

KEEI

MONTHLY KOREA ENERGY TRENDS

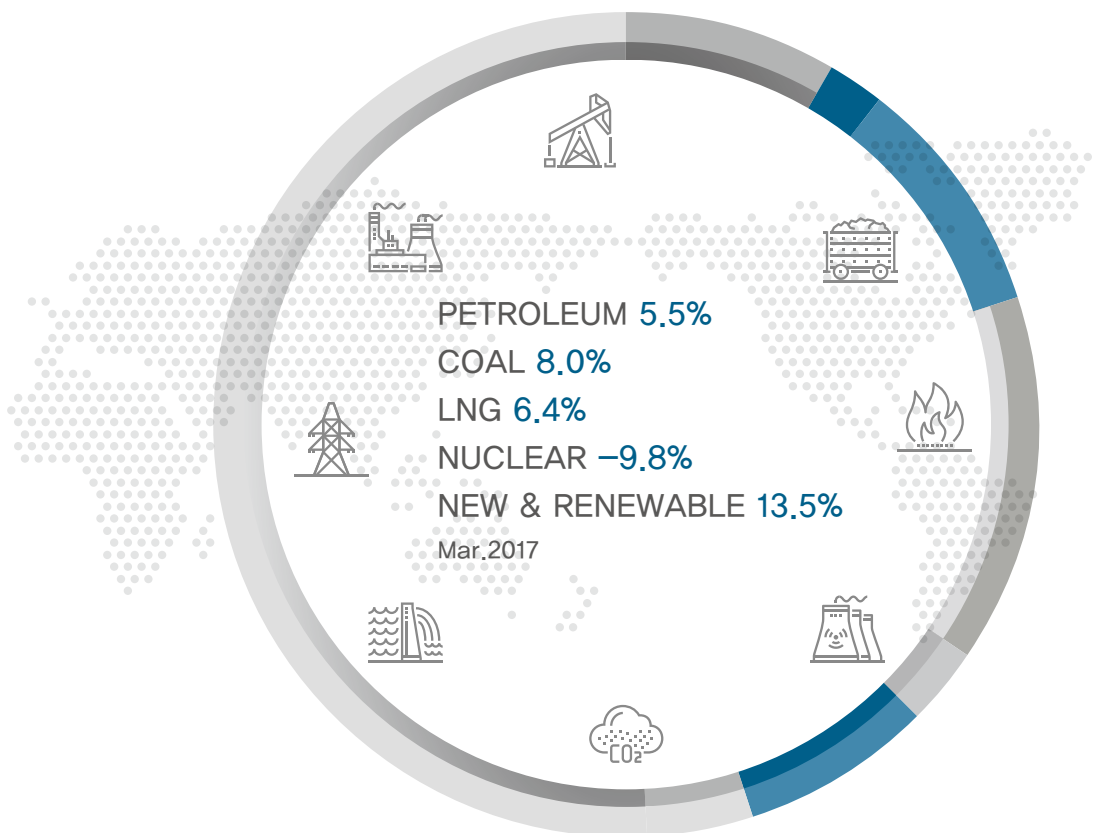


Table of Contents

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

1. The Economy and the Industry

□ The total export value increased by 24.1% year-on-year in April due to picking up export of semi-conductors, ships and iron & steel products.

- The export value of semi-conductors posted the largest growth (56.9%) since August 2010, marking seven consecutive months of increase, backed by steadily rising unit price of memory chips, the launch of a new smart phone and expanded memory chip capacity in addition to the year-on-year base effect.
- The export value of ships rose by 102.9%, hitting a record high of \$7.13 billion, with 24 ships sold abroad including two offshore plants.
- The export value of iron & steel products rebounded (↑35.9%) as a result of increased unit prices amid ongoing restructuring of iron and steel industry in China and the export of offshore platform frames (\$510 million, Norway).

□ The mining and manufacturing production index increased by 1.7% year-on-year in April, recording a slower growth rate than in the prior month. The service industry production index rose by 2.5% year-on-year in April.

- The growth rate of mining and manufacturing production index fell by 1.6%p from a month earlier as the index declined in the semi-conductor industry and grew at slower pace in the cement and iron & steel industries, although the index grew faster in the basic chemical materials sector (9.2%) and also increased in the automobile sector (1.4%).
- The growth rate of service industry production index declined by 0.3%p from the previous month due to a decrease in the restaurant & accommodations business (-3.6%) even though the index started to increase in the wholesale & retail business (1.1%) and continued a fast rise in the health & social welfare business (10.2%).

► Trend in major economic and industrial indicators

	2015	2016	2017			2017	M2	M3	M4
			M2	M3	M4				
GDP (trillion won)	1 466.8 (2.8)	1 508.3 (2.8)	-	355.5 (2.9)	-	-	-	365.8 (2.9)	-
Total export (\$billion, customs clearance basis)	526.8 (-8.0)	495.4 (-5.9)	35.9 (-13.4)	43.0 (-8.2)	41.1 (-11.1)	43.2 (20.2)	48.7 (13.2)	51.0 (24.1)	-
Semi-conductors	62.9 (0.4)	62.2 (-1.1)	4.2 (-12.8)	5.3 (-1.9)	4.6 (-11.8)	6.4 (54.1)	7.5 (41.7)	7.1 (56.9)	-
Ships, marine structures & components	40.1 (0.6)	34.3 (-14.6)	2.7 (-49.3)	2.6 (-28.5)	3.5 (24.1)	1.9 (-29.4)	2.9 (11.1)	7.1 (102.9)	-
Mining and manufacturing production index (2010=100)	108.1 (-0.3)	109.2 (1.0)	98.3 (2.3)	112.7 (-0.5)	107.2 (-2.7)	104.9 (6.7)	116.4 (3.3)	109.0 (1.7)	-
ICT production index	113.1 (1.4)	118.7 (4.9)	106.2 (5.6)	107.9 (-2.8)	108.7 (-0.2)	108.2 (1.9)	120.4 (11.6)	109.6 (0.8)	-
Service industry performance index (2010=100)	112.1 (2.9)	115.5 (3.0)	108.0 (3.2)	115.8 (2.5)	113.8 (2.0)	110.7 (2.5)	119.0 (2.8)	116.6 (2.5)	-

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

2. Energy Prices

Global energy prices

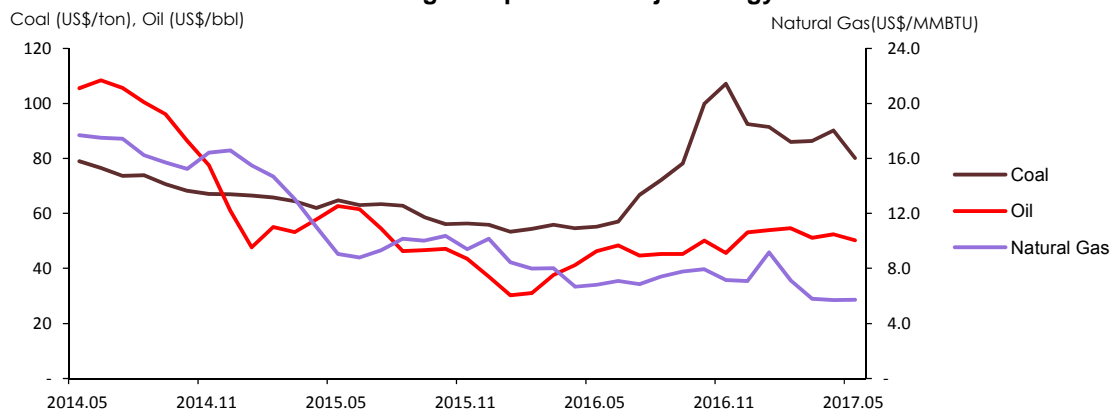
- **Global oil prices decreased by 4.2% in May from a month earlier despite the extended oil output cut agreement by oil producing countries, because of the expanded crude oil output in OPEC member countries.**
 - OPEC and non-OPEC oil producing countries reached a consensus on extending oil production cut for additional nine months until the end of March 2018 in a OPEC meeting held in Vienna, Austria, and agreed to maintain the reduction target of 1.72 million b/d.
 - The total oil output across OPEC, however, increased by 250,000b/d than a month earlier due to bigger production in Nigeria and Libya which are exempt from the agreement.
- **Global coal prices declined by 11.1% from the previous month due to resumed coal export in Australia following the restoration of coal mining area that was previously hit by a cyclone.**

► Trend in global energy prices

	2015	2016	2017					
			M3	M4	M5	M3	M4	M5
Crude oil (US\$/bbl)	51.0	43.2	37.7	41.2	46.2	51.1	52.4	50.2
	(-47.0)	(-15.2)	(-29.2)	(-28.8)	(-26.2)	(24.3)	(13.4)	(3.8)
Natural gas (US\$/MMBTU)	10.9	7.4	8.0	6.7	6.8	5.8	5.7	5.7
	(-35.6)	(-32.0)	(-38.6)	(-39.4)	(-24.7)	(-13.3)	(-16.2)	(-19.2)
Coal (US\$/ton)	61.6	70.6	55.9	54.5	55.2	86.3	90.1	80.1
	(-18.0)	(14.6)	(-13.2)	(-11.9)	(-14.8)	(58.3)	(63.4)	(40.6)
Uranium (US\$/lb)	36.7	26.3	29.6	27.6	27.8	24.6	23.2	21.6
	(9.8)	(-28.5)	(-24.9)	(-28.6)	(-21.9)	(-11.0)	(-16.6)	(-20.6)

Note: Global oil price is the average of the three benchmarks; Brent, Dubai, WTI, Natural gas and coal prices are based on Japan's LNG importing price from Indonesia (CIF) and the price of Australian coal. () is year-on-year growth rates (%)
Source: www.petronet.co.kr, IMF (primary commodity price)

► Trend in global prices of major energy sources



Domestic energy prices

□ **Gasoline and diesel prices declined by 0.4% and 0.5% respectively in May from the previous month, reflecting decreased global oil prices.**

- The prices of gasoline and diesel had increased for five months in a row until February and then has been declining ever since.

