GOING
HIGHER 4

HYUNDAI OILBANK
ANNUAL REPORT 2017

HIGHER PERFORMANCE

Hyundai Oilbank

HIGHER PERFORMANCE

Hyundai Oilbank is working toward becoming South Korea's leading global total energy company, through sustained facility investment and stable growth.

In 2017, Hyundai Oilbank achieved a record-high operating profit, based on the nation's highest heavy oil upgrading ratio. Our subsidiaries in the non-oil refining sector also continued to grow, showing stable operations.

We are dedicated to fulfilling our corporate social responsibilities by practicing sharing and volunteer services. This includes donating 1% of monthly employee salaries. We were also the first in the nation's oil refining industry to accomplish ten million work hours with no accidents, demonstrating our commitment to worker safety.

Through these enthusiastic efforts and notable accomplishments, Hyundai Oilbank is emerging as a global total energy company with international competitiveness.

GOING HIGHER

FY2014	FY2015	FY2016	**FY2017**	FY2018
Higher Reliability	Higher Efficiency	Higher Progress	**Higher Performance**	Higher Prosperity

CONTENTS

INTRODUCTION

BUSINESS REVIEW

MANAGEMENT REVIEW

FINANCIAL REVIEW

APPENDIX

INTRODUCTION

Financial Highlights

In 2017, Hyundai Oilbank posted exceptional results based on its first-rate heavy oil upgrading facilities in South Korea, crude oil imports diversification, successful business diversification, and various cost-saving initiatives.

Operating Performance

Sales

16,376.2

(Unit: KRW billion)

Operating Profit

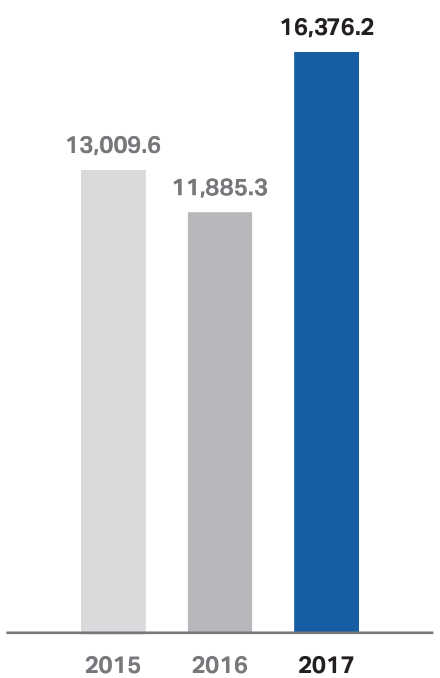
1,260.5

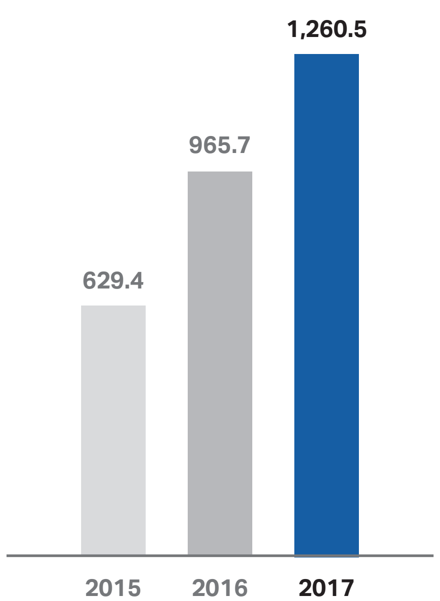
(Unit: KRW billion)

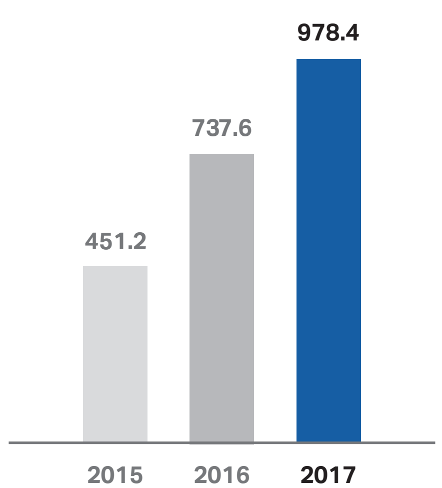
Net Income

978.4

(Unit: KRW billion)







※ Based on the Korean International Financial Reporting Standards (K-IFRS) and consolidated financial statements

Financial Status

(Unit: KRW billion)

	2015	2016	2017
Total Assets	7,560.1	9,708.1	11,262.0
Total Liabilities	3,798.3	5,221.8	6,128.7
Total Equity	3,761.8	4,486.3	5,133.3

Stability Indicators

(Unit: %)

	2015	2016	2017
Current Ratio	119.1	103.8	112.6
Liabilities-to-Equity Ratio	101.0	116.4	119.4
Interest Coverage Ratio	7.8 times	15.4 times	15.0 times

Credit Ratings

Corporate Bond

AA-

Korea Ratings, Korea Investors Service, NICE Investors Service

Commercial Paper

A1

Korea Ratings, Korea Investors Service, NICE Investors Service

※ As of the end of 2017

Profitability

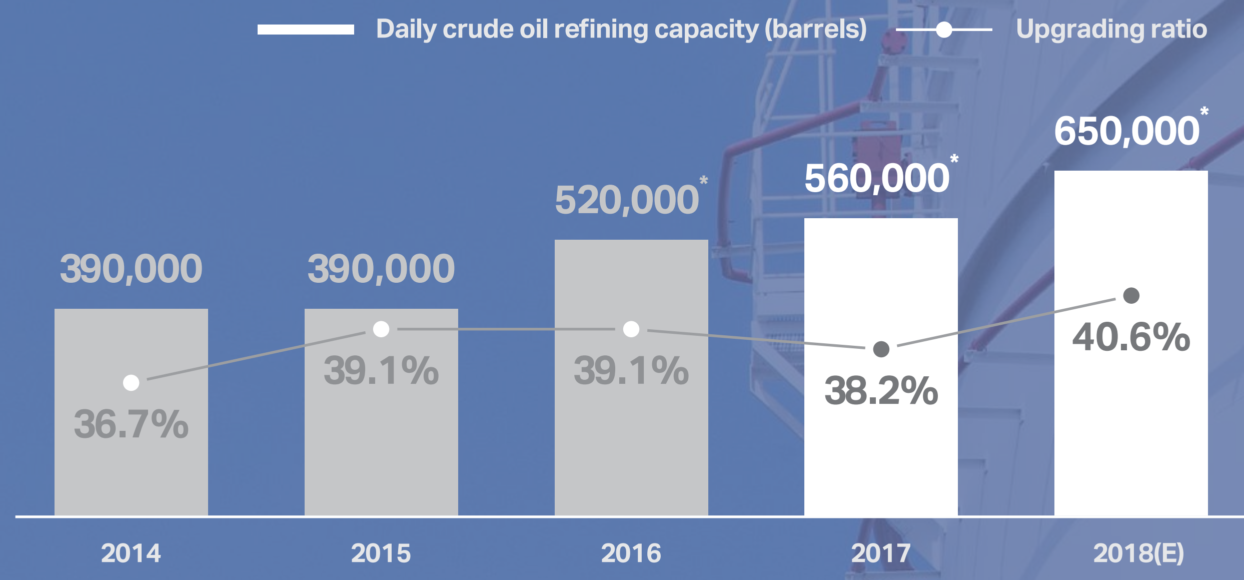
Record-high operating profit

Recorded a surplus for the 22nd straight quarter

In 2017, Hyundai Oilbank achieved a record-high operating profit of KRW 1.261 trillion through cost savings, led by the industry's highest-level heavy oil upgrading facilities and the imports of heavy oil from Central America. We also recorded a surplus in operating profit for the 22nd consecutive quarter, from the third quarter of 2012 through to the end of 2017.

Competitiveness

The nation's highest heavy oil upgrading ratio



* Including 130,000 barrels of Hyundai Chemical's condensate splitter

Crude oil imports diversification

	2012	2015	2017
Ratio of imports from the Middle East	91%	82%	72%
Number of Import countries*	13	20	21
Number of oil types*	21	39	47

* Cumulative number of import countries and oil types since 2012

Enhancing competitiveness through sustained facilities investment and oil imports diversification

Hyundai Oilbank is growing steadily thanks to its strengthened competitiveness, by diversifying crude oil imports and expanding export markets. This growth is accomplished despite the current challenging climate, including changes in international oil prices and policy uncertainties at home and abroad. In the future, we plan to generate additional earnings by further expanding the production capacity of high value-added products based on our continuous investment in facilities.

Diversification

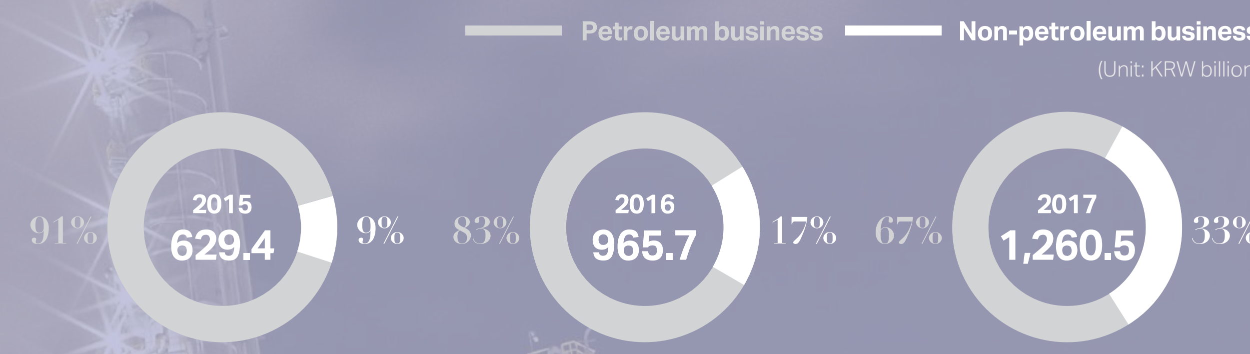
Financial Status of Subsidiaries in 2017

(Unit: KRW billion)

	Sales	Operating Profit
Hyundai Chemical	3,373.6	267.0
Hyundai and Shell Base Oil	708.6	123.7
Hyundai Cosmo Petrochemical	2,388.2	115.4
Hyundai Oil Terminal	32.9	9.1

* Hyundai OCI is scheduled to begin commercial operations in February 2018.

Change in operating profit in the non-oil refining sector



* Based on consolidated financial statements

Seeking stable and sustained growth through business diversification and new businesses in the non-oil refining sector

Hyundai Oilbank has been promoting business diversification with the goal of expanding new businesses in the non-oil refining sector, and these new businesses are achieving noticeable results through their stable settlement in the market.

In 2017, Hyundai Chemical, which began commercial operations in November 2016, achieved an operating profit of KRW 267.0 billion. Hyundai and Shell Base Oil, Hyundai Cosmo Petrochemical, and Hyundai Oil Terminal recorded operating profits of KRW 123.7 billion, KRW 115.4 billion, and KRW 9.1 billion, respectively. Hyundai OCI is exploring new business territories as the nation's first refiner to enter the carbon black business.

Safety

Achieved ten million zero-accident work hours at Daesan Refinery Plant

10,974,934 work hours

(As of the end of 2017)

November 2015	5,000,000
December 2016	8,000,000
September 2017	10,000,000
2018 Goal	14,000,000

(Unit: Work hours)

Achieved ten million zero-accident work hours

The Daesan Refinery Plant of Hyundai Oilbank has been free of accidents for 1,402 days, from October 2013 through September 2017. In accomplishing this, it became the first refining plant in South Korea to achieve ten million zero-accident work hours. Continuing this record to date, we will remain committed to developing the Daesan Refinery Plant into one of the safest workplaces by placing the highest priority on safety.

Sustainability

Hyundai Oilbank 1% Nanum Foundation

Sharing 1% of salaries

Donating 1% of employees' monthly salaries since September 2011

Volunteer hours of employees

6,066 hours

Donations by 1% Nanum Foundation

8.89 Unit: KRW billion

Creating a better world through 1% sharing

Employees of Hyundai Oilbank and its subsidiaries are taking the lead in spreading the culture of sharing. This includes donating 1% of salaries, and engaging in more than 5,000 hours of volunteer services each year for people in need. As a global company, we also practice caring and sharing initiatives both at home and abroad, such as expanding support for developing countries. Hyundai Oilbank will continue to fulfill its corporate social responsibilities through a wide range of social contribution initiatives.

Message from the CEO

"For Hyundai Oilbank, 2017 will be remembered as a year in which it achieved high growth through stable revenue creation. In 2018, we promise to take a leap forward by continuously pursuing new businesses and successfully completing our expansion projects while placing our top priority on safety."

Dear valued shareholders, customers, and other stakeholders:
I am pleased to report on our performance in 2017, and on our plans for the upcoming year, on behalf of everyone at the company.

In 2017, Hyundai Oilbank achieved a record-high operating profit of KRW 1.261 trillion. Both our sales and net income surged more than 30% from the year before to KRW 16.376 trillion and KRW 978.4 billion, respectively.

We have made steady efforts for the diversification of our business portfolio even amid rapid market changes. In addition to Hyundai Chemical, Hyundai Cosmo Petrochemical, Hyundai and Shell Base Oil, and Hyundai Oil Terminal, Hyundai OCI will begin commercial operations in 2018. This business diversification will serve as a driving force for earnings growth by expanding the weight of non-petroleum businesses and by generating stable earnings.

We also achieved an impressive record of ten million zero-accident work hours despite the large-scale maintenance on our #2 Plant, heavy oil upgrading facilities, and #1 BTX process. The industry's longest record of 1,428 accident-free days, which occurred at our Daesan plant, show that we have the fundamentals required for the company to manufacture and supply products in a safe and stable manner.
In addition, our efforts for the diversification of crude oil imports, which have previously been focused on the Middle East, will continue this year, introducing traditional crude oil from the United States for the first time in South Korea.

In 2018, Hyundai Oilbank will gain a foothold to take a new leap forward, targeting an 'operating profit of KRW 2 trillion by 2022'. We will operate our plants with a safety-first mindset, and will actively explore new businesses such as petroleum, petrochemicals, and fine chemicals both at home and abroad.

We will also successfully complete our Solvent De-Asphalting (SDA), Delayed Coker Unit (DCU), and other heavy oil upgrading processes and subsidiary expansion projects, which are currently in the works. Furthermore, we will continue our impressive progress by using creative thinking to raise operational efficiency and improve profitability.

Hyundai Oilbank's 1% Nanum Foundation is now marking its sixth year. We will continue to practice our founding philosophy of 'sharing 1% of salaries with people in need' by carrying out a wide range of social contribution activities at home and abroad.

Hyundai Oilbank's IPO is coming up this year. We will do our very best to boost the value of all our shareholders, customers, and other stakeholders. I wish the very best of health and happiness to you and your family.

Moon Jong-bak
President & CEO

Message from Executives

Kang Dal-ho, Vice President
Head of Safety & Production Division

In 2017, the Safety & Production Division accomplished the first ten million zero-accident work hours, a first among domestic oil refineries, by successfully completing its large-scale projects without a single incident. The projects included the company's largest-ever maintenance and facility and capacity increases since its foundation.

I believe that this achievement was a result of our concerted efforts and hard work, placing our top priority on safety and the environment. In 2018, we will set safe operations as the primary goal of our plant operation, while also concentrating our efforts on continuous revenue creation.

Following our #2 Plant's capacity expansion project in 2017, we will complete additional capacity expansion projects for a number of processes including #1 Plant's heavy oil upgrading facilities, which will begin in 2018, and our subsidiary extension project.

Going forward, we plan to generate additional earnings by further expanding the production capacity of high value-added products, based on ongoing facility investment. The approximately 661,157 m2 public waters reclamation project to pursue new businesses will be completed in the third quarter of 2018, and we are exploring various new businesses with commercial value and viability, including the petrochemical business, to be located in that site.

The Division will do its best to seek out optimal businesses whose profitability and stability can be significantly improved, including business diversification and vertical integration. In order to ensure 'work-life balance', which is important to our employees, we will provide a variety of support systems and programs such as Family Day and flexible work arrangements.

Park Byeong-deok, Vice President
Head of Sales & Marketing Division

In recent year, the Sales & Marketing Division has been dedicated to realizing a differentiated image. For example, we opened design-specialized complex gas stations, supported female gas station managers, enhanced customer service, and held original promotional events.

As a result, we ranked first in the gas station service evaluation conducted by various organizations for the third consecutive year, as well as in the call center service evaluation for the ninth consecutive year. In 2018, we will strengthen our highest-level quality management service on the basis of friendliness and cleanliness, further establishing our company as a trusted brand.

Although in 2017 we were already ranked as a refinery with one of the lowest fake oil detection rates, in 2018 we will focus on eliminating the transaction of fake petroleum and complaints on quality by bringing in quality support vehicles loaded with state-of-the-art inspection equipment and highly trained professionals.

In addition, we will continue to expand product types for sale such as slurry oil, heavy aromatics, and petcokes. As for the XTeer lubricant brand, which has already achieved economy of scale, we will foster it as a source of steady profit by increasing its portfolio to 270 types by the end of the year. Lastly, we will increase our domestic market share through keen competition, and will continue with our contribution to maximizing company-wide earnings by optimizing our domestic demand and export portfolio.

Jang Ji-hak, Vice President
Head of Global Business Division

The global petroleum market seems to be close to a point of overall balance, given that shale oil production in the United States is gradually increasing, and the reductions in production from the Organization of the Petroleum Exporting Countries (OPEC) that have been implemented since January 2017 are showing a satisfactory ratio of observance. However, geopolitical unrest and macroeconomic uncertainties are a continuous concern.

The Division will place its top priority on cost savings in procuring raw materials, and at the same time will focus on risk management in line with changes in international oil prices and other internal and external circumstances.

In terms of export markets, it is expected that the intensity of the Southeast Asian export market competition will be further heightened due to increases in exports from China and in the supply of petroleum products following the completion of a new refinery in Vietnam. We will expand exports to high-quality markets in advanced countries, as well as exporting new products such as high-end gasoline. We also plan to augment the maritime diesel oil retail business in line with changes following the implementation of International Maritime Organization (IMO) environmental regulations in 2020.

Domestically, we will revamp our cost competitiveness through the optimization of newly installed processes such as the Solvent De-Asphalting (SDA) process, and will contribute to the maximization of earnings by adjusting supply and demand with a focus on economic feasibility.

Han Hwan-gyu, Senior Executive
Head of Management Support Division

In 2018, volatility in the financial markets and oil prices should expand further due largely to the spread of national protectionism and heightening expectations of the monetary policy normalization.

In a rapidly changing business environment, the Management Support Division will focus its capacity and efforts on faithfully conducting its generic operations to ensure internal stability and maximize revenue generation by division. In addition, we will strengthen support for our subsidiaries in the non-oil refining sector, including Hyundai OCI which will start commercial operations this year, so that they can engage in their business in a stable manner and continue to grow, creating optimal synergies amongst them.

In the meantime, we are preemptively controlling risks through systematic risk management in accordance with the characteristics of the petroleum market, where various risk factors such as oil price and exchange rate fluctuations are present. Going forward, we will make every effort for risk management so as to minimize exchange rate and oil price risks.

Internally, we intend to create a flexible organizational culture so that our employees will be able to strengthen their capabilities through learning groups, where innovative and creative thinking will be encouraged through a wide range of communication activities. Lastly, we will successfully conclude our listing by concentrating our capacity and efforts on the initial public offering scheduled for the second half of 2018.

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.

Aiming for 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. By widening the role and boosting the status of the BOD, our highest decision-making body, we have established an advanced corporate governance system that meets the expectations of our stakeholders, including shareholders, employees, and customers.

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.

In accordance with Hyundai Oilbank's articles of incorporation and BOD regulations, the BOD consists of five members, including one internal director, one non-executive director, and three outside directors, all of whom are elected at the annual general meeting (AGM). The BOD is chaired by the CEO. As the company's highest decision-making body, 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 BOD

Inside Director	Moon Jong-bak	• 2014-Present: President & CEO, Hyundai Oilbank
Non-Executive Director	Kwon Oh-gap	• 2014-Present: Inside Director, Hyundai Heavy Industries • 2013-Present: Commissioner, K League
Outside Directors	Yoon Jeung-hyun	• 2009-2011: Minister of Strategy and Finance • 2004-2007: Governor, Financial Services Commission and Financial Supervisory Service • 1999: Director, Asian Development Bank
	Kim Jung-hoe	• 2008-2010: President & CEO, KB Financial Group and Vice Chairman, KB Asset Management • 2003-2007: Vice-Governor, Financial Supervisory Service
	Lee Kyoo-yong	• 2008-President: Adviser, Kim & Chang law firm • 2007-2008: Minister, Ministry of Environment • 2003-2006: Director, Planning and Coordination Office, Ministry of Environment

※ As of 2017

※ Changes made after 2017: In the general shareholders' meeting and BOD meeting on March 16, 2018, President & CEO Moon Jong-bak was reappointed; non-executive director Kwon Oh-gap resigned and was appointed as inside director, outside director Kim Jung-hoe's term of office was completed, and Kim Gap-yu was appointed as outside director.

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, Internal Transaction Monitoring Committee, and Outside Director Nominating Committee are as follows.

Composition and Roles of Sub-committees

Audit Committee	Kim Jung-hoe Yoon Jeung-hyun Lee Kyoo-yong	• Examine the company's accounting and corporate activities • 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 • Handle selection, replacement, and dismissal of the audit firm
Internal Transaction Monitoring Committee	Kim Jung-hoe Yoon Jeung-hyun Lee Kyoo-yong	• Approve and report to the Board on major internal transactions among Hyundai Heavy Industries (HHI) Group affiliates
Outside Director Nominating Committee	Moon Jong-bak Kim Jung-hoe Yoon Jeung-hyun	• Nominate outside director candidates to be appointed at the AGM

※ As of 2017

Major BOD Activities in 2017

In 2017, the Board held a total of eight meetings to discuss and make decisions on major management issues.

Key Board Resolutions in 2017

AGM, BOD, Corporate governance	• Approval of the convocation of the AGM, and the adoption of the agenda items for FY 2017 • Appointment of Audit Committee members • Appointment of Internal Transaction Monitoring Committee members • Revision of BOD regulations
Investment	• Investment in Delayed Coker Unit (DCU) capacity expansion
Accounting and Finance	• Approval of the FY 2017 financial statements • Approval of the FY 2017 business report • Approval of the transaction limit terms with financial companies of HHI Group affiliates (quarterly) • Approval of the internal transaction limit with HHI Group affiliates (quarterly)
Others	• Approval of a sponsorship agreement with Hyundai Heavy Industries Sports • Approval of a sponsorship agreement with K League • Pursuit of IPO

Corporate History

Marking its 53rd anniversary in 2017, Hyundai Oilbank continues its commitment to innovation and to increased efforts to grow into a global total energy company.

1964-2009

Nov. 1964 Established as Kukdong Oil Industrial Company, South Korea's first privately-owned petroleum refinery company

Jan. 1969 Changed company name to Kukdong Shell Oil Co., Ltd.

May 1977 Changed company name to Kukdong Oil Co., Ltd.

Aug. 1978 Completed crude refining facility (10,000 bpd)

Aug. 1988 Launched commercial operation of atmospheric distillation plant (60,000 bpd)

Nov. 1988 Changed company name to Kukdong Oil Refining Co., Ltd.

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

Jul. 1993 Changed company name to Hyundai Oil Refinery Co., Ltd.

Jun. 1994 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)

Dec. 1999 Acquired Hanwha Energy and merged with Hanwha Energy Plaza

Nov. 1964
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)

2001-2010

Apr. 2002 Changed company name to Hyundai Oilbank Co., Ltd.

Nov. 2004 Named Good Company for New Management-Employees Culture by the Ministry of Labor

Nov. 2005 Completed the Clean Fuel Project

Mar. 2006 Received a grand prize in Best Ethical Management Company Awards from the Ministry of Commerce, Industry, and Energy in the manufacturing category

Jan. 2007 Received A rating in compliance program

Apr. 2008 Signed an agreement on strategic alliance for oil refinery business with Cosmo Oil of Japan

Dec. 2008 Received the Prime Minister Award at the 15th Corporate Innovation Awards from Korea Chamber of Commerce and Industry

Mar. 2009 Received the Grand Prix at the 7th Ethical Management Awards from the New Industry Management Academy

Dec. 2009 Received the USD 5 Billion Export Tower on Trade Day from Korea International Trade Association (KITA)

Jun. 2010 Received the Korea Great Workplace Award from Hankyung Magazine

Aug. 2010 Became an affiliate of the Hyundai Heavy Industries Group

Aug. 2010 Kwon Oh-gap appointed as the President and CEO of Hyundai Oilbank

Jun. 1994
Launched the Oilbank brand

2011-2015

Mar. 2011 Launched the Customer Advisory Panel
Sep. 2011 Began commercial operations of the #2 HOU Plant
Nov. 2011 Established Hyundai Oilbank Central Technology R&D Institute
Feb. 2012 Joint business with Shell for lube base oil business
Feb. 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
Sep. 2012 Received the Presidential Award at the 1st Korea Knowledge Awards
Oct. 2012 Ranked first in KS-CQI in the entire industry category and KS-SQI in refinery category
Dec. 2012 President & CEO Kwon Oh-gap received the Silver Tower Industrial Medal on Trade Day
Dec. 2012 Received the USD 8 Billion Export Tower on Trade Day from KITA
Feb. 2013 Named one of the top 10 companies at the Best Employers in South Korea by Aon Hewitt
Apr. 2013 Began commercial operations of the #2 BTX Plant of Hyundai Cosmo Petrochemical
Jul. 2013 Signed an MOU for mixed-xylene manufacturing business with LOTTE Chemical
Sep. 2013 Launched lubricant business and XTeer automobile engine oil brand
Dec. 2013 Began commercial operations of Hyundai Oil Terminal
Jan. 2014 Directly-run service stations participated in the 1% profit sharing program
May 2014 Obtained ISO 14001 Energy Management System 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 of Hyundai and Shell Base Oil
Sep. 2014 Completed the construction of Daegu Logistics Center
Sep. 2014 Moon Jong-bak appointed as the President and CEO of Hyundai Oilbank
Nov. 2014 Ranked first in the service station category at the KS-CQI surveys by Korean 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-Management Culture Awards from Ministry of Employment and Labor
Nov. 2014 Received the Presidential Award at the 13th Korea Safety Awards
Dec. 2014 Received the Presidential Award at the 2014 Corporate Innovation Award from Korea Chamber of Commerce and Industry
Feb. 2015 Received the Grand Prize at the 11th Transparent Management Awards
Jun. 2015 Formed alliance with Seoul National Cemetery
Jun. 2015 Received the Presidential Award at the 2015 Green Management Awards
Nov. 2015 Received the Presidential Award at the 2015 Korea Electrical Safety Awards

2016

Feb. 2016 Established Hyundai OCI

May 2016 Completed the construction of the Hanmaeum Hall, a welfare center at an apartment complex for staff

Nov. 2016 Bagan commercial operations of the MX Plant of Hyundai Chemical

Dec. 2016 Accomplished eight million work hours with no accidents

Dec. 2016 President & CEO Moon Jong-bak received the Gold Tower Industrial Medal on Trade Day

2017

Apr. 2017 Achieved nine million zero-accident work hours

Jun. 2017 Signed MOU for the construction of Children's Library in National Library of Vietnam in Hanoi, Vietnam

Sep. 2017 Achieved ten million zero-accident work hours

Nov. 2017 Opened Children's Library in National Library of Vietnam in Hanoi, Vietnam

Nov. 2016
Bagan commercial operations of the MX Plant of Hyundai Chemical

May 2016
Completed the construction of the Hanmaeum Hall, a welfare center at an apartment complex for staff

Sep. 2017
Achieved 10 million zero-accident work hours

Topics from 2017

2017 was a meaningful year for Hyundai Oilbank as it carried out its largest-ever maintenance in August, achieved the industry's first ten million zero-accident work hours in September, and finished construction of Vietnam's first Children's Library in November.

