

KEEI

MONTHLY KOREA ENERGY TRENDS

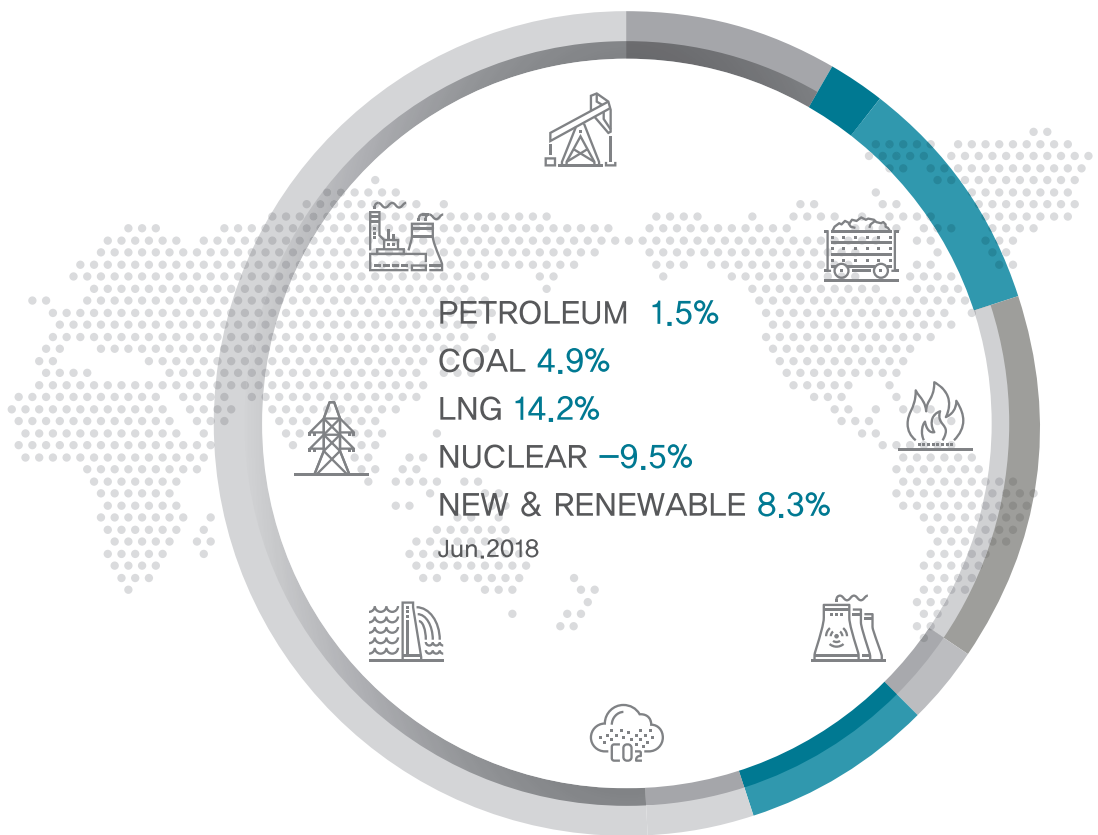


Table of Contents

1.	The Economy and the Industry	4
2.	Energy Prices.....	6
3.	Energy Supply.....	10
4.	Energy Consumption.....	12
5.	Coal.....	14
6.	Petroleum.....	15
7.	Gas	16
8.	Electricity	17
9.	Nuclear.....	18
10.	Heat and Renewable energy.....	19
11.	Industry.....	20
12.	Transport.....	21
13.	Buildings	22
14.	Transformation.....	23
	〈Appendix〉 Major Indicators & Statistics of Energy Supply and Demand	24

1. The Economy and the Industry

- **Gross Domestic Product(“GDP”) recorded a year-on-year growth of 2.8% in 2Q 2018, backed by decent growth in private spending, although the investment declined.**
 - Private spending went up by 2.8% year-on-year with steadily growing retail sales. Meanwhile, the consumer confidence index decreased in June, constraining the growth of the private spending.
 - Construction investment showed a downward trend (-1.5%) with a sharp drop in the value of orders received, especially in the residential area. Facility investment also continued to decline.
- **The total export value fell by 0.3% year-on-year in June despite strong performance of the semi-conductor industry, affected by fewer work days and the base effect of outstanding last year’s record in ship export.**
 - The export value of semi-conductors went up by 39.0% to \$11billion, setting a new record and representing 21.8% of the total export value, with the help of strong demand for server DRAM and steady growth of emerging markets such as Internet of Things (IoT) and autonomous vehicles.
 - The export value of petroleum products and petrochemicals rose by 69.3% and 17.2% respectively, as the unit price of export increased in sync with global oil price movement.
 - The export value of vessels continued to plunge (-82.2%), influenced by the base effect of a large export in the same month last year and the reduced backlog of orders.
 - The export value of iron & steel products was down no more than 0.8%, despite the base effect of good export figures during the same month last year, because of the increased global prices.
- **The production index of mining & manufacturing industries fell by 0.4% due to decreased production of electrical devices and automobiles, while the service production index rose by 1.7%.**
 - The production index of mining & manufacturing industries declined for the first time in three months despite the growth in the cement (4.5%), basic chemical material (3.4%) and ICT (17.5%) sectors, as the production decreased in the electric device (-4.9%), automobile (-8.0%) and iron & steel product (-1.6%) sectors.
 - The service production index has been up for eight consecutive months, boosted by strong performance of the wholesale & retail (1.7%) and health & social welfare (4.0%) sectors, although the production decreased in the restaurant & accommodations (-2.4%) and real estate & leasing (-3.5%) sectors.

► **Trend in major economic and industrial indicators**

	2016	2017p	2018p			2018p		
			M4	M5	M6	M4	M5	M6
GDP (trillion won)	1 509.8 (2.9)	1 556.0 (3.1)	- -	- -	389.6 (2.8)	- -	- -	400.6 (2.8)
Total export (\$billion, customs clearance basis)	495.4 (-5.9)	573.7 (15.8)	50.8 (23.8)	44.9 (13.1)	51.3 (13.4)	49.9 (-1.9)	50.7 (12.9)	51.1 (-0.3)
Semi-conductors	62.9 (0.4)	62.2 (-1.1)	5.6 (2.5)	5.7 (-2.6)	5.6 (1.7)	8.8 (56.7)	9.7 (69.9)	9.5 (69.6)
Petroleum products	26.5 (-17.3)	35.0 (32.3)	2.5 (3.8)	2.8 (28.2)	2.4 (4.9)	4.0 (58.3)	3.9 (41.6)	4.1 (69.3)
Ships, marine structures & components	34.3 (-14.6)	42.2 (23.1)	7.1 (102.7)	2.4 (27.6)	7.4 (43.2)	1.8 (-75.1)	0.8 (-66.3)	1.3 (-82.2)
Mining and manufacturing production index (2015=100)	102.3 (2.3)	104.2 (1.8)	103.3 (3.7)	104.3 (1.8)	105.4 (1.2)	104.3 (1.0)	105.6 (1.2)	105.0 (-0.4)
Service industry production index (2015=100)	102.6 (2.6)	104.5 (1.8)	103.1 (1.7)	104.5 (1.8)	106.0 (1.5)	105.9 (2.7)	106.9 (2.3)	107.8 (1.7)

Note: Figures are based on the real price of 2010, P means provisional, () is year-on-year growth rates (%)

Source: Korea International Trade Association, Korea Statistical Information Service

Domestic energy prices

- **Gasoline and diesel prices were almost flat in August compared to the previous month in line with the global oil price trend.**
 - Gasoline and diesel prices have been up less than 1% for two months, amid slight ups and downs in global oil prices (around \$72/bbl), due to a small increase in the won/dollar exchange rate.
- **Propane and butane prices rose by 2.1% and 3.0% respectively in August from the previous month, according to the increase in the won/dollar exchange rate.**
 - Domestic LPG price is determined based on global LPG price (Saudi Aramco's supply price) of the previous month and the exchange rate—the global LPG price was nearly flat in July, but the exchange rate rose by 2.5% from the previous month, driving up the domestic price in August.

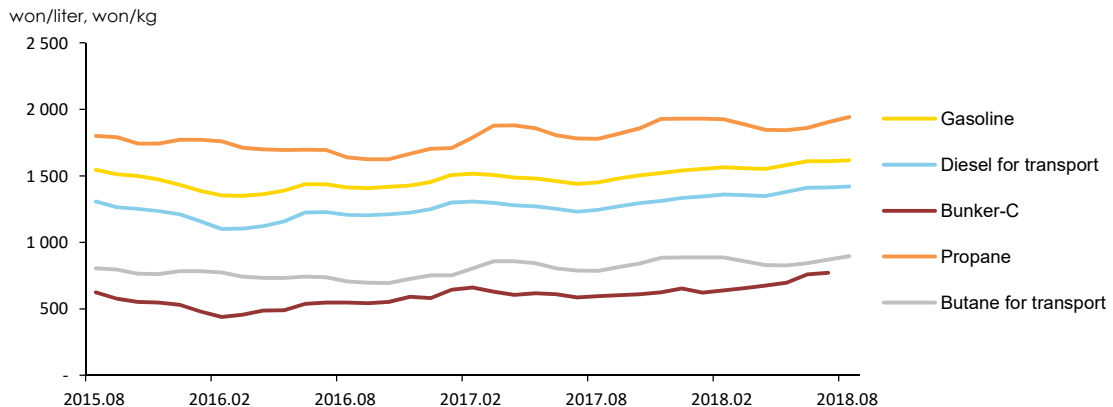
► Trend in domestic energy prices

	2016	2017				2018		
			M6	M7	M8	M6	M7	M8
Gasoline (won/liter)	1 402.9 (-7.1)	1 491.4 (6.3)	1 461.6 (1.7)	1 438.6 (0.1)	1 451.8 (2.8)	1 609.1 (10.1)	1 610.9 (12.0)	1 618.3 (11.5)
Diesel for transport (won/liter)	1 182.9 (-9.0)	1 282.6 (8.4)	1 251.5 (2.1)	1 229.8 (0.1)	1 244.9 (3.1)	1 410.0 (12.7)	1 411.9 (14.8)	1 419.1 (14.0)
Bunker-C (won/liter)	521.1 (-14.9)	619.4 (18.9)	610.4 (13.4)	584.6 (6.8)	594.1 (8.6)	759.5 (24.4)	771.5 (32.0)	- (-100.0)
Propane (won/kg)	1 689.7 (-6.2)	1 833.7 (8.5)	1 805.9 (6.4)	1 780.9 (5.2)	1 779.4 (8.6)	1 860.0 (3.0)	1 902.9 (6.9)	1 942.9 (9.2)
Butane for transport (won/liter)	733.9 (-9.0)	826.4 (12.6)	804.7 (8.6)	786.6 (6.9)	785.5 (11.2)	843.7 (4.8)	869.1 (10.5)	894.8 (13.9)

