

# KEEI MONTHLY KOREA ENERGY TRENDS



COAL 0.6%  
PETROLEUM -11.0%  
LNG -3.9%  
NUCLEAR 30.2%  
NEW & RENEWABLE 8.5%  
JUNE. 2022





**This publication is derived from Energy Demand & Supply  
Statistics and Energy Price Statistics issued until June 2022**



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## 1. The Economy and the Industry

### □ The mining & manufacturing production index went up by 1.3% year-on-year in June, as semiconductor and automobile production increased.

- The semiconductor production index jumped 23.9% year-on-year, with export continuously growing (10.7%, based on export value) and factories running at increased capacity (3.2%, based on utilization rate index). The pace of growth, however, was slower, and the inventory also increased (80.0%, based on inventory index).
- The automobile production index rose by 3.5% year-on-year, as the shortage of auto parts supply was alleviated.
- The production index of basic chemical materials dropped by 3.5% year-on-year, as facility utilization rate declined (-5.3%, based on utilization rate index) due to the fire accident at S-oil's Onsan factory (2022.5.19~) and maintenance work at some petrochemical plants.
- The iron & steel production index decreased by 1.7% year-on-year as a result of weak demand in some industries that are major source of demand such as the construction sector.

### □ The service production index posted a year-on-year growth of 4.0% (in June), as the production increased in all sub-sectors of the service industry, especially in the food & accommodation sector.

- The wholesale & retail production index grew more slowly by 0.7% year-on-year, while the transportation production index was up 9.7% year-on-year, led by the air transportation sector.
- The food & accommodation production index went up by 19.8% year-on-year, as the production increased in all sub-sectors including accommodations, restaurants and bars following the removal of social distancing measures and amid a drop in the number of Covid-19 cases.

#### ► Major economic and industrial indicators

	2021p			2022p			
		M1~6	M6	M1~6	M4	M5	M6
GDP (trillion won)	1 915.8 (4.1)	932.0 (4.2)	478.3 (6.2)	959.5 (3.0)	-	-	492.2 (2.9)
Total export (\$billion, customs clearance basis)	644.4 (25.7)	303.1 (26.0)	54.8 (39.7)	350.5 (15.6)	57.8 (12.9)	61.6 (21.4)	57.7 (5.3)
Industrial production index (2015=100)	114.3 (7.4)	112.1 (8.8)	117.2 (12.2)	117.0 (4.4)	118.1 (3.6)	119.9 (7.5)	118.7 (1.3)
Semi-conductors	298.6 (29.4)	267.5 (24.5)	300.0 (25.8)	343.0 (28.2)	335.9 (34.8)	351.6 (24.2)	371.6 (23.9)
Basic chemical products	107.9 (6.7)	106.2 (4.1)	103.5 (10.0)	105.5 (-0.6)	104.0 (-2.2)	104.0 (-2.4)	99.9 (-3.5)
Iron&Steel	97.4 (5.8)	96.5 (5.1)	98.2 (20.8)	96.6 (0.1)	95.0 (-3.8)	98.3 (0.3)	96.5 (-1.7)
Cars	88.2 (4.5)	91.3 (17.2)	95.9 (20.9)	91.6 (0.3)	94.5 (-2.5)	95.5 (15.8)	99.3 (3.5)
Service production index (2015=100)	110.9 (4.3)	108.4 (4.0)	113.5 (4.9)	113.6 (4.8)	115.0 (5.0)	117.6 (7.4)	118.0 (4.0)
Wholesale & Retail	106.0 (4.0)	104.4 (4.2)	107.3 (3.5)	107.4 (2.8)	109.7 (2.6)	111.6 (4.8)	108.0 (0.7)
Food & Accommodation	80.7 (1.4)	75.0 (-5.6)	84.2 (-0.5)	88.7 (18.2)	91.8 (16.9)	102.5 (20.7)	100.9 (19.8)

Note: Figures are based on the real price of 2015, P means provisional, ( ) is year-on-year growth rates (%)

Source: BOK Economic statistics system, Korea International Trade Association, Korea Statistical Information Service