MARCH

Operated employee health promotion program

The Safety & Production Division operated a health promotion program under the slogan of "Strong Body for Solid Safety". Aimed at promoting the health of employees, the program attracted the participation of 490 employees from Hyundai Oilbank's Safety & Production Division and partner companies. Participants who showed the highest rates of improvement to their body fat rate before and after the program's implementation were awarded hotel accommodation vouchers and Hyundai Oilbank Gift Certificates. More than 200 executives and employees also joined the health promotion program in the Seoul office.

MAY

Diversified crude oil imports

Hyundai Oilbank imported 1 million barrels of US crude oil in each of May and June. This was a result of the increase in price of crude oil from the Middle East – on which the company had heavily relied previously – due to OPEC's decision to extend oil production cuts. It was considered a positive change overall in terms of energy security, by reducing trade conflicts with the United States and diversifying crude oil imports, avoiding the over-reliance on the Middle East. Hyundai Oilbank plans to pursue crude oil imports diversification consistently by examining economic feasibility and stability.

JULY

Ranked first in the KS-SQI survey for the third consecutive year

Hyundai Oilbank ranked first in the gas station category for the third consecutive year in the 2017 KS-SQI (Korean Standard Service Quality Index) survey. The KS-SQI model was developed by the Korean Standards Association and the Seoul National University Institute of Management Research, reflecting the characteristics of the South Korean service industry. The first ranking honor recognized the company's ongoing efforts to improve its services, such as holding friendliness and cleanliness contests annually targeting gas stations across the country, supporting bonus card monitoring member activities, and having barista events at gas stations.

AUGUST

Carried out company's largest-scale regular maintenance

Hyundai Oilbank carried out a massive maintenance repair work to improve the efficiency of safety inspections and facilities, along with the capacity expansion of some facilities. The company's periodical maintenance takes place every two to three years. In 2017, however, it was carried out over an entire month in the largest one-time maintenance since the company's foundation. The work was conducted on #2 Plant, #2 HOU (Heavy Oil Upgrading) process, and #1 BTX process, with 280,000 barrels of daily crude oil refining capacity. An average of 5,161 employees per day from Hyundai Oilbank and over 40 partner companies came together for this maintenance to create a safe plant environment.

SEPTEMBER

Achieved ten million zero-accident work hours, a first in the industry

Hyundai Oilbank was the first in the oil refining industry to record ten million zero-accident work hours. A work hour is an index that is calculated by multiplying the number of workers, working hours, and the number of working days. It was a particularly meaningful accomplishment considering that the company had a smaller number of employees than its competitors. This achievement was made possible by placing safety at the highest priority even amidst the ongoing large-scale facility expansion and maintenance.

NOVEMBER

Developed the Children's Library, the first cultural complex facility in Vietnam

Marking the 25th anniversary of the diplomatic relations between South Korea and Vietnam, Hyundai Oilbank completed the construction of the Children's Library in the National Library of Vietnam in Hanoi, Vietnam. Developed by Hyundai Oilbank's 1% Sharing Foundation through a commitment of KRW 340 million, it is expected to play an important role as the first children's cultural complex facility in Vietnam. The facility will provide Vietnamese children with a variety of video content such as animations and movies, as well as exciting experiences, through its various themed spaces including a playroom, a musical instrument experience room, and a mini theater, in addition to a library with more than 2,000 books for children and youth.

DECEMBER

A Christmas miracle, granting children's wishes

The Hyundai Oilbank 1% Sharing Foundation held a "Santa Claus" event with employees who had participated in the 1% of salary sharing during the year. At this event, held at the Seoul Office and the Daesan Refinery Plant, employees turned into Santa Claus, packing gifts and replying to cards on which children's wishes and desired gifts were written. The Foundation prepared the gifts to be distributed to more than 1,000 children in thirty-one Community Child Centers across the country.

Corporate Vision

Hyundai Oilbank developed “Vision 2022” by reflecting its goal of becoming ‘a global total energy company with international competitiveness’.

In our efforts to achieve this vision, we plan to improve the profitability of our petroleum business through heavy oil upgrading ratio increases, and to broaden the portion of operating profit from the non-oil refining sector by aggressively pursuing new businesses in addition to the existing lube base oil, oil storage, petrochemical, and carbon black businesses.

VISION 2022

A Global Energy Company
with International Competitiveness

An energy company
with the best productivity

Growing through
overseas expansion

A respected company that
fulfills its social responsibilities

Achieve sales of KRW 25 trillion and
operating profit of KRW 2.2 trillion

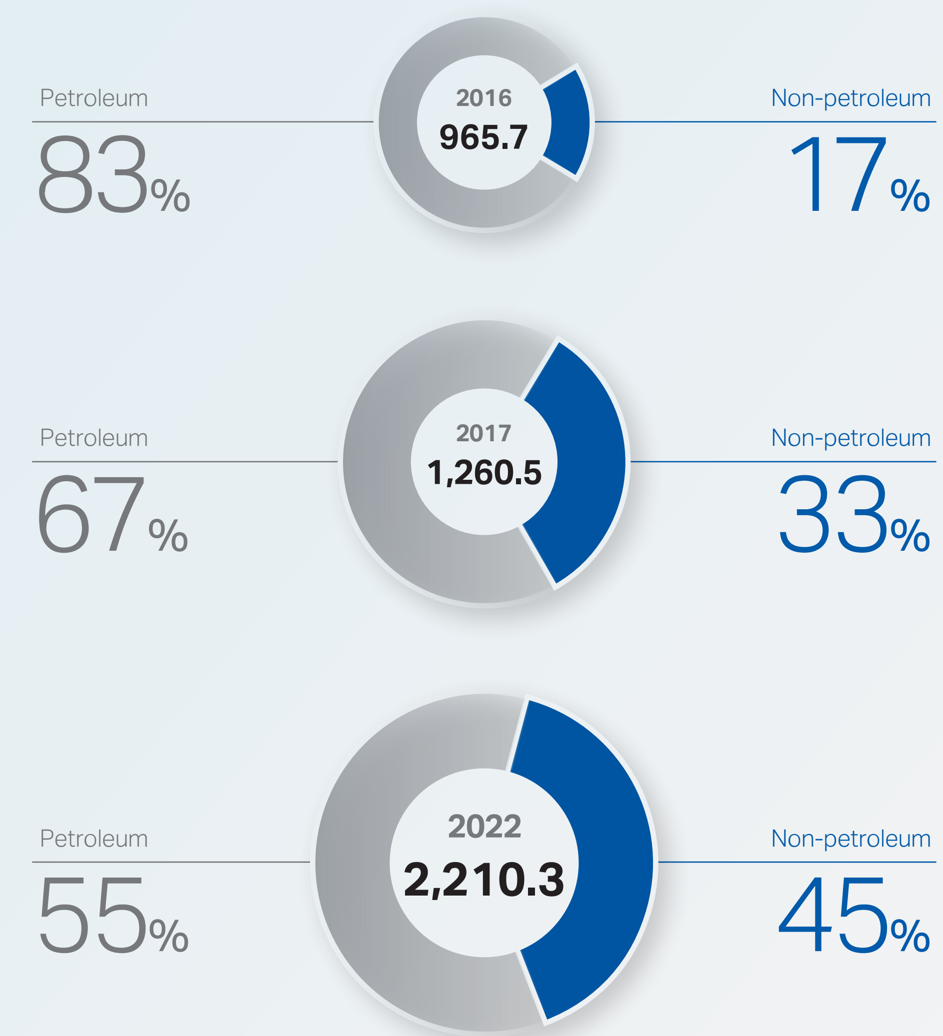
Achieve sales of KRW 25 trillion and operating profit of KRW 2.2 trillion by 2022

Hyundai Oilbank maintains the highest profitability in the South Korean refinery industry through crude oil imports diversification, cost savings, and process improvements. Supported by this stable revenue structure, we aim to strengthen existing businesses and tap into overseas markets to achieve sales of KRW 25 trillion and operating profit of KRW 2.2 trillion by 2022.

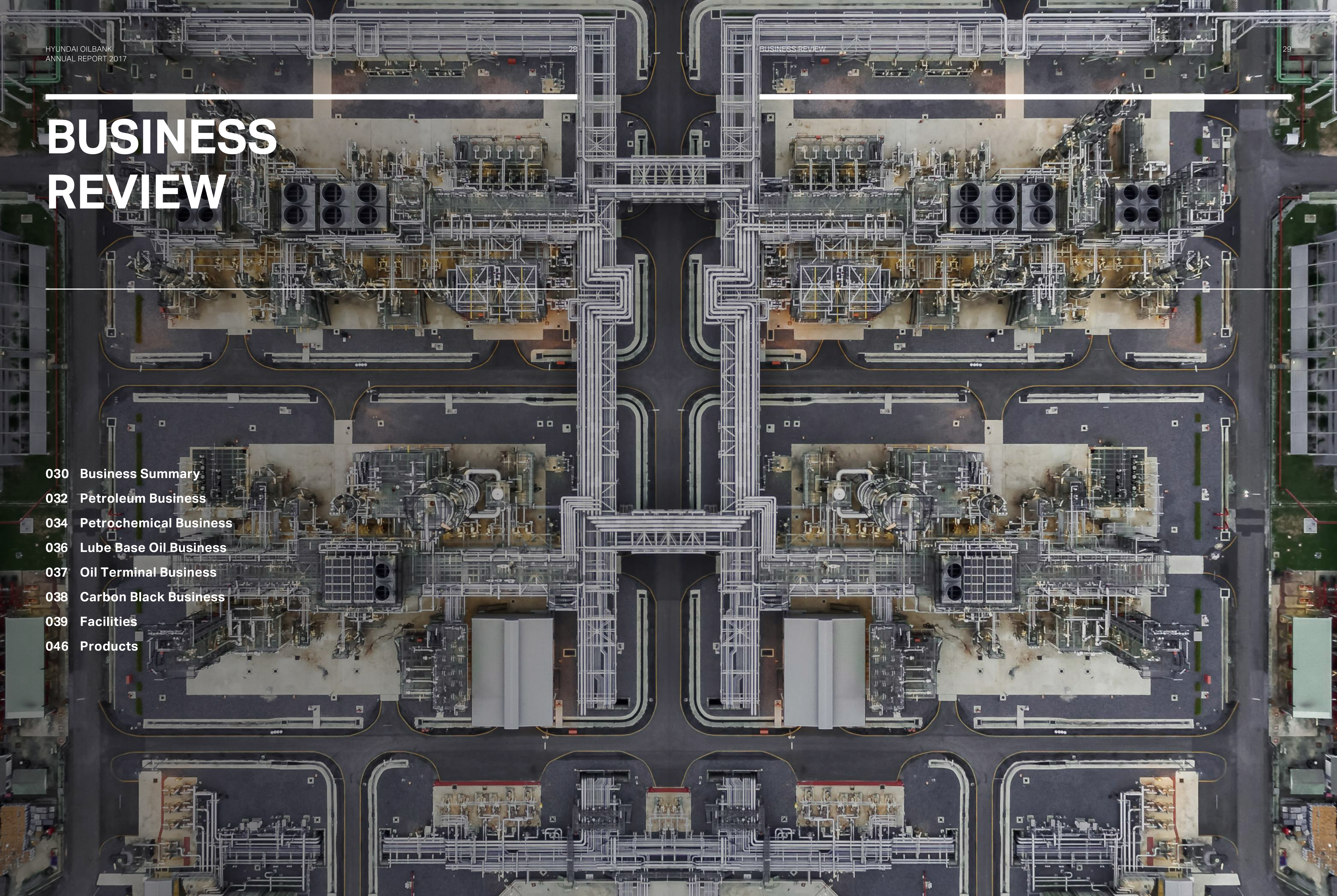
We will also continue to diversify, so that non-petroleum businesses account for more than 45% of our total operating profit. The portion of operating profit taken up by non-petroleum businesses was a mere 17% in 2016 but was raised to 33% in 2017, and the company’s operating profit grew by KRW 294.8 billion year-on-year to reach KRW 1.261 trillion. This demonstrates that we are on track to realize our Vision 2022.

Operating Profit and Portion by Business

(Unit: KRW billion)



※ Based on consolidated financial statements



BUSINESS REVIEW

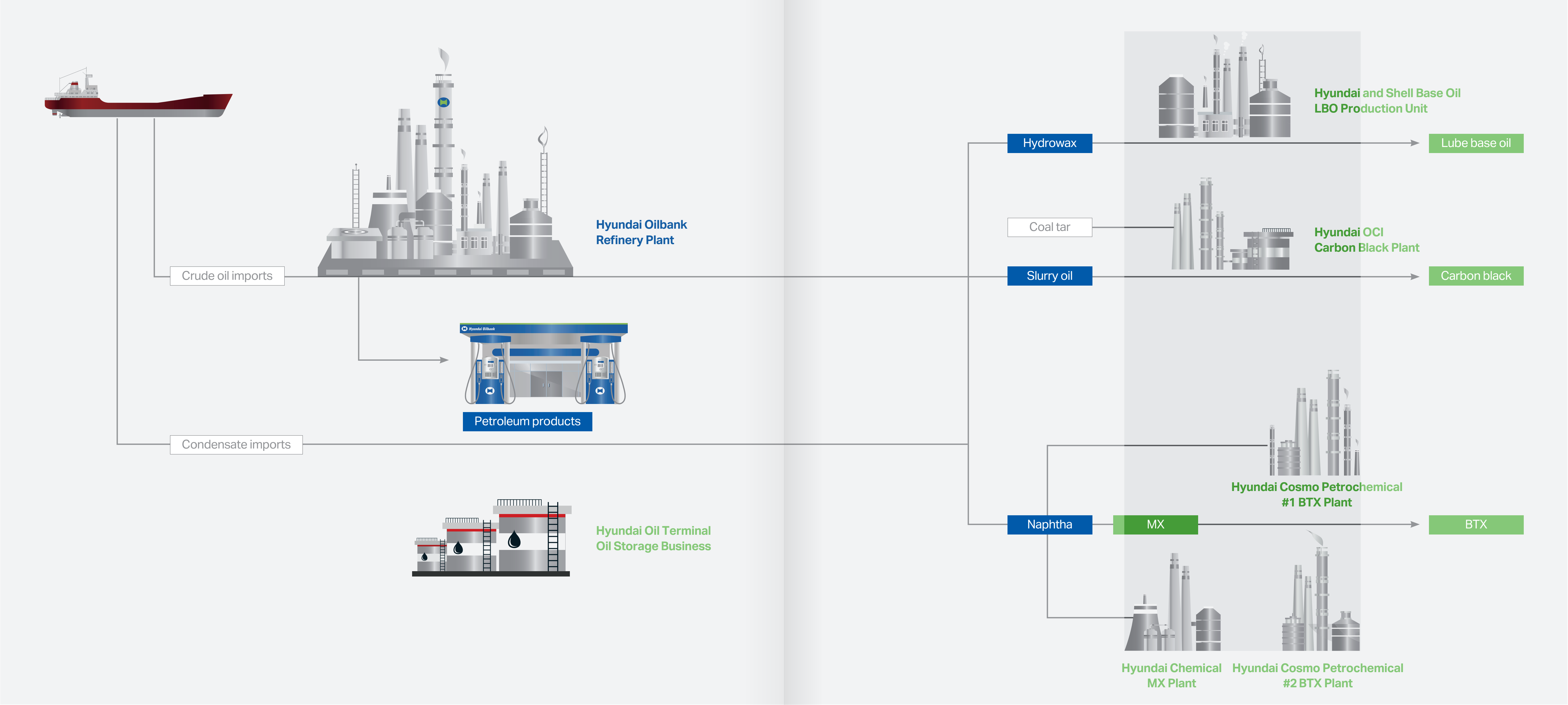
Business Summary

Building stable growth foundations through vertical business integration

Hyundai Oilbank is diversifying its businesses and creating synergies through vertical integration. In 2016, we completed vertical integration in the benzene, toluene, and p-xylene (BTX) businesses as the Mixed-Xylene (MX) Plant of Hyundai Chemical began commercial operations. Hyundai Chemical produces MX, using naphtha produced in Hyundai Oilbank's crude oil refining process together with imported condensate. This MX is then used alongside naphtha as the raw materials for Hyundai Cosmo Petrochemical's BTX production.

We achieved vertical integration in the lubricant base oil business in 2014, from petroleum to lubricant base oil. This was done by advancing into the LBO business through a joint venture with the Shell Petroleum Company Limited. Using our self-produced LBO, we launched XTeer, a new high-quality lubricant product.

In addition, we established Hyundai OCI through a partnership with OCI to enter the carbon black business, a first among domestic refineries, and Hyundai OCI is scheduled to begin commercial operations in February 2018. We are building stable growth foundations while enhancing our operational efficiency through business expansion and vertical integration.



Petroleum Business

Hyundai Oilbank has a daily crude oil refining capacity of 561,000 barrels, which represents a 21.5 % 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 company.

Diversifying crude oil imports

Hyundai Oilbank actively expanded the imports of non-Middle East crude oil in response to the OPEC's supply reductions in 2017. We continued to introduce Mexican crude oil, which is difficult to process and yet low in price, while expanding crude oil imports from the United Kingdom, Russia, and the United States.

Reinforcing brand image

In 2017, Hyundai Oilbank reorganized its marketing strategy to ensure the ultimate in customer satisfaction. We introduced new promotions such as providing snacks through coupon events, increased affiliated partners including the H-Point and the Blue Point to improve customer convenience, and renewed our mobile apps to be more user-friendly.

In recognition of our continuous efforts to achieve customer satisfaction, we have ranked first in the KS-SQI (Korea Service Quality Index) survey for three consecutive years, the KS-CQI (Korean Standard-Contact Service Quality Index) survey for six years in a row, and the KSQI (Korean Service Quality Index) survey for nine consecutive years, retaining our brand image of offering 'gas stations that ensure customer satisfaction'.

Strengthening gas station services

In 2017, Hyundai Oilbank focused on friendliness and cleanliness at its gas stations, in order to strengthen domestic sales capabilities. These efforts included holding the Service Leader Academy, as well as recruiting more female managers with job experience in the customer satisfaction (CS) area, a first in the industry. We also continued to develop complex gas stations that could act as regional landmarks with their innovative designs.

In addition, we are dedicated to making gas stations that customers can trust. For example, we recorded the lowest rate among domestic oil refineries in abnormal product detection by the Korea Petroleum & Distribution Authority in 2017.

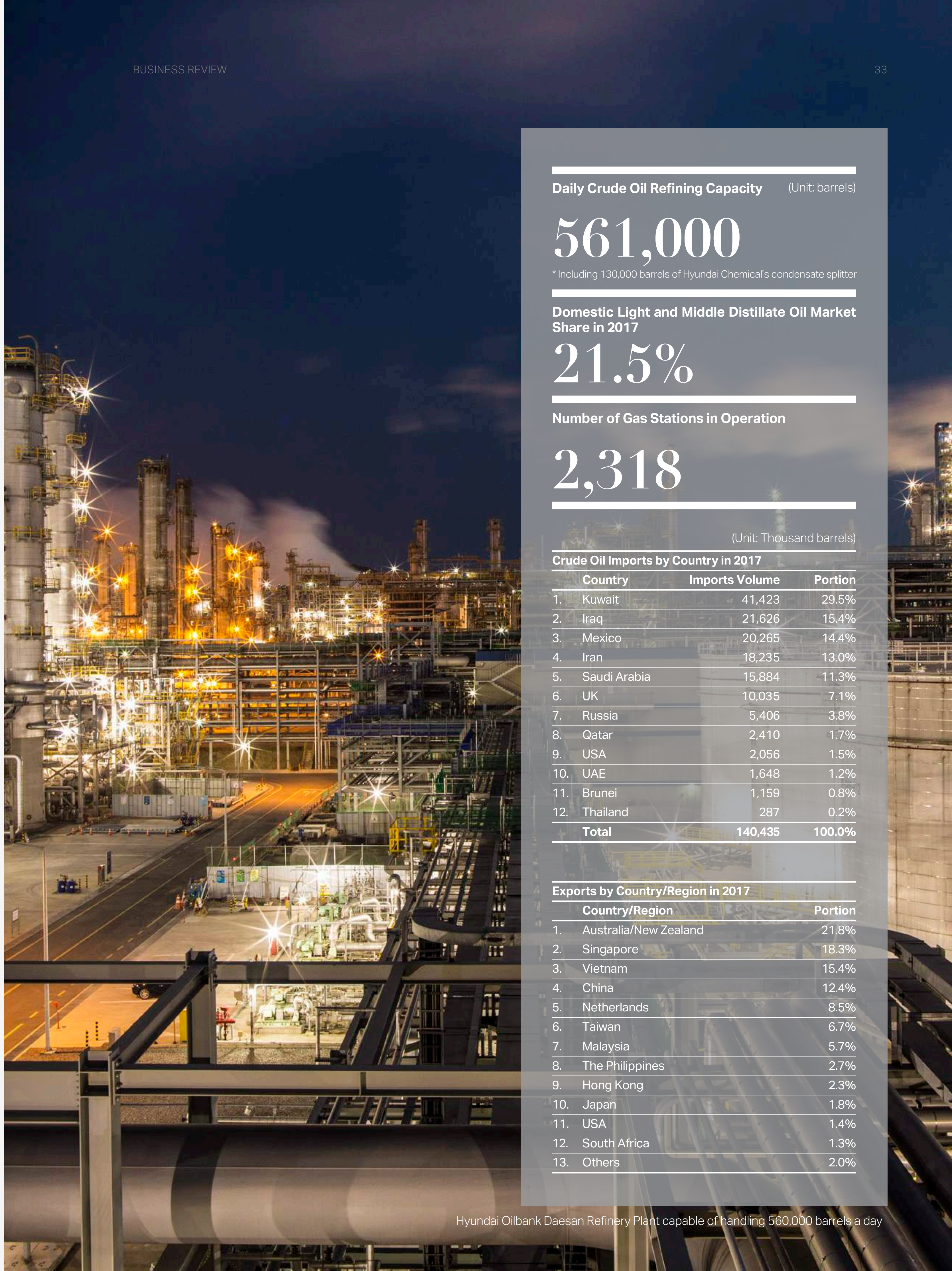
Diversifying product specifications and expanding global presence

Hyundai Oilbank exported 48.4 million barrels of petroleum products in 2017.
We increased the portion of exports to the markets of Australia/New Zealand, Singapore, and Vietnam as compared to that in 2016. This was backed largely by diversifying the specifications of export products, expanding sales in the maritime diesel oil retail market in Singapore, and reducing cost by using multi-product joint shipments.

Moving forward, we will aggressively advance into additional high-margin markets by leveraging our overseas subsidiaries, branches, and networks, while increasing the exports of premium gasoline and other high-end products.

Sales by Product in 2017 (Unit: Thousand barrels)

Type	Sales Volume
Diesel	60,673
Naphtha	41,000
Gasoline	31,140
Fuel oil	22,323
Jet fuel	14,244
Kerosene	4,982
LPG	3,748
Others	8,292
Total	**186,402**



Daily Crude Oil Refining Capacity (Unit: barrels)

561,000

* Including 130,000 barrels of Hyundai Chemical's condensate splitter

Domestic Light and Middle Distillate Oil Market Share in 2017

21.5%

Number of Gas Stations in Operation

2,318

Crude Oil Imports by Country in 2017 (Unit: Thousand barrels)

	Country	Imports Volume	Portion
1.	Kuwait	41,423	29.5%
2.	Iraq	21,626	15.4%
3.	Mexico	20,265	14.4%
4.	Iran	18,235	13.0%
5.	Saudi Arabia	15,884	11.3%
6.	UK	10,035	7.1%
7.	Russia	5,406	3.8%
8.	Qatar	2,410	1.7%
9.	USA	2,056	1.5%
10.	UAE	1,648	1.2%
11.	Brunei	1,159	0.8%
12.	Thailand	287	0.2%
	Total	**140,435**	**100.0%**

Exports by Country/Region in 2017

	Country/Region	Portion
1.	Australia/New Zealand	21.8%
2.	Singapore	18.3%
3.	Vietnam	15.4%
4.	China	12.4%
5.	Netherlands	8.5%
6.	Taiwan	6.7%
7.	Malaysia	5.7%
8.	The Philippines	2.7%
9.	Hong Kong	2.3%
10.	Japan	1.8%
11.	USA	1.4%
12.	South Africa	1.3%
13.	Others	2.0%

Hyundai Oilbank Daesan Refinery Plant capable of handling 560,000 barrels a day

Petrochemical Business

Hyundai Oilbank has expanded its business portfolio to include petrochemicals 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 now boasts an annual BTX production capacity of 1,530,000 tons, after completing the #2 BTX Plant in February 2013 which improved profitability and responded to the dramatically growing demand from China, India, and other Asian countries.