Note: Gasoline, diesel and butane prices are based on charging station prices, Bunker-C price is based on dealership price, propane price is based on sales shop price. () is year-on-year growth rates (%)

Source: www.opinet.co.kr

► Trend in domestic petroleum product prices



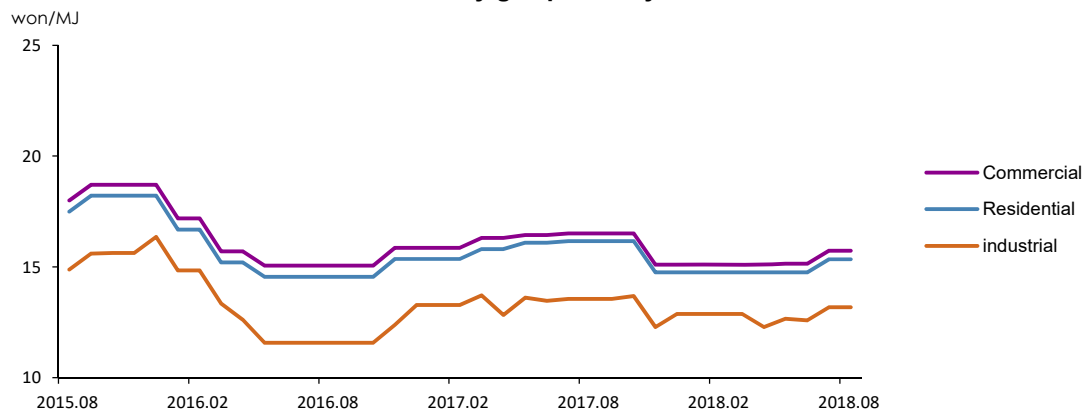
□ **City gas prices for each end-use went up by around 4% from the earlier month, reflecting the LNG price increase in the previous month (July).**

- City gas prices for commercial, residential and industrial use rose by 3.9%, 4.0% and 4.7% respectively in August after several months of stagnancy since Nov, 2017, as the LNG importing price increased in sync with global oil price trend during H1 2018.

□ **Heat energy price was up 0.5% in August from the previous month as a result of the city gas price change in July and the yearly calculation of fuel cost.**

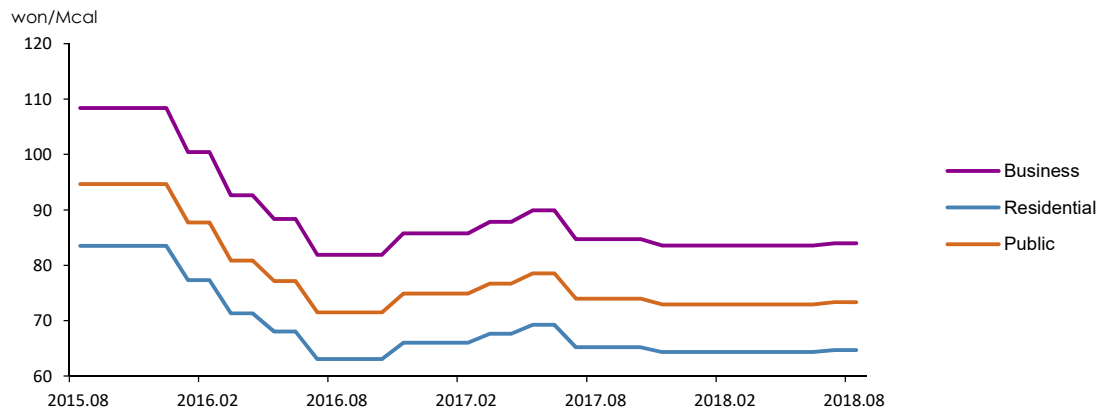
- Korea District Heating Corporation's heat energy price is linked to city gas price according to the fuel cost pass-through scheme, and the actual fuel cost is reflected in the heat energy price once a year (LNG for over 100MW, city gas for under 100MW).

► Trend in city gas prices by end-use sectors



Note: Instead of volume(M³), calorie(MJ) has been used as the unit of measurement in the city gas rate system since July 2012. Figures before that are converted based on standard calorie(additional tax, base charge excluded)

► Trend in heat energy rates by end use sectors

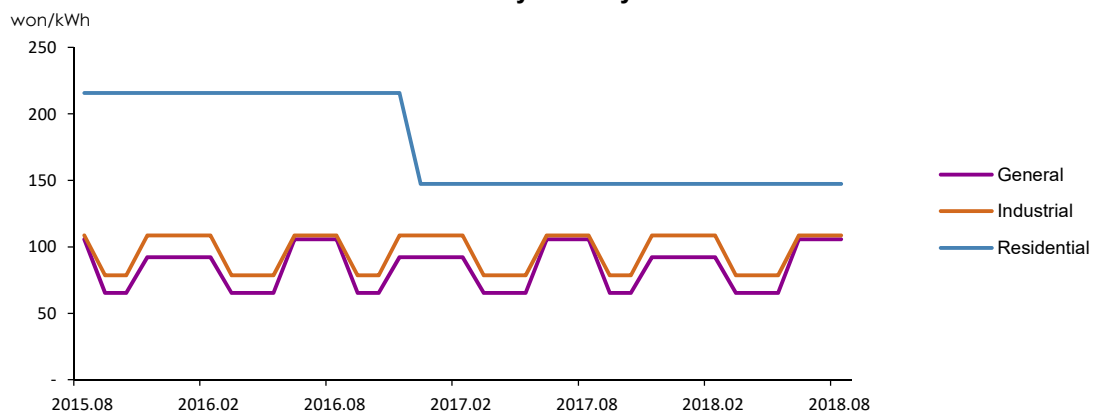


Note: The rates are based on flat rate for heating (additional tax, base charge excluded)

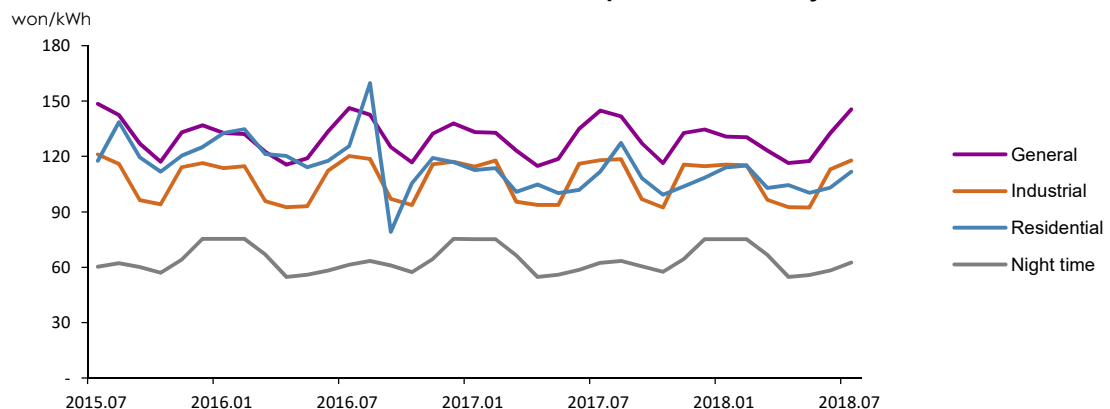
Source: Korea District Heating Corporation.

- **Electricity prices¹ for industrial and general consumers rose sharply in June with the seasonal rate adjustment, and since then, the prices have been stagnant until August.**
 - Electricity prices for industrial and general use change based on season and the time of day, and the prices increased by 38.2% and 62.1% respectively (in June) following the price adjustment from spring/autumn (Mar-May, Sep-Oct) to summer (Jun-Aug).
- **The unit sales price of electricity posted a year-on-year growth of 6.7% in July and increased in all end-use sectors.**
 - The unit sales price of electricity for general and industrial use were up 9.8% and 4.3% from the previous month, and that for residential use rose by 8.4% due to growing power demand during extremely hot weather and the progressive power pricing system.

► **Trend in electricity rates by end-use sectors**



► **Trend in unit sales price of electricity**



¹ The electricity prices by end-use sectors refer to the prices for residential use ([high voltage], the 2nd stage electricity rates), general use ([A], low voltage) and Industrial use ([B], high voltage B middle load).

3. Energy Supply

- **The total energy import volume went up by 4.3% year-on-year in June, as the import of major energy sources all increased except bituminous coal.**
 - The importing price of crude oil was up 48.4% to \$74.1/bbl, LNG up 25.1% to \$509.7/ton, bituminous coal down 1.9% to \$114.2/ton.
 - The import volume of crude oil increased by 12.2% due to bigger input to refineries (7.5%); the oil import from the Middle East rose for the first time in ten months; the oil import from the Americas also increased with stronger price competitiveness according to no tariff duty.
 - The import volume of petroleum products posted a year-on-year growth of 1.8%, despite weak naphtha imports, as LPG use increased in the petrochemical sector, and the import of bunker-C rose as a result of decreased domestic production
 - The LNG import from Oman and the U.S. increased, and consequently, the total import volume rose by 8.3%. The import of bituminous coal as feedstock increased, while its import as fuel declined, leading to a drop in the total import volume.
 - The foreign energy dependency including nuclear energy was up 0.7%p year-on-year to 94.5% with increased energy import, and the energy share of the total import value went up by 7.0%p to 28.4%, affected by increased energy prices.