□ **Propane and butane prices fell by 1.1% and 1.8% respectively in May on a month-over-month basis along with the falling global prices.**

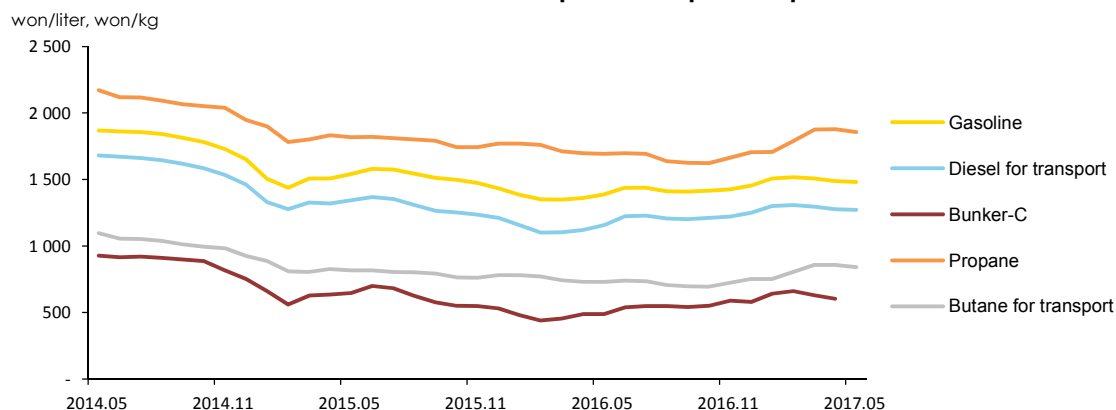
- Global prices of butane and propane (Saudi Aramco's supply price) declined by 10.5% and 20.4% respectively in April from the previous month.
- Domestic LPG prices fell slightly despite the sharp fall in global prices as domestic LPG suppliers suffered accumulated loss due to delayed reflection of global price increase to the domestic price.

► Trend in domestic energy prices

	2015	2016	2017			2017	M3	M4	M5
			M3	M4	M5				
Gasoline (won/liter)	1 510.4	1 402.7	1 350.1	1 361.7	1 388.7	1 506.8	1 487.5	1 481.2	
	(-17.3)	(-7.1)	(-10.5)	(-9.7)	(-10.0)	(11.6)	(9.2)	(6.7)	
Diesel for transport (won/liter)	1 299.5	1 182.7	1 103.2	1 121.4	1 157.9	1 297.3	1 277.8	1 271.4	
	(-20.6)	(-9.0)	(-16.9)	(-15.1)	(-13.8)	(17.6)	(14.0)	(9.8)	
Bunker-C (won/liter)	612.5	520.8	455.4	487.7	489.1	630.0	603.7	-	
	(-31.9)	(-15.0)	(-27.5)	(-23.1)	(-24.4)	(38.3)	(23.8)	-	
Propane (won/kg)	1 801.5	1 689.8	1 711.1	1 698.1	1 693.2	1 875.9	1 878.7	1 857.1	
	(-14.8)	(-6.2)	(-5.0)	(-7.3)	(-6.9)	(9.6)	(10.6)	(9.7)	
Butane for transport (won/liter)	806.5	734.1	742.1	731.2	731.1	858.5	858.1	842.3	
	(-23.3)	(-9.0)	(-8.0)	(-11.6)	(-10.6)	(15.7)	(17.4)	(15.2)	

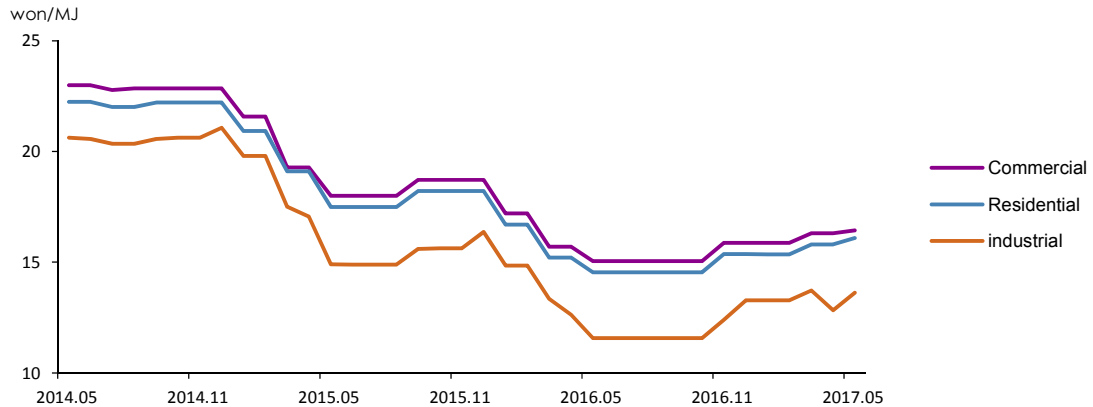
Note: Gasoline, diesel and butane is based on charging station prices, Bunker-C is based on dealership prices, propane is based on sales shop prices. () is year-on-year growth rates (%)
Source: www.opinet.co.kr

► Trend in domestic petroleum product prices



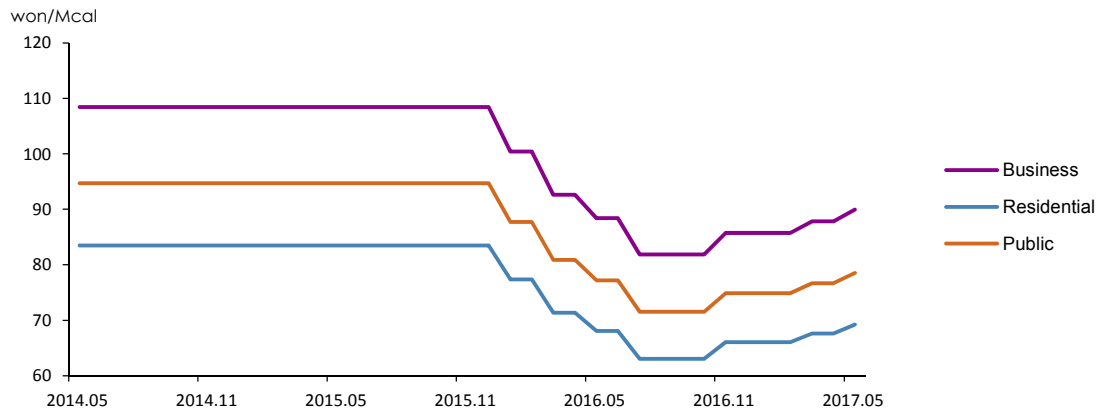
- ☐ **City gas rates went up slightly in May from a month earlier affected by the pass-through of raw material cost.**
 - City gas rates for residential, commercial and industrial use increased by 1.8%, 0.8% and 6.1% respectively with the reflection of the global LNG price increase earlier this year.
- ☐ **Heat energy rates for residential, business and public use increased by 2.4% each along with the city gas rate increase.**

► **Trend in city gas rates 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.

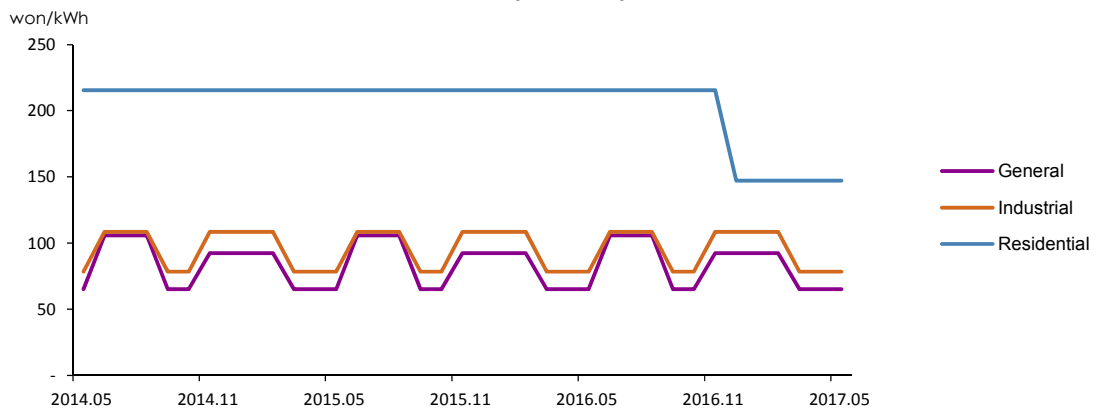
□ **Electricity rates by type of customers were the same as the previous month in May and have been unchanged since March when the spring season rate was applied.**

- Electricity rates for the industrial and general use declined by 27.7% and 29.4% respectively in March due to the seasonal rate change from winter (Nov-Feb) to spring/autumn (Mar-May, Sep-Oct).

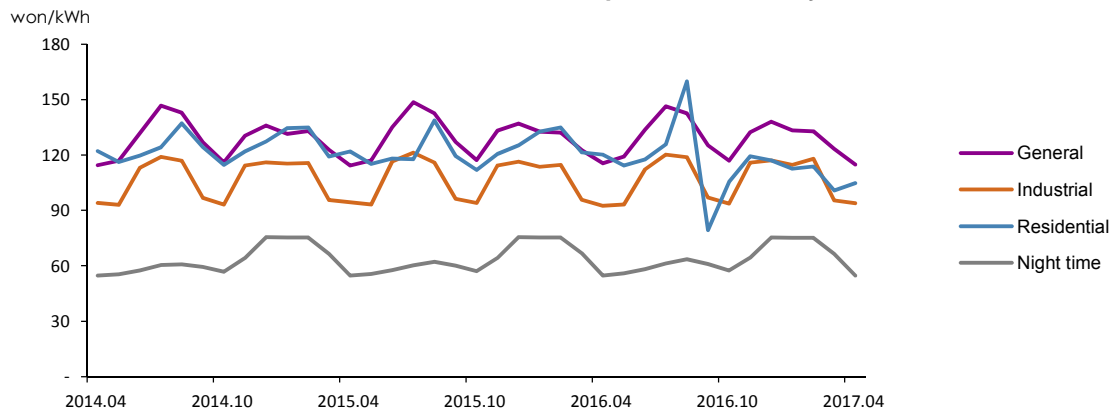
□ **In April, unit sales price of electricity increased by 4.0% for the residential customers but declined by 6.8% and 1.7% for the general and industrial customers respectively compared to the previous month.**

- The unit sales price of electricity for residential use, which is progressively rated, went up amid rising electricity consumption, and in the case of general and industrial use, the unit sales price declined.