Thanks to cost reductions, better operations processes, and increased para-xylene (PX) production volume, Hyundai Cosmo Petrochemical posted sales of KRW 2.388 trillion and an operating profit of KRW 115.4 billion in 2017. In the future, the company plans to expand its export regions into Taiwan and Southeast Asia.
Leader Academy, as well as recruiting more female managers with job experience in the customer satisfaction (CS) area, a first in the industry. We also continued to develop complex gas stations that could act as regional landmarks with their innovative designs.

In addition, we are dedicated to making gas stations that customers can trust. For example, we recorded the lowest rate among domestic oil refineries in abnormal product detection by the Korea Petroleum & Distribution Authority in 2017.

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

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, and achieved sales of KRW 3.4 trillion and an operating profit of KRW 267.0 billion in 2017. 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) and Hyundai Oilbank's subsidiary (Hyundai Cosmo Petrochemical), creating business synergies such as the effects of more than KRW 1.0 trillion imports replacement and KRW 1.5 trillion export increases.

Hyundai Chemical produces approximately 2,500,000 tons of petrochemical products, including MX and light naphtha, and about 27,000,000 barrels of petroleum products, including jet fuel and diesel, on an annual basis. This is achieved by processing an average of 130,000 barrels of condensate daily. Through safe and efficient plant operation, Hyundai Chemical will continue to seek stable revenue bases and additional diversification in the petrochemical business.

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

Lube Base Oil Business

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. Since successfully establishing itself in the LBO market in 2015, Hyundai and Shell Base Oil has continued to increase profitability by improving its production yields and strengthening marketing capabilities.

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 2017, its LBO was supplied to more than 30 countries.
In addition, Hyundai and Shell Base Oil plans to expand its sales by securing annual production capacity of 1,000,000 tons by the second half of 2018 through an expansion project.

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

Oil Terminal Business

Hyundai Oilbank became the first domestic refiner to enter the commercial tank terminal business in 2012 when the company established Hyundai Oil Terminal. Hyundai Oil Terminal is progressing well towards achieving its goal of developing the largest oil logistics base in the southeastern region.

Hyundai Oil Terminal

Hyundai Oil Terminal is a subsidiary of Hyundai Oilbank. 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).

In addition to the storage business launched in December 2013, Hyundai Oil Terminal 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. Sales and operating profit reached KRW 32.9 billion and KRW 9.1 billion, respectively, in 2017.

Hyundai Oil Terminal will continue to secure future growth engines by expanding its storage facility and proactively developing relevant businesses with a view to attracting international petroleum and petrochemical products for shipping to and from Southeast Asia, in addition to domestic markets.

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

Carbon Black Business

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.

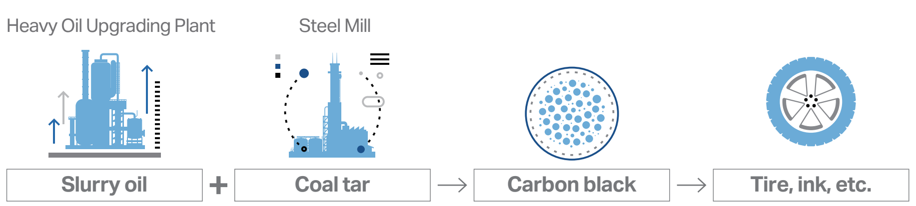
Hyundai OCI

Established in February 2016, Hyundai OCI is a joint venture with OCI Company, the No. 1 carbon black producer in South Korea. Carbon black is a carbon powder that 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 the compounding agents that reinforce tires and other rubber products, and in printer inks.

In August 2016, Hyundai OCI began the construction of a carbon black plant at the Daesan Industrial Complex, located near Hyundai Oilbank Daesan Refinery Plant. The carbon black plant was completed in October 2017, with an annual production capacity of 100,000 tons, and its commercial operations are expected to begin in February 2018.

In addition, Hyundai OCI plans to secure carbon black production facilities with an annual production capacity of 150,000 tons by 2020. It will grow into the industry's best carbon black company, based on Hyundai Oilbank's petrochemical plant operation abilities and OCI's excellent carbon black technologies, plus a stable raw material supply system.

Carbon Black Business System



Carbon Black Plant of Hyundai OCI | www.hyundaioci.co.kr

Facilities

Hyundai Oilbank has established industry-leading refining facilities, while continuously expanding new businesses in the non-oil refining sector through ongoing facility investments.

Hyundai Oilbank Daesan Refinery Plant

Hyundai Oilbank's Daesan Refinery Plant, located in Seosan, South Chungcheong Province and covering approximately 3.8 million square meters, is the company's key base for the refining of crude oil. The plant consists of oil refining facilities capable of handling 560,000 barrels of crude oil, and heavy oil cracking units that can turn 164,500 barrels of heavy oil into high value-added light and middle distillate oil each day.

Hyundai Oilbank is increasing its production capacity through sustained facility investments. 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. Its carbon black plant will begin commercial operations in 2018. In 2018, a solvent de-asphalting (SDA) process will be added and an HOU plant expansion project is currently under way. Through these efforts, the Daesan Refinery Plant continues to grow into a world-leading, cutting-edge production base.

Key Facilities

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 Plant.

Total Capacity (Unit: Thousand barrels/day)

Process	#1 Plant	#2 Plant	#1 BTX	#2 BTX	MX Plant	Carbon Black	Total
Crude Distillation Unit (CDU)	121.0	310.0	-	-	130.0	-	**561.0**
Vacuum Distillation Unit (VDU)	88.0	-	-	-	-	-	**88.0**
Light End Recovery Unit (LER)	12.0	6.0	-	-	5.3	-	**23.3**
Naphtha/Mogas* Hydrotreating Units	-	-	-	-	-	-	-
Naphtha Hydro Treating (NHT)	12.0	20.0	-	-	92.0	-	**124.0**
Platforming Treating (PLT)	4.4	20.0	-	-	56.0	-	**80.4**
Mogas Hydro Treating (MHT)	-	34.0	-	-	-	-	**34.0**
Alkylation Treating (ALK)	-	21.0	-	-	-	-	**21.0**
Mogas Merox Treating (MMX)	-	10.0	-	-	-	-	**10.0**
Kerosene/Gas Oil Hydro Treating Units	-	-	-	-	-	-	-
Kerosene Hydro Treating (KHT)	-	60.0	-	-	-	-	**60.0**
Gas Oil Hydro Treating (GHT)	22.0	102.0	-	-	18.0	-	**142.0**
Kerosene Merox (KMX)	22.0	-	-	-	31.0	-	**53.0**
Heavy Oil Cracking Units	-	-	-	-	-	-	-
Hydro Cracking (HCR)	42.0	-	-	-	-	-	**42.0**
Delayed Coker Unit (DCU)	36.5	-	-	-	-	-	**36.5**
Atmospheric Residue Desulfurization (ARDS)	-	91.0	-	-	-	-	**91.0**
Residue Fluidized Catalytic Cracking (RFCC)	-	86.0	-	-	-	-	**86.0**
LBO Production Unit	-	-	-	-	-	-	-
Lube Base Oil (LBO)	20.0	-	-	-	-	-	**20.0**
BTX Unit (Tons/year)	-	-	-	-	-	-	-
Benzene	-	-	127.0	70.0	350.0	-	**547.0**
Paraxylene	-	-	346.0	987.0	-	-	**1,333.0**
Mixed-xylene (MX)	-	-	-	-	1,200.0	-	**1,200.0**
Carbon Black Production Unit (Thousand tons/year)	-	-	-	-	-	-	-
Carbon black	-	-	-	-	-	100	**100**

* Mogas: Short for motor gasoline, the material is used to formulate gasoline.

Crude Distillation Unit (CDU)
The CDU process separates crude oil into different petroleum fractions by 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 based on 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 oil, including kerosene, diesel, LPG, and naphtha.

Delayed Coker 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 blend-stock 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 blend-stock for various products.

Platforming (PLT)
The PLT process converts the low-octane naphtha produced by the NHT and HCR into high-octane naphtha reformate that is rich in aromatic components. The reformate is used as a gasoline blend-stock 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.

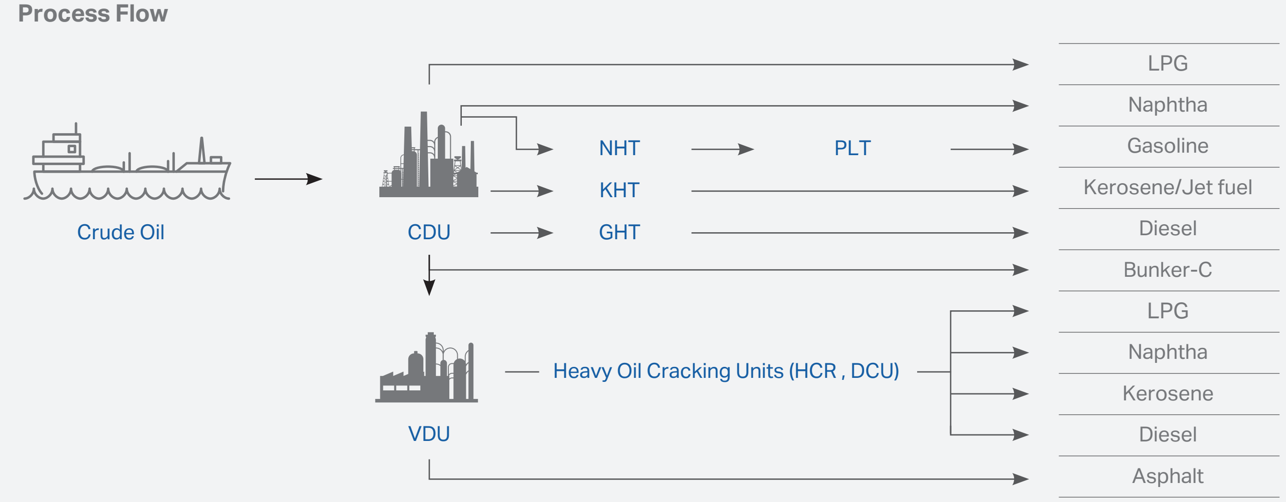
Residue Fluidized Catalytic Cracking (RFCC)
The RFCC process breaks down low sulfur atmospheric residue from ARDS in high temperatures using a fluidized catalyst. It produces gasoline, mixed butane, and propylene.

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.

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

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.

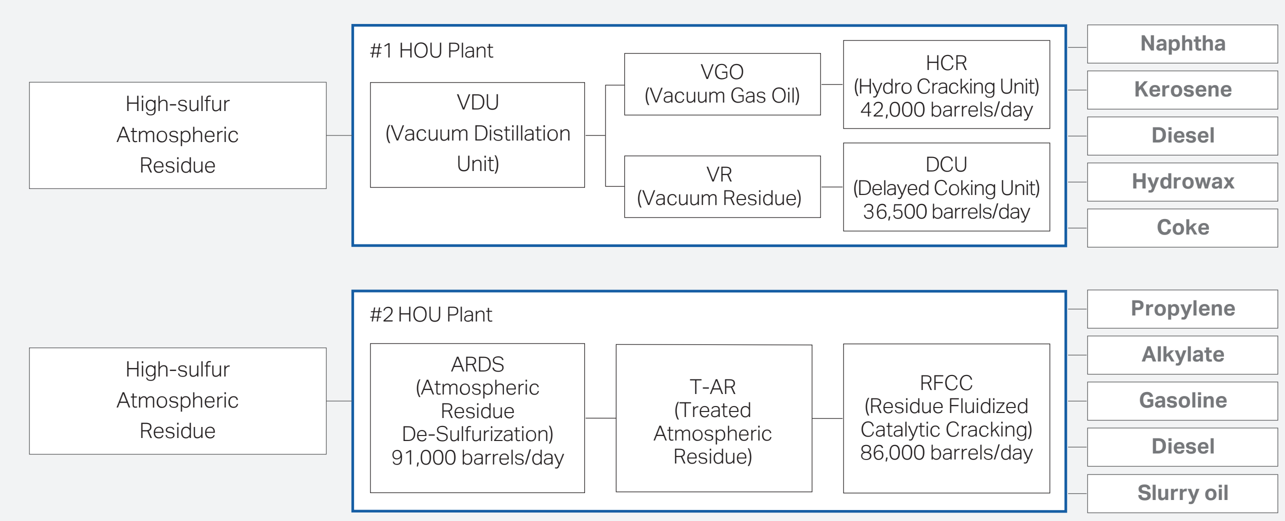
In September 2011, Hyundai Oilbank completed the #2 HOU Plant, increasing its daily upgrading capacity from 70,000 to 164,500 barrels, thus laid the foundation for the next level. As of the end of 2017, Hyundai Oilbank's upgrading ratio was 38.2%, the highest in South Korea.

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-10 parts per million of sulfur content, the world's strictest standard, and exports them to the U.S. and other advanced markets.

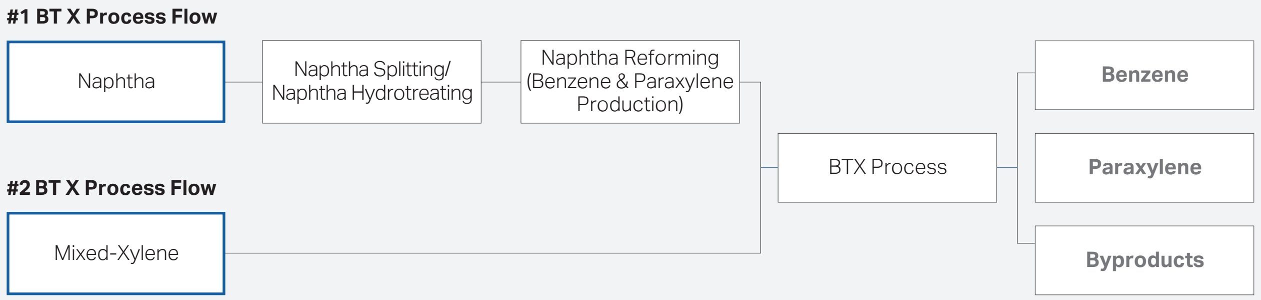
#1 HOU Plant
An HOU plant produces high value-added petroleum products by cracking fuel oil that is created in a CDU. Hyundai Oilbank has two HOU Plants, among which the #1 HOU Plant has mainly produced kerosene and diesel using fuel oil from the #1 CDU as its raw material since beginning operations in 1989. The #1 HOU Plant consists of the HCR unit and DCU, and its daily refining capacity is 42,000 barrels in the HCR and 36,500 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 and the RFCC process. It uses low sulfur bunker-C oil, which is created through the ARDS process, as its raw material, to produce high value-added products. Daily refining capacity of the plant is 91,000 barrels through the ARDS process and 86,000 barrels through the RFCC process.

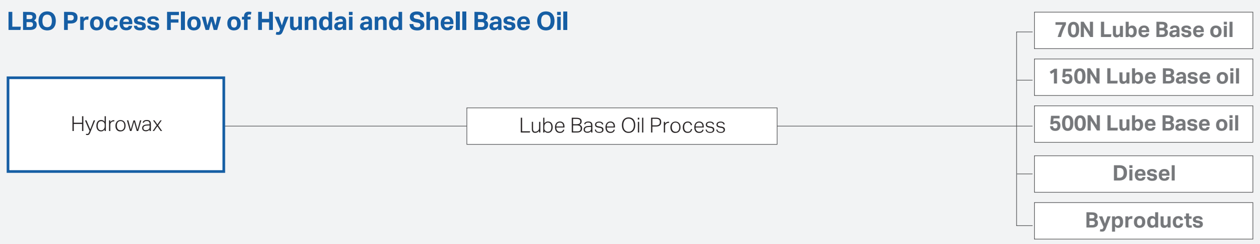
HOU Process Flow



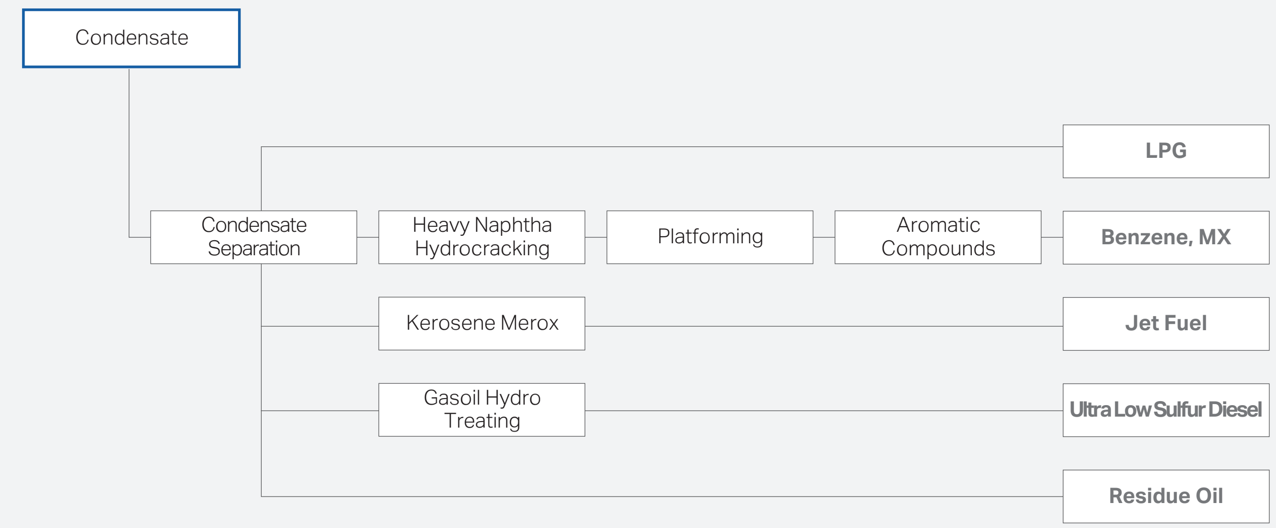
BT X Process Flow of Hyundai Cosmo Petrochemical

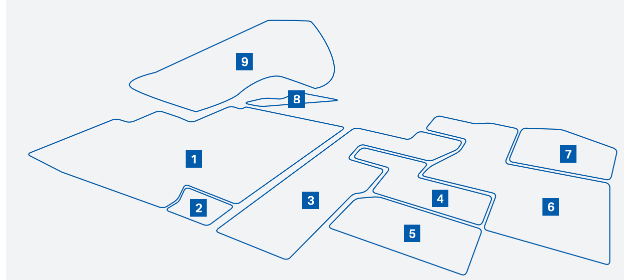


LBO Process Flow of Hyundai and Shell Base Oil



Condensate/MX Process Flow of Hyundai Chemical

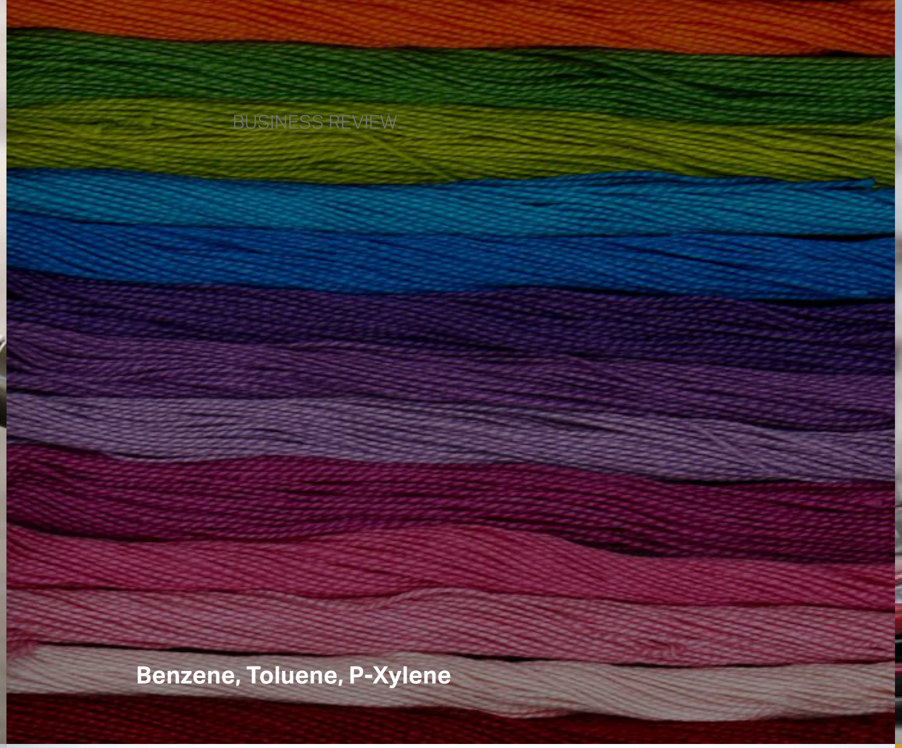




1 #1 Plant / #1 HOU Plant
2 LBO Production Unit
3 #2 Plant
4 #1 BTX Plant
5 #2 BTX Plant
6 #2 HOU Plant
7 MX Plant
8 Hyundai Daejuk Park
9 Carbon Black Plant

Major Products

Premium Gasoline



Benzene, Toluene, P-Xylene

Lubricants

Fuel Oil

Jet Fuel

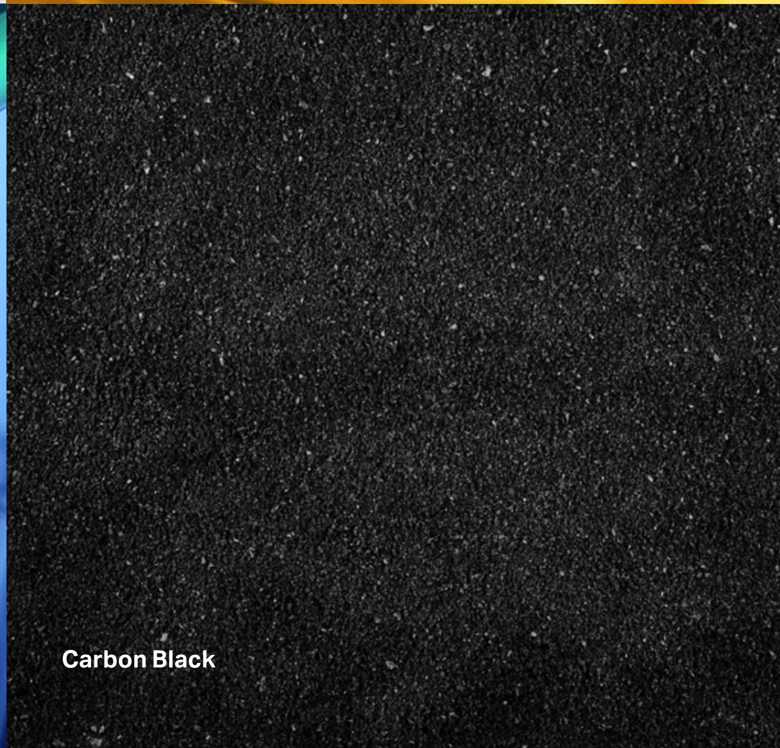
Naphtha

Lube Base Oil

LPG (Liquefied Petroleum Gas)

Alkylate

Propylene



Carbon Black

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 happier future.

Petroleum Products

Premium Gasoline

Hyundai Oilbank's high-quality, high-octane premium gasoline has an octane rating of over 98. Because it uses additives that improve fuel efficiency, it features higher power output and better fuel economy, even in difficult driving conditions over a prolonged period of time. This eco-friendly, high performance gasoline also significantly reduces harmful 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.

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 prevent engines from freezing. 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-Xylene (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.

Alkylate

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 is used in the production of para xylene, ortho xylene, and meta xylene. It is also used as a solvent in paints and agricultural chemicals.

Others

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 α' fuel additive.

Carbon Black

Carbon black is a carbon powder that is produced by the incomplete combustion or pyrolysis 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.

MANAGEMENT REVIEW

Management Philosophy & Strategy

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.

Management Philosophy

The management philosophy of Hyundai Oilbank consists of seven detailed policies.

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.

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

A passionate talent, with a challenging spirit to become the best
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 pioneering spirit, passion for customer satisfaction, a professional mindset and sense of responsibility, and strong drive.

+

An innovative talent who changes the world
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.

+

A trusted talent who acts with integrity
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

Hyundai Oilbank recorded operating profits of nearly KRW 1.26 trillion in 2017, thanks to ongoing cost reductions and improved sales competitiveness. The primary drivers of this profit were stability in plant operations, plant efficiency improvements, lower costs from diversifying crude oil suppliers, new high-yield clients, the diversification of sales channels, and ten million zero-accident work hours.

Forecasting oil prices and exchange rates will be difficult in 2018, given increased shale oil production following an upward movement in oil prices, and expanded exports of petroleum products in the wake of rising supply abilities by refineries in China and other Asian countries.

Despite these obstacles, Hyundai Oilbank will strive to discover profitable crude oil across the globe, and will develop its business in high-margin overseas markets.
The company will continue to reduce costs by increasing its upgrading capacity and improving production efficiency. Future growth businesses will be explored to build a foothold for mid- to long-term growth, and all our plants will operate to the highest levels of safety with a specific target of zero emergency stops.

2018 Strategic Tasks

Put safety first
Continue to operate plants with safety as a priority

Pursue new business Build growth for the future
with safety as a priority

Carry out expansion projects
Complete upgrading capacity increase

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.

Ethical Management System and Programs

Hyundai Oilbank introduced a business ethics system in 2002. The company has set goals of becoming a 'preferred company to conduct transactions' with customers and business partners; a 'preferred company for investment' for shareholders; a 'preferred company to work' for employees; and, 'a company which fulfills its responsibilities for our society'. Since joining the Hyundai Heavy Industries Group in 2010, the company's ethical management policies have been set out and executed at the Group level, along with an enterprise-wide consensus on transparent management and innovation.

Ethical Management System

Hyundai Oilbank operates a practical ethical management system based on ethical standards, including 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 that demand a stricter ethical mindset.