► **Trend in energy trade and domestic production**

	2016	2017p			2018p		
			M1~6	M6	M1~6	M5	M6
Import volume							
Crude oil (Mbbl)	1 078.1 (5.1)	1 118.2 (3.7)	542.7 (2.1)	87.3 (4.0)	557.4 (2.7)	95.2 (2.7)	98.0 (12.2)
Petroleum product (Mbbl)	334.6 (8.7)	314.8 (-5.9)	159.7 (-1.2)	28.0 (2.4)	168.2 (5.3)	27.9 (2.5)	28.5 (1.8)
Bituminous coal (Mton)	118.5 (-0.8)	131.5 (11.0)	65.3 (16.3)	11.2 (26.0)	65.9 (1.0)	9.9 (1.8)	10.2 (-8.6)
Anthracite (Mton)	9.4 (5.4)	7.0 (-25.7)	3.8 (-7.6)	0.5 (-18.7)	4.1 (7.2)	0.8 (34.1)	0.8 (54.3)
LNG (Mton)	33.5 (0.3)	37.6 (12.3)	19.6 (17.9)	3.5 (39.4)	22.7 (15.5)	2.8 (11.7)	3.7 (8.3)
Import volume (Mtoe)	321.9 (2.7)	339.3 (5.4)	168.6 (7.3)	27.8 (10.7)	176.7 (4.8)	28.5 (6.3)	29.0 (4.3)
Import value (billion US\$, CIF)	80.9 (-21.2)	109.5 (35.2)	54.2 (49.9)	8.7 (36.5)	69.4 (27.9)	11.4 (30.9)	12.8 (47.3)
Domestic production							
Hydropower (TWh)	6.6 (14.5)	7.0 (5.4)	3.2 (7.0)	0.6 (9.1)	3.4 (5.4)	0.8 (29.9)	0.7 (29.3)
Anthracite (Mton)	1.7 (-2.2)	1.5 (-13.9)	0.8 (-6.3)	0.1 (-3.4)	0.7 (-14.3)	0.1 (-5.1)	0.1 (-20.8)
Natural gas (Mton)	0.1 (-18.0)	0.3 (120.5)	0.1 (200.5)	0.0 (391.1)	0.1 (-7.0)	0.0 (-5.6)	0.0 (-6.4)
Renewable energy (Mtoe)	13.6 (5.7)	15.0 (10.2)	7.5 (10.5)	1.3 (12.7)	8.3 (11.4)	1.4 (10.9)	1.4 (8.3)

Note: p means provisional, () is year-on-year growth rates (%)
Source: Monthly Energy Statistics

4. Energy Consumption

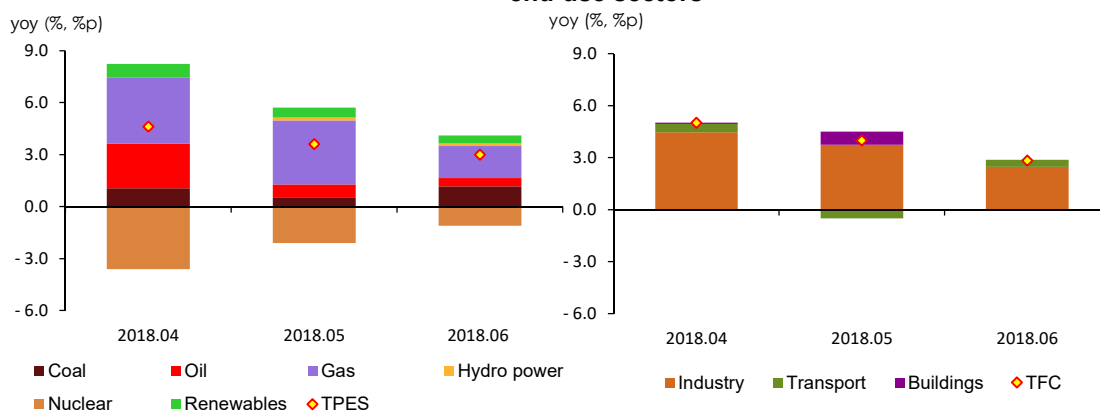
- **Total Primary Energy Supply (“TPES”) increased by 3.0% year-on-year in June, despite decreased use of nuclear energy, as coal, petroleum and gas use all increased.**
 - Coal consumption has been growing for 18 consecutive months, as the industrial sector maintained strong growth in coal consumption with increased use of anthracite and coal for steelmaking and cement production. In addition, the consumption rebounded in the power generation sector with continuous effect of new power plants.
 - Petroleum consumption rose by 1.5%; industrial LPG consumption increased, as the prices stabilized at low levels; naphtha consumption increased along with decreased regular maintenance; gasoline and diesel consumption also increased with growing number of automobiles.
 - Gas consumption has been growing rapidly for eight months in a row, led by the power generation and city gas production sectors.
 - The average capacity factor at nuclear power plants fell by 5.2%p year-on-year to 71.8%, as stronger safety checks and the shutdown of Wolsong unit1 led to increased preventive maintenance (1.5GW, 28.5%), and as a result, the total nuclear generation declined by 9.5%.
- **Total Final Consumption (“TFC”) recorded a year-on-year growth of 2.8% in June, despite weak consumption in the buildings sector, as the consumption increased in the industrial and transport sectors.**
 - Industrial energy consumption went up by 3.8%. The consumption growth rate, however, decreased because of the slower growth in power use with fewer work days and reduced outputs of iron & steel products, in addition to the slower growth in naphtha use, caused by its relatively high price level compared to LPG.
 - Transport energy consumption increased by 2.1% even though the consumption declined in the domestic navigation and railways sectors, as it increased in the aviation sector and bounced back in the road transport sector.
 - The energy consumption was down 0.4% in the buildings sector due to decreased consumption in commercial buildings (-2.9%), although the residential buildings consumed more energy (6.5%).
 - Electricity consumption went up by 3.5% driven by demand from the buildings and industrial sectors with increased service and semi-conductor production. Meanwhile, the consumption growth slowed down owing to the plunged power use in the primary metals industry with reduced outputs of electric steel plates.

► Energy consumption trend

	2016	2017p	2018p				
			M1~6	M6	M1~6	M5	M6
Total energy (Mtoe)	293.4	301.1	148.5	22.9	153.0	24.2	23.6
	(2.4)	(2.6)	(2.0)	(2.2)	(3.1)	(3.6)	(3.0)
Final energy (Mtoe)	225.1	232.5	116.1	17.8	119.6	18.9	18.4
	(3.3)	(3.3)	(3.2)	(3.1)	(3.0)	(4.0)	(2.8)

Note: p means provisional, () is year-on-year growth rates
Source: Monthly Energy statistics (KEEI)

► **The growth rates of TPES and TFC & energy consumption trend by energy source and end-use sectors**



5. Coal

□ Coal consumption recorded a year-on-year growth of 4.9% in June, led by the industrial and transformation sectors.

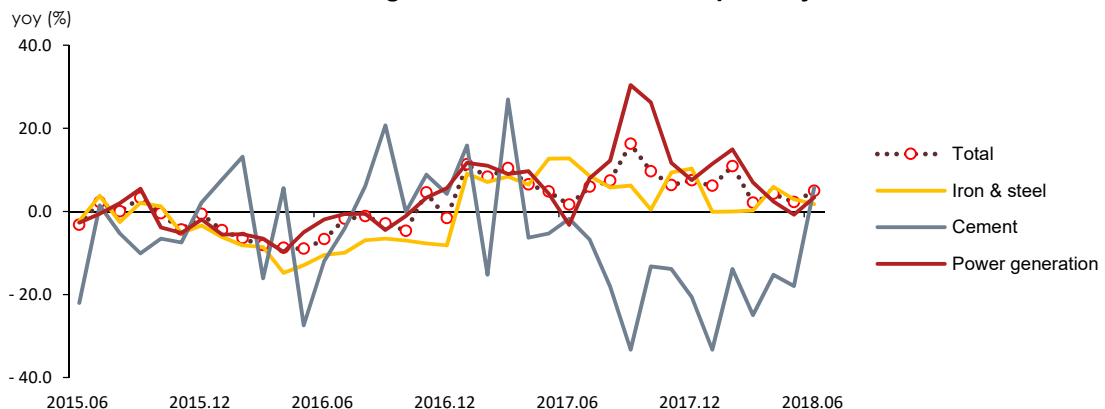
- The transformation sector posted a decent growth in coal use, following the commissioning of new power plants in H2 last year, even though the capacity factor declined due to the shutdown of old power plants and increased preventive maintenance.
- Industrial coal consumption rose by near 7% in June, maintaining the previous month's rapid growth, as anthracite consumption surged, and coking coal consumption grew steadily in the steel making sector, which takes a large share of the total consumption, and bituminous coal consumption rebounded from steep dive in the cement production sector.

► Coal consumption trend

	2016	2017p	2018p				
			M1~6	M6	M1~6	M5	M6
Coal (Mton)	129.3 (-4.3)	139.6 (8.0)	66.5 (7.2)	10.3 (1.6)	69.8 (5.1)	10.9 (2.2)	10.8 (4.9)
Industry	47.8 (-6.6)	49.2 (2.9)	24.5 (7.9)	4.0 (10.2)	25.1 (2.5)	4.4 (7.0)	4.3 (7.3)
Buildings	1.3 (-14.8)	1.1 (-14.1)	0.4 (-18.3)	0.0 (-33.3)	0.3 (-10.4)	0.0 (17.6)	0.0 -
Power generation	80.3 (-2.7)	89.4 (11.3)	41.6 (7.1)	6.2 (-3.3)	44.4 (6.7)	6.5 (-0.8)	6.5 (3.4)

Note: p means provisional, () is year-on-year growth rates (%)
Source: Monthly Energy Statistics

► The growth rate of coal consumption by use



6. Petroleum

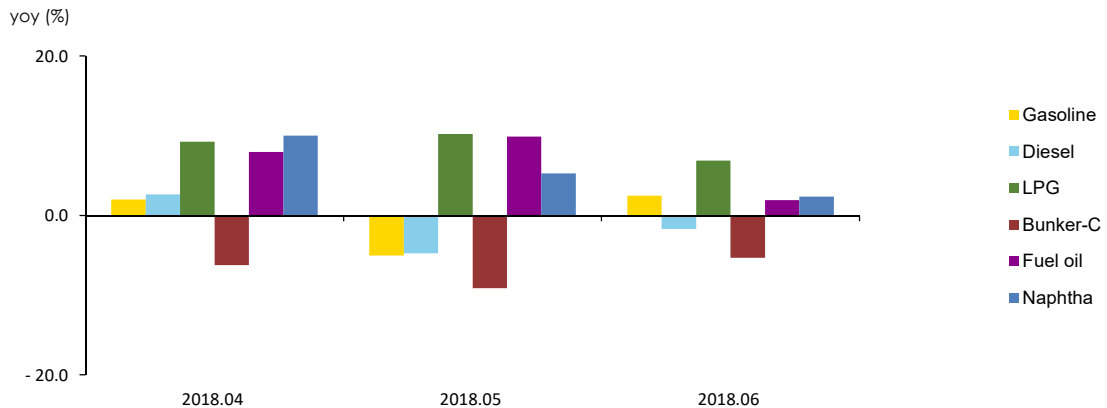
- **Petroleum consumption increased by 1.5% year-on-year in June, led by the industrial, transport and transformation sectors, although the consumption declined in the buildings sector.**
 - Industrial petroleum consumption was up 1.9%, boosted by increased naphtha and LPG use in the petrochemical sector, leading the growth of the total consumption.
 - The transport sector posted 1.3% growth in petroleum consumption, as gasoline and diesel consumption rebounded after the 5% drop in the previous month.
 - Petroleum consumption dropped by 3.1% in the buildings sector, especially kerosene and bunker-C, influenced by increased petroleum product prices.