## 2. Energy Prices<sup>1</sup>

### Global Energy Prices

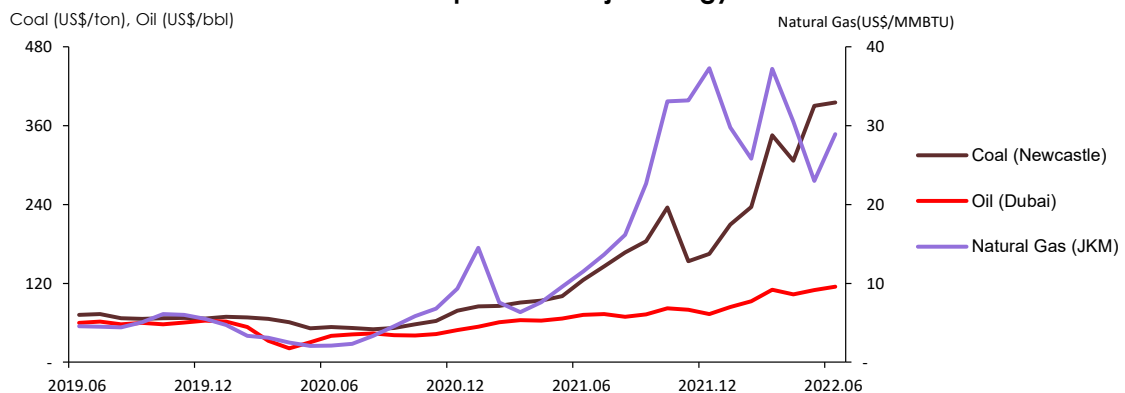
- **Global oil price increased in June from the previous month, despite concerns about interest rate hikes and another lockdown in China, partly due to the sanctions on Russian crude oil.**
  - Global oil price was up 4.7% year-on-year, as the European Union (EU) agreed on an embargo on Russian crude oil, transported by sea (May 30), and the G7 nations decided to push forward with a price cap on Russian crude oil (June 28), despite the possibility of another lockdown in China and concerns about an economic recession and slowing demand due to the base rate hikes in the US.
  - Global coal price rose, driven by the increased use of coal as a replacement for gas, although the price growth was limited by the spread of Covid-19 and worries over an economic recession.
  - Natural gas price soared from the previous month in Europe and Asia due to a drop in Russia's PNG supply to Europe and the shutdown of the US Freeport LNG terminal.

#### ► Global energy prices

	2020	2021				2022			
			M4	M5	M6		M4	M5	M6
Crude oil (US\$/bbl)	42.2	69.3	62.9	66.3	71.6	102.8	108.2	113.3	
	(-33.5)	(64.2)	(-2.4)	(5.4)	(7.9)	(-7.3)	(5.2)	(4.7)	
Coal (US\$/ton)	60.2	136.4	93.9	100.4	125.3	306.6	390.4	395.0	
	(-22.8)	(126.5)	(3.3)	(7.0)	(24.8)	(-11.2)	(27.3)	(1.2)	
Natural gas (US\$/MMBTU)									
TTF	3.2	16.2	7.2	8.9	10.3	32.2	29.2	33.5	
	(-32.3)	(398.7)	(17.4)	(23.9)	(15.4)	(-23.9)	(-9.5)	(14.8)	
JKM	4.2	17.8	7.6	9.6	11.5	30.5	23.0	28.9	
	(-25.2)	(326.0)	(20.3)	(25.3)	(20.5)	(-18.0)	(-24.6)	(25.7)	

Note: Oil and coal prices are based on Dubai oil and Newcastle thermal coal in Australia, respectively. ( ) is month-on-month growth rates (%)  
Source: www.petronet.co.kr, World Bank(Commodity Markets), CME Group

#### ► Global prices of major energy sources



<sup>1</sup> This report presents the energy price trend of the month for which energy consumption data is available. For more on the latest price trend, see *Energy Supply and Demand Brief*

## Domestic energy prices

### □ Gasoline and diesel prices went up by 5.9% and 6.4% respectively in June compared to the previous month, because the unit price of crude oil imports increased.

- The domestic pump price of diesel surpassed that of gasoline amid the rise in international diesel prices.
- The price of bunker-C oil rose by 3.3% than the previous month, affected by global oil price increase.
- Propane and butane prices remained the same as the previous month, as supply price of LPG was kept unchanged in the domestic market. On a year-on-year basis, however, the prices went up by 28.0% and 29.1% respectively.

### □ In June, the relative price of propane in terms of city gas for industrial customers (propane/city gas) remained the same as the previous month at 1.54.

- Industrial propane price and city gas rate were kept unchanged, and therefore, their relative price also remained the same as the previous month. On a year-on-year basis, however, the prices went up by 57.6% and 60.0% respectively, and accordingly, the relative price fell by 1.5%.