Major Ethical Management Action Programs

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.
Reporting conflicts of interests	When an employee is likely to have a conflict of interest while performing his/her duties, the employee makes a prior report to ensure total transparency in the transaction. This system is applied to employees and business partners.
Ethical management trainings and PR activities	Hyundai Oilbank provides both group training and customized cyber training on ethical management, and undertakes various activities to publicize its policies. Every year, employees use a survey table to check if they are observing ethics regulations. This enhances understanding of the regulations, and encourages employees to find ways to improve.
Listening to field opinions on ethical management	Hyundai Oilbank gathers opinions from the field, from employees and business partners, to assess how much its ethical management is being put into practice. The company collects opinions on what improvements are needed, any difficulties, and suggestions. Hyundai Oilbank also reviews whether to implement these opinions, while always aiming to reflect these opinions and suggestions in our work.
Whistleblower protection and rewards	There are various whistleblowing channels in place, including the ethical management website, phone, fax, and email. Reports are protected by the strictest confidentiality. If the content of a report contributes to the company recovering revenue, the whistleblower is rewarded, based on the company's reward guidelines.
Clean Notice system	If an employee has received a gift from a stakeholder such as a business partner, through unavoidable circumstances, the gift is returned to the giver through a designated delivery company after a simple notification process. Items that cannot be returned are donated to social welfare facilities.

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 employee 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
CCO	• 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	• Internal training: Training on the enacting and amendment of laws / training of employees in charge of compliance /training in parallel with compliance inspections / training for new staff, team leaders, and gas station owners / selected training as required • External training: Supervised by the Korea Fair Competition Federation and Fair Trade Commission • Cyber Training Center: Online training
Oversight system	• Compliance regulations and company-wide work procedures • Whistleblower system: CP consultation room / alert device • CP inspections / prior business review system
Disciplinary system	• Disciplinary measures are taken based on personnel regulations (reward, disciplinary action regulations) • The Personnel Committee deliberates and makes a decision (up to dismissal)
Document management system	• CP operation-related online and offline document management (Team in charge: Policy Cooperation Team)

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 crude oil Hyundai Oilbank imports from the Middle East is mostly purchased by contract at a price set during the month of loading. Consequently, price fluctuations that may occur during the one-month shipping period are risks. To prevent losses from price fluctuations at this time, the company has instituted mandatory hedging for operating margins, as well as for fixed price bids, oil reserves, and storage facility rental transactions. In order to respond effectively to oil price fluctuations, the company also determines the portion of the monthly import volume that is exposed to risk from volume fluctuations, and then makes adjustments based on the prevailing oil price. Hyundai Oilbank has made it a rule to adjust the risk exposure volume by adjusting base prices and by also hedging swap transactions.

Diversification of Crude Oil Import

Hyundai Oilbank is actively diversifying the sources of its crude oil imports in order to avoid the geopolitical risks that arise from importing crude oil from the Middle East, especially Iran. Its crude oil purchases now include Latin America and the North Sea, and its oil benchmarks therefore incorporate West Texas Intermediate (WTI) and Brent crude prices. 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 holds quarterly Risk Management Committee meetings to establish optimal hedging strategies by monitoring economies of scale at home and abroad. The Exchange Risk Management Team minimizes risk by actively hedging exposures, based on these hedging strategies.

Quality Management

In order to improve its post-sales service, Hyundai Oilbank has established thorough, by-phase quality inspections and a detailed quality complaint management system. In addition, the company aims to maximize customer satisfaction through its ongoing R&D efforts.

Managing 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.

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. In 2016, Hyundai Oilbank was recertified for the ISO 9001 quality management system, and won international recognition for its quality management.

Quality Complaint Management System

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, the Technical Support Center uses cutting-edge testing and analysis equipment to respond immediately to customer requests. Even when the cause of a problem is not clear, representatives visit a customer 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.

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.

Quality Complaint Handling Procedure

STEP. 1	STEP. 2	STEP. 3	STEP. 4
Complaint received	Sampling	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 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, maximizing synergy effects among Hyundai Group companies.

Roles and Activities of the Institute

The institute is the center of next-generation R&D of Hyundai Oilbank. It has brought together the technology development functions and research personnel. 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. In addition, joint R&D with Heesung Catalysts Corp. enabled Hyundai Oilbank to develop a catalyst for our #1 GHT process; thus, in September 2016, Hyundai Oilbank became the first South Korean company to produce its own hydrotreating catalyst technology.

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 will lead research into technologies that will support business diversification. This will focus on promising areas including carbon materials manufacturing, marine opportunity crude processing, lubricants, fluidized bed combustion (FBC) hydrotreating, methanol synthesis using natural gas, coal gasification and oil compound manufacturing, high value-added solvents, insoluble sulfur, modified asphalt, and the processing of by-products into high-value-added items.

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

Brand Management

Hyundai Oilbank is increasing its sales competitiveness by enhancing brand value, improving service quality, and undertaking distinctive marketing activities which are 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 carries out sports marketing to get closer to consumers. The company has sponsored K-League, South Korea's top professional football league, and joined the title sponsorship of the Ulsan Hyundai Football Club. Of particular note, Hyundai Oilbank has sponsored the K-League for seven consecutive years, enjoying the publicity associated with this sponsorship.

Hyundai Oilbank also focuses on enhancing the brand value of its products. The company actively publicizes the 'XTeer' lubricant brand and the 'XTeer α' fuel additive brand in order to increase awareness and promote sales, including through promotions at gas stations and customer experience events. In 2017, we held a friendly match between the Ulsan Hyundai Football Club and Vietnam U23, widely publicizing 'XTeer α'.

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.

Ensuring Friendliness and Cleanliness

Hyundai Oilbank undertakes service quality improvements based on its slogan 'Good Service Bank!' in order to build an image of clean and friendly gas stations.
The company assigned customer service specialists, known as MD, around the nation for the first time in the domestic industry. A variety of promotions for each region have been offered, including performances, festivals, and alliances with discount stores.

Hyundai Oilbank also operates the 'Service Campaign', which enables customers to recommend friendly gas stations, the 'Dream Team', which demonstrates standardized service delivery and trains attendants, and 'Service Monitoring', which assesses marketing activities and levels of service from a customer's perspective, and suggests improvements. In addition, a gas station customer service manual was developed, with an aim to provide standardized services.

As a result of these efforts, Hyundai Oilbank ranked first in the gas station category in the 2017 Korea Standard-Service Quality Index (KS-SQI) survey by the Korean Standards Association (KSA) for the third consecutive year.

In addition, its call center earned top rating in the call center category in the Korean Service Quality Index (KSQI) from Korean Management Association Consulting (KMAC), for the ninth consecutive year. The company also ranked first in the Korean Standard-Contact Service Quality Index (KS-CQI) survey from the KSA for the sixth straight year.

Marketing Activities

Hyundai Oilbank responds to the changing market environment by accurately identifying the ever-changing needs of our consumers, and then undertaking marketing activities that reflect those needs.

Differentiated Customer Relationship Management

The distinctive customer relationship management (CRM) of Hyundai Oilbank begins with the scientific analysis of customer data from the 7.1 million customers of its bonus cards. The main CRM activities are 'Customer CRM', which reflects customer lifestyles, and 'Affiliated CRM', which can be used by our customers as well as customers of partner companies.

The company also launches distinctive promotions, such as the 'Happy Four Seasons Promotion', which offers bonus card customers useful benefits in each season of the year, and 'Online Coupon Event', which offers coupons targeting gas station customers, thus contributing to increasing customer loyalty.

Expanding Affiliate 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 while continuously strengthening alliances to expand non-oil businesses, including the gas station complex development.

Building Partnerships with Affiliate Service Stations

Hyundai Oilbank is strengthening its partnerships with affiliate service stations through the Partner Relationship Management (PRM) program, which provides premium services to gas station and LPG filling station owners. The company hosts a cultural event every year for owners and their families, to provide a special family experience, offers regular support programs, including discounts on health check-ups at major hospitals, and donates items for congratulatory and consolatory occasions.

There is also the 'Visiting Barista', a program in which food trucks travel to gas stations to provide free coffee to customers. In addition, Hyundai Oilbank leverages economies of scale by using group purchasing to buy high-quality sales promotion gifts such as mineral water that can be stocked at the lowest possible price by each gas station owner.

Environmental Management

Hyundai Oilbank is strengthening its environmental management, with an aim to minimize its ecological footprints of its production and to establish a safe work environment.

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 it 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.

Major Areas of Integrated SHE System

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

Major Environmental Management Activities

Environmental Investment

Hyundai Oilbank has built highly efficient pollution prevention facilities at its production locations in order to minimize pollution. In 2017, the company invested approximately KRW 3.4 billion. This included the installation of odor monitoring systems and leakage detecting sensors to prevent foul odors and reduce chemical materials. In 2018, plans were made to invest around KRW 5.3 billion to improve facilities for the handling of harmful chemical substances, including the installation of gas sensors and low NOx burners.

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.

Environmental Conference and Inspections

Hyundai Oilbank regularly conducts safety and environmental inspections, and runs the Safety and Environmental Conference, all in effort to prevent and remove safety and environmental risks as part of its commitment to accident prevention and mitigation.

Safety and Environmental Inspections

- Ascertain environmental risk factors through prior inspections
- Manage the results of implementing action plans following environmental inspections
- Confirm compliance with environmental laws, regulations, and guidelines
- Carry out on-site checks on facility management
- Conduct every quarter: Directly-run service stations, logistics centers, Safety & Production Division

Safety and Environmental Conference

- Establish safety and environmental investment plans and identify execution results
- Establish measures for major pending issues
- Monitor pollutant discharge concentration by discharge facility
- Share revisions to important laws and regulations
- Hold every quarter: Sales Division, Safety & Production Division, Subsidiaries

Chemical Emergency Response Programs

In order to promptly respond to any chemical incidents and minimize damage to the environment, Hyundai Oilbank has established and operates the Chemical Safety Team (CST) in partnership with the Geum River Basin Environmental Office of the Ministry of Environment and other companies in the Daesan Industrial Complex. In addition, the company has overhauled its incident response manual to improve in-house prevention and control capabilities, and holds prevention and control drills for potential accident scenarios according to the company's annual plans.

CST	Major roles
Ministry of Environment (Geum River Basin Environmental Office), Hyundai Oilbank, LG Chemical, Hanwha Total Petrochemical, LOTTE Chemical, KCC	• Provide information on the accident location and chemicals, in the event of a chemical accident • Provide control equipment from each company and assist in control outside hazard sites in the event of an accident • Share information inside the regional industrial complex and form an emergency communications network

CSR Management

Hyundai Oilbank practices empathy through its 'hopeful energy' and endeavors to make a positive contribution to society through a wide range of volunteer activities with staff, their families, and service stations.

Hyundai Oilbank 1% Nanum Foundation

The Hyundai Oilbank 1% Nanum Foundation was established in September 2011, when staff at the company 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 conveys warmth and support to those in need through a wide range of projects. We provide heating oil to low-income households and welfare institutions, assist lunch to the elderly in need, and offer scholarships for children of cargo truck drivers.

현대오일뱅크 1% 나눔재단

Vision of Hyundai Oilbank 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.

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 approximately 150,000 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 worth KRW 50 million annually to junior high school, high school, and university students from low-income families living near its headquarters.

In September 2011, the construction of Hyundai Daejuk Park was completed on a 17,400 ㎡ 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 June 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 for the park's continued maintenance including flower tree planting and coastal maintenance, thereby contributing to community development.

Volunteer Activities

Employees of Hyundai Oilbank have provided more than 5,000 hours of community service every year since 2005 through the 'Sharing Happiness Volunteer Program'. They visit places where helping hands are needed, and the company makes financial contributions to the charities its employees support, giving a grant of KRW 10,000 per volunteer hour. In addition, the company donates up to KRW 2 million worth of supplies to the charities as part of its efforts to create a world of warmth and support for people in need.

Charitable Programs

Hyundai Oilbank's 'One Company, One Military Unit' program supports the Yeonpyeong Unit of the Marine Corps, including by carrying out counseling activities and inviting its members to the company's athletics competition. 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. We also provide venues through which we can impart to our employees the meaning of sharing through volunteer work.

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. There are 21 disabled employees working as car wash attendants, and the company helps them stand on their own feet. Moreover, the company has held family invitation events for these employees every year at Nami Island, Everland theme park, the Hwadam Forest, and other locations across South Korea since 2012.

CSR Slogan 'Full of Love', Hopeful Energy' | The motif of two brightly smiling faces facing each other embodies Hyundai Oilbank's commitment to social contributions and creating a better society through acts of compassion for humanity.

FINANCIAL REVIEW

Management's 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. 2017 Economic Overview

In 2017, the global economy achieved solid growth as the economic recovery of major advanced countries, including the United States, spread to emerging countries. Of particular notice was the domestic demand-oriented growth in the United States, due to favorable employment and expectations of tax reform, and growth in the resource-rich countries led by the stabilization of international raw materials prices.

South Korea's economic growth was led by exports following the global economic recovery. However, major economic recovery was limited to certain industries, including an improvement in export unit prices due to a rise in international oil prices and a semiconductor market boom.

2. Market Overview

1) International Crude Oil Price and Foreign Exchange Rate
The international crude oil market is characterized by limited availability, concentrated regional production, uncertain supply and demand, and price volatility. It can be described as a seller's market, with the market controlled by major sellers. In this market, crude oil of the Organization of Petroleum Exporting Countries (OPEC) accounts for the highest portion as it consists of net exporters of crude oil. Therefore, the organization has traditionally had enormous influence in the oil markets. However, non-OPEC producers are rapidly increasing their market share, due mainly to the production of shale oil, giving them significant influence over price.

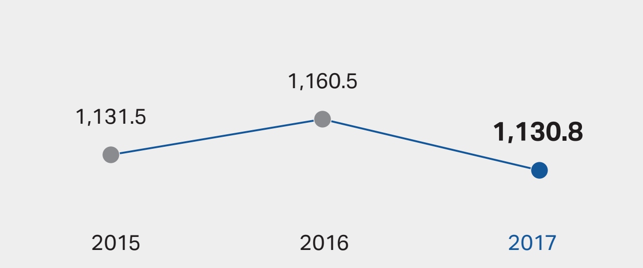
In 2017, international oil prices showed a downturn in the first half of the year due to oversupply despite the OPEC's production cuts, but reversed to an upturn in the second half recovering from a supply glut. This resulted primarily from OPEC's high observance of production cuts and a delay in the US shale oil production. In addition, global oil prices continued to rise, led by global economic recovery, the weakening dollar, and geopolitical risks. As a result, international oil prices rose to the USD 60 range by the end of the year.

International oil prices are expected to rise slightly in 2018 due to an increase in oil demand following the continued global economic recovery and the expected extension of OPEC's output cuts. However, the rise should be limited since increased shale oil production in the US, as well as weaker real purchasing power due to oil price hikes, should serve to restrain the increase in oil demand.

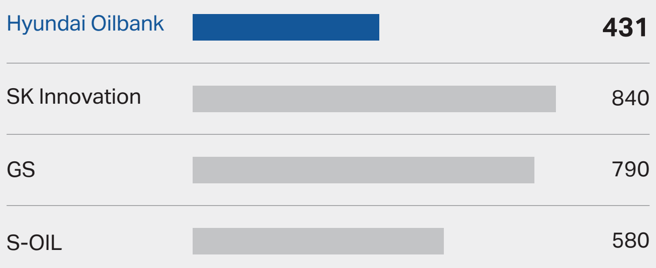
2017 was a year in which the stock markets and the Won currency rallied as investment in risk assets expanded amid the global economic recovery. The Won currency remained strong throughout the year as the performance of domestic export companies, including petrochemicals and semiconductors, improved overall, and the net inflow of foreign investment funds continued. The dollar weakened at the end of the year due to the possibility of monetary tightening in the EU, Japan, and other countries. Consequently, the Won/Dollar exchange rate closed the year at KRW 1,071.4.

In 2018, major economies are expected to improve on the

Average Foreign Exchange Rate (Unit: KRW/USD)



Refining Capacity (Unit: Thousand barrels/day)



back of US tax reform, and the global stock market should continue to be satisfactory. There is a possibility, however, that foreign investment funds will flow out due to the reversal of the benchmark interest rate between South Korea and the United States, and the deepening trade friction arising from the US. Accordingly, the won/dollar exchange rate is anticipated to fluctuate between KRW 1,060 and KRW 1,160.

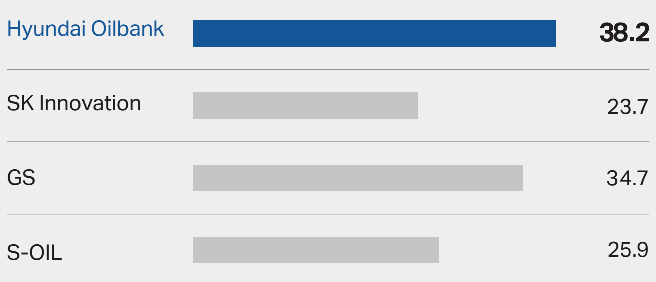
2) Overview of the Domestic Oil Refining Industry
The South Korean oil refining industry has the world's sixth-largest crude refining capacity, at 3,064,000 barrels per day as of the end of 2016, thanks to large-scale refinery expansion projects in the early 1990s.These facilities enable economies of scale and give the domestic oil refining industry a competitive advantage in exports In fact, the South Korean oil refining industry is not domestic demand-oriented any more, and exports more than half of its total production.

In 2017, the South Korean oil refining industry was able to once again enjoy a favorable market environment. Refining margins remained similar to the previous year in the first half of 2017, but improved significantly in the second half. This was due to the disruption in operations caused by Hurricane Harvey in the United States and an increase in demand for petroleum products in the wake of global economic recovery.

The global economic recovery will continue in 2018, while refining capacity expansion is limited, and the combined refining margins are expected to remain robust under the petroleum products market's healthy supply and demand conditions.

There are also uncertainties, including geopolitical risks and the potential for a downfall in oil prices following the expansion of shale oil production in the United States and a failure in implementing the OPEC's agreement to reduce production.

Upgrading Ratio (Unit: %))



Given the uncertainties in the petroleum product market, Hyundai Oilbank plans to strengthen its competitiveness through a wide range of sales strategies including: exports diversification and quality improvement; sustained heavy oil upgrading; and investments in the expansion of production capacity.

Management's Discussion & Analysis

II. Business Results

1. Operating Performance

(Unit: KRW billion)

	2017	2016	Change	
1. Sales	16,376.2	11,885.3	4,490.9	37.8%
2. Cost of Goods Sold	14,684.0	10,466.5	4,217.5	40.3%
3. Gross Profit	1,692.2	1,418.8	273.4	19.3%
4. Selling and Administrative Expenses	431.7	453.1	-21.4	-4.7%
5. Operating Profit	1,260.5	965.7	294.8	30.5%
6. Non-Operating Income (Expenses)	31.1	-20.5	51.6	-251.7%
7. Current Income	1,291.6	945.2	346.4	36.6%
8. Share of Profit of Associates	313.1	208.1	105.0	50.5%
9. Net Income	978.5	737.1	241.4	32.7%
Operating Margin	7.7%	8.1%	-0.4%p	-5.3%
Net Margin	6.0%	6.2%	-0.2%p	-3.7%

※ 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 carefully managed its refining margins by flexibly adjusting its plant operating capacity, and also focused on maintaining the most efficient product inventories throughout the year. in addition, the company undertook an economic analysis of each demand channel, for both domestic sales and exports, and expanded sales through channels with outstanding margins, which led to record-high operating profits in 2017.

Hyundai Oilbank has continued sustained growth by maintaining record-long surplus streak for 22 consecutive quarters since the third quarter of 2012, thanks to its efforts to improve profitability through the stable operation of its 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 has expanded imports of crude oil products from sources other than the Middle East, including the Forties Oil Field in the North Sea, Sokol in Russia, and Maya and Isthmus in Mexico. It has also increased imports of supplementary materials by developing basic new materials, such as C5C6 and solvent xylene.

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 ten 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

In recent years, the demand for petroleum products has slowed down and low oil prices continue due mainly to the shale band. 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 adjusts sales flexibly to react proactively to market changes while applying sales strategies that are appropriate for each channel to maximize profitability.

Retail Sales : Hyundai Oilbank sells its products to gas stations, agencies, the National Agricultural Cooperative Federation, general stores, LPG filling stations, and other retail sales channels through which light and middle distillate oil is mainly supplied. The retail sales channel is the main channel that the company is seeking to expand in strategic regions in South Korea, as well as increasing sales through more advertising and mass promotions. The company also strives to build its brand value by ensuring friendly and clean services at gas stations, and to increase operating profits and asset values through the development of gas station complexes.

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 marine fuel oil, jet fuel, asphalt and naphtha, unlike retail sales which deal primarily with the supply of light and middle distillate oil. In addition, we strive to create new revenue sources by developing special oil types and finding new clients.

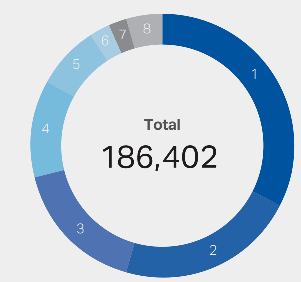
Exports : Exports have increased steadily thanks to the increasing operating capacity ratio and a more diverse range of export products since the expansion of heavy oil upgrading (HOU) facilities. Given the increasingly close interconnection between the domestic and overseas marketplaces, Hyundai Oilbank 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 39.1% in 2016, the highest in South Korea. As a result, the percentage of sales from light and middle distillate oil products, including gasoline, jet fuel, kerosene, and gas oil has remained stable. In terms of product sales by volume, gas oil led with 32.5% 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.

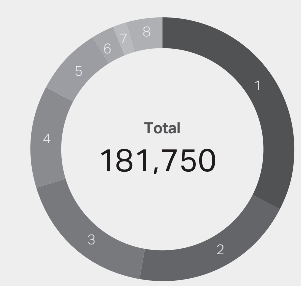
Sales by Product (Unit: Thousand barrels)

2017



1. Gas Oil	60,673	32.5%
2. Naphtha	41,000	22.0%
3. Gasoline	31,140	16.7%
4. Fuel Oil	22,323	12.0%
5. Jet Fuel	14,244	7.6%
6. Kerosene	4,982	2.7%
7. LPG	3,748	2.0%
8. Others	8,292	4.4%

2016



1. Gas Oil	59,417	32.7%
2. Naphtha	36,714	20.2%
3. Gasoline	32,014	17.6%
4. Fuel Oil	22,346	12.3%
5. Jet Fuel	15,226	8.4%
6. Kerosene	5,152	2.8%
7. LPG	3,214	1.8%
8. Others	7,667	4.2%

2015

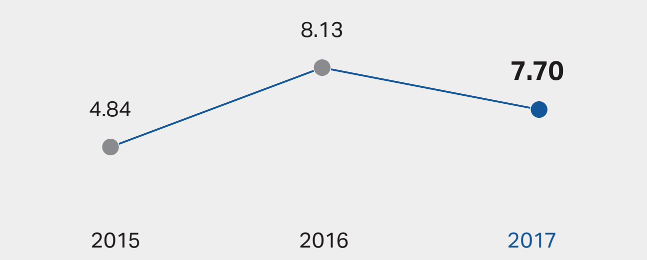
1. Gas Oil	52,692	32.3%
2. Naphtha	31,644	19.4%
3. Gasoline	29,588	18.1%
4. Fuel Oil	21,141	12.9%
5. Jet Fuel	13,006	8.0%
6. Kerosene	4,201	2.6%
7. LPG	3,915	2.4%
8. Others	7,134	4.4%

Management's Discussion & Analysis

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. The company recorded satisfactory operating profits in 2014, despite a worsening external business environment, and has maintained record-long surplus streak for 22 consecutive quarters, thereby realizing stable operating profits. In 2017, of particular note, Hyundai Oilbank achieved a record-high operating profit thanks to maximized sales volume and commercial production at Hyundai Chemical, a new a joint venture with Lotte Chemical.

Operating Margin (Unit: %)



※ Based on consolidated financial statements

Favorable supply and demand conditions should continue in the domestic oil refining industry in 2018, behind expectations that refining facility expansion will be limited and demand for petroleum products will increase. However, the increase in petroleum products due to the expansion of China's crude oil import quota should lead to intensifying export competition in the region.

In order to react to this mid- to long-term market outlook, Hyundai Oilbank will focus on maximizing profits by building new businesses, 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 2018 by increasing efficiency across all areas of its business, from crude oil imports to production and sales.

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 petroleum and petrochemical businesses, and to create future value by establishing new businesses.

Consisting of R&D 1 Team and 2 Team, the institute develops catalysts, provides technology support to the Daesan 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 research into methanol production technology, and technology to remove organic acid from opportunity crude oil. 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

At the end of 2017, the company's total assets amounted to KRW 11.262 trillion, up 16.0% over the previous year. Current assets rose 34.4% year-on-year to reach KRW 4.307 trillion, attributable to increases in inventory and receivables arising from higher oil prices.

There was an increase in tangible assets due to facility investments, which led to an 7.0% increase in non-current assets to KRW 6.955 trillion. Current liabilities rose by 23.8% to KRW 3.824 trillion, as rising oil prices caused an increase in accounts payable. Non-current liabilities went up by 8.0% to KRW 2.305 trillion, and total liabilities rose by 17.4% to reach KRW 6.129 trillion. Total shareholders' equity was up 14.4% to KRW 5.133 trillion, and the liabilities-to-equity ratio rose by 3.0% points to 119.4%.

Key Financial Indicators

(Unit: KRW billion)

	2017	2016	Change	
Current Assets	**4,306.6**	3,205.1	1,101.5	34.4%
Non-current Assets	**6,955.4**	6,503.1	452.3	7.0%
Total Assets	**11,262.0**	9,708.1	1,553.9	16.0%
Current Liabilities	**3,823.7**	3,088.2	735.5	23.8%
Non-current Liabilities	**2,305.0**	2,133.6	171.4	8.0%
Total Liabilities	**6,128.7**	5,221.8	906.9	17.4%
Capital Stock	**1,225.4**	1,225.4	0	0.0%
Hybrid Bonds	**224.3**	224.3	0	0.0%
Capital Surplus	**-50.3**	-50.3	0	0.1%
Accumulated Other Comprehensive Income	**214.9**	232.3	-17.4	-7.5%
Retained Earnings	**3,063.0**	2,495.2	567.8	22.8%
Non-controlling Interest	**456.1**	359.6	96.5	26.8%
Total Shareholders' Equity	**5,133.3**	4,486.3	647.0	14.4%
Liabilities-to-Equity Ratio	**119.4%**	116.4%	3.0%p	2.6%

※ Based on consolidated financial statements

2) CAPEX

Hyundai Oilbank continues to make the investments needed to improve its position in the petroleum 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.