► Trend in petroleum product consumption by end-use sectors

	2016	2017p	2018p				
			M1~6	M6	M1~6	M5	M6
Petroleum (Mbbbl)	921.1	938.2	458.4	74.5	467.6	78.6	75.7
	(8.0)	(1.9)	(1.9)	(2.7)	(2.0)	(2.3)	(1.5)
Industry	542.6	566.8	275.6	45.0	281.3	48.9	45.8
	(8.3)	(4.5)	(5.3)	(0.9)	(2.1)	(5.7)	(1.9)
Transport	300.5	304.4	148.7	25.6	149.3	25.5	26.0
	(5.8)	(1.3)	(1.6)	(8.0)	(0.4)	(-3.2)	(1.3)
Buildings	56.3	56.9	28.4	3.5	30.1	3.7	3.4
	(5.2)	(1.1)	(-2.7)	(13.6)	(5.9)	(4.9)	(-3.1)
Power generation	21.8	10.1	5.7	0.5	6.9	0.4	0.6
	(48.7)	(-53.6)	(-55.0)	(-61.7)	(20.4)	(-29.8)	(16.1)

Note: p means provisional, () is year-on-year growth rates (%)
Source: Monthly Energy Statistics

► The consumption growth rates of major petroleum products



7. Gas

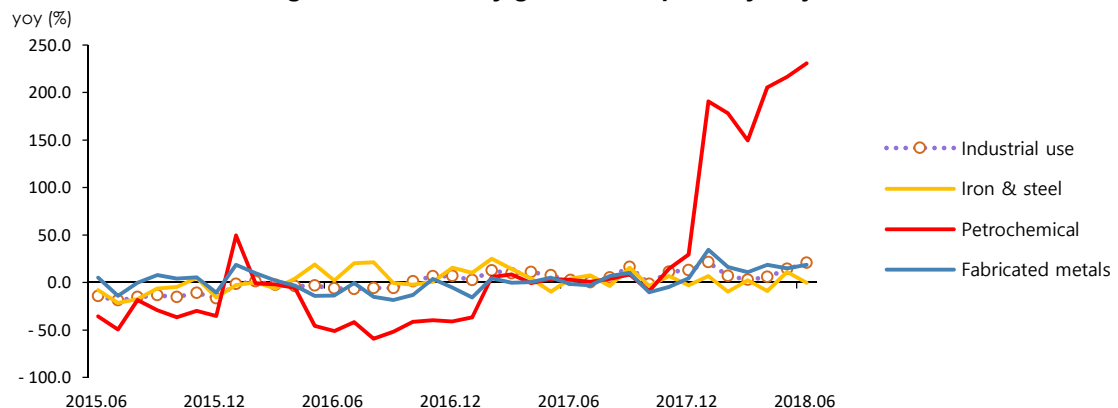
- **Natural gas consumption went up by 14.2% year-on-year in June, along with double digit growth rates in the power generation and city gas production sectors.**
 - Gas consumption for power generation grew by 15.5% from the same month last year, as baseload generation declined (-4.3%) despite more use of coal, due to plunged nuclear generation, and as power demand grew decently (3.5%).
 - Gas consumption for city gas production grew by 6.6%p faster compared to the consumption by end-users, which was driven by surging city gas demand for district heating.
- **City gas consumption increased by 5.5% year-on-year in June, driven by a surge in the industrial consumption, although the consumption declined in the buildings sector.**
 - Industrial city gas consumption was up over 20%, as its enhanced price competitiveness led to the rapid consumption growth in the petrochemical industry.
 - City gas consumption in buildings fell by nearly 10% on a year-on-year basis, because the consumption sharply decreased in commercial buildings, although the consumption increased in residential buildings.

► Trend in natural gas and city gas consumption

	2016	2017p			2018p		
			M1~6	M6	M1~6	M5	M6
LNG (Mton)	34.9	36.1	18.5	2.3	22.0	2.7	2.6
	(4.4)	(3.5)	(3.4)	(4.9)	(18.9)	(31.7)	(14.2)
Power generation	15.5	15.4	7.3	1.3	9.4	1.4	1.5
	(6.4)	(-0.6)	(4.8)	(7.4)	(28.4)	(45.1)	(15.5)
City gas production	17.4	18.4	10.0	0.9	11.1	1.1	1.0
	(2.7)	(5.8)	(2.5)	(1.4)	(10.6)	(14.8)	(12.1)
City gas (bm³)	21.3	22.6	12.8	1.2	13.6	1.4	1.2
	(2.3)	(6.2)	(4.3)	(2.5)	(6.0)	(7.7)	(5.5)
Industry	7.2	7.8	4.0	0.5	4.5	0.7	0.7
	(-1.4)	(7.6)	(7.6)	(2.4)	(11.6)	(14.1)	(20.6)
Buildings	12.8	13.6	8.2	0.5	8.5	0.7	0.5
	(5.0)	(6.0)	(3.0)	(3.2)	(3.8)	(3.2)	(-9.1)

Note: p means provisional, () is year-on-year growth rates (%)
Source: Monthly Energy Statistics

► The growth rate of city gas consumption by major industries



8. Electricity

□ Electricity consumption rose by 3.5% year-on-year in June, as the consumption grew faster in the buildings sector and more slowly in the industrial sector.

- Industrial electricity consumption has continued to grow, with the fabricated metals and petrochemical industries taking the lead, although the consumption grew at slower pace, affected by fewer work days and much less use of electricity in the primary metals industry.
- Electricity consumption in buildings grew rapidly by over 5%, as the consumption increased in commercial buildings (6.2%) due to bigger service production (1.7%) and in residential buildings (4.7%) with increased number of holidays for local elections.

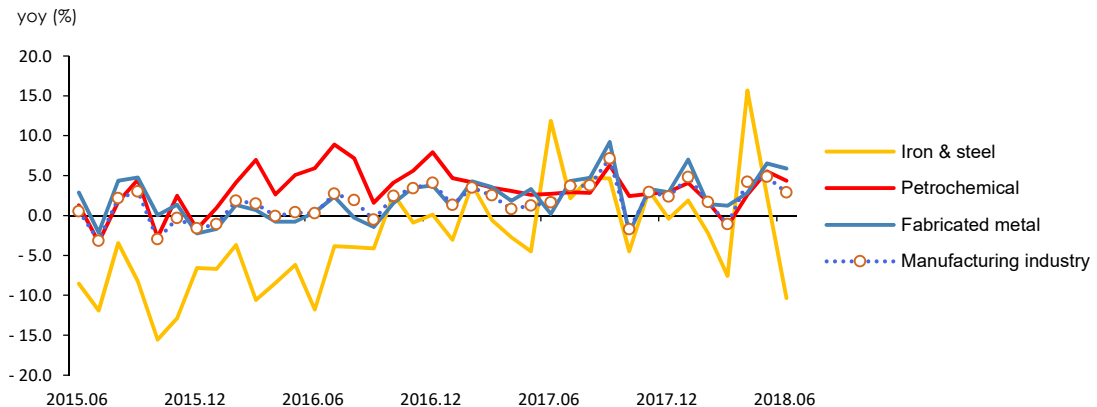
► Trend in electricity consumption by end-use sectors

	2016	2017p	2018p				
			M1~6	M6	M1~6	M5	M6
Electricity (TWh)	497.0	507.7	251.4	39.7	261.7	40.5	41.0
	(2.8)	(2.2)	(1.2)	(0.0)	(4.1)	(4.6)	(3.5)
Industry	270.0	276.7	136.9	22.6	140.8	23.3	23.0
	(1.6)	(2.5)	(2.1)	(2.5)	(2.8)	(4.6)	(2.1)
Transport	2.7	2.8	1.3	0.2	1.4	0.2	0.2
	(21.3)	(4.9)	(2.1)	(5.5)	(7.9)	(4.3)	(2.6)
Buildings	224.4	228.3	113.2	16.9	119.4	17.0	17.8
	(4.0)	(1.7)	(0.1)	(-3.2)	(5.6)	(4.6)	(5.3)

Notes: p means provisional, () is year-on-year growth rates (%)

Source: Monthly Energy Statistics

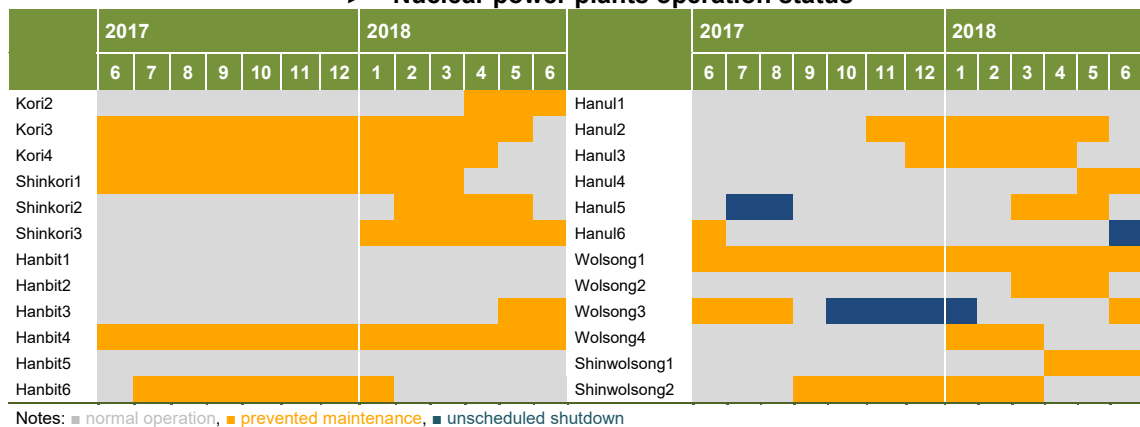
► The growth rate of electricity consumption in manufacturing industry



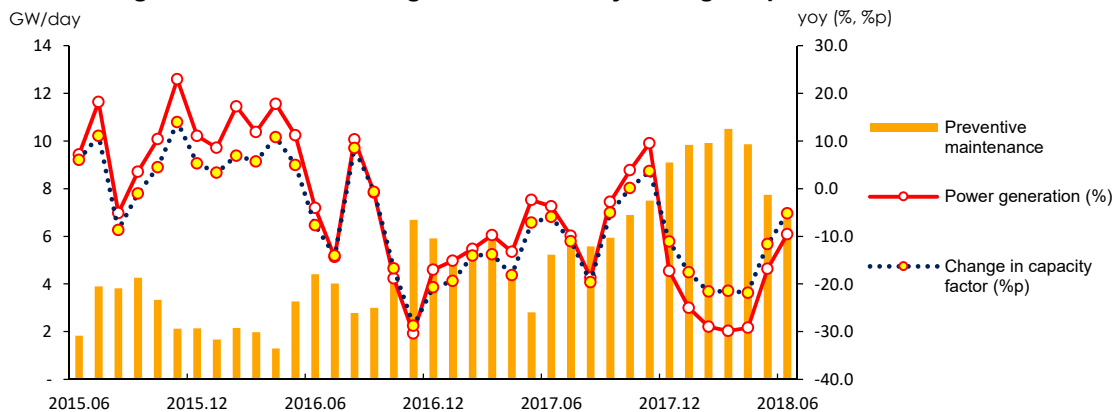
9. Nuclear

- **Nuclear generation decreased by 9.5% year-on-year in June, following the shutdown of nine reactors for preventive maintenance.**
 - The average capacity factor fell by 5.2%p to 71.8% on a year-on-year basis, because of the stronger safety checks and consequently delayed permission for power plant restart, in addition to the shutdown of Wolsong unit1.
 - Daily average of preventive maintenance dramatically increased (1.5GW, 28.5%), as eight out of 24 reactors were shutdown for planned preventive maintenance and one for unplanned maintenance. Nuclear's share of the total generation dropped by 3.4%p to 25.4%.