► Trend in electricity rates by end-use sectors



► Trend in unit sales price of electricity



3. Energy Supply

- **The amount of energy imported expanded 4.0% year-on-year in March, measured in terms of toe, along with over 10% rise in crude oil import.**
 - Energy import volume was expanded, especially crude oil, coal and LNG, although the import of petroleum products declined.
 - Energy import value has been growing drastically for five straight months due to rising global energy prices and bigger import volume of major energy sources.

► Trend in energy trade and domestic production

	2015	2016p	2017p				
			M1~3	M1~3	M1	M2	M3
Import volume							
Crude oil (Mbbbl)	1 026.2 (10.6)	1 078.1 (5.1)	265.3 (7.4)	278.2 (4.9)	93.7 (13.2)	88.6 (-8.3)	95.9 (11.7)
Petroleum product (Mbbbl)	307.9 (-5.7)	333.8 (8.4)	81.5 (7.2)	78.7 (-3.4)	26.5 (-8.4)	24.8 (0.1)	27.5 (-1.3)
Bituminous coal (Mton)	119.4 (1.3)	118.5 (-0.8)	29.1 (-3.5)	34.3 (17.8)	12.2 (16.3)	11.1 (32.6)	11.0 (7.3)
Anthracite (Mton)	8.9 (7.8)	9.4 (5.4)	1.9 (-10.2)	1.7 (-9.5)	0.6 (-12.7)	0.4 (-12.9)	0.7 (-4.4)
LNG (Mton)	33.4 (-10.1)	33.4 (0.2)	9.8 (-4.4)	11.4 (16.4)	4.3 (27.5)	3.6 (19.6)	3.5 (2.7)
Import volume (Mtoe)	314.8 (1.7)	322.7 (2.5)	82.2 (2.4)	88.8 (8.0)	31.3 (11.1)	28.2 (9.0)	29.3 (4.0)
Import value (billion US\$, CIF)	102.7 (-41.0)	80.9 (-21.2)	17.7 (-37.2)	28.6 (62.1)	9.5 (54.5)	9.4 (64.1)	9.8 (68.1)
Domestic production							
Hydropower (TWh)	5.8 (-25.9)	6.6 (14.3)	1.4 (-10.4)	1.5 (8.7)	0.5 (-15.7)	0.5 (29.5)	0.5 (25.8)
Anthracite (Mton)	1.8 (0.9)	1.7 (-2.2)	0.4 (-2.6)	0.4 (-3.6)	0.1 (-9.3)	0.1 (6.5)	0.1 (-6.5)
Natural gas (Mton)	0.1 (-41.5)	0.1 (-18.0)	0.0 (-39.8)	0.1 (147.0)	0.0 (145.1)	0.0 (140.1)	0.0 (155.8)
Renewable energy (Mtoe)	12.8 (17.2)	15.0 (16.4)	3.8 (16.8)	4.3 (13.0)	1.5 (13.5)	1.4 (12.1)	1.4 (13.5)

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

4. Energy Consumption

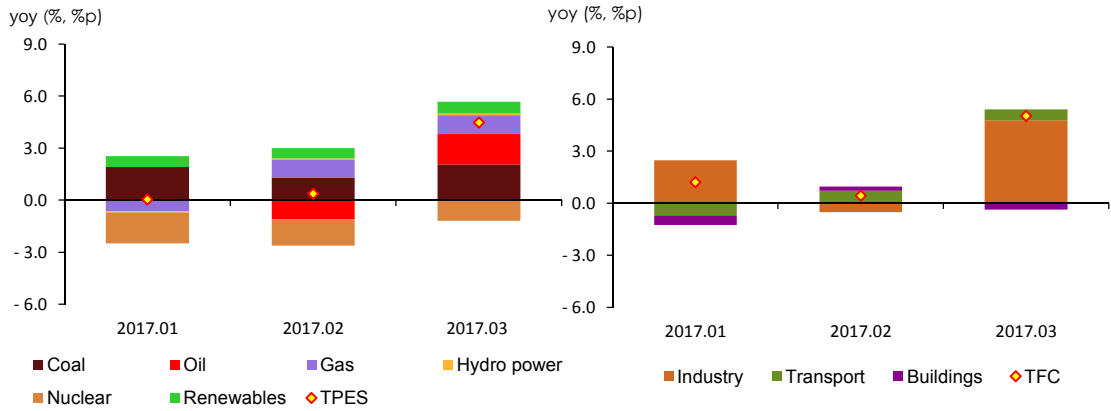
- **Total Primary Energy Demand (“TPED”) was up 4.5% in March on a year-on-year basis along with the rising consumption of major energy sources except nuclear energy.**
 - Coal consumption increased in the industrial sector mainly for the cement production and surged in the power generation sector (12.4%) due to the expansion of generation facilities and diminished effect of maximum output reduction, leading the growth of TPES for two consecutive months.
 - Petroleum consumption rebounded by 5.5% as xylene production drastically increased from newly built petrochemical facilities (Hyundai Chemical; 1Mton mixed xylene, 0.8Mton light naphtha), and accordingly, naphtha consumption rose by 19.4% along with the growing petroleum consumption for transport use.
 - Gas consumption rose for two months in a row led by the power generation and industrial sectors; gas use for power generation increased amid growing electricity demand and falling nuclear and oil-fired generation; gas use increased for city gas production (6.0%).
 - Nuclear generation has been declining for seven consecutive months as increased preventive maintenance led to lower capacity factors, although such decline slowed down.
- **Total Final Consumption (“TFC”) was up 5.0% year-on-year led by the industrial and transport sectors, though energy consumption declined in the buildings sector.**
 - Industrial energy consumption increased by 8.1%, leading the growth of TFC, as petroleum consumption surged (16.4%), especially naphtha and LPG, in the petrochemical industry, and expanded semi-conductor production drove up the electricity demand in the fabricated metals industry.
 - Energy consumption was up 3.6% in the transport sector, despite higher prices of petroleum products, along with increasing number of cars, traffics and cargo volume.
 - Energy consumption fell by 1.6% in the buildings sector even though heating degree days increased because petroleum consumption declined due to the higher price level.
 - Electricity consumption went up by 0.7% led by the industrial sector (2.5%) where expanded production of petrochemical products and semi-conductors raised power demand, although electricity consumption declined in the buildings sector (-1.3%) because of sluggish production activities in the wholesale & retail and restaurant & accommodations businesses.

► Energy consumption trend

	2015	2016p		2017p			
			M1~3	M1~3	M1	M2	M3
Total energy (Mtoe)	287.5	295.4	78.2	79.5	27.8	25.4	26.3
	(1.6)	(2.7)	(3.3)	(1.6)	(0.0)	(0.4)	(4.5)
Final energy (Mtoe)	218.6	226.7	60.3	61.6	21.2	19.9	20.5
	(2.2)	(3.7)	(3.5)	(2.2)	(1.2)	(0.4)	(5.0)

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 source and end-use sectors



5. Coal

☐ Coal consumption rose by 8.0% year-on-year in March, especially for power generation and cement production in the industrial sector.

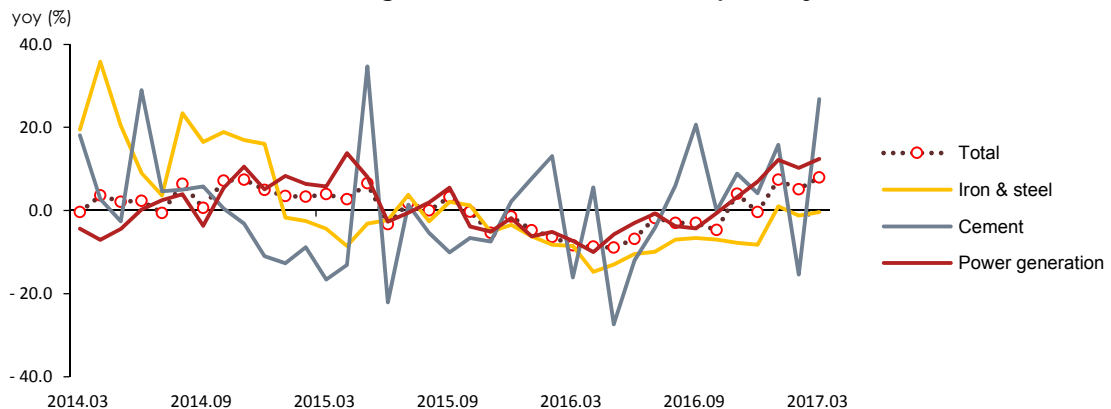
- Coal consumption increased by more than 10% in the power generation (transformation) sector due to base effect and facility expansion, driving up the total coal consumption.
- Coal consumption rose sharply by more than 20% in the cement production industry, leading the growth of total industrial coal consumption, though the steelmaking industry consumed less amount of coal.
- Anthracite consumption in buildings has been declining for seven consecutive months despite increased heating degree days (22.3degree days, 6.6%), as the fuel has been continuously replaced by other energy sources.