(Unit: KRW billion)

	2017	2016	Change	
New Investment	**371.4**	213.4	158.0	74.0%
Additional Investment	**175.0**	118.9	56.1	47.2%
Capital Investment	**0**	111.0	-111.0	-100.0%
Total	**546.4**	443.3	103.1	23.3%

※ Based on separate financial statements

6. Liquidity and Financing

1) Liquidity

Consisting of cash and cash equivalents and short-term financial assets, the company's liquidity stood at KRW 332.0 billion at the end of 2017. 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 hybrid bonds. Total borrowings at the end of 2017 were KRW 2.738 trillion, a year-on-year increase of KRW 216.2 billion. This was caused largely by new investments in the expansion of heavy oil upgrading facilities and routine maintenance on #2 Plant. Total liabilities increased by 17.3% over the year to reach KRW 6.129 trillion at the end of 2017, and the liabilities to-equity ratio rose by 3.0% points to 119.4%.

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.

We have audited the accompanying separate financial statements of Hyundai Oilbank Co., Ltd. (the Company), which comprise the separate statements of financial position as at December 31, 2017 and 2016, and the separate statements of profit or loss, separate statements of comprehensive income, separate statements of changes in equity and separate statements of cash flows for the years then ended, and notes to the separate financial statements, including a summary of significant accounting policies and other explanatory information.

Management's Responsibilities for the Financial Statements
Management is responsible for the preparation and fair presentation of the separate financial statements in accordance with International Financial Reporting Standards as adopted by the Republic of Korea (Korean IFRS), and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibilities
Our responsibility is to express an opinion on the separate financial statements based on our audits. We conducted our audits in accordance with Korean Standards on Auditing. Those standards require that we comply with ethical requirements, and plan and perform the audit to obtain reasonable assurance about whether the separate financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the separate financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the separate financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the separate financial statements 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. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the separate financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion
In our opinion, the accompanying separate financial statements present fairly, in all material respects, the separate financial position of Hyundai Oilbank Co., Ltd. as at December 31, 2017 and 2016, and its separate financial performance and its separate cash flows for the years then ended in accordance with Korean IFRS.

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 financial statements may differ from those generally accepted and applied in other countries.

Seoul, Korea
March 09, 2018

This report is effective as of March 09, 2018, 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 separate 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.

Hyundai Oilbank Co., Ltd. and Subsidiaries
Consolidated Statements of Financial Position
December 31, 2017 and 2016

(in thousands of Korean won)

	Notes	2017	2016
Assets			
Current assets			
Cash and cash equivalents		₩ 206,842,365	₩ 300,946,654
Short-term financial instruments	8	125,183,166	165,060,342
Derivative financial instruments	20	43,847,366	9,868,892
Trade and other receivables	10,32	1,683,716,664	1,323,221,734
Inventories	11	2,158,941,580	1,320,555,206
Other current assets		88,085,859	85,421,647
		4,306,617,000	3,205,074,475
Non-current assets			
Investments in joint ventures	12	196,909,833	158,333,920
Long-term financial instruments	8	2,024,500	2,027,000
Available-for-sale financial assets	9	3,000,000	3,000,000
Long-term trade and other receivables	10	114,222,031	115,806,275
Investments in properties	13	10,634,973	10,634,973
Property, plant and equipment	14	6,502,071,577	6,102,715,829
Intangible assets	15	96,726,423	95,594,343
Deferred tax assets	29	521,921	5,273
Other non-current assets		29,317,734	14,940,051
		6,955,428,992	6,503,057,664
Total assets		₩ 11,262,045,992	₩ 9,708,132,139

Hyundai Oilbank Co., Ltd. and Subsidiaries
Consolidated Statements of Cash Flows
Years Ended December 31, 2017 and 2016

(in thousands of Korean won)

	Notes	2017	2016
Liabilities			
Current liabilities			
Short-term financial liabilities	17	₩ **1,040,391,386**	₩ 1,101,995,855
Derivative financial instruments	20	**52,125,144**	11,590,466
Trade and other payables	16,32	**2,473,833,459**	1,726,539,039
Current tax liabilities	29	**205,144,034**	172,699,985
Provisions	19	**2,535,000**	7,779,004
Other current liabilities		**49,707,315**	67,610,232
		3,823,736,338	3,088,214,581
Non-current assets			
Long-term financial liabilities	17	**2,029,745,560**	1,885,886,302
Trade and other payables	16	**59,963,539**	59,438,139
Provisions	19	**4,061,800**	4,081,711
Deferred income		**29,293,634**	27,493,382
Deferred tax liabilities	29	**175,297,537**	150,201,873
Other non-current liabilities		**6,614,424**	6,471,058
		2,304,976,494	2,133,572,465
Total liabilities		**6,128,712,832**	5,221,787,046
Equity attributable to owners of the Parent Company			
Share capital	21	**1,225,412,110**	1,225,412,110
Hybrid capital securities	22	**224,272,850**	224,272,850
Share premium		**(50,342,421)**	(50,342,421)
Accumulated other comprehensive income	23	**214,902,254**	232,255,167
Retained earnings	24	**3,063,002,875**	2,495,193,888
Non-controlling interest		**456,085,492**	359,553,499
Total equity		**5,133,333,160**	4,486,345,093
Total liabilities and equity		₩ **11,262,045,992**	₩ 9,708,132,139

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 Profit or Loss
Years Ended December 31, 2017 and 2016

(in thousands of Korean won)

	Notes	2017	2016
Revenue	7,32	₩ **16,376,191,660**	₩ 11,885,304,308
Cost of sales	26,32	**14,683,958,036**	10,466,522,759
Gross profit		**1,692,233,624**	1,418,781,549
Selling and administrative expenses	25,26	**431,684,589**	453,098,320
Operating profit		**1,260,549,035**	965,683,229
Finance income	27	**110,002,056**	39,002,161
Finance costs	27	**102,541,910**	120,007,793
Other non-operating income	28	**207,055,323**	294,226,062
Other non-operating expenses	28	**221,866,223**	280,468,654
Share of profit of associates	12	**38,352,497**	46,751,270
Profit before income tax		**1,291,550,778**	945,186,275
Income tax expense		**313,125,382**	207,542,674
Profit for the period		₩ **978,425,396**	₩ 737,643,601
Profit is attributable to:			
Owners of the Parent Company		₩ **861,399,287**	₩ 691,581,229
Non-controlling interest		**117,026,109**	46,062,372
Basic earnings per share (in Korean won)	30	₩ **3,471**	₩ 2,780

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 Comprehensive Income
Years Ended December 31, 2017 and 2016

(in thousands of Korean won)

	2017	2016
Profit for the period	₩ 978,425,396	₩ 737,643,601
Other comprehensive income		
Items that may be subsequently reclassified to profit or loss		
Cash flow hedges	(4,664,653)	(1,625,292)
Share of other comprehensive income of associates	313,007	813,524
Exchange differences	(3,913,862)	773,884
Items that will not be reclassified to profit or loss		
Remeasurements of net defined benefit liability	11,148,251	18,286,826
Share of other comprehensive income of associates	(89,591)	3,037,392
Gain (loss) on revaluation of land	(9,364,075)	231,669,352
Total comprehensive income for the period	₩ 971,854,473	₩ 990,599,287
Total comprehensive income for the period is attributable to:		
Owners of the Parent Company	855,322,480	944,806,385
Non-controlling interest	116,531,993	45,792,902
	₩ 971,854,473	₩ 990,599,287

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 Changes in Equity
Years Ended December 31, 2017 and 2016

(in thousands of Korean won)

	Share capital	Hybrid Equity Securities	Share premium	Accumulated Other Comprehensive Income	Retained Earnings	Non-controlling Interest	Total
Balance at January 1, 2016	₩ 1,225,412,110	₩ 224,272,850	₩ (76,016,121)	₩ (2,186,580)	₩ 2,101,351,584	₩ 288,981,449	₩ 3,761,815,292
Total comprehensive income for the period	-	-	-	-	-	-	-
Profit for the period	-	-	-	-	691,581,229	46,062,372	737,643,601
Cash flow hedges	-	-	-	-	-	(430,969)	(1,625,292)
Remeasurements of net defined benefit liability	-	-	-	(1,194,323)	18,783,409	(496,583)	18,286,826
Share of other comprehensive income of associates	-	-	-	3,850,916	-	-	3,850,916
Exchange differences	-	-	-	773,884	-	-	773,884
Gain on revaluation of land	-	-	-	231,011,270	-	658,082	231,669,352
Transactions with owners	-	-	-	-	-	-	-
Share issuance of subsidiaries	-	-	(258,647)	-	-	50,711,495	50,452,848
Dividends paid	-	-	-	-	(306,353,028)	-	(306,353,028)
Dividends of hybrid equity securities	-	-	-	-	(10,169,306)	-	(10,169,306)
Changes in ownership interest in subsidiaries that do not result in loss of control	-	-	-	-	-	-	-
Acquisition of investments in subsidiaries	-	-	(7,067,653)	-	-	(25,932,347)	(33,000,000)
Others	-	-	33,000,000	-	-	-	33,000,000
Balance at December 31, 2016	₩ 1,225,412,110	₩ 224,272,850	₩ (50,342,421)	₩ 232,255,167	₩ 2,495,193,888	₩ 359,553,499	₩ 4,486,345,093
					-	-	-
Balance at January 1, 2017	₩ 1,225,412,110	₩ 224,272,850	₩ (50,342,421)	₩ 232,255,167	₩ 2,495,193,888	₩ 359,553,499	₩ 4,486,345,093
Total comprehensive income for the period	-	-	-	-	-	-	-
Profit for the period	-		-	-	861,399,287	117,026,109	978,425,396
Cash flow hedges	-	-	-	(3,883,295)	-	(781,358)	(4,664,653)
Remeasurements of net defined benefit liability	-	-	-	-	10,861,009	287,242	11,148,251
Share of other comprehensive income of associates	-	-	-	223,416	-	-	223,416
Exchange differences	-	-	-	(3,913,862)	-	-	(3,913,862)
Gain on revaluation of land	-	-	-	(9,779,172)	415,097	-	(9,364,075)
Transactions with owners	-	-	-	-	-	-	-
Dividends paid	-	-	-	-	(294,098,906)	(20,000,000)	(314,098,906)
Dividends of hybrid equity securities	-	-	-	-	(10,767,500)	-	(10,767,500)
Balance at December 31, 2017	₩ 1,225,412,110	₩ 224,272,850	₩ (50,342,421)	₩ 214,902,254	₩ 3,063,002,875	₩ 456,085,492	₩ 5,133,333,160

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 Cash Flows
Years Ended December 31, 2017 and 2016

(in thousands of Korean won)

	Notes	2017	2016
Cash flows from operating activities			
Cash generated from operations			
Profit for the period		₩ 978,425,396	₩ 737,643,601
Adjustments	31	705,764,519	562,324,856
Changes in assets and liabilities	31	(466,410,842)	(607,720,461)
		1,217,779,073	692,247,996
Interest received		7,314,188	692,247,996
Interest paid		(87,291,073)	67,610,232
Income taxes paid		(263,939,910)	(138,778,642)
Net cash inflow from operating activities		873,862,278	483,643,437
Cash flows from investing activities			
Increase in short-term financial assets		(11,294,438)	(181,215,123)
Decrease in short-term financial assets		51,171,614	51,185,968
Decrease (increase) in financial assets at fair value through profit or loss		3,908,271	(2,524,202)
Proceeds from disposal of avilable-for-sale financial assets		-	22,800
Decrease in long-term financial assets		2,500	500
Payment for acquisition of property, plant and equipment		(789,688,409)	(825,781,579)
Proceeds from disposal of property, plant and equipment		6,177,129	29,176,091
Payment for acquisition of intangible assets		(43,430)	(3,144,029)
Proceeds from disposal of intangible assets		354,545	1,954,364
Payment for acquisition of investments in associates		-	(25,000,000)
Increase in loans and receivables		(14,998,734)	(12,641,012)
Decrease in loans and receivables		16,626,535	20,887,562
Net cash outflow from investing activities		₩ (737,784,417)	₩ (947,078,660)

(in thousands of Korean won)

	Notes	2017	2016
Cash flows from financing activities			
Proceeds from short-term financial liabilities		₩ 4,858,664,931	₩ 3,379,652,378
Repayments of short-term financial liabilities		(4,857,252,634)	(2,731,267,933)
Repayments of current portion of long-term financial liabilities		(17,027,096)	(317,744,882)
Repayments of current portion of bonds		(380,000,000)	(100,000,000)
Proceeds from issuance of bonds		338,974,960	-
Proceeds from long-term financial liabilities		155,903,099	583,677,253
Capital paid of non-controlling interest		-	50,452,848
Acquisition of investments in subsidiaries		-	(33,000,000)
Dividends of hybrid capital securities		(10,767,500)	(10,767,500)
Dividends paid		(314,098,906)	(306,353,028)
Net cash inflow (outflow) from financing activities		(225,603,146)	514,649,136
Net increase (decrease) in cash and cash equivalents		(89,525,285)	51,213,913
Cash and cash equivalents at the beginning of the year		300,946,654	250,139,265
Effects of exchange rate changes on cash and cash equivalents		(4,579,004)	(406,524)
Cash and cash equivalents at the end of the year		₩ 206,842,365	₩ 300,946,654

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

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

Hyundai Oilbank Co., Ltd. and Subsidiaries

1. General Information

Hyundai Oilbank Co., Ltd. (the Company) was established in 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 has a production capacity of 431,000 barrels per stream day (BPSD) in petroleum and 130,000 barrels per stream day (BPSD) in condensate processing.

The consolidated financial statements of the Company as at and for the period ended December 31, 2017, consist that of the Company and its subsidiaries (collectively referred to as "the Group").

As at December 31, 2017, Hyundai Robotics Co., Ltd. owns 91.13% of total outstanding shares. The shares of Group held by Hyundai Heavy Industries Co., Ltd. were transferred to Hyundai Robotics Co., Ltd., a newly established entity through equity spin-off from Hyundai Heavy Industries Co., Ltd, on April 1, 2017. As a result, Hyundai Robotics Co., Ltd. became the Company's major shareholder.

The consolidated subsidiaries as at December 31, 2017 and 2016, are as follows:

Subsidiaries	Location	Ownership interest held by the Group (%)		Business
		2017	2016	
HDO Singapore Pte. Ltd.	Singapore	100	100	Petroleum trading
MS Dandy Ltd.	Marshall Islands	100	100	Ships leasing
Hyundai Oil Terminal Co., Ltd.	Korea	100	100	Oil storage industry
Hyundai and Shell Base Oil Co.,Ltd.	Korea	60	60	Lubricant oil production
Hyundai Oilbank (Shanghai) Co., Ltd.	China	100	100	Petroleum trading
Hyundai Chemical Co.,Ltd.	Korea	60	60	Crude petroleum refining
Grande Ltd.	Marshall Islands	100	100	Ships leasing
HYUNDAI OCI Co., Ltd.	Korea	51	51	Carbon black production

Summarized financial information for consolidated subsidiaries as at and for the periods ended December 31, 2017 and 2016, is as follows:

(1) 2017 (in thousands of Korean won)

Subsidiaries	Assets	Liabilities	Sales	Profit (loss) for the period
HDO Singapore Pte. Ltd.	₩ 439,269,235	₩ 407,310,217	₩ 4,257,161,250	₩ 7,178,367
MS Dandy Ltd.	14,398,400	1,286	1,358,524	174,940
Hyundai Oil Terminal Co., Ltd.	121,472,920	11,745,280	32,887,166	6,874,821
Hyundai and Shell Base Oil Co.,Ltd.	586,476,923	274,750,803	708,602,284	102,227,220
Hyundai Oilbank (Shanghai) Co., Ltd.	50,770,806	46,135,356	271,571,301	(793,695)
Hyundai Chemical Co.,Ltd.	2,032,676,533	1,332,304,467	3,373,580,260	186,559,707
Grande Ltd.	24,583,534	17,515,617	2,138,453	158,983
HYUNDAI OCI Co., Ltd.	230,962,258	125,464,640	53,625,632	3,009,411

(2) 2016 (in thousands of Korean won)

Subsidiaries	Assets	Liabilities	Sales	Profit (loss) for the period
HDO Singapore Pte. Ltd.	₩ 259,690,027	₩ 231,808,008	₩ 3,433,966,764	₩ 5,780,992
MS Dandy Ltd.	16,916,236	5,194,139	1,568,430	16,722
Hyundai Oil Terminal Co., Ltd	126,943,873	19,105,292	34,944,250	7,392,758
Hyundai and Shell Base Oil Co.,Ltd	509,925,993	250,457,371	498,860,827	74,245,709
Hyundai Oilbank (Shanghai) Co., Ltd.	83,806,587	78,077,745	311,672,939	1,555,156
Hyundai Chemical Co.,Ltd.	1,629,455,904	1,114,371,359	570,905,898	41,913,923
Grande Ltd.	29,175,950	21,373,499	956,956	(446,289)
HYUNDAI OCI Co., Ltd.	112,362,100	9,879,294	-	(1,010,041)

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 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.

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

2.2 Changes in Accounting Policy and Disclosures

(a) 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, 2017. The adoption of these amendments did not have any material impact on the financial statements.

- Amendments to Korean IFRS 1007 *Statement of Cash Flows*

  Amendments to Korean IFRS 1007 Statement of Cash flows require to provide disclosures that enable users of financial state ments to evaluate changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash flows.
- Amendments to Korean IFRS 1012 *Income Tax*

  Amendments to Korean IFRS 1012 clarify how to account for deferred tax assets related to debt instruments measured at fair value. Korean IFRS 1012 provides requirements on the recognition and measurement of current or deferred tax liabilities or assets. The amendments issued clarify the requirements on recognition of deferred tax assets for unrealized losses, to ad dress diversity in practice.
- Amendments to Korean IFRS 1112 *Disclosures of Interests in Other Entities*

  Amendments to Korean IFRS 1112 clarify when an entity's interest in a subsidiary, a joint venture or an associate is classified as held for sales in accordance with Korean IFRS 1105, the entity is required to disclose other information except for summa rized financial information in accordance with Korean IFRS 1112.

(b) New standards and interpretations not yet adopted by the Group

Certain new accounting standards and interpretations that have been published that are not mandatory for annual reporting period commencing January 1, 2017 and have not been early adopted by the Group are set out below.

- Amendments to Korean IFRS 1028 *Investments in Associates and Joint Ventures*

When an investment in an associate or a joint venture is held by, or it held indirectly through, an entity that is a venture capital organization, or a mutual fund, unit trust and similar entities including investment-linked insurance funds, the entity may elect to measure that investment at fair value through profit or loss in accordance with Korean IFRS 1109. The amendments clarify that an entity shall make this election separately for each associate of joint venture, at initial recognition of the associate or joint venture. The Group will apply these amendments retrospectively for annual periods beginning on or after January 1, 2018, and early adoption is permitted. The Group does not expect the amendments to have a significant impact on the financial statements because the Group is not a venture capital organization.

- Amendment to Korean IFRS 1040 *Transfers of Investment Property*

Paragraph 57 of Korean IFRS 1040 clarifies that a transfer to, or from, investment property, including property under construction, can only be made if there has been a change in use that is supported by evidence, and provides a list of circumstances as examples. The amendment will be effective for annual periods beginning on or after January 1, 2018, with early adoption permitted. The Group does not expect the amendment to have a significant impact on the financial statements.

- Amendments to Korean IFRS 1102 *Share-based Payment*

Amendments to Korean IFRS 1102 clarify accounting for a modification to the terms and conditions of a share-based payment that changes the classification of the transaction from cash-settled to equity-settled. Amendments also clarify that the measurement approach should treat the terms and conditions of a cash-settled award in the same way as for an equity-settled award. The amendments will be effective for annual periods beginning on or after January 1, 2018, with early adoption permitted. The Group does not expect the amendments to have a significant impact on the financial statements.

- Enactments to Interpretation 2122 *Foreign Currency Transaction and Advance Consideration*

According to these enactments, the date of the transaction for the purpose of determining the exchange rate to use on initial recognition of the related asset, expense or income (or part of it) is the date on which an entity initially recognizes the non-monetary asset or non-monetary liability arising from the payment or receipt of advance consideration. If there are multiple payments or receipts in advance, the entity shall determine a date of the transaction for each payment or receipt of advance consideration. These enactments will be effective for annual periods beginning on or after January 1, 2018, with early adoption permitted. The Group does not expect the enactments to have a significant impact on the financial statements.

- Enactment of Korean IFRS 1116 *Leases*

Korean IFRS 1116 Leases issued on May 22, 2017 is effective for annual periods beginning on or after January 1, 2019, with early adoption permitted. This standard will replace Korean IFRS 1017 Leases, Interpretation 2104 Determining whether an Arrangement contains a Lease, Interpretation 2015 Operating Leases-Incentives, and Interpretation 2027 Evaluating the Substance of Transactions Involving the Legal Form of a Lease.

At inception of a contract, the entity shall assess whether the contract is, or contains, a lease. Also, at the date of initial application, the entity shall assess whether the contract is, or contains, a lease in accordance with the standard. However, the entity will not need to reassess all contracts with applying the practical expedient because the entity elected to apply the practical expedient only to contracts entered before the date of initial application.

① Lessee accounting

A lessee shall apply this standard to its leases either retrospectively to each prior reporting period presented applying Korean IFRS 1008 Accounting Policies, Changes in Accounting Estimates and Errors (Full retrospective application); or retrospectively with the cumulative effect of initially applying the standard recognized at the date of initial application. The Company has not selected this standard yet.

The Company performed an impact assessment to identify potential financial effects of applying Korean IFRS 1116. The assessment was performed based on available information as at December 31, 2017 to identify effects on 2018 financial statements. The Company is analyzing the effects on the financial statements; however, it is difficult to provide reasonable estimates of financial effects until the analyses is complete.

② Lessor accounting

The Company expects the effect on the financial statements applying the new standard will not be significant as accounting for the Company, as a lessor, will not significantly change.

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

- Enactment of Korean IFRS 1109 *Financial Instruments*

The new standard for financial instruments issued on September 25, 2015 is effective for annual periods beginning on or after January 1, 2018 with early application permitted. This standard will replace Korean IFRS 1039 Financial Instruments: Recognition and Measurement. The Group will apply the standards for annual periods beginning on or after January 1, 2018.

The standard requires retrospective application with some exceptions. For example, an entity is not required to restate prior period in relation to classification and measurement (including impairment) of financial instruments. The standard requires prospective application of its hedge accounting requirements for all hedging relationships except the accounting for time value of options and other exceptions.

Korean IFRS 1109 *Financial Instruments* requires three main areas including: (a) classification and measurement of financial assets on the basis of the entity's business model for managing financial assets and the contractual cash flow characteristics of the financial assets, (b) a new impairment model of financial instruments based on the expected credit losses, and (c) hedge accounting including expansion of the range of eligible hedging instruments and hedged items that qualify for hedge accounting or change of a method of hedge effectiveness assessment.

An effective implementation of Korean IFRS 1109 requires preparation processes including financial impact assessment, accounting policy establishment, accounting system development and the system stabilization. The impact on the Group's financial statements due to the application of the standard is dependent on judgements made in applying the standard, financial instruments held by the Group and macroeconomic variables. The Group performed an impact assessment to identify potential financial effects of applying Korean IFRS 1109. The assessment was performed based on available information as at December 31, 2017, and the Group does not expect the adoption to have a significant impact on the financial statements.

(a) Classification and Measurement of Financial Assets

When implementing Korean IFRS 1109, the classification of financial assets will be driven by the Group's business model for managing the financial assets and contractual terms of cash flow. The following table shows the classification of financial assets measured subsequently at amortized cost, at fair value through other comprehensive income and at fair value through profit or loss. If a hybrid contract contains a host that is a financial asset, the classification of the hybrid contract shall be determined for the entire contract without separating the embedded derivative.

Business model for the contractual cash flows characteristics	Solely represent payments of principal and interest	All other
Hold the financial asset for the collection of the contractual cash flows	Measured at amortized cost[1]	Recognized at fair value through profit or loss[2]
Hold the financial asset for the collection of the contractual cash flows and sale	Recognized at fair value through other comprehensive income [1]	
Hold for sale	Recognized at fair value through profit or loss	

[1] A designation at fair value through profit or loss is allowed only if such designation mitigates an accounting mismatch (irrevocable).

[2] Equity investments not held for trading can be recorded in other comprehensive income (irrevocable).

With the implementation of Korean IFRS 1109, the criteria to classify the financial assets at amortized cost or at fair value through other comprehensive income are more strictly applied than the criteria applied with Korean IFRS 1039. Accordingly, the financial assets at fair value through profit or loss may increase by implementing Korean IFRS 1109 and may result an extended fluctuation in profit or loss.

(b) Impairment: Financial Assets and Contract Assets

The new impairment model requires the recognition of impairment provisions based on expected credit losses (ECL) rather than only incurred credit losses as is the case under Korean IFRS 1039. It applies to financial assets classified at amortized cost, debt instruments measured at fair value through other comprehensive income, lease receivables, contract assets, loan commitments and certain financial guarantee contracts.

Under Korean IFRS 1109 'expected loss' model, a credit event (or impairment 'trigger') no longer has to occur before credit losses are recognized. The Group will always recognize (at a minimum) 12-month expected credit losses in profit or loss. Lifetime expected losses will be recognized on assets for which there is a significant increase in credit risk after initial recognition.

Stage1	Loss allowance
1. No significant increase in credit risk after initial recognition[2]	12-month expected credit losses (expected credit losses that result from those default events on the financial instrument that are possible within 12 months after the reporting date)
2. Significant increase in credit risk after initial recognition	Lifetime expected credit losses (expected credit losses that result from all possible default events over the life of the financial instrument)
3. Credit-impaired	

[1] A loss allowance for lifetime expected credit losses is required for a financial instrument if the credit risk on that financial instrument has increased significantly since initial recognition. It is also required for contract assets or trade receivables that are not, according to Korean IFRS 1115 Revenue from Contracts with Customers, considered to contain a significant financing component. Additionally, the Group can elect an accounting policy of recognizing lifetime expected credit losses for all contract assets and/or all trade receivables, including those that contain a significant financing component.

