,163	30,000,000
Hyundai and Shell Base Oil Co., Ltd.		-	-	51,600,000
Other related parties				
Hyundai Heavy Industries Co., Ltd.		152,219	29,200	-
Hyundai Electric & Energy Systems Co., Ltd.		1,476,762	1,495,385	-
Hyundai Samho Heavy Industries Co., Ltd.		4,723	3,204	-

The compensation paid or payable to key management for employee services consists of:

in thousands of Korean won

	2020	2019	
Short-term salaries	3,366,816	4,350,867	
Post-employment benefits	510,351	465,144	
	3,877,167	4,816,011	

Key management includes directors (executive and non-executive) who have the authority and responsibility in planning, operations and control of the Group's operations.

### 35. Business Combination

The Group acquired substantial potential voting rights for Hyundai and Shell Base Oil Co. Ltd., and it was transferred from a joint venture to a subsidiary for the year ended December 31, 2020.

Purchase consideration

Details of the purchase consideration at the acquisition date are as follows:

in thousands of Korean won

	Amount
Cash and cash equivalents	5,536,000
Fair value of interest in Hyundai and Shell Base Oil Co. Ltd. (percentage of ownership: 60%)	263,374,200
	268,910,200

The fair value of the interest was remeasured by using discounted cash flow model as at the acquisition date, and as a result of the remeasurement, the Group recognized gain on disposal of investments accounted for using the equity method amounting to  $\pm$  84,491 million.

Identifiable assets acquired and the liabilities assumed

Details of fair value of the identifiable assets acquired and the liabilities assumed at the acquisition date are as follows:

	Amount
Assets	
Cash and cash equivalents	139,693,518
Trade receivables	40,367,679
Inventories	19,531,860
Property, plant and equipment	265,070,777
Intangible assets	51,177,858
Right-of-use assets	5,067,300
Other assets	5,553,923
	526,462,915
Liabilities	
Trade payables	34,497,214
Financial liabilities	119,960,046
Lease liabilities	5,295,637
Deferred tax liabilities	16,388,928
Other liabilities	12,655,531
	188,797,356
Net asset amount	337,665,559
Non-controlling interest <sup>1</sup>	135,066,224

<sup>&</sup>lt;sup>1</sup> Non-controlling interest was calculated by applying non-controlling interest rate of 40%, to the fair value of recognizable net assets.

December 31, 2020 and 2019

### Goodwill

The details of goodwill arising from the business combination are as follows:

in thousands of Korean won

	Amount
Total purchase consideration	268,910,200
Fair value of identifiable net assets	202,599,335
Goodwill	66,310,865

The goodwill of \( \text{\$\frac{4}{6}},311 \) million arising from the business combination is attributable to synergies such as the efficiency of the operation of the plant and others. The recognized goodwill will not be deductible for tax purpose.

### Valuation techniques for major assets

Acquired assets	Valuation techniques				
Inventories	Market approach: amount represents the estimated selling price for inventories, less all estimated costs of completion and costs necessary to make the sale. Fair value was determined considering normal profits and others.				
Property, plant and equipment	Market approach or cost approach: fair value was determined considering the price generated from market transactions of similar available assets or the replacement cost taking appropriate depreciation into account.				
Intangible assets	Multi-period excess profit approach: it was determined in consideration of the present value of net cash flows expected to arise from customer relationships.				

### Effect on profit or loss from transfer to consolidation

Net sales and profit of Hyundai and Shell Base Oil Co. Ltd for the period from November 2020 (the acquisition date) included in the consolidated statements of profit or loss ₩ 93,742 million and ₩ 16,593 million, respectively. Net sales and profit for the current reporting period as though the acquisition date had been as of the beginning of the annual reporting period are as follows:

### in thousands of Korean won

	Amounts before adjustments	Adjustments	Amounts after adjustments
Sales	13,689,914,469	42,982,299	13,732,896,768
Profit (loss) for the year	(359,771,339)	21,121,250	(338,650,089)

### 36. Other Significant Matters

The Group issued debentures as at January 28, 2021, and the details are as follows:

in thousands of Korean won

	Issue date	Maturity date	Interest rate	Amount
125-1 <sup>st</sup> Non-guaranteed debenture	2021-01-28	2024-01-28	1.12%	90,000,000
125-2 <sup>nd</sup> Non-guaranteed debenture	2021-01-28	2026-01-28	1.62%	150,000,000
125-3 <sup>rd</sup> Non-guaranteed debenture	2021-01-28	2028-01-28	1.91%	90,000,000
125-4 <sup>th</sup> Non-guaranteed debenture	2021-01-28	2031-01-28	2.38%	70,000,000
				400,000,000

In February 2021, the Group invested ₩ 950 million to Kohygen, a company founded to enhance hydrogen charging infrastructure.





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