► **Nuclear power plants operation status**



► **The growth rate of nuclear generation & daily average of preventive maintenance**



10. Heat and Renewable energy

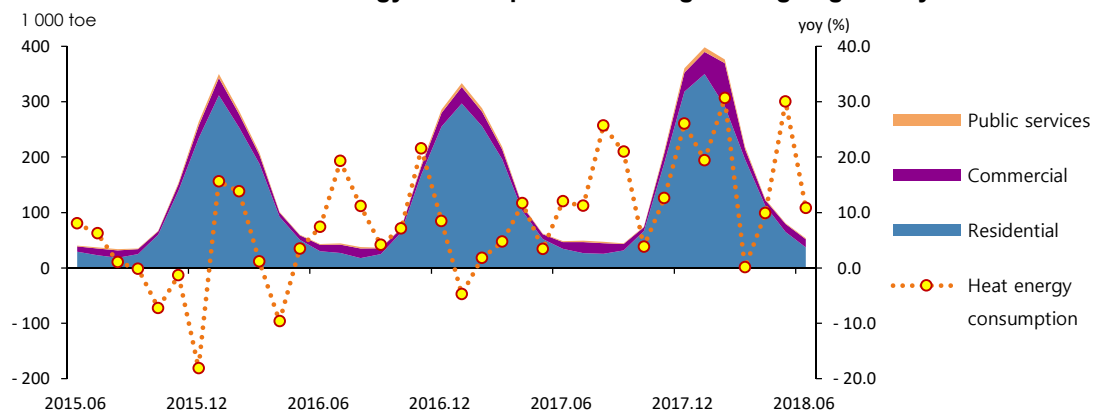
□ **Heat energy consumption went up by 10.8% year-on-year in June amid decreased number of cooling degree days and growing supply to new facilities.**

- Heat energy consumption increased, especially for residential and commercial use, as hot water demand increased with lower average temperature (in Seoul) and decreased cooling degree days (-10.5), along with the effect of the new Combined Heat & Power plant and lower heat energy price (-7.1%).

□ **Renewable & other energy consumption rose by 10.1%, as renewable and hydropower generation increased with the growth in installed capacity and the amount of rainfall.**

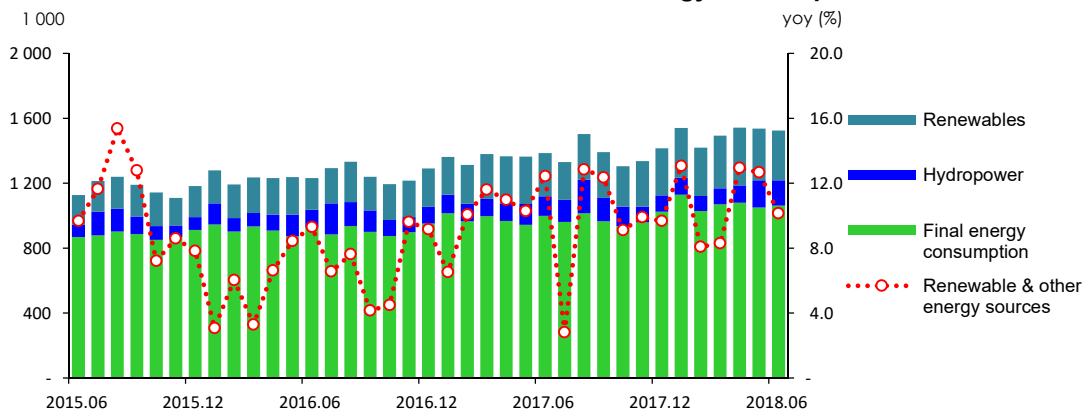
- Renewable generation (except hydro) increased by 16.2%, with solar PV, wind and bioenergy taking the lead, even though an IGCC plant was shut down. The renewables' share of TFC also grew by 6.2%, as the consumption increased in the industrial and transport sectors.
- Hydropower generation (729.2GWh) went up by 29.3% thanks to the increased amount of rainfall (390.7mm) compared to the same month last year (274.7mm).

► Heat energy consumption & heating/cooling degree days



Note: The heat energy consumption is based on the supply of KDHC, GS Power, SH Corp. In accordance with the heating/cooling degree days of the meteorological agency, base temperature of heating degree days is set at 18°C and that of cooling degree days was revised from 18°C to 24°C.

► Trend in renewable and other energy consumption



11. Industry

- Industrial energy use recorded a year-on-year growth of 3.8% in June, led by the petrochemical and fabricated metals sectors.
 - The consumption growth rate declined than a month earlier, affected by fewer work days (-1.5days) and less energy use in the primary metals sector.

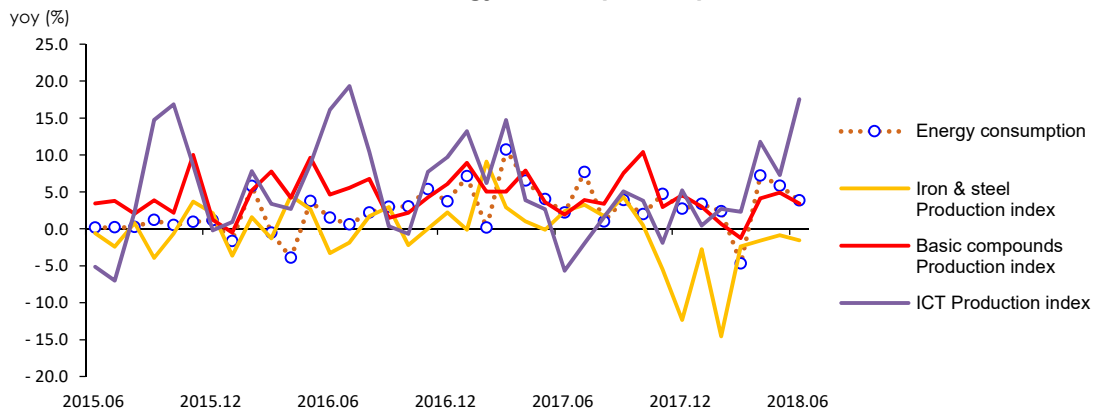
► Trend in the industrial energy consumption

	2016	2017p		2018p		M1~6	M5	M6
			M1~6	M6				
Industry (Mtoe)	137.8	143.8	70.8	11.5	72.8	12.4	12.0	
	(1.9)	(4.3)	(5.1)	(2.2)	(2.9)	(5.8)	(3.8)	
Petrochemical	65.9	68.6	33.5	5.4	35.3	6.1	5.7	
	(6.7)	(4.0)	(4.7)	(-0.7)	(5.4)	(9.4)	(7.1)	
- Naphtha	52.7	56.2	27.3	4.3	27.8	4.8	4.4	
	(4.7)	(6.6)	(5.8)	(1.7)	(1.6)	(5.3)	(2.4)	
Iron & Steel	28.1	30.0	14.8	2.5	15.0	2.6	2.5	
	(-8.0)	(6.7)	(7.7)	(11.5)	(1.4)	(2.9)	(0.3)	
-Coking coal	23.4	25.2	12.4	2.1	12.6	2.1	2.1	
	(-9.0)	(7.5)	(8.9)	(12.3)	(1.7)	(2.9)	(1.7)	
Fabricated metal	10.6	10.9	5.5	0.9	5.7	0.9	0.9	
	(0.4)	(3.0)	(2.8)	(2.6)	(4.7)	(5.3)	(3.8)	
Share of feedstock (%)	58.8	59.9	59.3	59.7	58.5	59.2	58.6	

Note: p means provisional, () is year-on-year growth rates (%)

Source: Monthly Energy Statistics

► Industrial energy consumption & production index



12. Transport

□ **Transport energy use rebounded by 2.1% in June on a year-on-year basis, as the consumption bounced backed in the road transport sector.**

- Energy use for road transport started to increased, as diesel and gasoline consumption recovered, though LPG consumption started downward movement.
- Energy use for domestic navigation has fallen for five straight months, limiting the growth of the total transport energy use, as a result of decreased export and coastal transport in addition to higher bunker-C price.
- Energy use for aviation has increased for four months in a row due to increased number of international flights and domestic passengers going abroad especially China. The consumption growth, however, was much slower owing to a drop in domestic flights and passenger & cargo demand.

► The growth rate of petroleum consumption in the transport sector

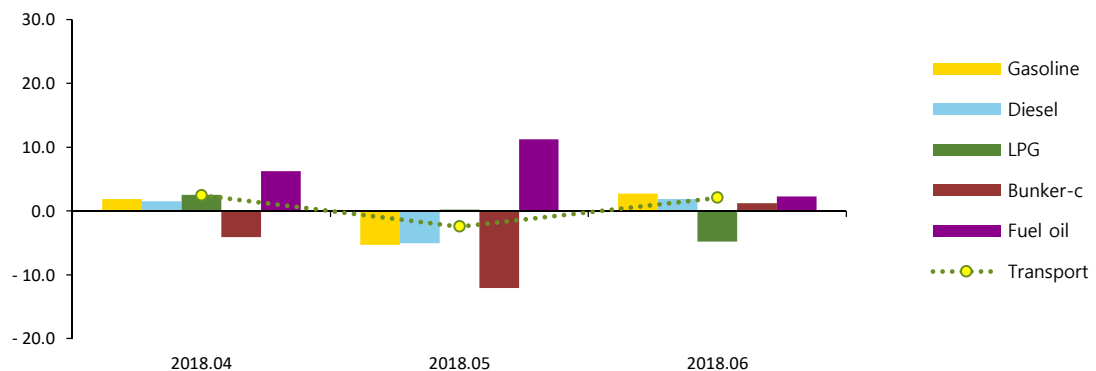
	2016	2017p	2018p				
			M1~6	M6	M1~6	M5	M6
Transport (Mtoe)	42.3	43.0	21.0	3.6	21.2	3.6	3.7
	(6.1)	(1.8)	(2.0)	(8.3)	(0.9)	(-2.5)	(2.1)
Road	33.9	34.4	16.8	3.0	17.0	2.9	3.0
	(4.9)	(1.5)	(2.0)	(9.6)	(0.7)	(-3.4)	(2.4)
Navigation	3.4	3.4	1.7	0.2	1.6	0.3	0.2
	(13.8)	(2.0)	(5.3)	(-4.6)	(-7.1)	(-11.5)	(-1.3)
Aviation	4.7	4.8	2.3	0.4	2.5	0.4	0.4
	(9.1)	(3.2)	(0.4)	(8.4)	(8.1)	(11.1)	(2.2)
Rail	0.3	0.3	0.2	0.0	0.2	0.0	0.0
	(8.3)	(2.5)	(-2.3)	(1.2)	(5.5)	(4.9)	(-1.5)