[2] If the financial instrument has low credit risk at the end of the reporting period, the Group may assume that the credit risk has not increased significantly since initial recognition.

Under Korean IFRS 1109, the asset that is credit-impaired at initial recognition would recognize all changes in lifetime expected credit losses since the initial recognition as a loss allowance with any changes recognized in profit or loss.

- Enactment of Korean IFRS 1115 Revenue from Contracts with Customers

The Group will apply Korean IFRS 1115 Revenue from Contracts with Customers issued on November 6, 2015 for annual reporting periods beginning on or after January 1, 2018. Earlier adoption is permitted under Korean IFRS. This standard replaces Korean IFRS 1018 Revenue, Korean IFRS 1011 Construction Contracts, Interpretation 2031 Revenue-Barter Transactions Involving Advertising Services, Interpretation 2113 Customer Loyalty Programs, Interpretation 2115 Agreements for the Construction of Real Estate and Interpretation 2118 Transfers of assets from customers.

The Group must apply Korean IFRS 1115 Revenue from Contracts with Customers within annual reporting periods beginning on or after January 1, 2018, and will elect the modified retrospective approach which will recognize the cumulative impact of initially

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

applying the revenue standard as an adjustment to retained earnings as at January 1 2018, the period of initial application. Korean IFRS 1018 and other current revenue standard identify revenue as income that arises in the course of ordinary activities of an entity and provides guidance on a variety of different types of revenue, such as, sale of goods, rendering of services, interest, dividends, royalties and construction contracts. However, the new standard is based on the principle that revenue is recognized when control of a good or service transfers to a customer so the notion of control replaces the existing notion of risks and rewards. A new five-step process must be applied before revenue from contract with customers can be recognized:

- Identify contracts with customers
- Identify the separate performance obligation
- Determine the transaction price of the contract
- Allocate the transaction price to each of the separate performance obligations, and
- Recognize the revenue as each performance obligation is satisfied.

The Group performed an impact assessment to identify potential financial effects of applying Korean IFRS 1115. The assessment was performed based on retainable information as at December 31, 2017, and the results of the assessment are explained as below. The results of the assessment as at December 31, 2017 may change due to additional information that the Group may obtain after the assessment.

(a) Identify performance obligation

The Group, upon providing transportation services as included condition in sale of goods, shall recognize transaction price and transportation service separately, and allocate the transaction price to corresponding performance obligations.

As the result of the assessment performed during 2017, the Group's revenue is expected to be decreased by ₩ 974 million.

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 recorded 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.

(b) Changes in ownership interests in subsidiaries without change of control

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.

(c) Disposal of subsidiaries

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 changes in carrying amount recognized in profit or loss.

(d) 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 there is 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 value as impairment loss.

(e) 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.

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

(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.
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 classified as available-for-sale financial assets are recognized in other comprehensive income.

(c) Translation into the presentation currency

The results and financial position of foreign operations that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities for each statement of financial position presented are translated at the closing rate at the end of the reporting period,
- income and expenses for each statement of profit or loss are translated at average exchange rates,
- all resulting exchange differences are recognized in other comprehensive income.

Exchange differences arising from the translation of borrowings designated for hedging the investment and other currency instruments are recognized in other comprehensive income. When foreign operations are wholly or partially sold, exchange differences recognized in equity are transferred to profit or loss in the statement of income. When the Company ceases to control the subsidiary, exchange differences that were recorded in equity are recognized in the statement of income as part of the gain or loss on sale.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate. Exchange differences arising are recognized in other comprehensive income.

2.5 Financial Assets

(a) Classification and measurement

The Group classifies its financial assets into the following categories: financial assets at fair value through profit or loss, available-for-sale financial assets, loans and receivables, and held-to-maturity financial assets. Regular way purchases and sales of financial assets are recognized on trade-date, the date on which the Group commits to purchase or sell the asset.

For hybrid (combined) instruments, the Group is unable to measure an embedded derivative separately from its host contract; therefore, the entire hybrid (combined) contract is classified as at fair value through profit or loss. The Group designated financial assets, foreign convertible bonds and securitized derivatives, as at fair value through profit or loss.

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. Available-for-sale financial assets and financial assets at fair value through profit or loss are subsequently carried at fair value. And, loans and receivables and held-to-maturity investments are subsequently carried at amortized cost using the effective interest method.

Gains or losses arising from changes in the fair value of financial assets at fair value through profit or loss are recognized in profit or loss within other income or other expenses. Gains or losses arising from changes in the available-for-sale financial assets are recognized in other comprehensive income, and amounts are reclassified to profit or loss when the associated assets are sold or impaired.

(b) Impairment

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

Impairment of loans and receivables is presented as a deduction in an allowance account, and that of other financial assets is directly deducted from their carrying amount. The Group writes off financial assets when the assets are determined to be no longer recoverable.
The Group considers that there is objective evidence of impairment if significant financial difficulties of the debtor, or delinquency in interest or principal payments for more than 3 months is indicated. Moreover, in the case of equity investments classified as available-for-sale, a significant decline in the fair value of the security below its cost by more than 30%, or prolonged decline for more than 6 months is considered an objective evidence of impairment.

(c) Derecognition

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.
(d) Offsetting of financial instruments

Financial assets and liabilities are offset and the net amount reported in the consolidated statements 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.

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

2.6 Derivative Financial 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 (expenses)' based on the nature of transactions.

2.7 Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined using the moving average method.

2.8 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.

2.9 Property, Plant and Equipment

Land is shown at fair value based on valuations by external independent valuers. Valuations of land are made on regularity with which significant changes in fair value can occur, and a further revaluation is performed when the fair value of land differs materially from its carrying amount.
Property, plant and equipment are stated at cost less accumulated depreciation and accumulated impairment losses. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Land is not depreciated. Depreciation on assets is calculated using the straight-line method to allocate the difference between their cost and their residual values over their estimated useful lives, as follows:

	Useful lives
Buildings	25 - 50 years
Structures	25 - 50 years
Machinery	2 - 36 years
Vessels	15 years
Tools and fixtures	5 years
Vehicles	5 years
Others	2 ~ 6 years

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

2.10 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.

2.11 Intangible Assets

Goodwill is measured as described in Note 2.3.(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 development costs 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 life
Trademark and licenses	4 - 20 years

2.12 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 to 50 years.

2.13 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.

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

2.14 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.

2.15 Financial Guarantee Contract

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 the amount determined in accordance with Korean IFRS 1037 Provisions, Contingent Liabilities and Contingent Assets and the amount initially recognized less cumulative amortization in accordance with Korean IFRS1018 Revenue, and recognized in the statement of financial position within 'other financial liabilities'.

2.16 Provisions

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.

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.

2.17 Current and Deferred Income 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 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. The Group recognizes current income tax on the basis of amounts expected to be paid to the tax authorities.

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 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 where the entity has a legally enforceable right to offset and intends either to settle on a net basis.

2.18 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

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

the related obligation. Remeasurement 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.

2.19 Revenue Recognition

Revenue is measured at the fair value of the consideration received or receivable for the sale of goods or rendering of services arising from the normal course of the business. Amounts disclosed as revenue are net of value added taxes, returns, rebates and discounts and after elimination of inter-company transactions.

The Group recognizes revenue when the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to the Group and when specific criteria have been met for each of the Group's activities as described below. The Group bases its estimate on historical results, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement.

(a) Sale of goods

The Group manufactures and sells petroleum products. Sales are recognized when control of the products has transferred, being when the products are delivered to the wholesaler.

(b) Interest income

Interest income is recognized using the effective interest method according to the time passed. When a loan and receivable is impaired, the Group reduces the carrying amount to its recoverable amount and continues unwinding the discount as interest income. Interest income on impaired loans and receivables is recognized using the original effective interest rate.

(c) Dividend income

Dividend income is recognized when the right to receive payment is established

2.20 Lease

A lease is an agreement, whereby the lessor conveys to the lessee, in return for a payment or series of payments, the right to use an asset for an agreed period of time. Leases in which a significant portion of the risks and rewards of ownership are not transferred to the Group are classified as operating leases. Payments made under operating leases are charge to profit or loss on a straight-line basis over the period of lease.

Leases where the Group, as lessee, has substantially all the risks and rewards of ownership are classified as finance leases. Finance leases are capitalized at the lease's inception at the fair value of the leased property or, if lower, the present value of the minimum lease payments. The corresponding rental obligations, net of finance charges, are included in other short-term and long-term payables. Each lease payment is allocated between the liability and finance cost.

If the Group is a lessor, a lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership at the inception of the lease. A lease other than a finance lease is classified as an operating lease. Lease income from

operating leases is recognized in income on a straight-line basis over the lease term. Initial direct costs incurred by the lessor in negotiating and arranging an operating lease is added to the carrying amount of the leased asset and recognized as an expense over the lease term on the same basis as the lease income.

2.21 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.

2.22 Approval of Issuance of the Financial Statements

The consolidated financial statements 2017 were approved for issue by the Board of Directors on February 1, 2018 and are subject to change with the approval of shareholders at their Annual General Meeting.

3. Critical Accounting Estimates and Assumptions

The preparation of financial statements requires the Group to make estimates and assumptions concerning the future. 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. 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.

(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.

(b) Useful lives of property, plant and equipment

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 29).

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

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, 2017, the Group recognizes provisions for environmental restoration as explained in Note 19. These provisions are estimated based on past experience.

(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 18).

4. Financial Risk Management

4.1 Financial Risk Factors

The Group's activities expose it 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.

(a) Market risk

i) 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, 2017 and 2016, are as follows:

(in thousands of Korean won)

2017	USD	EUR	JPY	GBP	Total
Cash and cash equivalents	₩ 1,863,785	₩ -	₩ -	₩ -	₩ 1,863,785
Trade receivables	910,935,864	-	-	-	910,935,864
Other receivables	15,954,285				15,954,285
	928,753,934	-	-	-	928,753,934
Trade payables	(1,512,009,613)	(108,002)	(1,516,096)	-	(1,513,633,711)
Other payables	(5,069,863)	(151,251)	(242,522)	(7,773)	(5,471,409)
Financial liabilities	(649,477,045)	-	-	-	(649,477,045)
	₩ (2,166,556,521)	₩ (259,253)	₩ (1,758,618)	₩ (7,773)	₩ (2,168,582,165)

(in thousands of Korean won)

2016	USD	EUR	JPY	GBP	Total
Cash and cash equivalents	₩ 6,475,802	₩ -	₩ -	₩ -	₩ 6,475,802
Trade receivables	780,147,244	-	-	-	780,147,244
Other receivables	116,420	-	-	-	116,420
	786,739,466	-	-	-	786,739,466
Trade payables	(693,770,109)	(106,773)	(1,805,558)	-	(695,682,440)
Other payables	(13,966,829)	(284,934)	-	(2,561)	(14,254,324)
Financial liabilities	(590,062,488)	-	-	-	(590,062,488)
	₩ (1,297,799,426)	₩ (391,707)	₩ (1,805,558)	₩ (2,561)	₩ (1,299,999,252)

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, 2017 and 2016, if the foreign exchange rate of the Korean won fluctuated by 5% while other variables held constant, the effects on profit would be as follows:

(in thousands of Korean won)

	2017		2016	
	5% Increase	5% Decrease	5% Increase	5% Decrease
Foreign currency assets	₩ 46,437,697	₩ (46,437,697)	₩ 39,336,973	₩ (39,336,973)
Foreign currency liabilities	(108,429,108)	108,429,108	(64,999,956)	64,999,956
Net effect	₩ (61,991,411)	₩ 61,991,411	₩ (25,662,983)	₩ 25,662,983

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

ii) Price risk

The Group is exposed to equity securities price risk because of investments held by the Group and classified on the statement of financial position either as available-for-sale or at fair value through profit or loss.

iii) Interest rate risk

The Group's cash flow interest rate risk arises from long-term borrowings. Borrowings issued at variable rates expose the Group to cash flow interest rate risk which is partially offset by cash held at variable rates.

Based on the various scenarios, the Group manages its cash flow interest rate risk by using floating-to-fixed interest rate swaps. Such interest rate swaps have the economic effect of converting borrowings from floating rates to fixed rates. Under the interest rate swaps, the Group agrees with other parties to exchange, at specified intervals (primarily quarterly), the difference between fixed contract rates and floating-rate interest amounts calculated by reference to the agreed notional amounts.

As at December 31, 2017, 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 year would be ₩ 437,396 thousand (2016: ₩ 320,283 thousand) lower/higher, mainly as a result of higher/lower interest expense on long-term floating rate borrowings.

(b) 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 credit quality of the customer is evaluated 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. Sales to retail customers are settled in cash or through major credit cards.

The maximum exposure to credit risk as at December 31, 2017 and 2016, is as follows:

i) Book amount

(in thousands of Korean won)

	2017		2016	
Cash and cash equivalents	₩	206,363,619	₩	300,558,390
Short-term financial instruments		125,183,166		165,060,342
Trade and other receivables		1,683,716,664		1,323,221,734
Derivative assets		43,847,366		9,868,892
Long-term financial instruments		2,024,500		2,027,000
Long-term trade and other receivables		114,222,031		115,806,275
Financial guarantee contracts		16,071,000		27,191,250
	₩	**2,191,428,346**	**₩**	**1,943,733,883**

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 (Note 32).

ii) Each region of the maximum exposure to credit risk

(in thousands of Korean won)

	2017		2016	
Korea	₩	1,231,351,731	₩	1,121,399,021
North America		10,431,270		25,218,470
Asia		899,974,827		787,855,655
Europe		5,345,332		6,570,946
Others		44,325,186		2,689,791
	₩	**2,191,428,346**	**₩**	**1,943,733,883**

(c) 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 projecting cash flows in major currencies and considering the level of liquid assets necessary to meet these, monitoring balance sheet liquidity ratios against internal and external regulatory requirements and maintaining debt financing plans.

The analyses of the Group's liquidity risk as at December 31, 2017 and 2016, are as follows:

(1) 2017

(in thousands of Korean won)

	Book amount	Cash flow on contract [1]	Maturity			
			Less than 6 months	Between 6 months and 1 year	Between 1 and 3 years	Over 3 years
Short-term financial liabilities	₩1,040,391,386	₩1,043,930,890	₩1,042,895,359	₩ 1,035,531	₩ -	₩ -
Trade payables and other liabilities	2,473,833,459	2,473,833,459	2,473,833,459	-	-	-
Long-term financial liabilities	2,029,745,560	2,267,079,995	125,415,823	27,091,243	824,937,885	1,289,635,044
Long-term trade payables and other liabilities	59,963,539	59,963,539	-	-	7,963,539	52,000,000
Derivative liabilities	52,125,144	52,125,144	52,125,144	-	-	-
designated as hedged items						
Financial guarantee contracts	-	₩ 16,071,000	₩ 16,071,000	-	-	-

[1] Includes interest amount to be paid and does not include present value discount.

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

(1) 2016

(in thousands of Korean won)

	Book amount	Cash flow on contract [1]	Maturity			
			Less than 6 months	Between 6 months and 1 year	Between 1 and 3 years	Over 3 years
Short-term financial liabilities	₩1,101,995,855	₩1,135,452,407	₩ 804,258,519	₩ 331,193,888	₩ -	₩ -
Trade payables and other liabilities	1,726,539,039	1,726,539,039	1,726,539,039	-	-	-
Long-term financial liabilities	1,885,886,302	2,214,846,090	23,902,716	27,190,035	733,875,054	1,429,878,285
Long-term trade payables and other liabilities	59,438,139	59,438,139	-	-	7,438,139	52,000,000
Derivative liabilities designated as hedged items	11,590,466	11,590,466	11,590,466	-	-	-
Financial guarantee contracts	-	27,191,250	27,191,250	-	-	-

[1] Includes interest amount to be paid and does not include present value discount.

4.2 Capital Management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order 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.

Consistent with others in the industry, 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' 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, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Total borrowings	₩ 3,070,136,946	2,987,882,157
Less: cash and cash equivalents	(206,842,365)	(300,946,654)
Net debt	2,863,294,581	2,686,935,503
Total equity	5,133,333,160	4,486,345,093
Total capital	7,996,627,741	7,173,280,596
Gearing ratio	₩ 36%	37%

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, 2017 and 2016.

(1) 2017

(in thousands of Korean won)

	Gross liabilities	Gross assets set off	Net amounts presented in the statement of financial position	Amounts not offset		Net amount
				Financial instruments	Cash collateral	
Other payables	₩ 18,544,187	₩ 11,529,884	₩ 7,014,303	₩ -	₩ -	₩ 7,014,303

(1) 2016

(in thousands of Korean won)

	Gross liabilities	Gross assets set off	Net amounts presented in the statement of financial position	Amounts not offset		Net amount
				Financial instruments	Cash collateral	
Other payables	₩ 28,054,850	₩ 11,743,706	₩ 16,311,144	₩ -	₩ -	₩ 16,311,144

5. Fair Value

5.1 Fair Value of Financial Instruments by Category

Carrying amount and fair value of financial instruments by category as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017		2016	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets[1,2]				
Derivative financial assets	₩ 43,847,366	₩ 43,847,366	₩ 9,868,892	₩ 9,868,892
Financial liabilities[2]				
Derivative financial liabilities	52,125,144	52,125,144	11,590,466	11,590,466

[1] Equity instruments that do not have a quoted price in an active market are measured at cost because their fair value cannot be measured reliably, and excluded from the fair value disclosures.

[2] Short-term trade receivables and payables whose carrying amount is a reasonable approximation of fair value are excluded from the fair value disclosures.

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

5.2 Financial Instruments Measured at Cost

Details of financial instruments measured at cost as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Equity securities (unlisted)	₩ 3,000,000	₩ 3,000,000

5.3 Fair Value Hierarchy

Items that are measured at fair value or for which the fair value is disclosed 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 (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 assets and financial liabilities that are measured at fair value as at December 31, 2017, are as follows:

(in thousands of Korean won)

	Level 1	Level 2	Level 3	Total
Financial assets/liabilities that are measured at fair value				
Derivative financial assets	₩ -	₩ 43,847,366	₩ -	**₩ 43,847,366**
Derivative financial liabilities	-	52,125,144	-	**52,125,144**

Fair value hierarchy classifications of the financial assets and financial liabilities that are measured at fair value as at December 31, 2016, are as follows:

(in thousands of Korean won)

	Level 1	Level 2	Level 3	Total
Financial assets/liabilities that are measured at fair value				
Derivative financial assets	₩ -	₩ 9,868,892	₩ -	**₩ 9,868,892**
Derivative financial liabilities	-	11,590,466	-	**11,590,466**

5.4 Valuation Technique and the Inputs

Valuation techniques and inputs used in the recurring, non-recurring fair value measurements and disclosed fair values categorized within Level 2 of the fair value hierarchy as at December 31, 2017 and 2016, are as follows:

(1) 2017

(in thousands of Korean won)

	Fair value	Level	Valuation techniques
Derivative financial assets			
Commodity forward contracts	₩ 43,847,366	2	Present value technique
Derivative financial liabilities			
Commodity forward contracts	52,125,144	2	Present value technique

(1) 2016

(in thousands of Korean won)

	Fair value	Level	Valuation techniques
Derivative financial assets			
Currency forwards	₩ 285,245	2	Present value technique
Commodity forward contracts	9,583,647	2	Present value technique
Derivative financial liabilities			
Currency forwards	285,245	2	Present value technique
Commodity forward contracts	11,305,221	2	Present value technique

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

6. Financial Instruments by Category

6.1 Carrying Amounts of Financial Instruments by Category

Categorizations of financial assets and liabilities as at December 31, 2017, are as follows:

(1) 2017 (in thousands of Korean won)

	Loans and receivables	Available-for-sale financial assets	Other financial assets[1]	Total
Cash and cash equivalents	₩ 206,842,365	₩ -	₩ -	₩ 206,842,365
Short-term financial assets	125,183,166	-	-	125,183,166
Available-for-sale financial assets	-	3,000,000	-	3,000,000
Derivatives financial instruments	-	-	43,847,366	43,847,366
Trade and other receivables	1,797,938,695	-	-	1,797,938,695
Long-term financial assets	2,024,500	-	-	2,024,500
	₩ 2,131,988,726	**₩ 3,000,000**	**₩ 43,847,366**	**₩ 2,178,836,092**

[1] Other financial assets include derivatives instruments designated as hedged items that are not subject to the categorization.

(in thousands of Korean won)

	Financial liabilities at fair value through profit or loss	Other financial liabilities[1]	Total
Short-term financial assets	₩ 1,040,391,386	₩ -	₩ 1,040,391,386
Derivatives financial instruments	-	52,125,144	52,125,144
Trade and other payables	2,533,796,998	-	2,533,796,998
Long-term financial liabilities	2,029,745,560	-	2,029,745,560
	₩ 5,603,933,944	**₩ 52,125,144**	**₩ 5,656,059,088**

[1] Other financial liabilities include derivatives liabilities designated as hedged items that are not subject to the categorization.

(1) 2016 (in thousands of Korean won)

	Loans and receivables	Available-for-sale financial assets	Other financial assets[1]	Total
Cash and cash equivalents	₩ 300,946,654	₩ -	₩ -	₩ 300,946,654
Short-term financial assets	165,060,342	-	-	165,060,342
Available-for-sale financial assets	-	3,000,000	-	3,000,000
Derivatives financial instruments	-	-	9,868,892	9,868,892
Trade and other receivables	1,439,028,009	-	-	1,439,028,009
Long-term financial assets	2,027,000	-	-	2,027,000
	₩ 1,907,062,005	**₩ 3,000,000**	**₩ 9,868,892**	**₩ 1,919,930,897**

[1] Other financial assets include derivatives instruments designated as hedged items that are not subject to the categorization.

(in thousands of Korean won)

	Financial liabilities at fair value through profit or loss	Other financial liabilities[1]	Total
Short-term financial assets	₩ 1,101,995,855	₩ -	₩ **1,101,995,855**
Derivatives financial instruments	-	11,590,466	**11,590,466**
Trade and other payables	1,785,977,178	-	**1,785,977,178**
Long-term financial liabilities	1,885,886,302	-	**1,885,886,302**
	₩ 4,773,859,335	**₩ 11,590,466**	**₩ 4,785,449,801**

[1] Other financial liabilities include derivatives liabilities designated as hedged items that are not subject to the categorization.

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

6.2 Net gains or Losses by Category of Financial Instruments

Net gains or net losses on each category of financial instruments for the periods ended December 31, 2017 and 2016, are as follows:

(1) 2017 (in thousands of Korean won)

	Financial assets at fair value through profit or loss	Loans and receivables	Financial liabilities at fair value through profit or loss	Financial liabilities at amortized cost	Total
Interest income	₩ -	₩ 7,424,987	₩ -	₩ -	₩ -7,424,987
Gain on disposal of financial assets at fair value through profit or loss	6,272,792	-	-	-	6,272,792
Gain on foreign currency translation	-	464,019	-	46,792,126	47,256,145
Gain on foreign currency transactions	-	28,481,771	-	211,327,549	239,809,320
Reversal of provision for impairment	-	332,534	-	-	332,534
Interest expense	-	(457,026)	-	(83,567,199)	(84,024,225)
Loss on disposal of financial assets at fair value through profit or loss	-	-	(2,645,079)	-	(2,645,079)
Loss on foreign currency translation	-	(14,370,771)	-	(12,946,140)	(27,316,911)
Loss on foreign currency transactions	-	(128,971,005)	-	(61,467,813)	(190,438,818)

(1) 2016 (in thousands of Korean won)

	Financial assets at fair value through profit or loss	Loans and receivables	Available-for-sale financial assets	Financial liabilities at fair value through profit or loss	Financial liabilities at amortized cost	Derivatives financial instruments	Total
Interest income	₩ -	₩ 7,969,226	₩ -	₩ -	₩ -	₩ -	₩ 7,969,226
Gain on disposal of f inancial assets at fair value through profit or loss	16,040,688	-	-	-	-	-	16,040,688
Gain on disposal of available -for-sale financial assets	-	-	19,310	-	-	-	19,310
Gain on foreign currency translation	-	15,865,577	-	-	6,236,327	-	22,101,904
Gain on foreign currency transactions	-	70,219,995	-	-	113,083,010	-	183,303,005
Interest expense	-	(478,335)	-	-	(62,060,119)	-	(62,538,454)
Loss on disposal of financial assets at fair value through profit or loss	-	-	-	(16,203,798)	-	-	(16,203,798)
Loss on transactions of derivative financial instruments	-	-	-	-	-	(1,222,455)	(1,222,455)
Loss on foreign currency translation	-	(203,641)	-	-	(43,708,205)	-	(43,911,846)
Loss on foreign currency transactions	-	(64,331,959)	-	-	(132,558,870)	-	(196,890,829)
Impairment loss	-	(322,878)	-	-	-	-	(322,878)

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

7. Segment Information

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

Breakdown of the Group's segment revenue for the periods ended December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Sale of goods	₩ 16,259,847,785	₩ 11,796,572,243
Others	116,343,875	88,732,065
	₩ 16,376,191,660	**₩ 11,885,304,308**

Major customer information for the periods ended December 31, 2017 and 2016, is as follows:

(in thousands of Korean won)

	2017	2016
Sales of goods and others [1]		
Customer [1]	₩ 1,700,426,349	₩ 1,221,809,654

[1] Customers who contribute more than 10% of the Group's revenue

8. Restricted Financial Instruments

As at December 31, 2017, certain short-term and long-term financial instruments amounting to nil (2016: ₩380 million) and ₩24.5 million (2016: ₩ 27 million) are restricted, respectively.

9. Available-for-sale Financial Assets

Available-for-sale financial assets as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Equity securities (unlisted)[1]	₩ 3,000,000	₩ 3,000,000

[1] Since the range of reasonable fair value estimates is significant and the probabilities of the various estimates cannot be reasonably assessed, these instruments are measured at cost.

Changes in available-for-sale financial assets for the periods ended December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Beginning balance	₩ 3,000,000	₩ 3,000,000
Acquisitions	-	3,490
Disposal	-	(3,490)
Ending balance	₩ 3,000,000	₩ 3,000,000

10. Trade and Other Receivables

Trade and other receivables as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Trade receivables [1]	₩ 1,518,434,134	₩ 1,192,000,589
Other receivables	144,983,758	130,178,875
Accrued income	19,827,861	573,678
Deposits	470,911	468,592
	₩ 1,683,716,664	**₩ 1,323,221,734**

[1] As at December 31, 2017, trade receivables that were transferred but have not matured yet amount to ₩ 106,000 million (2016: ₩ 40,000 million). The Group transferred the receivables to DBS bank and substantially all the risks and rewards were transferred. As a result, the transaction has been accounted for disposal of trade receivables (Note 19).