► Coal consumption trend

	2015	2016p		2017p			
			M1~3	M1~3	M1	M2	M3
Coal (Mton)	134.8	129.0	32.0	34.2	12.2	10.6	11.3
	(1.1)	(-4.4)	(-6.5)	(6.9)	(7.4)	(5.1)	(8.0)
Industry	50.9	47.7	11.3	11.3	3.9	3.4	3.9
	(-1.0)	(-6.2)	(-6.6)	(-0.8)	(0.1)	(-3.5)	(1.0)
Buildings	1.5	1.3	0.4	0.3	0.1	0.1	0.1
	(-9.6)	(-14.8)	(-13.5)	(-17.9)	(-25.3)	(-11.1)	(-13.3)
Power generation	82.5	80.0	20.2	22.6	8.1	7.1	7.4
	(2.8)	(-3.0)	(-6.2)	(11.6)	(12.2)	(10.2)	(12.4)

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 went up by 5.5% in March primarily due to expanded naphtha consumption, leading the growth of TFC.**

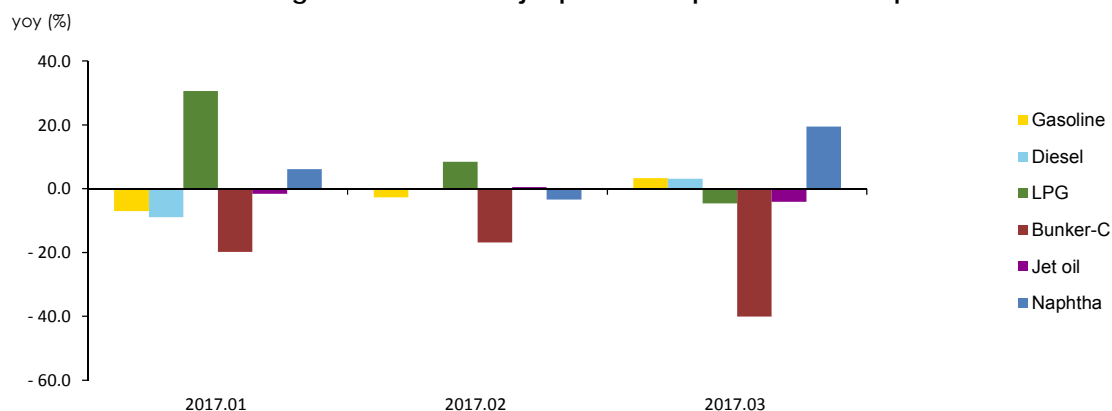
- Petroleum consumption made a dramatic rebound in the industrial sector amid growing consumption by the petrochemical industry, especially naphtha and LPG.
- Petroleum consumption increased for two consecutive months in the transport sector, road and domestic navigation in particular, despite higher prices of petroleum products.
- Petroleum consumption has been declining in the buildings sector for five straight months, especially kerosene (-9.3%) and LPG (-10.3%), partly because increased price of petroleum products weakened price competitiveness.
- Petroleum consumption showed steady downward trend in the transformation sector as higher price of bunker-C for power generation decreased oil-fired generation.

► **Trend in petroleum product consumption by end-use sectors**

	2015	2016p	2017p				
			M1~3	M1~3	M1	M2	M3
Petroleum (Mbbbl)	856.2	921.5	231.9	235.2	79.9	74.6	80.6
	(4.2)	(7.6)	(7.8)	(1.4)	(1.2)	(-2.5)	(5.5)
Industry	501.0	543.4	133.7	141.4	48.3	43.8	49.3
	(1.9)	(8.5)	(7.3)	(5.7)	(7.8)	(-3.8)	(13.6)
Transport	287.1	300.4	71.5	72.2	23.3	23.3	25.5
	(6.8)	(4.6)	(3.7)	(0.9)	(-4.3)	(4.0)	(3.3)
Buildings	53.5	56.0	18.7	17.5	6.5	5.9	5.1
	(11.7)	(4.8)	(10.9)	(-6.5)	(-7.2)	(-3.1)	(-9.2)
Power generation	14.6	21.6	8.0	4.1	1.8	1.6	0.7
	(13.0)	(47.8)	(67.7)	(-48.2)	(-34.9)	(-34.7)	(-74.0)

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

► **The growth rates of major petroleum product consumption**



7. Gas

☐ **Gas consumption was up 6.4% year-on-year in March driven by a dramatic growth in the power generation and city gas production sectors.**

- Gas consumption for power generation surged as electricity demand went up slightly (0.7%) and sudden reduction of nuclear generation was partially replaced by gas. Gas consumption for city gas production also increased as industrial city gas consumption has grown for six straight months.

☐ **City gas consumption rose by 2.4% on a year-on-year basis boosted by a sharp increase in the industrial sector.**

- Industrial city gas consumption has been up for six consecutive months led by the petrochemical and primary metals industries, despite a slight consumption decline in the fabricated metals industry.
- City gas consumption maintained the level of the same month last year despite higher heating degree days (22.3 degree days, 6.6%) because commercial and residential city gas consumption grew by mere 0.6% and 0.3% respectively, affected by the city gas rate increase.

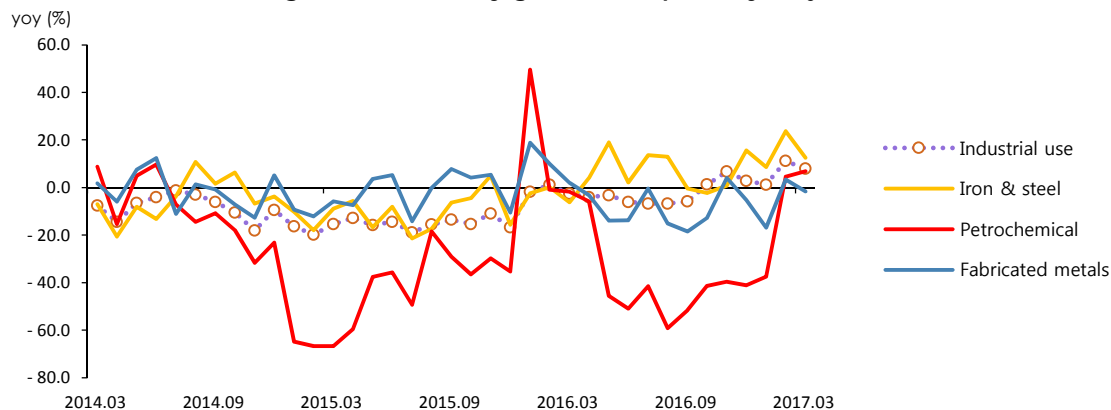
► **Trend in natural gas and city gas consumption**

	2015	2016p	2017p				
			M1~3	M1~3	M1	M2	M3
LNG (Mton)	33.4	34.9	11.4	11.7	4.3	3.9	3.5
	(-8.7)	(4.2)	(1.2)	(2.5)	(-2.8)	(5.5)	(6.4)
Power generation	14.6	15.3	3.9	4.1	1.4	1.3	1.3
	(-8.2)	(5.3)	(-6.3)	(4.3)	(-2.7)	(9.3)	(7.6)
City gas production	16.9	17.4	6.7	6.8	2.6	2.3	2.0
	(-6.9)	(2.7)	(4.1)	(1.8)	(-2.7)	(3.8)	(6.0)
City gas (bm³)	20.8	21.3	8.2	8.4	3.0	2.9	2.5
	(-5.9)	(2.3)	(3.2)	(2.3)	(-0.4)	(5.1)	(2.4)
Industry	7.3	7.2	2.0	2.2	0.7	0.7	0.7
	(-15.5)	(-1.9)	(-1.1)	(6.6)	(1.2)	(11.2)	(7.9)
Buildings	12.2	12.8	5.8	5.9	2.2	2.1	1.6
	(0.5)	(5.1)	(5.0)	(1.0)	(-0.9)	(3.4)	(0.4)

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 went up by 0.7% in March on a year-on-year basis led by the industrial sector, although the consumption declined in the buildings sector.

- The growth of industrial electricity consumption was at the mid-2% level due to decent consumption growth in the petrochemical industry and moderate recovery in the fabricated metals industry.
- Electricity consumption in buildings declined for the first time this year and declined in all of the residential, commercial and public sectors.

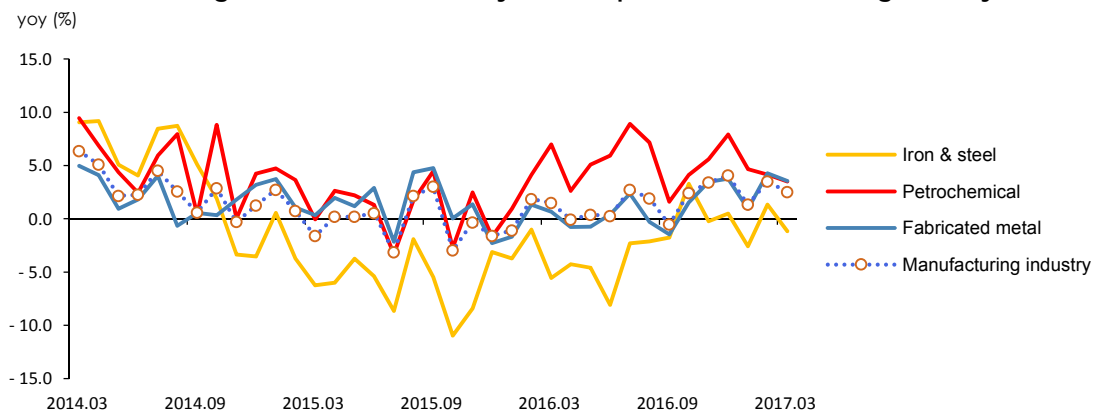
► Trend in electricity consumption by end-use sectors

	2015	2016p	2017p				
			M1~3	M1~3	M1	M2	M3
Electricity (TWh)	483.7	497.0	130.5	132.2	45.2	44.4	42.6
	(1.3)	(2.8)	(1.8)	(1.3)	(1.2)	(2.0)	(0.7)
Industry	265.6	270.0	67.8	69.5	23.5	22.4	23.5
	(0.4)	(1.6)	(0.9)	(2.4)	(1.4)	(3.5)	(2.5)
Transport	2.2	2.7	0.7	0.7	0.2	0.2	0.2
	(10.7)	(21.3)	(26.6)	(-0.1)	(0.9)	(2.9)	(-4.5)
Buildings	215.8	224.4	62.0	62.0	21.4	21.7	18.9
	(2.3)	(4.0)	(2.6)	(0.1)	(1.0)	(0.4)	(-1.3)