Note: p means provisional, () is year-on-year growth rates (%)

Source: Monthly Energy Statistics

► The growth rate of energy consumption in the transport sector & major petroleum products

yoy (%)



13. Buildings

□ **Energy consumption in buildings fell by 0.4% year-on-year in June especially in commercial and public buildings due to decreased number of both cooling degree days and work days.**

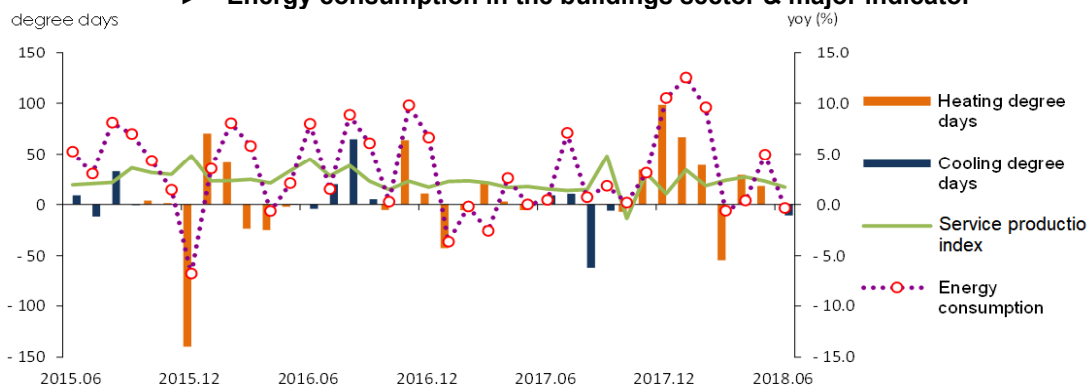
- Energy consumption in buildings decreased despite lower energy prices except petroleum products, especially in commercial and public buildings, because of temperature effect and fewer work days, though the consumption increased in residential buildings.
- Energy consumption in residential buildings went up by 6.5%, as fewer work days led to increased residential use of major energy sources except kerosene (-10.4%).
- Energy consumption in commercial buildings fell more sharply than the previous month, as LPG and city gas use declined (-2.2%, -32.7%) along with decreased production index of the restaurant & accommodations business (-2.4%), although electricity and heat energy consumption increased (6.2%, 19.8%).

► Energy consumption trend in the buildings sector

	2016	2017p	2018p				
			M1~6	M6	M1~6	M5	M6
Buildings (Mtoe)	45.0	45.7	24.3	2.7	25.6	2.9	2.7
	(5.2)	(1.5)	(-1.0)	(0.4)	(5.4)	(4.9)	(-0.4)
Residential	21.7	21.9	12.2	1.0	13.3	1.3	1.0
	(5.5)	(1.1)	(-2.2)	(2.5)	(9.2)	(12.2)	(6.5)
Commercial	17.1	17.4	8.9	1.2	8.9	1.2	1.2
	(3.5)	(2.0)	(0.5)	(2.5)	(0.8)	(-0.7)	(-2.9)
Public · others	6.2	6.4	3.2	0.5	3.4	0.5	0.5
	(8.7)	(1.7)	(-0.5)	(-7.2)	(3.9)	(1.1)	(-7.1)

Note: p means provisional, () is year-on-year growth rates (%)
Source: Monthly Energy Statistics

► Energy consumption in the buildings sector & major indicator



14. Transformation

□ The total energy input for power generation rose by 2.5% year-on-year in June, mainly coal and gas.

- Gas consumption grew rapidly in the power generation sector, as gas generation accounted for the majority of the growth in power generation, while baseload generation (coal + nuclear) continued downward spiral on a year-on-year basis.
- Gas made up a larger share of the total generation than nuclear energy, posting seven consecutive months of share increase on a year-on-year basis.

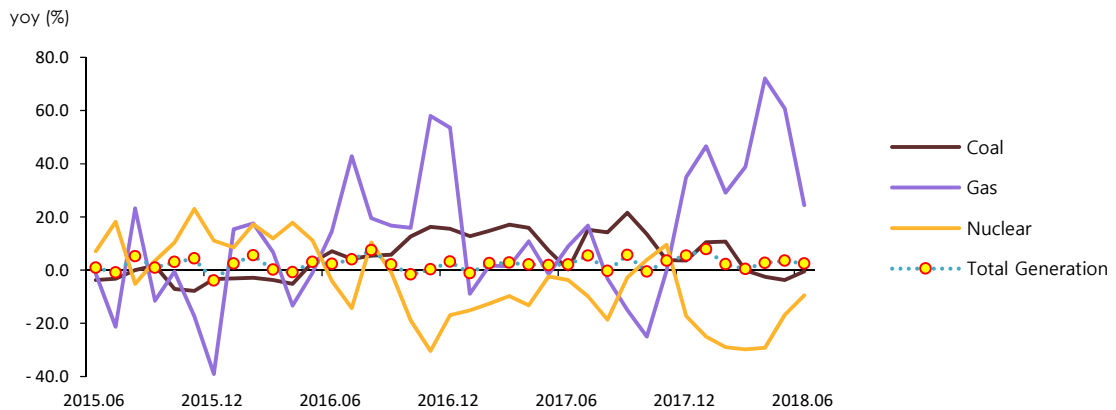
► Energy consumption in the power generation sector

	2016	2017p			2018p		
			M1~6	M6	M1~6	M5	M6
Input (Mtoe)	110.9	110.9	53.9	8.5	54.9	8.7	8.7
	(0.8)	(-0.0)	(-1.9)	(-2.8)	(1.8)	(1.3)	(2.5)
Coal	49.2	52.8	24.6	3.7	26.3	3.8	3.8
	(-2.8)	(7.4)	(3.3)	(-6.5)	(6.9)	(-0.6)	(3.3)
Oil	3.0	1.2	0.7	0.1	0.7	0.0	0.1
	(50.1)	(-59.7)	(-61.3)	(-67.5)	(6.1)	(-29.5)	(10.0)
Gas	20.5	20.5	9.8	1.7	12.5	1.9	1.9
	(6.3)	(-0.0)	(5.2)	(8.0)	(28.1)	(44.3)	(15.5)
Nuclear	34.2	31.6	16.6	2.7	12.8	2.4	2.4
	(-1.7)	(-7.5)	(-8.8)	(-2.8)	(-23.3)	(-16.8)	(-9.5)
Hydro/other renewables	4.0	4.7	2.3	0.4	2.6	0.5	0.5
	(17.4)	(16.4)	(19.1)	(26.8)	(15.7)	(15.9)	(20.3)

Notes: p means provisional, () is year-on-year growth rates (%)

Source: Monthly Energy Statistics

► Change in capacity factor and share of power generation by major energy sources



*Capacity factor is the ratio of actual energy produced to the amount of energy produced from continuous operation at full rated power

<Appendix> Major Indicators & Statistics of Energy Supply and Demand

Major Statistics & Indicators of the Economy

	2015	2016	2017				2018		
			4Q	1Q	2Q		4Q	1Q	2Q
GDP (trillion won)	1 466.8 (2.8)	1 509.8 (2.9)	396.5 (2.6)	366.2 (2.9)	389.6 (2.8)	1 556.0 (3.1)	407.6 (2.8)	376.4 (2.8)	400.6 (2.8)
Private consumption	707.5 (2.2)	725.4 (2.5)	184.5 (1.4)	185.8 (2.1)	181.0 (2.4)	744.3 (2.6)	190.7 (3.4)	192.4 (3.5)	186.1 (2.8)
Facilities investment	140.3 (4.7)	138.8 (-1.0)	37.4 (3.3)	37.3 (16.1)	42.0 (17.9)	159.1 (14.6)	40.6 (8.6)	40.1 (7.3)	40.8 (-3.0)
Construction investment	211.5 (6.6)	233.4 (10.3)	65.1 (11.9)	49.5 (11.3)	67.1 (8.5)	251.1 (7.6)	67.6 (3.8)	50.4 (1.8)	66.1 (-1.5)
Consumer price index (2015=100)	100.0	101.0	101.5	102.7	102.7	102.9	103.1	104.0	104.3
USD to KRW exchange rate (won)	1 131.0	1 160.8	1 156.4	1 154.9	1 129.4	1 131.0	1 107.5	1 072.7	1 079.0
Benchmark rate (%)	1.6	1.4	1.3	1.3	1.3	1.3	1.4	1.5	1.5
Coincident composite index (2015=100)	100.0	103.3	104.5	105.9	106.8	107.0	107.9	108.5	109.1
Mining & manufacturing production index (2015=100)	100.0	102.3	108.4	103.2	104.3	104.2	104.3	100.9	105.0
Manufacturing operation ratio index (2015=100)	100.0	98.2	101.4	95.9	98.3	97.1	96.0	92.7	99.3
Average temperature	13.6	13.6	8.0	1.4	18.9	13.0	6.7	0.8	18.1
- year-on-year difference	0.2	-0.0	-0.6	0.1	-0.2	-0.6	-1.3	-0.6	-0.8
Heating degree days	2 459.1 (-1.7)	2 589.7 (5.3)	935.3 (8.0)	1 487.5 (-1.7)	138.6 (-1.6)	2 687.6 (3.8)	1 060.9 (13.4)	1 538.9 (3.5)	185.4 (33.8)
Cooling degree days	151.8 (21.1)	238.1 (56.9)	- n.a	- n.a	18.2 (78.4)	188.1 (-21.0)	- n.a	- n.a	7.7 (-57.7)
Energy intensity	0.20 (-1.2)	0.20 (-0.5)	0.19 (-0.1)	0.22 (-0.9)	0.18 (-0.7)	0.19 (-0.5)	0.19 (0.8)	0.22 (-0.3)	0.18 (0.9)
Per capita consumption									
oil (bbl)	16.7 (3.7)	18.0 (7.4)	4.7 (6.8)	4.6 (1.4)	4.3 (1.7)	18.2 (1.5)	4.8 (0.7)	4.6 (0.3)	4.5 (3.1)
Electricity (MWh)	9.5 (0.7)	9.7 (2.3)	2.4 (3.0)	2.6 (1.0)	2.3 (0.7)	9.9 (1.8)	2.4 (2.2)	2.7 (4.1)	2.4 (3.3)
City gas (1 000 m³)	0.4 (-6.4)	0.4 (1.8)	0.1 (7.2)	0.2 (3.4)	0.1 (4.9)	0.4 (5.8)	0.1 (10.5)	0.2 (7.4)	0.1 (2.2)
Total energy (toe)	5.6 (1.0)	5.7 (1.9)	1.5 (1.9)	1.5 (1.6)	1.3 (1.7)	5.9 (2.3)	1.5 (3.3)	1.6 (2.1)	1.4 (3.4)