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

The aging analysis of trade receivables as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

		2017		2016
Trade receivables not past due	₩	1,658,996,282	₩	1,299,989,919
Trade receivables past due but not impaired[1]				
Less than 1 month		23,851,581		21,445,179
Between 1 month to 3 months		451,986		872,492
Between 3 months to 6 months		42,889		248
Over 6 months		373,926		620,998
Trade receivables impaired[2]				
Up to 1 year		-		456,097
Over 1 year		-		150,646
	₩	**1,683,716,664**	**₩**	**1,323,535,579**

[1] Trade receivables are temporarily overdue.

[2] Total trade receivables impaired less the recoverable amount (receivables pledged as collateral) is set as provisions for impairment.

Details of long-term trade and other receivables of the Group as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

		2017		2016
Long-term loans	₩	58,607,433	₩	64,609,637
Deposits		55,614,598		51,196,638
	₩	**114,222,031**	**₩**	**115,806,275**

Movements on provisions for impairment of trade and other receivables for the periods ended December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

		2017		2016
Beginning balance	₩	769,401	₩	649,674
Impairment loss on trade receivables		(332,534)		322,878
Receivables written off during the year as uncollectible		(86,948)		(203,151)
Ending balance	**₩**	**349,919**	**₩**	**769,401**

11. Inventories

Inventories as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

		2017		2016
Products	₩	22,492,941	₩	13,964,847
Finished goods		315,461,210		258,927,879
Work in process		156,046,964		136,318,171
Raw materials		512,590,423		378,196,217
Supplies		32,622,983		27,988,088
Materials-in-transit		1,119,727,059		505,160,004
	₩	**2,158,941,580**	**₩**	**1,320,555,206**

Details of cost of inventories recognized as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

		2017		2016
Cost of inventories (cost of sales)	₩	13,539,252,144	₩	9,844,788,495
Loss on valuation of inventory (reversal)		3,617,655		(23,634)

12. Investments in Associates and Joint Ventures

Investments in joint ventures as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	Country	Ownership (%)	2017		2016	
			Acquisition cost	Book amount	Acquisition cost	Book amount
Joint Ventures						
Hyundai Cosmo Petrochemical Co., Ltd.	Korea	50	₩ 316,100,000	₩ 196,909,833	₩ 316,100,000	₩ 158,333,920

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

Details of valuation of investments in associates and joint ventures that are accounted for using the equity method for the periods ended December 31, 2017 and 2016, are as follows:

(1) 2017 (in thousands of Korean won)

	Beginning	Acquisition	Share of profit of joint ventures	Share of other comprehensive income of joint ventures	Disposal	Ending
Hyundai Cosmo Petrochemical Co., Ltd.	₩ 158,333,920	-	₩ 38,352,497	223,416	-	₩ 196,909,833

(1) 2016 (in thousands of Korean won)

	Beginning	Acquisition	Share of profit of joint ventures	Share of other comprehensive income of joint ventures	Disposal	Ending
Hyundai Cosmo Petrochemical Co., Ltd.	₩ 82,731,734	₩ 25,000,000	₩ 46,751,270	₩ 3,850,916	-	₩ 158,333,920

Elimination of unrealized gains and losses for the periods ended December 31, 2017 and 2016, is as follows:

(1) 2017 (in thousands of Korean won)

	Transaction	Beginning	Increased	Realized	Ending
Hyundai Cosmo Petrochemical Co., Ltd.	Disposal of PP&E	₩ (112,731,172)	₩ -	₩ 489,163	₩ (112,242,009)
	Disposal of intangible asset	(100,885)	-	33,628	(67,257)
	Sale of inventories	(1,385,238)	(1,541,440)	1,385,238	(1,541,440)
		₩ (114,217,295)	**₩ (1,541,440)**	**₩ 1,908,029**	**₩ (113,850,706)**

(1) 2016 (in thousands of Korean won)

	Transaction	Beginning	Increased	Realized	Ending
Hyundai Cosmo Petrochemical Co., Ltd.	Disposal of PP&E	₩ (113,246,684)	₩ -	₩ 515,512	₩ (112,731,172)
	Disposal of intangible asset	(134,513)	-	33,628	(100,885)
	Sale of inventories	(841,882)	(1,385,238)	841,882	(1,385,238)
		₩ (114,223,079)	**₩ (1,385,238)**	**₩ 1,391,022**	**₩ (114,217,295)**

Financial information of the investees as at and for the year ended December 31, 2017, is as follows:

(1) 2017 (in thousands of Korean won)

	Assets	Liabilities	Sales	Profit for the period
Hyundai Cosmo Petrochemical Co., Ltd.	₩ 1,371,089,403	₩ 749,568,324	₩ 2,388,167,762	₩ 75,971,818

13. Investment Property

Changes in investment property for the periods ended December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Opening net book amount	₩ 10,634,973	₩ 10,634,973
Closing net book amount	₩ 10,634,973	₩ 10,634,973

During the year, rental income from investment property is ₩ 12 million (2016: ₩12 million), and direct operating expenses (including repairs and maintenance) arising from investment property that generated rental income during the year are ₩120 million (2016: ₩110 million).

Fair value of investment property as at December 31, 2017, is ₩11,740 million (2016: ₩11,854 million). The valuation of fair value is performed by an independent valuer.

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

14. Property, Plant and Equipment

Changes in property, plant and equipment for the periods ended December 31, 2017 and 2016, are as follows:

(1) 2017 (in thousands of Korean won)

	Land	Buildings	Structures	Machinery and equipment	Vessels	Vehicles	Tools	Construction -in-progress	Others	Total
Opening acquisition cost	₩ 1,195,757,362	₩ 324,511,474	₩1,611,981,993	₩4,187,193,758	₩ 49,292,506	₩ 13,186,991	₩164,172,437	₩ 246,611,410	₩280,428,130	₩8,073,136,061
Opening accumulated depreciation	-	(70,062,461)	(463,215,243)	(1,120,067,139)	(5,002,144)	(11,550,874)	(108,232,554)	-	(192,289,817)	(1,970,420,232)
Opening net book amount	1,195,757,362	254,449,013	1,148,766,750	3,067,126,619	44,290,362	1,636,117	55,939,883	246,611,410	88,138,313	6,102,715,829
Acquisitions	505,701	541,733	290,722	2,103,581	29,079	237,565	8,139,496	747,003,845	-	758,851,722
Disposals	(5,255,613)	(941,219)	(855,642)	(9,287,085)	-	(19)	(204,658)	-	-	(16,544,236)
Transfer and others	447,638	6,894,383	33,661,048	279,650,384	-	531,399	7,103,164	(399,773,614)	65,216,073	(6,269,525)
Depreciation charge	-	(8,024,788)	(44,622,131)	(214,636,702)	(2,307,819)	(577,211)	(17,742,905)	-	(43,863,391)	(331,774,947)
Exchange differences	-	-	-	-	(4,904,806)	-	(2,460)	-	-	(4,907,266)
Closing acquisition cost	1,191,455,088	330,234,948	1,644,388,046	4,448,432,075	43,727,999	13,786,226	174,790,874	593,841,641	345,552,608	8,786,209,505
Closing accumulated depreciation	-	(77,315,826)	(507,147,299)	(1,323,475,278)	(6,621,183)	(11,958,375)	(121,558,354)	-	(236,061,613)	(2,284,137,928)
Closing net book amount	₩1,191,455,088	₩252,919,122	₩1,137,240,747	₩3,124,956,797	₩37,106,816	₩1,827,851	₩53,232,520	₩ 593,841,641	₩109,490,995	₩6,502,071,577

(1) 2016 (in thousands of Korean won)

	Land	Buildings	Structures	Machinery and equipment	Vessels	Vehicles	Tools	Construction -in-progress	Others	Total
Opening acquisition cost	₩ 842,355,802	₩ 283,642,271	₩1,295,352,765	₩ 3,286,456,533	₩ 20,055,386	₩ 13,948,848	₩154,591,308	₩ 769,385,192	₩222,989,978	₩ 6,888,778,083
Opening accumulated depreciation	-	(64,395,208)	(424,164,052)	(933,727,145)	(2,924,744)	(12,258,283)	(117,698,580)	-	(149,990,983)	(1,705,158,995)
Opening net book amount	842,355,802	219,247,063	871,188,713	2,352,729,388	17,130,642	1,690,565	36,892,728	769,385,192	72,998,995	5,183,619,088
Acquisitions	874,149	2,412,722	769,587	1,561,441	16,599,871	461,796	7,475,350	873,599,593	-	903,754,509
Disposals	(19,027,886)	(1,801,814)	(806,947)	(5,669,530)	-	(64)	(235,014)	-	(1,357,361)	(28,898,616)
Transfer and others	67,994,300	41,777,245	316,125,551	900,895,881	10,876,206	36,062	26,561,311	(1,396,265,597)	61,010,966	29,011,925
Revaluation of land	303,560,997	-	-	-	-	-	-	-	-	303,560,997
Depreciation charge	-	(7,186,203)	(38,510,154)	(182,390,561)	(1,907,420)	(552,242)	(14,754,764)	-	(44,514,287)	(289,815,631)
Exchange differences	-	-	-	-	1,591,063	-	272	(107,778)	-	1,483,557
Closing acquisition cost	1,195,757,362	324,511,474	1,611,981,993	4,187,193,758	49,292,506	13,186,991	164,172,437	246,611,410	280,428,130	8,073,136,061
Closing accumulated depreciation	-	(70,062,461)	(463,215,243)	(1,120,067,139)	(5,002,144)	(11,550,874)	(108,232,554)	-	(192,289,817)	(1,970,420,232)
Closing net book amount	₩ 1,195,757,362	₩ 254,449,013	₩1,148,766,750	₩ 3,067,126,619	₩ 44,290,362	₩ 1,636,117	₩ 55,939,883	₩ 246,611,410	₩ 88,138,313	₩6,102,715,829

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

Line items including depreciation in the statements of profit or loss for the periods ended December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Cost of sales	₩ 313,245,291	₩ 272,616,043
Selling and administrative expenses	18,529,656	17,199,588
	₩ 331,774,947	**₩ 289,815,631**

During the year, the Group has capitalized borrowing costs amounting to ₩ 6,502 million (2016: ₩19,720 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 3.01% (2016: 3.64%).

Details of property, plant and equipment provided as collaterals as at December 31, 2017, are as follows:

(1) 2017

(in thousands of Korean won and USD)

	Book amount	Secured amount	Related line item	Related amount	Secured party
Land	₩ 10,741,623	₩ 234,000,000	Borrowings (Note 17)	₩ 195,000,000	KEB Hana bank and other financial institutions
Building	3,350,135				
Structures	39,521,695				
Machinery	169,971,075				
Land / Building	85,789,041	₩ 858,000,000		₩ 715,000,000	Korea Development bank and other financial institutions
Machinery	860,111,836				
Construction-in-progress	64,263,601				
Construction-in-progress	207,099,606	₩ 144,000,000		₩ 103,000,000	Korea Development bank and other financial institutions
Vessel	23,279,994	USD 16,331		USD 16,331	HIHD Co., Ltd.

The Group entered into contractual commitments for acquisition of investments in property plant and equipment as at December 31, 2017. The amount of contractual commitments is ₩624,846 million.

The following table analyzes the book amount of land measured under revaluation model and cost model as at December 31, 2017

(in thousands of Korean won)

	Revaluation model	Cost model
Land	₩ 1,191,455,088	₩ 888,753,505

Operating lease

The lease payments recognized as expenses for the periods ended December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Total lease payments	₩ 22,653,418	₩ 20,742,595

Total minimum lease payments in relation to non-cancellable operating leases that are payable at the end of the reporting period are as follows:

(in thousands of Korean won)

	2017	2016
Within one year	₩ 18,930,374	₩ 17,518,746
Later than one year but not later than two years	8,284,080	9,780,984
Later than two years	5,398,922	8,527,587
	₩ 32,613,376	**₩ 35,827,317**

15. Intangible assets

Changes in intangible assets for the periods ended December 31, 2017 and 2016, are as follows:

(1) 2017

(in thousands of Korean won)

	Goodwill	Development costs	Membership rights	Others	Total
Book amount at January 1, 2017	₩ 56,629,475	₩ 9,719,430	₩ 13,108,566	₩ 16,136,872	**₩ 95,594,343**
Additions	-	-	32,116	11,314	**43,430**
Disposals	-	-	(620,139)	-	**(620,139)**
Amortization	-	(2,837,983)	-	(1,605,039)	**(4,443,022)**
Transfer and others	-	3,514,007	696,421	1,974,073	**6,184,501**
Exchange differences	-	-	(32,378)	(312)	**(32,690)**
Book amount at December 31, 2017	₩ 56,629,475	₩ 10,395,454	₩ 13,184,586	₩ 16,516,908	**₩ 96,726,423**

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

(1) 2016 (in thousands of Korean won)

	Goodwill	Development costs	Membership rights	Others	Total
Book amount at January 1, 2016	₩ 56,629,475	₩ 5,993,342	₩ 13,736,667	₩ 17,256,892	**₩ 93,616,376**
Additions	-	139,625	3,004,404	-	**3,144,029**
Disposals	-	-	(3,637,453)	-	**(3,637,453)**
Amortization	-	(2,298,299)	-	(1,528,788)	**(3,827,087)**
Transfer and others	-	5,884,762	(3,490)	408,874	**6,290,146**
Exchange differences	-	-	8,438	(106)	**8,332**
Book amount at December 31, 2016	₩ 56,629,475	₩ 9,719,430	₩ 13,108,566	₩ 16,136,872	**₩ 95,594,343**

Line items including amortization in the statements of profit or loss for the periods ended December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Cost of sales	₩ 835,418	₩ 568,194
Selling and administrative expenses	3,607,604	3,258,893
	₩ 4,443,022	**₩ 3,827,087**

15.1 Impairment of Intangible assets

The Group's goodwill as at December 31, 2017, represents the goodwill arising from past acquisition. Goodwill is distributed based on the cash-generating units, by which the executives manage the goodwill.

(in thousands of Korean won)

	Goodwill allocation amount	
	2017	2016
Goodwill	₩ 56,629,475	₩ 56,629,475

Assumptions	Rate	
	2017	2016
Operating profit margin compared to sales volume	6.77%	7.06%
Growth rate of the sales volume[1]	0.64%	4.07%
Growth rate beyond 5 years[2]	0.71%	1.47%
Pre-tax discount rate[3]	7.56%	6.69%

1 Weighted average of sales growth rate calculated based on historical growth rate to forecast cash flows for five years.
2 Consistent with the growth rate beyond five years used in the Industrial Report.
3 Pre-tax discount rate applied in forecasted cash flows.

The Group determines the sales volume growth rate by the expectation level set based on the past performance and market development. Additionally, no issue of impairment regarding goodwill has been identified through damage assessment.

16. Trade and Other Payables

Trade and other payables as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Current		
Trade payables	₩ 1,731,142,746	₩ 863,240,831
Other payables	714,770,940	846,493,275
Accrued expenses	27,919,773	16,804,933
	2,473,833,459	**1,726,539,039**
Non-current		
Long-term other payables	52,000,000	52,000,000
Long-term withholdings	7,963,539	7,438,139
	₩ 59,963,539	**₩ 59,438,139**

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

17. Short and Long-term financial liabilities

Details of short-term financial liabilities as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

		2017		2016
Short-term borrowings	₩	693,477,044	₩	709,225,848
Current portion of long-term borrowings		27,007,875		13,006,280
Current portion of bonds		319,906,467		379,763,727
	₩	**1,040,391,386**	**₩**	**1,101,995,855**

Details of long-term financial liabilities as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

		2017		2016
Long-term borrowings		1,051,927,995		868,103,688
Bonds		977,817,565		1,017,782,614
	₩	**2,029,745,560**	**₩**	**1,885,886,302**

Details of short-term borrowings as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

Type of Borrowings	Creditor	Annual interest (%)	2017	2016
Commercial paper	KTB Investment & Securities Co., Ltd. and others	2.10%-2.15%	40,000,000	-
Invoice loan	Korea Development Bank and others	1.76%-1.97%	474,693,333	442,661,297
Usance L/C	Korea Development Bank and others	1.90%~2.10%	174,783,711	89,150,027
Invoice loan	Bank of China and others	-	-	58,251,163
General loan	Shinhan Bank and others	3.18%	4,000,000	119,163,361
			₩ 693,477,044	**₩ 709,225,848**

Details of long-term borrowings as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

Type of Borrowings	Creditor	Annual interest (%)	2017	2016
Commercial paper	Shinhan Bank	1.95%	₩ 60,000,000	₩ -
Energy invest loan	Korea Development Bank	2.00%	1,151,200	1,726,800
Environmental mprovement loan	Korea Development Bank	-	-	111,800
Facility loan	Shinhan Bank	-	-	10,000,000
Facility loan	KEB and others	3.59%	194,688,615	194,592,803
Facility loan	Korea Development Bank and others	3.67%	704,249,584	648,167,637
Facility loan	Korea Development Bank and others	3.67%	101,349,578	-
Shipbuilding loan	Suhyup Bank	-	-	5,156,237
Shipbuilding loan	HHD Co., Ltd.	4.40%	17,496,893	21,354,691
			1,078,935,870	**881,109,968**
Less: current maturities			**(27,007,875)**	**(13,006,280)**
			₩ 1,051,927,995	**₩ 868,103,688**

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

Details of bonds as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

Type of Borrowings	Issuance date	Maturity date	Annual interest (%)	2017	2016
110th	2012-07-20	2017-07-20	3.12%	₩ -	₩ 299,864,224
111-2nd	2012-10-23	2019-10-23	3.52%	99,904,333	99,852,151
112-1st	2014-01-27	2018-01-27	3.35%	149,985,567	149,812,369
112-2nd	2014-01-27	2019-01-27	3.59%	49,945,596	49,895,377
113th	2014-06-25	2018-06-25	3.01%	99,948,950	99,846,850
114-1st	2014-11-21	2017-11-21	2.36%	-	79,899,503
114-2nd	2014-11-21	2019-11-21	2.59%	159,760,340	159,635,300
114-3rd	2014-11-21	2021-11-21	2.94%	59,857,265	59,820,823
115-1st	2015-03-27	2018-03-27	1.98%	69,971,950	69,859,749
115-2nd	2015-03-27	2020-03-27	2.20%	189,647,804	189,491,272
115-3rd	2015-03-27	2022-03-27	2.53%	139,650,871	139,568,723
116-1st	2017-07-07	2022-07-07	2.58%	179,407,815	-
116-2nd	2017-07-07	2024-07-07	2.85%	99,643,541	-
				1,297,724,032	**1,397,546,341**
Less: current maturities				**(319,906,467)**	**(379,763,727)**
				₩ 977,817,565	**₩ 1,017,782,614**

18. Net Defined Benefit Liability

Details of net defined benefit liabilities recognized in the statements of financial position as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Present value of defined benefit obligations	₩ 196,301,428	₩ 189,371,001
Fair value of plan assets	(223,705,551)	(202,395,666)
Contribution to National Pension Fund	(330,154)	(371,981)
Net defined benefit liabilities in the statement of financial position [1]	₩ (27,734,277)	₩ (13,396,646)

[1] The excess portion of fair value of plan asset over present value of funded defined benefit obligations is recorded as other non-current assets.

Movements in the defined benefit obligations for the periods ended December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Beginning balance	₩ 189,371,001	₩ 193,262,357
Current service cost	27,106,849	25,295,403
Interest expense	5,275,571	4,919,275
Remeasuments:	(14,097,259)	(25,271,020)
Actuarial losses from changes in demographic assumptions	-	2,107,098
Actuarial gains and losses from changes in financial assumptions	(10,772,358)	(24,829,568)
Actuarial gains and losses from experience adjustments	(3,324,901)	(2,548,550)
Benefits payments	(11,922,559)	(13,082,363)
Effect of transference	567,825	4,247,349
Ending balance	₩ 196,301,428	₩ 189,371,001

Movements in the fair value of plan assets for the periods ended December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Beginning balance	₩ 202,395,666	₩ 179,581,649
Expected return on plan assets	5,389,700	4,244,590
Remeasurements:		
Return on plan assets (excluding amounts included in interest income)	(2,646,589)	(1,523,407)
Contributions:		
Employer	29,955,632	28,200,000
Payments from plans:		
Benefit payments	(11,388,858)	(8,107,166)
Ending balance	₩ 223,705,551	₩ 202,395,666

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

Plan assets as at December 31, 2017 and 2016, consist of as follows:

(in thousands of Korean won)

	2017			2016		
	Quoted price	Total	Composition (%)	Quoted price	Total	Composition (%)
Cash and cash equivalents	₩ 224,035,705	₩ 224,035,705	100%	₩ 202,767,647	₩ 202,767,647	100%

Expected contributions to post-employment benefit plans for the financial year following the reporting period are ₩ 22,760 million.

The significant actuarial assumptions as at December 31, 2017 and 2016, are as follows:

(in percentage, %)

	2017	2016
Discount rate at year-end	3.19%	2.90%
Salary growth rate	1.86% ~ 3.74%	2.06% ~ 3.94%

The sensitivity of the defined benefit obligation to changes in the principal assumptions is

(in percentage)

	Impact on defined benefit obligation		
	Changes in assumption	Increase in assumption	Decrease in assumption
Discount rate	1%	10.05% decrease	11.84% increase
Salary growth rate	1%	11.69% increase	10.12% decrease

A decrease in corporate bond yields will increase plan liabilities, although this will be partially offset by an increase in the value of the plans' bond holdings.

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. The sensitivity of the defined benefit obligation to changes in principal actuarial assumptions is calculated using the projected unit credit method, the same method applied when calculating the defined benefit obligations recognized on the statement of financial position.

The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the prior period.

Expected maturity analysis of undiscounted pension benefits as at December 31, 2017, 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	₩ 7,695,232	₩ 13,410,547	₩ 30,378,681	₩ 770,121,393	**₩ 821,605,853**

19. Provisions, Contingent Liabilities and Commitments

19.1 Provisions

Changes in provisions for the periods ended December 31, 2017 and 2016, are as follows:

(1) 2017

(in thousands of Korean won)

	Beginning balance	Increase	Decrease	Ending balance
Provision for environmental restoration costs	₩ 6,529,598	₩ 2,998,299	₩ (2,931,097)	₩ 6,596,800
Provision for carbon gas emission	5,331,117	-	(5,331,117)	-
	₩ 11,860,715	**₩ 2,998,299**	**₩ (8,262,214)**	**₩ 6,596,800**

(1) 2016

(in thousands of Korean won)

	Beginning balance	Increase	Decrease	Ending balance
Provision for environmental restoration costs	₩ 4,727,601	₩ 2,500,000	₩ (698,003)	₩ 6,529,598
Provision for carbon gas emission	4,104,690	5,331,117	(4,104,690)	5,331,117
	₩ 8,832,291	₩ 7,831,117	₩ (4,802,693)	₩ 11,860,715

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, 2017, emission rights for allocation of no cost are as follows:

(in thousands of ton)

	2015	2016	2017	Total
Emission allowances allocated free of charge	2,422	3,263	1,986	**7,671**

The carrying amount of emission rights is nil and none of rights are pledged as collaterals.

19.2 Provisions

(in billions of Korean won)

	Description	Amount	Outcome and expectation
Lawsuit as the defendant	Damage claim suit (The Fair Trade Commission)	12.4	-Pending at Seoul central District Court -Unable to expect the outcome
	Damage claim suit (THE HANKOOK SHELL OIL CO.,LTD)	14.8	-Pending at Seoul central District Court -Unable to expect the outcome

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

19.3 Commitments

The Group has entered into bank overdraft agreements with KEB Hana Bank and others for up to ₩30,000 million (2016: ₩30,000 million). And, the Group has entered into agreement for a discount note for the amount of ₩40,000 million (2016: ₩50,000 million) and medium and long-term discount note for the amount of ₩60,000 million with Shinhan Bank and the exercised amounts are ₩60,000 million. Also, the Group has entered into mutual support agreements with Woori Bank for cooperation partner amounting to ₩30,000 million (2016: \50,000 million) and general loan agreement amounting to ₩30,000 million (2016: ₩30,000 million) as at December 31, 2017.

The Group has entered into an import letter of credit arrangement of USD4,103 million (2016: USD 4,166 million) with KEB Hana Bank and others. Payment of USD1,101 million has been made as at December 31, 2017, to the beneficiary.

The Group has entered into a factoring agreement with Shinhan Capital for up to ₩170,000 million and with DBS Bank for up to ₩110,000 million, and ₩106,000 million has been paid to DBS Bank as at December 31, 2017.

The Group is provided with supplemental funding agreements for borrowings amounting to ₩286,000 million from Lotte Chemical Co., Ltd., and ₩120,000 million from OCI Company Ltd., respectively, as at December 31, 2017.

The Group has entered into a purchase agreement where non-controlling shareholders of its subsidiary, Hyundai and Shell Base Oil Co., Ltd have the option to request the purchase of relevant shares after from August, 2021.

20. Derivative financial instruments

As at December 31, 2017, the Group has entered into foreign exchange forward contracts to hedge foreign exchange fluctuation risk and into commodity forward contracts to hedge price fluctuation risk related to the crude oil. The Group used valuations provided by financial institutions for fair values of all derivative financial instruments.

Details of derivative financial instruments as at December 31, 2017, are as follows:

(1) 2017 (in thousands of USD)

Purpose	Type of contract	Details of contract	Contract unit	Contract value
Cash flow hedge	Commodity forward contracts	Refining margin risk hedge	USD	118,789

Derivative financial instruments as at December 31, 2017 and 2016, are as follows:

(1) 2016 (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	Commodity forward contracts	-	-	₩ 43,847,366	₩ 52,125,144

(1) 2016 (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	Commodity forward contracts	₩ -	₩ -	₩ 9,583,647	₩ 11,305,221
	Foreign exchange forward contracts	-	-	285,245	285,245
		₩ -	**₩ -**	**₩ 9,868,892**	**₩ 11,590,466**

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 2017, amounts to \(-)5,714 million (2016: \(-)1,831 million), and the associated gains or losses that are reclassified from equity to profit or loss, as at 2017, amounts to \(-)2,217 million (2016: \18,766 million).