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

Source: Monthly energy statistics

► The growth rate of electricity consumption in manufacturing industry

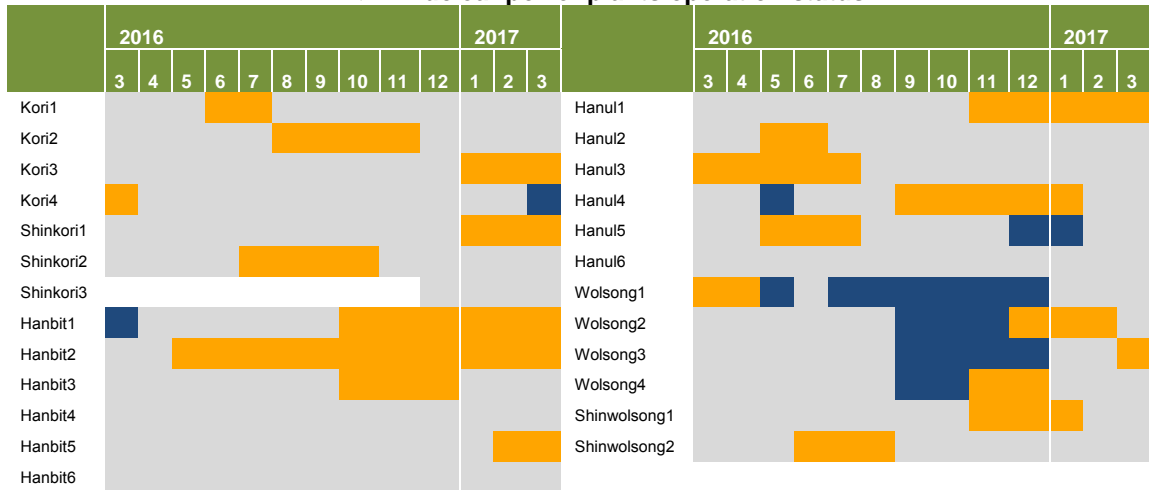


9. Nuclear energy

□ Nuclear generation was down 9.8% in March on a year-on-year basis amid falling capacity factor partly due to a sudden increase in preventive maintenance.

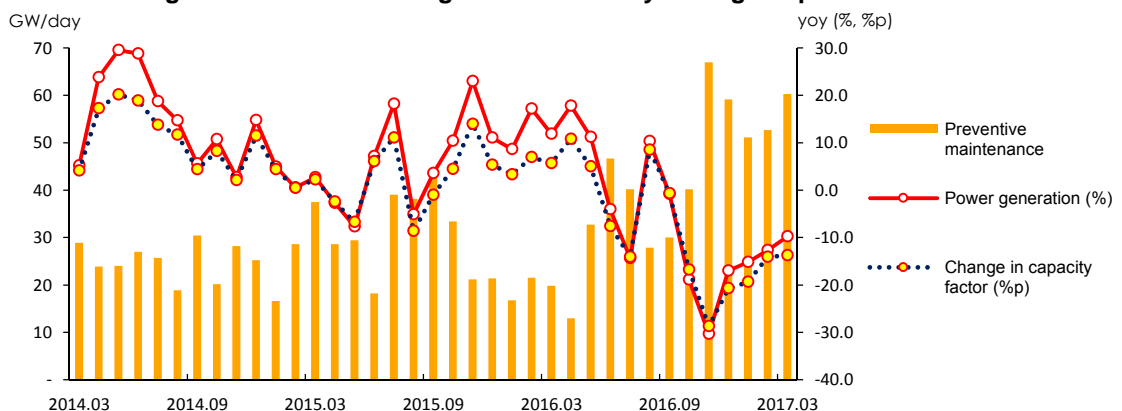
- Preventive maintenance increased by 203.7% on daily average as the number of nuclear reactors on preventive shutdown grew by four more reactors from the same month last year.
- Nuclear generation has been decreasing for seven months in a row on a year-on-year basis due to lower capacity factor, and nuclear energy accounted for 28.2% in the total power generation, maintaining less than 30% share since October 2016.

► Nuclear power plants operation status



Notes: ■ normal operation, ■ prevented maintenance, ■ unscheduled shutdown

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



10. Heat and Renewable energy

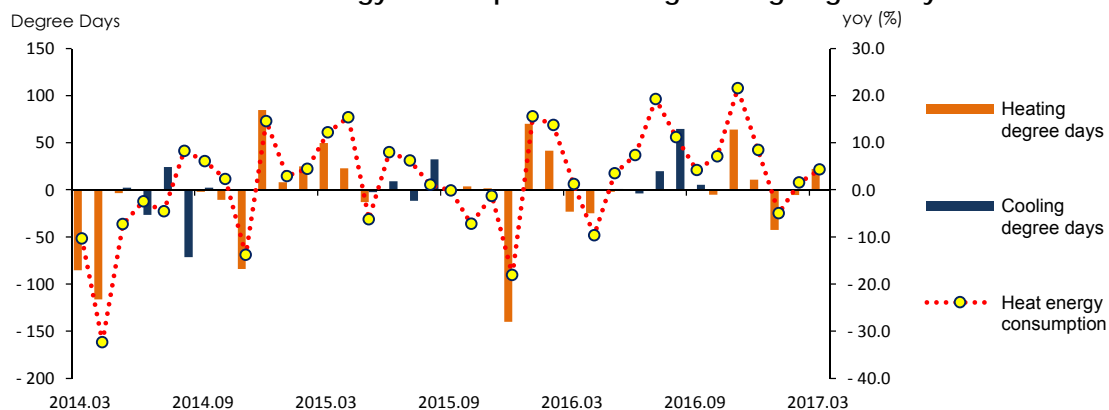
□ **Heat energy consumption was up 4.3% year-on-year in March affected by increased heating degree days and decreased heat energy rates.**

- Heating degree days increased by 22.3degree days (6.6%) as the average temperature went down by 0.7°C (in Seoul) in March, last year. Heat energy rate increased by 2.4% compared to the previous month but decreased by 5.2% from the same period last year affected by four-time downward rate adjustment in 2016.

□ **Renewable and other energy consumption made a year-on-year increase of 14.3% backed by steady growth in the power generation and industrial sectors.**

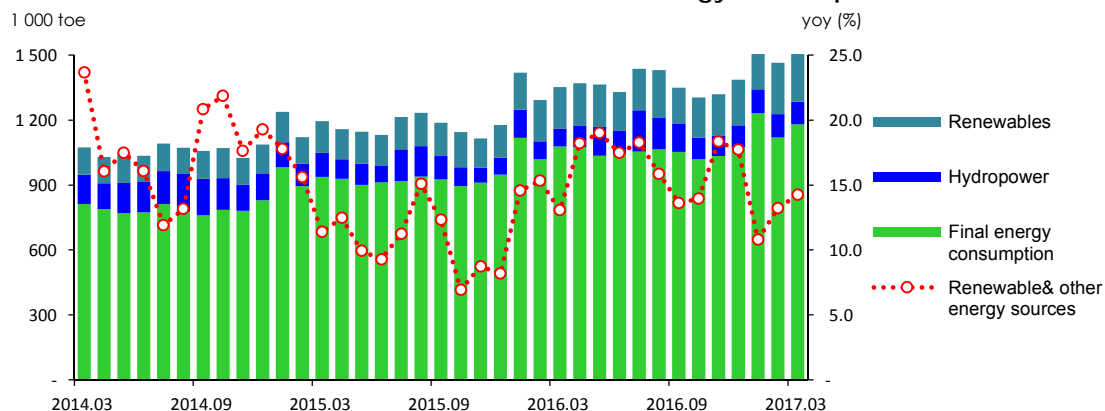
- Renewable energy consumption continued to grow fast in the power generation sector along with expanded use of fuel cells and solar PV & solar heat. TFC continued to grow decently led by the industrial sector.

► 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 consumption increased by 8.1% in March on a year-on-year basis driven by drastic consumption growth in the petrochemical industry.

- Energy consumption in the petrochemical industry increased as Naptha consumption rose sharply after a decline in the prior month, leading the growth of total industrial energy consumption.
- Energy consumption in the iron and steel industry rose by 0.2% despite smaller pig iron output (-1.2%), due to more use of petroleum products.
- Energy consumption in the fabricated metals industry increased by near 3% backed by growing energy consumption in the semi-conductor industry.

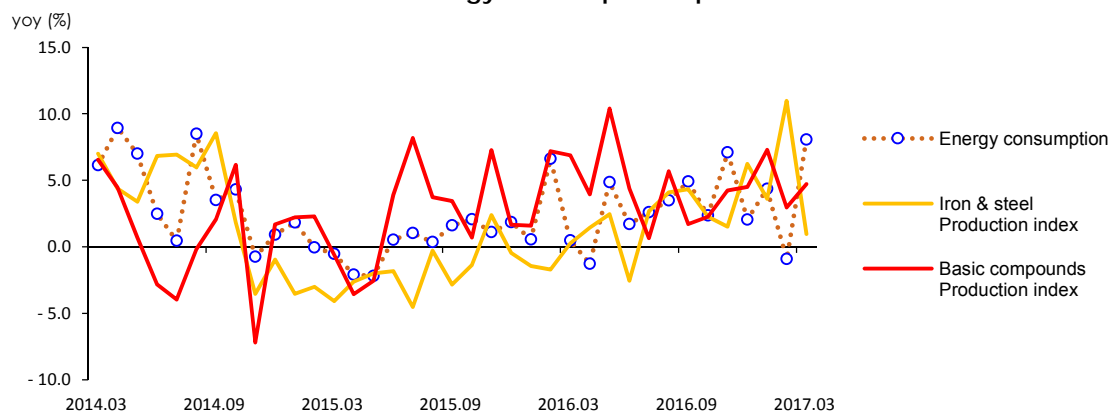
► Trend in the industrial energy consumption

	2015	2016p			2017p		
			M1~3	M3	M1	M2	M3
Industry (Mtoe)	136.7 (0.5)	140.7 (2.9)	34.9 (2.4)	12.5 (8.1)	12.4 (4.4)	11.3 (-0.9)	12.5 (8.1)
Petrochemical	61.7 (-0.6)	65.2 (5.7)	16.3 (6.4)	6.0 (16.4)	5.9 (7.0)	5.4 (-1.8)	6.0 (16.4)
- Naptha	50.4 (3.7)	52.3 (3.9)	13.3 (4.1)	5.0 (19.4)	4.8 (6.1)	4.5 (-3.4)	5.0 (19.4)
Iron & Steel	31.4 (-2.6)	29.0 (-7.6)	7.2 (-6.9)	2.4 (0.2)	2.5 (0.7)	2.3 (-0.2)	2.4 (0.2)
Fabricated metal	10.6 (-1.1)	10.7 (1.4)	2.8 (3.1)	1.0 (2.8)	1.0 (-3.1)	0.9 (4.5)	1.0 (2.8)
Share of feedstock (%)	59.0	57.4	57.8	58.4	57.5	57.9	58.4

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

Source: Monthly energy statistics

► Industrial energy consumption & production index



12. Transport

□ Energy consumption grew by 3.6% in the transport sector in March especially in the road transport and domestic navigation sectors despite higher prices of petroleum products.