Note: Figures are based on the real price of 2010, p means provisional, () is year-on-year growth rates (%)

Source: BOA Economic Statistics System, Monthly Energy Statistics

The Index of Production & Operating Ratio by Sectors

(2015=100)

	2016	2017					2018			
			M1~6	M4	M5	M6	M1~6	M4	M5	M6
Industrial production index										
All industry	103.1 (3.2)	105.5 (2.3)	104.2 (3.2)	104.0 (3.2)	105.0 (2.4)	108.9 (2.0)	105.2 (1.0)	106.0 (1.9)	106.8 (1.7)	109.1 (0.2)
Mining & manufacturing	102.3 (2.3)	104.2 (1.8)	103.8 (3.4)	103.3 (3.7)	104.3 (1.8)	105.4 (1.2)	102.9 (-0.8)	104.3 (1.0)	105.6 (1.2)	105.0 (-0.4)
Iron & steel	100.2 (0.2)	100.7 (0.4)	101.0 (2.4)	101.4 (1.0)	104.3 (-0.1)	102.7 (2.4)	97.1 (-3.8)	99.8 (-1.6)	103.4 (-0.9)	101.1 (-1.6)
Cement	108.3 (8.3)	109.9 (1.4)	111.4 (7.8)	121.7 (4.3)	128.7 (8.2)	110.7 (-9.2)	100.0 (-10.3)	110.1 (-9.5)	114.8 (-10.8)	115.7 (4.5)
Basic compound	104.8 (4.8)	110.4 (5.4)	108.5 (5.4)	106.7 (7.9)	109.6 (3.6)	105.2 (1.9)	111.2 (2.5)	111.1 (4.1)	115.0 (4.9)	108.8 (3.4)
Transport equipment	97.7 (-2.3)	94.9 (-2.9)	99.2 (-0.8)	102.7 (2.2)	97.1 (-2.7)	101.9 (-2.9)	91.8 (-7.5)	97.2 (-5.4)	97.0 (-0.1)	93.7 (-8.0)
Electric & electronic	103.3 (3.3)	106.4 (3.0)	103.5 (3.4)	103.9 (6.2)	105.4 (5.4)	109.1 (5.4)	101.4 (-2.0)	103.0 (-0.9)	103.2 (-2.1)	103.8 (-4.9)
Service	102.6 (2.6)	104.5 (1.8)	102.7 (1.9)	103.1 (1.7)	104.5 (1.8)	106.0 (1.5)	105.2 (2.4)	105.9 (2.7)	106.9 (2.3)	107.8 (1.7)
Operating ratio index										
Manufacturing	98.2 (-1.8)	97.1 (-1.2)	97.1 (-0.9)	97.0 (-0.7)	98.4 (-2.7)	99.6 (-2.4)	96.0 (-1.2)	97.9 (0.9)	100.2 (1.8)	99.8 (0.2)
Iron & steel	99.9 (-0.1)	101.0 (1.0)	100.7 (2.3)	101.1 (1.0)	103.9 (-0.1)	102.5 (2.4)	98.3 (-2.4)	97.9 (-3.2)	101.5 (-2.3)	99.9 (-2.5)
Cement	107.0 (7.0)	107.6 (0.5)	108.9 (6.2)	119.1 (2.7)	125.2 (6.6)	107.8 (-10.5)	107.0 (-1.7)	120.5 (1.2)	125.6 (0.3)	127.4 (18.2)
Basic compound	103.6 (3.6)	107.2 (3.4)	105.9 (3.6)	104.1 (6.1)	107.1 (2.1)	102.3 (0.2)	106.8 (0.8)	106.5 (2.3)	110.1 (2.8)	105.0 (2.6)
Transport equipment	94.2 (-5.8)	89.7 (-4.8)	94.0 (-3.1)	96.9 (-0.2)	91.7 (-5.2)	96.3 (-4.8)	89.5 (-4.8)	96.0 (-0.9)	95.3 (3.9)	92.1 (-4.4)
Electric & electronic	102.2 (2.2)	102.8 (0.5)	101.1 (1.9)	100.9 (3.5)	101.7 (0.8)	105.8 (3.9)	95.6 (-5.4)	97.2 (-3.7)	99.1 (-2.6)	98.6 (-6.8)

Note: p means provisional
Source: Monthly Energy Statistics

International Energy Prices

	2016	2017					2018			
			M1~8	M6	M7	M8	M1~8	M6	M7	M8
Crude oil (USD/bbl)										
WTI	43.3 (-11.2)	51.0 (17.6)	49.4 (21.0)	45.2 (-7.5)	46.7 (4.2)	48.1 (7.3)	66.3 (34.2)	67.3 (48.9)	70.6 (51.2)	67.9 (41.2)
Dubai	41.2 (-18.8)	53.2 (28.9)	50.8 (32.6)	46.5 (0.4)	47.6 (11.9)	50.2 (15.1)	69.2 (36.2)	73.6 (58.4)	73.1 (53.7)	72.5 (44.3)
Brent	45.0 (-16.0)	54.8 (21.7)	52.2 (22.9)	47.6 (-4.8)	49.2 (5.6)	51.9 (10.0)	71.9 (37.6)	75.9 (59.7)	75.0 (52.5)	73.8 (42.4)
Unit value of import (C&F)	41.0 (-23.0)	53.3 (29.9)	51.6 (34.4)	50.0 (11.1)	47.5 (3.2)	48.8 (11.4)	69.8 (35.2)	74.1 (48.4)	75.1 (58.1)	75.1 (53.8)
LNG										
From Indonesia (USD/MMBTU)	6.9 (-32.6)	8.3 (20.2)	8.2 (20.2)	8.3 (38.6)	8.3 (31.2)	8.9 (33.7)	10.1 (24.0)	10.4 (25.8)	10.4 (25.9)	10.4 (17.0)
Unit value of import (USD/ton, CIF)	356.7 (-35.0)	416.3 (16.7)	415.2 (19.4)	407.5 (37.4)	408.4 (33.7)	426.0 (28.7)	501.3 (20.7)	509.7 (25.1)	519.6 (27.2)	527.7 (23.9)
Bituminous coal (USD/ton)										
From Australia	65.9 (14.5)	88.6 (34.5)	83.9 (53.2)	81.0 (52.3)	87.5 (40.5)	98.6 (46.3)	107.4 (28.1)	114.8 (41.8)	119.6 (36.6)	117.3 (19.0)
Unit value of import (CIF)	68.9 (-6.8)	104.3 (51.5)	105.8 (72.9)	116.4 (92.1)	101.6 (63.2)	92.7 (45.7)	113.0 (6.8)	114.2 (-1.9)	112.3 (10.5)	110.1 (18.7)
Petroleum product (USD/bbl)										
Gasoline	56.2 (-19.1)	68.1 (21.2)	65.7 (23.0)	59.8 (1.2)	61.8 (19.2)	67.5 (24.5)	81.7 (24.4)	83.6 (39.7)	83.1 (34.6)	84.8 (25.7)
Kerosene	52.8 (-18.3)	65.3 (23.6)	62.3 (25.3)	57.0 (-2.2)	59.8 (9.6)	63.1 (17.8)	84.6 (35.8)	86.9 (52.4)	87.4 (46.2)	87.3 (38.3)
Diesel	53.0 (-20.4)	66.4 (25.1)	63.5 (27.4)	58.4 (-1.2)	61.5 (11.7)	64.3 (18.9)	84.5 (33.2)	87.4 (49.7)	86.9 (41.3)	88.5 (37.7)
Bunker-C	35.4 (-21.6)	49.7 (40.2)	47.6 (52.7)	45.3 (22.6)	46.1 (23.7)	47.3 (26.9)	63.8 (34.2)	69.2 (52.7)	70.4 (52.7)	69.1 (46.1)
Propane	323.3 (-22.3)	468.8 (45.0)	423.8 (37.0)	385.0 (16.7)	345.0 (16.9)	420.0 (47.4)	533.1 (25.8)	560.0 (45.5)	555.0 (60.9)	580.0 (38.1)
Butane	355.8 (-18.5)	500.8 (40.7)	473.8 (39.3)	390.0 (6.8)	365.0 (17.7)	460.0 (58.6)	530.0 (11.9)	560.0 (43.6)	570.0 (56.2)	595.0 (29.3)
Naphtha	42.5 (-19.0)	53.8 (26.6)	50.5 (25.2)	44.8 (-1.2)	45.7 (9.8)	50.3 (26.1)	68.2 (35.1)	70.7 (57.7)	72.1 (57.8)	71.5 (42.2)

Note: 1. () is year-on-year growth rates(%)

2. Gasoline type is 95RON, diesel is 0.001%, Bunker-C is high-sulfur oil(180cst/3.5%), for propane and butane, CP is reference value

Source: www.petronet.co.kr, IMF (primary commodity price), Monthly energy statistics

Total Primary Energy Supply (TPES)