For the periods ended December 31, 2017 and 2016, realized and unrealized gain (loss) from derivative instruments transactions are as follows:

(1) 2017 (in thousands of Korean won)

	Type of contract	Disposal of financial instruments at fair value through profit or loss		Valuation of financial instruments at fair value through profit or loss		Loss on transactions of derivative financial instruments
		Gain	Loss	Gain	Loss	
Trading purposes	Foreign exchange forward contracts	₩ 5,453,088	₩ 2,364,521	₩	₩ -	₩ -
	Commodity forward contracts	819,704	280,558		-	-
		₩ 6,272,792	**₩ 2,645,079**	**₩ -**	**₩ -**	**₩ -**

(1) 2016 (in thousands of Korean won)

	Type of contract	Disposal of financial instruments at fair value through profit or loss		Valuation of financial instruments at fair value through profit or loss		Loss on transactions of derivative financial instruments
		Gain	Loss	Gain	Loss	
Trading purposes	Foreign exchange forward contracts	11,213,349	7,865,508		-	₩ 1,222,455
	Commodity forward contracts	4,827,339	8,338,290		-	-
		₩ 16,040,688	**₩ 16,203,798**	**₩**	**₩ -**	**₩ 1,222,455**

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

21. Equity

The Group's number of authorized shares is 500,000,000 shares. Total number of ordinary shares issued is 245,082,422 shares, and the par value per share is ₩5,000.

22. Hybrid Equity Securities

Details of bond-type hybrid equity securities classified as equity as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	Issue date	Maturity date	Interest rate	2017	2016
1-1st private hybrid equity securities	2015-12-11	2045-12-11	4.80%	₩ 160,000,000	₩ 160,000,000
1-2nd private hybrid equity securities	2015-12-11	2045-12-11	4.75%	65,000,000	65,000,000
				225,000,000	**225,000,000**
Less: issuance expenses				**(727,150)**	**(727,150)**
				₩ 224,272,850	**₩ 224,272,850**

The condition of hybrid equity securities issued for the period ended December 31, 2017, is as follows:

(in thousands of Korean won)

	1-1st Private hybrid equity securities	1-2nd Private hybrid equity securities
Issue amount	₩ 160,000,000	₩ 65,000,000
Maturity	30 years (At maturity, it can be extended on the Group's decision)	
Rate	From issue date to December 11, 2020 : Fixed rate 4.80% per year Recalculated and applied every 5 years, Yield rate of government bond with 5 year maturity + annual 2.865% + annual 2.00% (step-up clauses)	From issue date to December 11, 2020 : Fixed rate 4.75% per year, Recalculated and applied every 5 years, Yield rate of government bond with 5 year maturity + annual 2.815 % + annual 2.00% (step-up clauses)
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 or every interest payment date depending on the Group's decision.	

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

23. Accumulated Other Comprehensive Income (Loss)

Accumulated other comprehensive income (loss) as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Gain on revaluation of land	₩ 221,232,098	₩ 231,011,270
Exchange differences	(1,952,095)	1,961,767
Share of other comprehensive income of associate	1,336,572	1,113,156
Cash flow hedge	(5,714,321)	(1,831,026)
	₩ 214,902,254	**₩ 232,255,167**

Changes in accumulated other comprehensive income (loss) for the periods ended December 31, 2017 and 2016, are as follows:

(1) 2017

(in thousands of Korean won)

	Before tax	Tax effect	After tax
Beginning balance	₩ 305,423,530	₩ (73,168,363)	₩ 232,255,167
Changes	(8,773,153)	(8,579,760)	(17,352,913)
Ending balance	₩ 296,650,377	₩ (81,748,123)	₩ 214,902,254

(1) 2016

(in thousands of Korean won)

	Before tax	Tax effect	After tax
Beginning balance	₩ (2,389,855)	₩ 203,275	₩ (2,186,580)
Changes	307,813,385	(73,371,638)	234,441,747
Ending balance	₩ 305,423,530	₩ (73,168,363)	₩ 232,255,167

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

24. Retained Earnings

Retained earnings as at December 31, 2017 and 2016, consist of:

(in thousands of Korean won)

	2017	2016
Legal reserves[1]	₩ 85,508,827	₩ 55,953,007
Unappropriated retained earnings	2,977,494,048	2,439,240,881
	₩ 3,063,002,875	**₩ 2,495,193,888**

[1] The Commercial Code of the Republic of Korea requires the Group to appropriate, 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 the payment of cash dividends, but may be transferred to share capital or used to reduce accumulated deficit, if any, with the ratification of the Group's majority shareholders.

25. Selling and Administrative Expenses

Selling and administrative expenses for the periods ended December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Salaries	₩ 96,083,113	₩ 95,206,298
Employee benefits	16,391,922	17,243,301
Promotional expenses	10,948,839	16,288,839
Advertising expenses	19,381,127	22,007,042
Service costs	49,853,885	45,143,137
Commission expenses	22,198,989	21,223,941
Transportation expenses	139,100,268	160,590,048
Depreciation	18,529,656	17,199,588
Amortization	3,607,605	3,258,893
Rental expenses	27,974,000	28,091,179
Others	27,615,185	26,846,054
	₩ 431,684,589	**₩ 453,098,320**

26. Expenses by Nature

Expenses by nature for the periods ended December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Changes in inventories	₩ (838,386,373)	₩ (365,326,415)
Purchase of inventories	14,377,638,517	10,210,114,909
Depreciation	331,774,947	289,815,631
Amortization	4,443,022	3,827,087
Salaries	269,535,550	238,993,167
Others	970,636,962	542,196,700
	₩ 15,115,642,625	**₩ 10,919,621,079**

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

27. Finance Income and Costs

Finance income and costs for the periods ended December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Finance income		
Interest income	₩ 7,424,987	₩ 7,969,226
Gain on disposal of available-for-sale financial assets	-	19,310
Gain on foreign currency translation	17,191,800	-
Gain on foreign currency transactions	85,385,269	31,013,625
	₩ 110,002,056	**₩ 39,002,161**
Finance costs		
Interest expense	₩ 84,024,225	62,538,454₩
Loss on foreign currency translation	1,949,163	22,307,869
Loss on foreign currency transactions	16,568,522	35,161,470
	₩ 102,541,910	**₩ 120,007,793**

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

28. Other non-operating Income and Expenses

(in thousands of Korean won)

		2017		2016
Other non-operating income				
Gain on disposal of financial assets at fair value through profit or loss	₩	6,272,792	₩	16,040,688
Gain on foreign currency translation		30,064,345		22,101,904
Gain on foreign currency transactions		154,424,052		152,289,379
Gain on disposal of property, plant, and equipment		367,049		4,350,702
Gain on disposal of intangible assets		-		8,282
Miscellaneous income		15,927,085		99,435,107
	₩	**207,055,323**	**₩**	**294,226,062**
Other non-operating expenses				
Loss on transactions of derivative financial instruments		-		1,222,455
Loss on disposal of financial assets at fair value through profit or loss		2,645,079		16,203,798
Loss on foreign currency translation		25,367,748		21,603,978
Loss on foreign currency transactions		173,870,295		161,729,358
Loss on disposal of property, plant, and equipment		10,734,156		4,073,229
Loss on disposal of intangible assets		265,593		1,691,371
Loss on valuation of property, plant, and equipment		-		1,515,693
Donations		3,854,843		6,084,294
Miscellaneous expenses		5,128,509		66,344,478
	₩	**221,866,223**	**₩**	**280,468,654**

29. Income Tax Expense

Income tax expense for the periods ended December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

		2017		2016
Current tax	₩	294,797,063	₩	216,284,946
Deferred tax due to temporary differences		24,579,016		71,325,615
Deferred tax due to tax credit		-		796,758
Deferred tax charged to equity		(6,250,697)		(80,864,645)
Income tax expense	₩	313,125,382	₩	207,542,674

The tax on the Group's profit before tax differs from the theoretical amount that would arise using the weighted average tax rate applicable to profits of the consolidated entities as follows:

(in thousands of Korean won)

		2017		2016
Other non-operating income				
Gain on disposal of financial assets at fair value through profit or loss	₩	6,272,792	₩	16,040,688
Gain on foreign currency translation		30,064,345		22,101,904
Gain on foreign currency transactions		154,424,052		152,289,379
Gain on disposal of property, plant, and equipment		367,049		4,350,702
Gain on disposal of intangible assets		-		8,282
Miscellaneous income		15,927,085		99,435,107
	₩	**207,055,323**	**₩**	**294,226,062**
Other non-operating expenses				
Loss on transactions of derivative financial instruments		-		1,222,455
Loss on disposal of financial assets at fair value through profit or loss		2,645,079		16,203,798
Loss on foreign currency translation		25,367,748		21,603,978
Loss on foreign currency transactions		173,870,295		161,729,358
Loss on disposal of property, plant, and equipment		10,734,156		4,073,229
Loss on disposal of intangible assets		265,593		1,691,371
Loss on valuation of property, plant, and equipment		-		1,515,693
Donations		3,854,843		6,084,294
Miscellaneous expenses		5,128,509		66,344,478
	₩	**221,866,223**	**₩**	**280,468,654**

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

Changes in deferred tax assets and liabilities for the periods ended December 31, 2017 and 2016, are as follows:

(1) 2017 (in thousands of Korean won)

	Temporary differences			Deferred tax assets (liabilities)
	Beginning balance	Changes	Ending balance	
Depreciation	₩ 66,974,354	₩ 14,950,377	₩ 81,924,731	₩ 22,704,768
Construction-in-progress	31,202,759	(999,648)	30,203,111	8,305,856
Contingent liabilities	500,000	-	500,000	137,500
Impairment loss	9,217,177	(737,111)	8,480,066	2,332,018
Accrued income	(571,281)	(113,196)	(684,477)	(171,112)
Provisions	34,022,980	1,867,454	35,890,434	9,869,869
Gain (loss) on valuation of inventories	3,914,169	3,480,872	7,395,041	2,033,636
Gain (loss) on disposal of property, plant, and equipment	1,286,813	(68,088)	1,218,725	335,149
Post-employment benefit obligations	93,950,520	17,153,817	111,104,337	30,194,605
Plan assets	(180,671,531)	(27,152,880)	(207,824,411)	(56,710,824)
Gain (loss) on valuation	(452,279)	7,241,882	6,789,603	1,782,099
of derivative instruments	683,129	159,848	842,977	231,819
Promotion expenses	(679,115,948)	9,527,198	(669,588,750)	(183,012,229)
Revaluation of assets	(91,858,874)	773	(91,858,101)	(25,260,978)
Advanced depreciation provision	85,224,459	(10,433,833)	74,790,626	21,149,848
Actuarial gains and losses	39,939	7,236	47,175	11,416
Other long-term employee benefits	6,561,067	420,286	6,981,353	1,846,078
Accrued expenses	-	19,083,198	19,083,198	5,247,879
Other payables	2,398,933	(1,124,500)	1,274,433	350,469
Government subsidy	5,331,117	(5,331,117)	-	-
Others	92,815,481	49,516,774	142,332,255	(16,153,482)
	₩ (518,547,016)	**₩ 77,449,342**	**₩ (441,097,674)**	**₩ (174,775,616)**

(1) 2016 (in thousands of Korean won)

	Temporary differences			Deferred tax assets (liabilities)
	Beginning balance	Changes	Ending balance	
Depreciation	₩ 47,627,184	₩ 19,347,170	₩ 66,974,354	₩ 16,207,794
Construction-in-progress	32,734,836	(1,532,077)	31,202,759	7,551,068
Contingent liabilities	500,000	-	500,000	121,000
Impairment loss	9,247,352	(30,175)	9,217,177	2,230,557
Accrued income	(376,882)	(194,399)	(571,281)	(138,246)
Provisions	33,364,259	658,721	34,022,980	8,233,561
Gain (loss) on valuation of inventories	4,037,115	(122,946)	3,914,169	947,229
Gain (loss) on disposal of property, plant, and equipment	1,406,820	(120,007)	1,286,813	311,409
Post-employment benefit obligations	70,521,903	23,428,617	93,950,520	22,730,129
Plan assets	(166,984,906)	(13,686,625)	(180,671,531)	(43,751,041)
Gain (loss) on valuation of derivative instruments	4,552,700	(5,004,979)	(452,279)	(109,451)
Promotion expenses	1,164,064	(480,935)	683,129	165,317
Revaluation of assets	(393,870,571)	(285,245,377)	(679,115,948)	(163,924,839)
Advanced depreciation provision	(91,858,874)	-	(91,858,874)	(22,229,847)
Actuarial gains and losses	110,722,427	(25,497,968)	85,224,459	19,928,020
Other long-term employee benefits	258,243	(218,304)	39,939	9,665
Accrued expenses	5,666,911	894,156	6,561,067	1,582,239
Government subsidy	3,523,433	(1,124,500)	2,398,933	580,542
Provision for carbon gas emission	4,104,690	1,226,427	5,331,117	1,290,130
Others	(139,818,328)	232,633,809	92,815,481	(1,931,836)
	₩ (463,477,624)	**₩ (55,069,392)**	**₩ (518,547,016)**	**₩ (150,196,600)**

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

Details of deferred income tax charged to equity are as follows:

(in thousands of Korean won)

		2017		2016
Cash flow hedges	₩	1,782,099	₩	(109,451)
Gain on revaluation of land		(82,771,414)		(73,407,339)
Actuarial losses		21,149,848		19,928,020
	₩	**(59,839,467)**	**₩**	**(53,588,770)**

The analysis of deferred tax assets and liabilities as at December 31, 2017 and 2016, is as follows:

(in thousands of Korean won)

		2017		2016
Deferred tax assets				
Deferred tax asset to be recovered after more than 12 months	₩	95,391,498	₩	77,903,745
Deferred tax asset to be recovered within 12 months		11,141,511		3,984,915
		106,533,009		81,888,660
Deferred tax liabilities				
Deferred tax liability to be recovered after more than 12 months		(281,137,513)		(231,837,563)
Deferred tax liability to be recovered within 12 months		(171,112)		(247,697)
		(281,308,625)		(232,085,260)
Deferred tax assets (liabilities), net	₩	(174,775,616)	₩	(150,196,600)

Details of unrecognized deductible (taxable) temporary differences as deferred tax liabilities as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

		2017		2016	Remarks
Interests in subsidiary	₩	147,587,377	₩	103,697,329	No plan for disposal

30. Earnings per Share

Basic earnings per ordinary share for the periods ended December 31, 2017 and 2016, is as follows:

(in thousands of Korean won, except per share amount)

		2017		2016
Profit attributable to the ordinary equity holders of the Parent Company	₩	861,399,287	₩	691,581,229
Dividends of hybrid equity securities		(10,767,500)		(10,169,306)
Weighted average number of ordinary shares outstanding(shares)		245,082,422		245,082,422
Basic earnings per share (in Korean won)	₩	3,471	₩	2,780

The Group did not issue any potential ordinary shares. Therefore, basic earnings per share is identical to diluted earnings per share.

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

31. Cash Generated from Operations

Cash generated from operations for the periods ended December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Adjustments for:		
Post-employment benefits	₩ 26,992,720	25,970,088
Depreciation	331,774,947	289,815,631
Amortization	4,443,022	3,827,087
Impairment loss(reversal)	(226,897)	117,635
Impairment loss(reversal) of other receivables	(105,636)	205,243
Interest expenses	84,024,225	62,538,454
Loss on foreign currency translation	27,316,911	43,911,847
Loss on disposal of financial assets at fair value through profit or loss	2,645,079	16,203,798
Loss on valuation of inventory (reversal)	3,617,655	(23,634)
Loss on disposal of property, plant, and equipment	10,734,156	4,073,229
Loss on disposal of intangible assets	265,593	1,691,371
Loss on valuation of property, plant, and equipment	-	1,515,693
Income tax expense	313,125,382	207,542,674
Interest income	(7,424,987)	(7,969,226)
Gain on foreign currency translation	(47,256,145)	(22,101,904)
Gain on disposal of financial assets at fair value through profit or loss	(6,272,792)	(16,040,688)
Gain on disposal of available-for-sale financial assets	-	(19,310)
Gain on disposal of property, plant, and equipment	(367,049)	(4,350,702)
Gain on disposal of intangible assets	-	(8,282)
Share of profit of investments accounted for using the equity method	(38,352,497)	(46,751,270)
Provision for restoration costs	498,299	2,500,000
	₩ 705,431,986	**₩ 562,647,734**

(in thousands of Korean won)

	2017	2016
Changes in operating assets and liabilities:		
Trade receivables	(377,430,029)	(591,387,644)
Other receivables	(26,776,633)	(46,672,526)
Inventories	(859,253,120)	(401,597,884)
Other current assets	(2,766,575)	33,267,554
Other non-current assets	54,789	22,339
Trade payables	927,415,778	292,798,736
Other payables	(76,315,717)	174,361,939
Other current liabilities	(17,833,923)	(39,910,366)
Long-term trade and other payables	525,400	45,620
Post-employment benefit obligations	(29,879,682)	(28,880,924)
Provisions	(5,762,214)	528,424
Deferred income	1,800,252	(887,532)
Other non-current liabilities	143,365	268,925
	₩ (466,078,309)	**₩ (607,043,339)**

Significant non-cash investing and financing activities for the periods ended December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Transferred from construction-in-progress to other property, plant and equipment and intangible assets accounts	₩ 400,184,614	₩ 1,396,265,596
Other payables related to the acquisition of property, plant and equipment	(36,908,313)	59,219,113

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

32. Related Party Transactions

As at December 31, 2017, the Parent Company is Hyundai Robotics Co., Ltd.(percentage of ownership:91.13%), a newly established entity through equity spin-off from Hyundai Heavy Industries Co., Ltd. on April 1, 2017. And Hyundai Robotics Co., Ltd. is also the ultimate parent company.

Details of associates and other related parties that have sales and other transactions with the Group or have outstanding balances as at December 31, 2017 and 2016, are as follows:

	2017	2016
Joint venture	Hyundai Cosmo Petrochemical Co., Ltd.	Hyundai Cosmo Petrochemical Co., Ltd.
Other related parties[1]	Hyundai Construction Equipment Co., Ltd.	-
	Hyundai Electric & Energy Systems Co., Ltd.	-
	Hyundai Global Service Co., Ltd.	-
	Hyundai Heavy Industries Co., Ltd.	-
	The subsidiaries of Hyundai Heavy Industries Co., Ltd. and others	The subsidiaries of Hyundai Heavy Industries Co., Ltd. and others

1 During the year, Hyundai Robotics Co., Ltd. became the Parent Company and therefore, subsidiaries of the Parent Company are included in other related parties of the Group. Hyundai Heavy Industries Co., Ltd., which was the Parent Company as at December 31, 2016, has been classified as other related party.

Sales and purchases with related parties for the periods ended December 31, 2017 and 2016, are as follows:

Type	Name of entity	2017	
		Sales and others	Purchases and others
Joint Venture	Hyundai Cosmo Petrochemical Co., Ltd.	₩ 1,700,426,349	₩ 1,025,060,892
Other related parties	Hyundai Heavy Industries Co., Ltd.	50,434,307	8,008,066
	Hyundai Construction Equipment Co., Ltd. [1]	6,014,266	-
	Hyundai Electric & Energy Systems Co., Ltd. 1	1,640,336	7,931,166
	Hyundai Mipo Dockyard Co.,Ltd.	6,017,768	-
	Hyundai Samho Heavy Industries Co.,Ltd.	11,994,898	3,366
	HYMS	85,711,699	-
	Others	6,569,422	10,471,739
		₩ 1,868,809,045	**₩ 1,051,475,229**

1 Hyundai Robotics Co., Ltd. was newly established on April 1, 2017 through equity spin-off from Hyundai Heavy Industries Co., Ltd. The amount includes the transaction amount from its establishment to December 31, 2017.

Type	Name of entity	2016	
		Sales and others	Purchases and others
Parent company	Hyundai Heavy Industries Co., Ltd.	₩ 88,503,830	₩ 57,104,013
Joint Venture	Hyundai Cosmo Petrochemical Co., Ltd.	1,221,809,654	843,691,926
Other related parties	Hyundai Mipo Dockyard Co.,Ltd.	7,474,548	16,037,664
	Hyundai Samho Heavy Industries Co.,Ltd.	20,847,032	52,432
	HYMS	50,941,946	-
	Others	5,518,126	8,314,522
		₩ 1,395,095,136	**₩ 925,200,557**

Outstanding balances arising from sales/purchases of goods and services as at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

		2017			
		Receivables		Payables	
		Trade receivables	Other receivables	Trade payables	Other payables
Joint Venture	Hyundai Heavy Industries Co., Ltd.	₩ 178,612,643	₩ 7,011,338	₩ 111,192,222	₩ 1,016,190
Other related parties	Hyundai Heavy Industries Co., Ltd.	19,200,897	-	-	475,651
	Hyundai Construction Equipment Co., Ltd.	3,391,457	-	-	
	Hyundai Electric & Energy Systems Co., Ltd.	544,356	-	-	90,354
	Hyundai Mipo Dockyard Co.,Ltd.	329,762	-	-	44,388
	Hyundai Samho Heavy Industries Co.,Ltd.	2,308,541	55,049	-	309
	HYMS	7,915,243	-	-	-
	Others	450,539	-	-	-
		₩ 212,753,438	**₩ 7,066,387**	**₩ 111,192,222**	**₩ 1,626,892**

Notes to the Consolidated Financial Statements

December 31, 2017 and 2016

(in thousands of Korean won)

		2016			
		Receivables		Payables	
		Trade receivables	Other receivables	Trade payables	Other payables
Parent Company	Hyundai Heavy Industries Co., Ltd.	₩ 7,968,242	₩ -	₩ -	₩ 15,281,851
Joint Venture	Hyundai Cosmo Petrochemical Co., Ltd.	143,009,731	8,433,351	84,633,464	906,282
Other related parties	Hyundai Mipo Dockyard Co.,Ltd.	1,131,326	24,050	-	145,167
	Hyundai Samho Heavy Industries Co.,Ltd.	1,739,106	55,049	-	309
	HYMS	6,834,046	-	-	-
	Others	1,009,767	-	-	115,293
		₩161,692,218	**₩ 8,512,450**	**₩ 84,633,464**	**₩ 16,448,902**

Fund transactions with related parties for the periods ended December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

		Contributions in cash	
		2017	2016
Joint Venture	Hyundai Cosmo Petrochemical Co., Ltd.	₩ -	₩ 25,000,000

(in thousands of Korean won)

		Contributions in cash	
		2017	2016
Parent Company	Hyundai Robotics Co., Ltd.	₩ (267,997,835)	₩ -

The Group has entrusted HI Investment & Securities Co., Ltd., an other related party of the Group, with short-term funds to invest in Money Market Trust (MMT) with an average daily balance of \ 72,933 million (2016: \ 94,944 million). For the periods ended 2017 and 2016, the Group does not have remaining balances in the MMT. The Group has deposited plan assets of \ 6,076 million (2016: \ 6,542 million) in HI Investment & Securities Co., Ltd. account as at December 31, 2017.

Details of payment guarantees and collateral provided by the Group for the financial supports to the related parties as at December 31, 2017, are as follows, and no collateral and payment guarantees are provided by the related parties:

(in thousands of USD)

		Guaranteed by	Guaranteed amount	Guarantee period	Remark
Joint Venture	Hyundai Cosmo Petrochemical Co., Ltd.	Mizuho Bank	USD 15,000	10/26/2012 ~ 9/30/2019	Borrowings

The compensation paid or payable to key management for employee services for the periods ended December 31, 2017 and 2016, consists of:

(in thousands of Korean won)

	2017	2016
Short-term salaries	₩ 2,777,557	₩ 1,527,847
Post-employment benefits	420,056	563,623
	₩ 3,197,613	**₩ 2,091,470**

Key management includes directors (executive and non-executive) who have the authority and responsibility in planning, operations and control of the Group's operations.

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

Domestic

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

Seoul Metropolitan Support Team
20th 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, Guwol-dong), Namdong-gu, Incheon, Korea
Tel +82-32-566-5188

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

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

Chungcheong/Honam Support Team
75 Dunsanseo-ro, Seo-gu, Daejeon, Korea
Tel +82-42-480-2248

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. Daishin Securities Bldg., 252 Angyeon-ro (Dongmun-dong), Seosan, Chungcheongnam-do, Korea
Tel +82-41-664-8533

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

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

Jeonnam Mobile
7th Fl. LG Bldg., 9, Yeonhyangjungangsanggagil (Yeonhyang-dong), Suncheon, Jeollanam-do, Korea
Tel +82-61-725-5871~2

Jeonbuk Branch
13th Fl. Tire Bank Bldg., 751 Baekje-daero (Inhu-dong 2-ga), Deokjin-gu, Jeonju, Jeollabuk-do, Korea
Tel +82-63-242-5151

Cheonan Mobile
18 Beodeul-ro (Munhwa-dong), Dongnam-gu, Cheoan, Chungcheongnam-do, Korea
Tel +070-7403-6526

Mokpo Mobile
63-12 Sinhang-ro, Samho-eup, Yeongnam-gun, Jeollanam-do, Korea
Tel +82-70-7403-6090

Yeongnam Support Team
4th Fl. Busan Hyundai OB 107 Asiad-daero (Geoje-dong), Yeonje-gu, Busan, Korea
Tel +82-51-590-5117

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

Ulsan Branch
4th Fl. Daewoo Securities Bldg., 251 Samsan-ro (Dal-dong), Nam-gu, Ulsan, Korea
Tel +82-52-227-9180

Gyeongnam Branch
1st Fl. LX Bldg., 532 Beon-gil 6, Changi-daero (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 Branch
16th Fl. Yeongnam Tower, 441 Dongdaegu-ro, Dong-gu, Daegu, Korea
Tel +82-53-603-6665

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

Andong Mobile
3rd Fl. KT Bldg., 86 Angicheon-ro (Dangbuk-dong), Andong, Gyeongsangbuk-do, Korea
Tel +82-54-853-3598

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

Contact Information

—

Finance Team, Hyundai Oilbank
Kim Kyoung-il, Vice President
Jung Min-chul, Deputy General Manager
Kim Eun-mi, Staff
E-mail: eunmi423@oilbank.co.kr

oilbank.co.kr