- Energy consumption went up by 4.1% in the road transport sector, leading the growth of energy consumption by the entire transport sector, due to an increase in the number of cars (3.7%) and traffics (1.6%, highway based).
- Energy consumption rose for two consecutive months in the domestic navigation sector amid growing export volume (5.6%), although coastal transport declined (-6.5%).

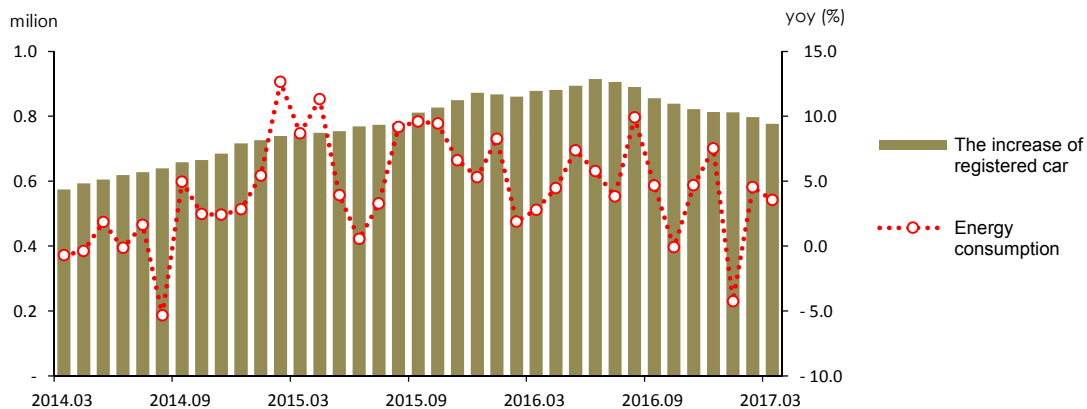
► The growth rate of petroleum consumption in the transport sector

	2015	2016p	2017p				
			M1~3	M3	M1	M2	M3
Transport (Mtoe)	40.3	42.3	10.1	3.6	3.3	3.3	3.6
	(7.1)	(5.1)	(4.3)	(3.6)	(-4.3)	(4.5)	(3.6)
Road	32.8	34.1	8.0	2.9	2.6	2.6	2.9
	(5.6)	(4.0)	(3.1)	(4.1)	(-4.6)	(3.6)	(4.1)
Navigation	2.9	3.3	0.8	0.3	0.3	0.3	0.3
	(27.0)	(10.8)	(9.4)	(8.4)	(-2.3)	(23.8)	(8.4)
Aviation	4.3	4.7	1.2	0.4	0.4	0.4	0.4
	(7.5)	(9.1)	(8.8)	(-2.8)	(-3.4)	(-1.0)	(-2.8)
Rail	0.3	0.3	0.1	0.0	0.0	0.0	0.0
	(2.2)	(8.3)	(15.1)	(-11.8)	(-3.7)	(0.3)	(-11.8)

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

Source: Monthly energy statistics

► The growth rate of energy consumption in the transport sector & registered car status



13. Buildings

□ **Energy consumption in the buildings sector fell by 1.6% in March on a year-on-year basis in spite of higher heating degree days, as the prices of coal, petroleum and city gas went up.**

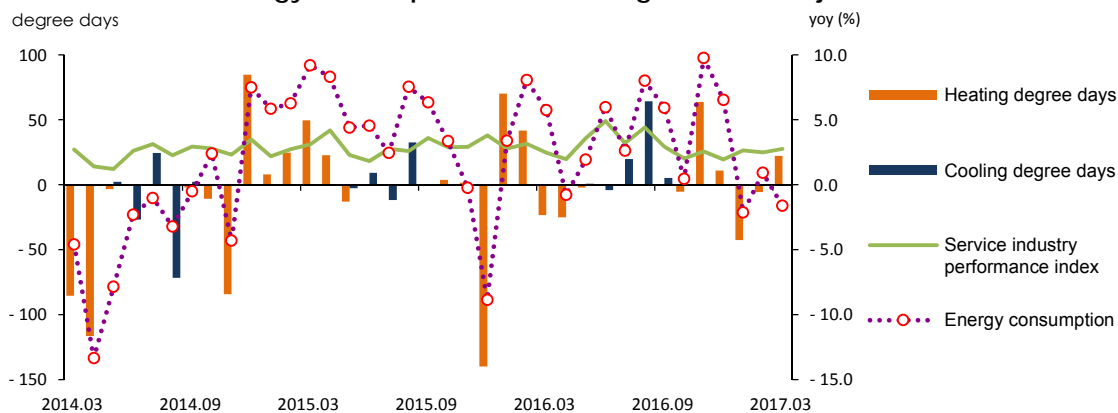
- Energy consumption declined in the buildings sector due to higher prices of major energy sources, although heating degree days increased (22.3 degree days, 6.6%).
- Residential energy consumption fell by 0.6% along with less use of electricity and coal & petroleum with the latter affected by higher price level.
- Energy consumption in the commercial and public sectors declined by 2.1% and 4.9% respectively as the price increase resulted in plunging kerosene and LPG consumption.

► Energy consumption trend in the buildings sector

	2015	2016p	2017p				
			M1~3	M1~3	M1	M2	M3
Buildings (Mtoe)	41.6 (3.6)	43.7 (5.0)	15.3 (5.6)	15.1 (-0.9)	5.5 (-2.1)	5.3 (0.9)	4.4 (-1.6)
Residential	20.1 (1.7)	21.1 (5.0)	8.5 (6.4)	8.4 (-0.7)	3.1 (-2.7)	3.0 (1.5)	2.4 (-0.6)
Commercial	16.4 (4.0)	17.1 (4.2)	5.2 (3.1)	5.2 (-1.0)	1.8 (-1.2)	1.8 (0.2)	1.5 (-2.1)
Public-others	5.2 (10.1)	5.5 (7.6)	1.6 (10.3)	1.6 (-2.3)	0.5 (-2.1)	0.5 (0.2)	0.5 (-4.9)

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

► Energy consumption in the buildings sector & major indicators



14. Transformation

□ Energy consumption for power generation grew by 0.9% year-on-year in March despite decreased nuclear generation as coal and gas-fired generation increased.

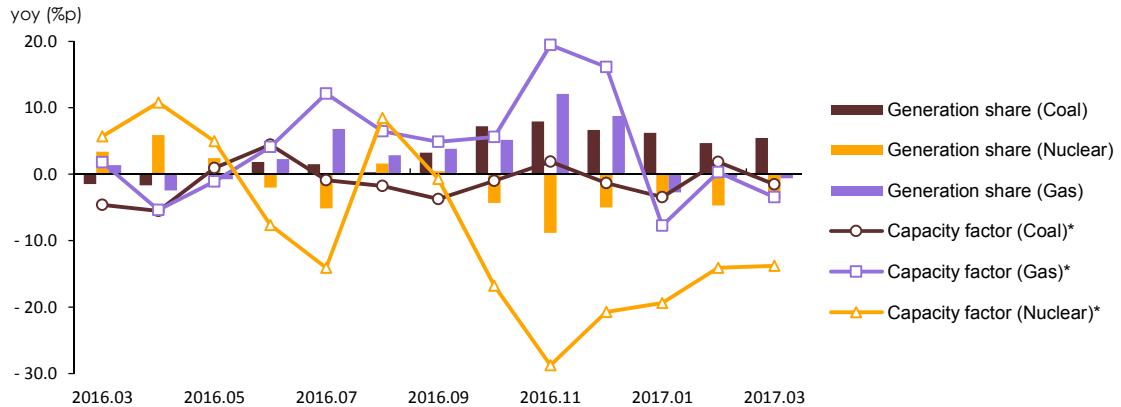
- The share of baseload (coal + nuclear) generation rose by 1.8%p year-on-year to 70.7% because of expanded coal-fired generation, although nuclear generation declined.