	2016	2017p					2018p			
			M1~6	M4	M5	M6	M1~6	M4	M5	M6
Coal (Mton)	129.3 (-4.3)	139.6 (8.0)	66.5 (7.2)	10.3 (6.4)	10.7 (4.7)	10.3 (1.6)	69.8 (5.1)	10.7 (4.2)	10.9 (2.2)	10.8 (4.9)
- Coking coal excluded	95.8 (-2.5)	103.5 (8.0)	48.7 (6.4)	7.5 (6.5)	7.7 (1.9)	7.3 (-2.5)	51.8 (6.3)	7.8 (3.6)	7.8 (2.0)	7.7 (6.2)
Oil (Mbbbl)	921.1 (8.0)	938.2 (1.9)	458.4 (1.9)	71.9 (2.1)	76.8 (1.5)	74.5 (2.7)	467.6 (2.0)	76.7 (6.7)	78.6 (2.3)	75.7 (1.5)
- Non-energy oil excluded	454.9 (11.3)	446.3 (-1.9)	219.5 (-1.0)	34.8 (-4.0)	36.8 (0.6)	36.2 (5.0)	225.4 (2.7)	36.1 (3.7)	36.7 (-0.2)	36.6 (1.3)
LNG (Mton)	34.9 (4.4)	36.1 (3.5)	18.5 (3.4)	2.5 (10.3)	2.1 (0.1)	2.3 (4.9)	22.0 (18.9)	3.1 (27.3)	2.7 (31.7)	2.6 (14.2)
Hydro (TWh)	6.6 (14.5)	7.0 (5.4)	3.2 (7.0)	0.5 (9.8)	0.6 (-4.4)	0.6 (9.1)	3.4 (5.4)	0.5 (-2.8)	0.8 (29.9)	0.7 (29.3)
Nuclear (TWh)	162.0 (-1.7)	148.4 (-8.4)	78.1 (-9.7)	13.3 (-13.2)	13.7 (-2.4)	12.5 (-3.7)	60.0 (-23.3)	9.4 (-29.2)	11.4 (-16.8)	11.3 (-9.5)
Others (Mtoe)	13.6 (5.7)	15.0 (10.2)	7.5 (10.5)	1.3 (11.0)	1.2 (12.0)	1.3 (12.7)	8.3 (11.4)	1.4 (14.3)	1.4 (10.9)	1.4 (8.3)
TPES (Mtoe)	293.4 (2.4)	301.1 (2.6)	148.5 (2.0)	23.0 (2.2)	23.4 (1.9)	22.9 (2.2)	153.0 (3.1)	24.0 (4.6)	24.2 (3.6)	23.6 (3.0)
- Non-energy oil excluded	235.5 (1.8)	239.9 (1.9)	118.8 (1.4)	18.3 (0.7)	18.4 (1.7)	18.1 (2.6)	123.0 (3.5)	19.0 (3.4)	19.0 (3.4)	18.8 (3.4)
- Non-energy oil&coal excluded	212.0 (3.2)	214.7 (1.3)	106.4 (0.6)	16.4 (0.1)	16.3 (0.6)	16.0 (1.5)	110.4 (3.7)	16.9 (3.1)	16.9 (3.4)	16.6 (3.6)

Note: p means provisional, () is year-on-year growth rates (%)
Source: Monthly Energy Statistics

Share of TPES by Sources

(unit: %)

	2016	2017p					2018p			
			M1~6	M4	M5	M6	M1~6	M4	M5	M6
Coal	27.7	28.7	27.7	27.7	28.3	28.0	28.1	27.5	27.8	28.3
- Coking coal excluded	19.7	20.3	19.4	19.3	19.4	18.8	19.9	19.0	19.0	19.2
Oil	40.1	39.7	39.3	40.0	41.8	41.5	38.9	40.7	41.1	40.7
- non-energy oil excluded	20.3	19.4	19.3	19.8	20.5	20.6	19.2	19.6	19.6	20.1
LNG	15.5	15.7	16.3	14.0	11.6	12.9	18.8	17.0	14.8	14.3
Hydro	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.4	0.7	0.7
Nuclear	11.6	10.5	11.2	12.3	12.4	11.6	8.3	8.4	10.0	10.2
Others	4.6	5.0	5.0	5.5	5.3	5.5	5.4	6.0	5.6	5.8
TPES	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: p means provisional
Source: Monthly Energy Statistics

Total Final Consumption (TFC)

(Unit: Mtoe)

	2016	2017p					2018p			
			M1~6	M4	M5	M6	M1~6	M4	M5	M6
Industry	137.8 (1.9)	143.8 (4.3)	70.8 (5.1)	11.3 (6.5)	11.7 (4.0)	11.5 (2.2)	72.8 (2.9)	12.1 (7.2)	12.4 (5.8)	12.0 (3.8)
Transport	42.3 (6.1)	43.0 (1.8)	21.0 (2.0)	3.5 (-1.2)	3.7 (3.9)	3.6 (8.3)	21.2 (0.9)	3.6 (2.4)	3.6 (-2.5)	3.7 (2.1)
Residential-commercial	38.7 (4.6)	39.3 (1.5)	21.1 (-1.1)	3.0 (2.8)	2.3 (-1.0)	2.2 (2.5)	22.3 (5.7)	3.0 (-1.0)	2.4 (5.7)	2.2 (1.3)
Public	6.2 (8.7)	6.4 (1.7)	3.2 (-0.5)	0.5 (1.4)	0.5 (5.4)	0.5 (-7.2)	3.4 (3.9)	0.5 (8.6)	0.5 (1.1)	0.5 (-7.1)
TFC	225.1 (3.3)	232.5 (3.3)	116.1 (3.2)	18.2 (4.2)	18.2 (3.3)	17.8 (3.1)	119.6 (3.0)	19.2 (5.0)	18.9 (4.0)	18.4 (2.8)
Coal (Mton)	49.0 (-6.8)	50.2 (2.5)	24.8 (7.4)	3.9 (1.6)	4.1 (5.5)	4.1 (10.0)	25.4 (2.3)	4.2 (7.2)	4.4 (7.0)	4.4 (7.2)
Oil (Mbbl)	899.3 (7.3)	928.1 (3.2)	452.7 (3.6)	71.5 (4.2)	76.1 (2.7)	74.1 (3.8)	460.7 (1.8)	76.3 (6.8)	78.1 (2.6)	75.1 (1.4)
Electricity (TWh)	497.0 (2.8)	507.7 (2.2)	251.4 (1.2)	40.8 (1.7)	38.7 (1.3)	39.7 (0.0)	261.7 (4.1)	42.0 (3.0)	40.5 (4.6)	41.0 (3.5)
City gas (Bm³)	21.3 (2.3)	22.6 (6.2)	12.8 (4.3)	1.8 (8.8)	1.3 (3.1)	1.2 (2.5)	13.6 (6.0)	1.8 (-2.9)	1.4 (7.7)	1.2 (5.5)
Heat-others (1 000 toe)	13.1 (4.2)	13.6 (3.7)	7.0 (1.8)	1.1 (4.2)	1.0 (5.8)	1.0 (6.6)	7.7 (10.3)	1.2 (11.4)	1.1 (12.4)	1.1 (6.5)

Note: p means provisional, () is year-on-year growth rates (%)

Source: Monthly Energy Statistics

Share of the Total Final Consumption by Sources

(unit: %)

	2016	2017p					2018p			
			M1~6	M4	M5	M6	M1~6	M4	M5	M6
Industry	61.2	61.9	61.0	61.9	64.4	64.5	60.9	63.2	65.6	65.1
Transport	18.8	18.5	18.1	19.1	20.4	20.3	17.7	18.6	19.2	20.2
Residential-commercial	17.2	16.9	18.1	16.3	12.6	12.2	18.6	15.4	12.8	12.0
Public	2.8	2.7	2.8	2.7	2.5	3.0	2.8	2.8	2.4	2.7
Final energy	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Coal	14.3	14.4	14.3	14.3	15.1	15.3	14.0	14.4	15.3	15.6
Oil	50.8	50.8	49.6	50.0	53.3	52.9	48.9	50.7	52.3	52.0
Electricity	19.0	18.8	18.6	19.2	18.3	19.1	18.8	18.9	18.4	19.2
City gas	10.1	10.2	11.6	10.6	7.8	6.9	11.9	9.8	8.0	7.0
Heat-others	5.8	5.9	6.0	5.9	5.5	5.9	6.4	6.3	6.0	6.1

Note: p means provisional

Source: Monthly Energy Statistics

Statistics on Energy Production Facilities

	2015	2016	2017				2018p		
				M4	M5	M6	M4	M5	M6
Total capacity (GW)	97.6 (4.8)	105.9 (8.4)	116.9 (19.7)	110.7 (16.0)	111.3 (16.3)	113.7 (18.8)	116.7 (18.0)	117.8 (19.0)	117.2 (18.5)
Nuclear	21.7 (4.8)	23.1 (6.4)	22.5 (3.7)	23.1 (11.6)	23.1 (11.6)	22.5 (8.8)	22.5 (3.7)	22.5 (3.7)	21.9 (0.6)
Bituminous coal	26.2 (1.1)	30.9 (18.0)	36.1 (37.8)	31.6 (21.9)	31.7 (22.4)	34.7 (34.0)	36.1 (36.9)	36.3 (37.5)	36.3 (37.5)
Gas	32.2 (6.5)	32.6 (1.2)	37.9 (17.4)	36.2 (13.6)	36.6 (15.0)	36.6 (15.0)	37.4 (14.6)	37.9 (16.1)	37.9 (16.1)
Refinery capacity (mil BPSD)	3.1 (3.7)	3.1 -	3.1 -	3.1 -	3.1 -	3.1 -	3.1 (0.2)	3.1 (0.2)	3.1 (0.2)

Note: () is year-on-year growth rates (%)

Source: The monthly report on major electric power statistics

Statistics on Energy Consumption

	2015	2016	2017				2018p		
				M4	M5	M6	M4	M5	M6
The number of household demanding city gas (mil)	17.4 (3.0)	18.0 (3.4)	18.6 (3.3)	18.2 (3.3)	18.1 (3.2)	18.2 (3.3)	18.8 (3.3)	18.8 (3.4)	18.8 (3.3)
Registered cars (mil)	21.0 (4.3)	21.8 (3.9)	22.5 (3.3)	22.1 (3.6)	22.1 (3.5)	22.2 (3.4)	22.8 (3.2)	22.8 (3.2)	22.9 (3.1)
- gasoline	9.8 (2.3)	10.1 (2.9)	10.4 (2.7)	10.2 (3.1)	10.2 (3.0)	10.3 (2.9)	10.5 (2.6)	10.5 (2.6)	10.5 (2.5)
- diesel	8.6 (8.6)	9.2 (6.4)	9.6 (4.4)	9.3 (5.3)	9.3 (5.1)	9.4 (4.8)	9.7 (4.1)	9.7 (4.1)	9.8 (4.1)
- LPG	2.3 (-3.4)	2.2 (-4.0)	2.1 (-2.9)	2.1 (-3.6)	2.1 (-3.5)	2.1 (-3.4)	2.1 (-3.2)	2.1 (-3.2)	2.1 (-3.3)
- hybrid	0.2 (31.3)	0.2 (37.6)	0.3 (37.6)	0.2 (31.2)	0.2 (35.2)	0.3 (34.3)	0.3 (42.1)	0.3 (36.6)	0.3 (34.6)

Note: () is year-on-year growth rates (%)

Source: Monthly Energy Statistics

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KEEI Monthly Korea Energy Trends is designed to be used for energy policy and market strategy in the government and industrial sector by analyzing and providing energy economic indicators in Korea.

This report is written by the Energy Demand and Supply Division of the Center for Energy Information and Statistics in cooperation with the Energy Statistics Research Division of KEEI and other related research divisions.

The energy economic indicators included in this report will be constantly updated until further confirmation.

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