► Energy consumption in the power generation sector

	2015	2016p	2017p				
			M1~3	M1~3	M1	M2	M3
Input (Mtoe)	109.6	110.3	28.9	29.0	10.2	9.3	9.5
	(1.4)	(0.6)	(1.7)	(0.2)	(-1.3)	(1.0)	(0.9)
Coal	50.6	49.0	12.4	13.9	5.0	4.4	4.5
	(2.7)	(-3.1)	(-6.2)	(11.7)	(12.3)	(10.3)	(12.5)
Oil	2.0	3.1	1.2	0.5	0.2	0.2	0.1
	(16.6)	(54.4)	(83.1)	(-57.4)	(-44.4)	(-44.1)	(-82.0)
Gas	19.3	20.3	5.2	5.4	1.9	1.8	1.8
	(-8.1)	(5.2)	(-6.4)	(4.5)	(-2.3)	(9.4)	(7.9)
Nuclear	34.8	34.2	9.3	8.2	2.8	2.6	2.8
	(5.3)	(-1.6)	(12.3)	(-12.6)	(-15.1)	(-12.7)	(-9.8)
Hydro/other renewables	3.0	3.7	0.8	1.0	0.3	0.3	0.4
	(-5.5)	(24.1)	(14.5)	(23.6)	(13.4)	(25.4)	(33.0)

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 economic statistics & indicators

	2014	2015			2016				2017
			3Q	4Q	1Q		3Q	4Q	1Q
GDP (trillion won)	1 427.0 (3.3)	1 466.8 (2.8)	368.5 (3.0)	386.6 (3.2)	355.5 (2.9)	1 466.8 (2.8)	368.5 (3.0)	395.9 (2.4)	365.8 (2.9)
Private consumption	692.2 (1.7)	707.5 (2.2)	177.1 (2.2)	181.8 (3.4)	181.9 (2.3)	707.5 (2.2)	177.1 (2.2)	184.6 (1.5)	185.6 (2.0)
Facilities investment	134.0 (6.0)	140.3 (4.7)	34.5 (6.0)	36.0 (3.0)	31.9 (-4.6)	140.3 (4.7)	34.5 (6.0)	36.8 (2.0)	36.5 (14.4)
Construction investment	198.5 (1.1)	211.5 (6.6)	55.9 (7.6)	58.2 (9.6)	44.7 (9.0)	211.5 (6.6)	55.9 (7.6)	64.9 (11.6)	49.7 (11.3)
Consumer price index (2010=100)	99.3	100.0	100.2	100.1	100.6	100.0	100.2	101.5	102.7
USD to KRW exchange rate (won)	1 052.8	1 131.0	1 169.0	1 157.5	1 202.4	1 131.0	1 169.0	1 156.4	1 154.9
Benchmark rate (%)	2.3	1.6	1.5	1.5	1.5	1.6	1.5	1.3	1.3
Coincident composite index (2010=100)	113.6	117.3	117.6	119.2	119.5	117.3	117.6	122.7	124.2
Mining & manufacturing production index (2010=100)	108.4	108.1	106.0	111.7	105.6	108.1	106.0	114.8	109.5
Manufacturing operation ratio index (2010=100)	94.3	92.4	90.1	93.9	89.1	92.4	90.1	93.5	88.1
Average temperature	13.3	13.6	24.8	8.7	1.3	13.6	24.8	8.0	1.4
- year-on-year difference	0.9	0.2	0.4	1.4	- 0.8	0.2	0.4	- 0.6	0.1
Heating degree days	2 501.6 (-13.5)	2 459.1 (-1.7)	- n.a	866.1 (-13.5)	1 513.2 (6.2)	2 459.1 (-1.7)	- n.a	935.3 (8.0)	1 487.5 (-1.7)
Cooling degree days	125.4 (-35.6)	151.8 (21.1)	138.3 (16.9)	- n.a	- n.a	151.8 (21.1)	138.3 (16.9)	- n.a	- n.a
Energy intensity	0.20 (-2.4)	0.20 (-1.1)	0.19 (-0.7)	0.19 (-2.1)	0.22 (0.4)	0.20 (-1.1)	0.19 (-0.7)	0.19 (0.1)	0.22 (-1.3)
Per capita consumption									
oil (bbl)	16.2 (-1.1)	16.8 (3.7)	4.1 (2.8)	4.5 (6.5)	4.5 (7.3)	16.8 (3.7)	4.1 (2.8)	4.7 (5.6)	4.6 (1.0)
Electricity (MWh)	9.4 (-0.1)	9.5 (0.7)	2.4 (1.9)	2.3 (-1.4)	2.5 (1.4)	9.5 (0.7)	2.4 (1.9)	2.4 (3.1)	2.6 (0.9)
City gas (1 000 m ³)	0.4 (-8.1)	0.4 (-6.4)	0.1 (-8.6)	0.1 (-11.6)	0.2 (2.7)	0.4 (-6.4)	0.1 (-8.6)	0.1 (6.9)	0.2 (1.9)
Total energy (toe)	5.6 (0.3)	5.6 (1.1)	1.4 (1.8)	1.5 (0.5)	1.5 (2.8)	5.6 (1.1)	1.4 (1.8)	1.5 (2.0)	1.5 (1.2)

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

(2010=100)

</

Note: p means provisional
Source: Monthly energy statistics

International energy prices

	2015	2016					2017			
			M1~5	M3	M4	M5	M1~5	M3	M4	M5
Crude oil (USD/bbl)										
WTI	48.8 (-47.5)	43.3 (-11.2)	37.7 (-27.6)	38.0 (-20.7)	41.1 (-24.7)	46.8 (-21.2)	51.1 (35.6)	49.7 (30.8)	51.1 (24.3)	48.5 (3.7)
Dubai	50.8 (-47.5)	41.2 (-18.8)	34.8 (-37.1)	35.2 (-35.6)	39.0 (-32.5)	44.3 (-29.8)	52.5 (50.6)	51.2 (45.3)	52.3 (34.1)	50.7 (14.6)
Brent	53.6 (-46.1)	45.0 (-16.0)	39.2 (-32.9)	39.8 (-30.1)	43.3 (-29.1)	47.7 (-27.4)	53.8 (37.2)	52.5 (32.0)	53.8 (24.2)	51.4 (7.8)
Unit value of import (C&F)	53.3 (-47.5)	41.0 (-23.0)	34.5 (-38.1)	32.1 (-42.5)	36.7 (-36.1)	41.2 (-33.6)	42.9 (24.2)	54.2 (68.8)	52.7 (43.7)	- -
LNG										
From Indonesia (USD/MMBTU)	11.0 (-35.5)	7.4 (-32.1)	7.6 (-40.0)	8.0 (-38.6)	6.7 (-39.4)	6.8 (-24.7)	6.7 (-11.7)	5.8 (-27.7)	5.7 (-14.5)	5.7 (-16.0)
Unit value of import (USD/ton, CIF)	549.1 (-35.3)	356.9 (-35.0)	370.0 (-42.6)	376.5 (-44.6)	342.7 (-43.4)	311.1 (-37.1)	412.0 (11.4)	406.5 (7.9)	412.0 (20.2)	- -
Bituminous coal (USD/ton)										
From Australia	61.6 (-18.0)	70.6 (14.5)	54.7 (-15.5)	55.9 (-13.2)	54.5 (-11.9)	55.2 (-14.8)	86.8 (58.8)	86.3 (54.4)	90.1 (65.2)	80.1 (45.3)
Unit value of import (CIF)	73.9 (-19.8)	68.8 (-6.8)	60.6 (-24.7)	61.2 (-25.6)	60.3 (-24.9)	62.0 (-18.8)	106.0 (74.8)	110.2 (80.1)	103.0 (70.8)	- -
Petroleum product (USD/bbl)										
Gasoline	69.4 (-37.4)	56.2 (-19.1)	52.4 (-27.6)	52.9 (-28.3)	54.5 (-28.3)	59.1 (-30.0)	67.3 (28.3)	64.3 (21.6)	67.7 (24.2)	64.8 (9.6)
Kerosene	64.7 (-42.5)	52.8 (-18.3)	46.2 (-35.2)	47.9 (-32.5)	49.6 (-31.1)	55.1 (-28.6)	63.7 (37.7)	61.9 (29.3)	63.9 (28.9)	61.1 (10.7)
Diesel	66.6 (-41.6)	53.0 (-20.4)	46.0 (-36.5)	46.9 (-35.3)	49.6 (-32.9)	56.1 (-30.4)	64.7 (40.5)	63.1 (34.6)	65.0 (31.2)	62.0 (10.6)
Bunker-C	45.2 (-47.7)	35.4 (-21.6)	27.5 (-47.2)	27.2 (-48.2)	29.6 (-45.0)	34.3 (-42.1)	48.4 (75.7)	46.2 (70.0)	48.0 (62.4)	47.3 (37.9)
Propane	416.3 (-47.4)	323.3 (-22.3)	313.0 (-32.0)	290.0 (-42.0)	320.0 (-30.4)	325.0 (-30.1)	448.0 (43.1)	480.0 (65.5)	430.0 (34.4)	385.0 (18.5)
Butane	436.7 (-46.1)	355.8 (-18.5)	351.0 (-25.5)	320.0 (-30.4)	350.0 (-25.5)	380.0 (-20.0)	515.0 (46.7)	600.0 (87.5)	490.0 (40.0)	390.0 (2.6)
Naphtha	52.5 (-44.3)	42.5 (-19.0)	39.2 (-30.6)	38.9 (-33.0)	42.3 (-29.9)	44.0 (-30.4)	52.6 (34.4)	50.7 (30.3)	52.2 (23.3)	48.6 (10.6)

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)

	2015	2016					2017p			
			M1~3	M1	M2	M3	M1~3	M1	M2	M3
Coal (Mton)	134.8 (1.1)	129.0 (-4.4)	32.0 (-6.5)	11.4 (-4.7)	10.1 (-6.3)	10.5 (-8.4)	34.2 (6.9)	12.2 (7.4)	10.6 (5.1)	11.3 (8.0)
- Coking coal excluded	98.1 (2.5)	95.5 (-2.6)	23.7 (-6.1)	8.5 (-4.2)	7.5 (-5.7)	7.7 (-8.3)	25.9 (9.3)	9.3 (9.6)	8.0 (7.4)	8.6 (10.9)
Oil (Mbbbl)	856.2 (4.2)	921.5 (7.6)	231.9 (7.8)	79.0 (6.6)	76.5 (12.1)	76.5 (4.9)	235.2 (1.4)	79.9 (1.2)	74.6 (-2.5)	80.6 (5.5)
- Non-energy oil excluded	411.7 (6.0)	458.5 (11.4)	115.1 (11.2)	39.4 (15.8)	36.5 (8.0)	39.2 (9.7)	111.7 (-3.0)	38.4 (-2.7)	36.2 (-0.8)	37.2 (-5.2)
LNG (Mton)	33.4 (-8.7)	34.9 (4.2)	11.4 (1.2)	4.4 (3.5)	3.7 (3.7)	3.3 (-4.3)	11.7 (2.5)	4.3 (-2.8)	3.9 (5.5)	3.5 (6.4)
Hydro (TWh)	5.8 (-25.9)	6.6 (14.3)	1.4 (-10.4)	0.6 (12.0)	0.4 (-20.0)	0.4 (-24.8)	1.5 (8.7)	0.5 (-15.7)	0.5 (29.5)	0.5 (25.8)
Nuclear (TWh)	164.8 (5.3)	162.2 (-1.6)	44.2 (12.3)	15.4 (8.6)	14.2 (17.2)	14.6 (11.9)	38.7 (-12.6)	13.1 (-15.1)	12.4 (-12.7)	13.2 (-9.8)
Others (Mtoe)	12.8 (17.2)	15.0 (16.4)	3.8 (16.8)	1.3 (14.8)	1.2 (18.9)	1.3 (16.9)	4.3 (13.0)	1.5 (13.5)	1.4 (12.1)	1.4 (13.5)
TPES (Mtoe)	287.5 (1.6)	295.4 (2.7)	78.2 (3.3)	27.8 (3.6)	25.3 (5.8)	25.2 (0.6)	79.5 (1.6)	27.8 (0.0)	25.4 (0.4)	26.3 (4.5)
- Non-energy oil excluded	232.2 (1.4)	237.7 (2.4)	63.8 (3.0)	22.9 (4.7)	20.3 (3.6)	20.6 (0.6)	64.2 (0.7)	22.6 (-1.0)	20.6 (1.4)	20.9 (1.8)
- Non-energy oil&coal excluded	206.4 (1.9)	214.3 (3.8)	58.0 (4.2)	20.9 (5.9)	18.5 (5.0)	18.6 (1.6)	58.4 (0.8)	20.6 (-1.2)	18.8 (1.7)	19.0 (2.0)

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

Share of TPES by sources

(unit: %)

	2015	2016					2017p			
			M1~3	M1	M2	M3	M1~3	M1	M2	M3
Coal	29.7	27.6	25.9	25.8	25.4	26.3	27.2	27.7	26.5	27.2
- Coking coal excluded	20.8	19.7	18.5	18.6	18.1	18.7	19.9	20.4	19.3	19.9
Oil	38.1	39.9	38.0	36.6	38.7	39.0	37.6	36.5	37.5	39.0
- non-energy oil excluded	18.9	20.4	19.5	18.9	19.1	20.6	18.4	18.0	18.7	18.5
LNG	15.2	15.4	19.0	20.7	19.0	17.1	19.2	20.1	19.9	17.4
Hydro	0.4	0.5	0.4	0.5	0.3	0.3	0.4	0.4	0.4	0.4
Nuclear	12.1	11.6	11.9	11.7	11.8	12.2	10.3	10.0	10.3	10.6
Others	4.5	5.1	4.8	4.6	4.8	5.0	5.4	5.3	5.3	5.5
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)

	2015	2016	2017p				2017p			
			M1~3	M1	M2	M3	M1~3	M1	M2	M3
Industry	136.7 (0.5)	140.7 (2.9)	34.9 (2.4)	11.9 (0.6)	11.4 (6.6)	11.6 (0.5)	36.3 (3.9)	12.4 (4.4)	11.3 (-0.9)	12.5 (8.1)
Transport	40.3 (7.1)	42.3 (5.1)	10.1 (4.3)	3.4 (8.3)	3.2 (1.9)	3.5 (2.8)	10.2 (1.2)	3.3 (-4.3)	3.3 (4.5)	3.6 (3.6)
Residential-commercial	36.4 (2.7)	38.1 (4.6)	13.7 (5.1)	5.0 (3.2)	4.7 (7.5)	3.9 (4.9)	13.6 (-0.8)	4.9 (-2.1)	4.8 (1.0)	3.9 (-1.2)
Public	5.2 (10.1)	5.5 (7.6)	1.6 (10.3)	0.5 (5.4)	0.5 (13.7)	0.5 (12.4)	1.6 (-2.3)	0.5 (-2.1)	0.5 (0.2)	0.5 (-4.9)
TFC	218.6 (2.2)	226.7 (3.7)	60.3 (3.5)	20.9 (2.5)	19.8 (6.2)	19.5 (2.1)	61.6 (2.2)	21.2 (1.2)	19.9 (0.4)	20.5 (5.0)
Coal (Mton)	52.4 (-1.3)	49.0 (-6.4)	11.7 (-6.8)	4.1 (-2.0)	3.7 (-8.3)	3.9 (-10.1)	11.6 (-1.3)	4.1 (-1.0)	3.5 (-3.8)	4.0 (0.6)
Oil (Mbbl)	841.6 (4.1)	899.8 (6.9)	223.9 (6.4)	76.2 (4.5)	74.0 (10.5)	73.7 (4.5)	231.0 (3.2)	78.1 (2.5)	73.0 (-1.4)	79.9 (8.4)
Electricity (TWh)	483.7 (1.3)	497.0 (2.8)	130.5 (1.8)	44.7 (-1.7)	43.6 (4.2)	42.2 (3.3)	132.2 (1.3)	45.2 (1.2)	44.4 (2.0)	42.6 (0.7)
City gas (Bm ³)	20.8 (-5.9)	21.3 (2.3)	8.2 (3.2)	3.0 (0.7)	2.8 (8.1)	2.4 (1.0)	8.4 (2.3)	3.0 (-0.4)	2.9 (5.1)	2.5 (2.4)
Heat-others (1 000 toe)	12.7 (14.7)	14.4 (13.6)	4.1 (13.6)	1.5 (14.3)	1.3 (13.8)	1.3 (12.5)	4.4 (7.7)	1.6 (6.5)	1.4 (8.1)	1.4 (8.7)

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

Share of the Total Final Consumption by sources

(unit: %)

	2015	2016	2017p				2017p			
			M1~3	M1	M2	M3	M1~3	M1	M2	M3
Industry	62.5	62.1	57.9	56.9	57.7	59.3	58.9	58.7	56.9	61.0
Transport	18.4	18.7	16.7	16.4	15.9	17.9	16.6	15.5	16.5	17.7
Residential-commercial	16.7	16.8	22.7	24.1	23.8	20.1	22.0	23.3	23.9	18.9
Public	2.4	2.4	2.7	2.6	2.7	2.7	2.5	2.5	2.6	2.4
Final energy	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Coal	16.0	14.4	13.0	13.1	12.4	13.5	12.6	12.8	11.9	12.9
Oil	49.1	50.5	47.3	46.4	47.4	48.2	47.5	46.5	46.5	49.6
Electricity	19.0	18.9	18.6	18.3	18.9	18.6	18.5	18.3	19.2	17.9
City gas	10.1	10.0	14.4	15.2	14.7	13.0	14.3	14.9	15.4	12.7
Heat-others	5.8	6.3	6.7	7.0	6.6	6.6	7.1	7.4	7.1	6.8

Note: p means provisional
Source: Monthly energy statistics

Statistics on energy production facilities

	2014	2015	2016				2017p		
				M1	M2	M3	M1	M2	M3
Total capacity (GW)	93.2 (7.2)	97.6 (4.8)	105.9 (13.6)	98.2 (12.6)	98.8 (13.3)	98.8 (13.3)	106.2 (12.9)	107.1 (13.8)	109.5 (14.8)
Nuclear	20.7 -	21.7 (4.8)	23.1 (11.6)	21.7 (4.8)	21.7 (4.8)	21.7 (4.8)	23.1 (11.6)	23.1 (11.6)	23.1 (11.6)
Bituminous coal	25.9 (10.7)	26.2 (1.1)	30.9 (19.3)	26.2 (8.7)	26.4 (9.3)	26.4 (9.3)	31.0 (19.6)	31.0 (19.6)	31.6 (21.9)
Gas	30.3 (27.2)	32.2 (6.5)	32.6 (7.8)	32.1 (24.5)	32.5 (26.2)	32.5 (26.2)	32.6 (5.2)	33.5 (8.0)	35.2 (10.4)
Refinery capacity (mil BPSD)	2.9 -	3.1 (3.7)	3.1 (3.7)	3.1 (3.7)	3.1 (3.7)	3.1 (3.7)	3.1 -	3.1 -	3.1 -

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

Source: The monthly report on major electric power statistics

Statistics on energy consumption

	2014	2015	2016				2017p		
				M1	M2	M3	M1	M2	M3
The number of household demanding city gas (mil)	16.9 (3.1)	17.4 (3.0)	18.0 (3.4)	17.5 (3.2)	17.6 (3.3)	17.6 (3.3)	18.0 (3.3)	18.1 (3.2)	18.2 (3.2)
Registered cars (mil)	20.1 (3.7)	21.0 (4.3)	21.8 (3.9)	21.1 (4.3)	21.1 (4.2)	21.2 (4.3)	21.9 (3.9)	21.9 (3.8)	22.0 (3.7)
- gasoline	9.6 (2.0)	9.8 (2.3)	10.1 (2.9)	9.8 (2.3)	9.9 (2.3)	9.9 (2.4)	10.1 (3.0)	10.2 (3.0)	10.2 (3.0)
- diesel	7.9 (7.3)	8.6 (8.6)	9.2 (6.4)	8.7 (8.5)	8.7 (8.4)	8.8 (8.4)	9.2 (6.1)	9.2 (5.9)	9.3 (5.5)
- LPG	2.3 (-2.3)	2.3 (-3.4)	2.2 (-4.0)	2.3 (-3.5)	2.2 (-3.6)	2.2 (-3.6)	2.2 (-3.9)	2.2 (-3.9)	2.2 (-3.8)
- hybrid	0.1 (40.0)	0.2 (31.3)	0.2 (37.6)	0.2 (29.1)	0.2 (29.0)	0.2 (28.9)	0.2 (37.8)	0.2 (37.5)	0.2 (37.6)

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

Source: Monthly energy statistics

KEEI

MONTHLY **KOREA ENERGY TRENDS** (2017, NO.63)



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.

If you have any further inquiries, please send an email to EnergyOutlook@keei.re.kr or call +82-52-714-2270.

405-11, Jongga-ro, Jung-gu, Ulsan, Korea, 44543

Phone: +82-52-714-2270

Fax: +82-52-714-2025

Email: webmaster@keei.re.kr

Homepage: <http://www.keei.re.kr>