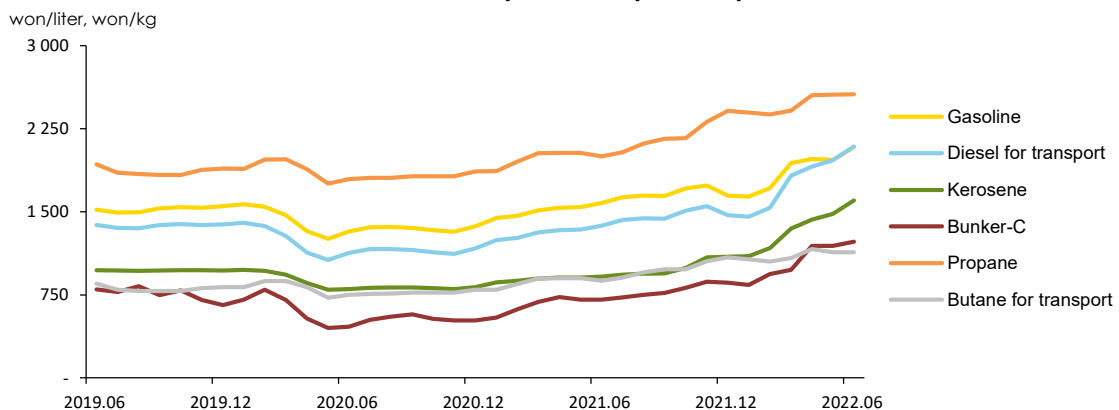
#### ► Domestic petroleum product prices

	2020	2021				2022		
			M4	M5	M6	M4	M5	M6
Gasoline (won/liter)	1 381.2 (-6.2)	1 591.1 (15.2)	1 534.5 (1.4)	1 541.5 (0.5)	1 577.3 (2.3)	1 976.5 (2.0)	1 967.1 (-0.5)	2 084.0 (5.9)
Diesel for transport (won/liter)	1 189.5 (-11.3)	1 392.0 (17.0)	1 332.7 (1.5)	1 338.8 (0.5)	1 374.4 (2.7)	1 906.4 (4.4)	1 964.3 (3.0)	2 089.0 (6.4)
Bunker-C (won/liter)	572.9 (-23.0)	732.2 (27.8)	730.1 (6.4)	706.4 (-3.2)	706.4 -	1 191.7 (22.3)	1 190.4 (-0.1)	1 229.3 (3.3)
Propane (won/kg)	1 850.3 (-1.0)	2 093.4 (13.1)	2 032.9 (0.2)	2 031.6 (-0.1)	1 999.6 (-1.6)	2 552.2 (5.8)	2 558.2 (0.2)	2 558.8 (0.0)
Butane for transport (won/liter)	790.8 (-1.9)	932.3 (17.9)	899.2 (0.1)	899.4 (0.0)	878.5 (-2.3)	1 163.2 (7.4)	1 134.6 (-2.5)	1 133.7 (-0.1)

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

Source: [www.opinet.co.kr](http://www.opinet.co.kr)

#### ► Domestic petroleum product prices



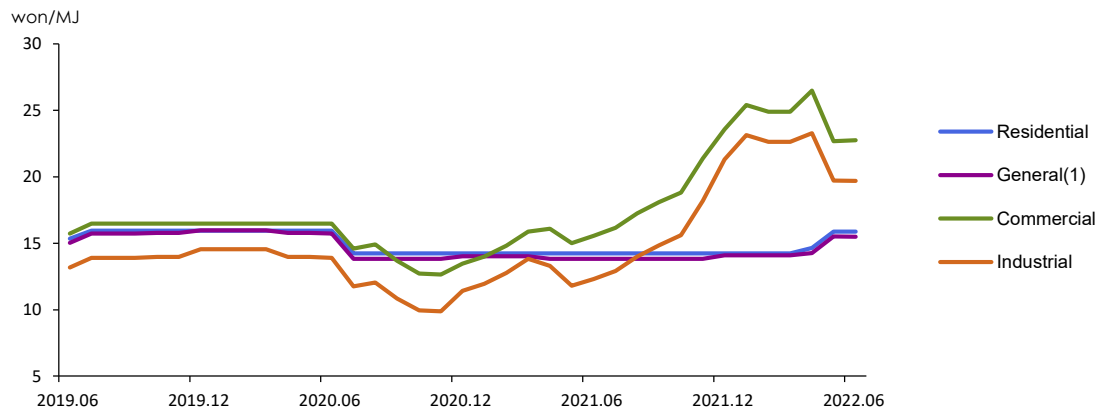
□ **City gas rates were almost flat in June compared to the previous month in all end-use sectors.**

- City gas rate was similar to that of the previous month in June, as the increased raw material cost was offset by decreased supply cost in the wholesale price.

□ **Electric rate for residential customers was unchanged, while the rates for general and industrial customers rose sharply, as they were adjusted for the summer season (Jun-Aug).**

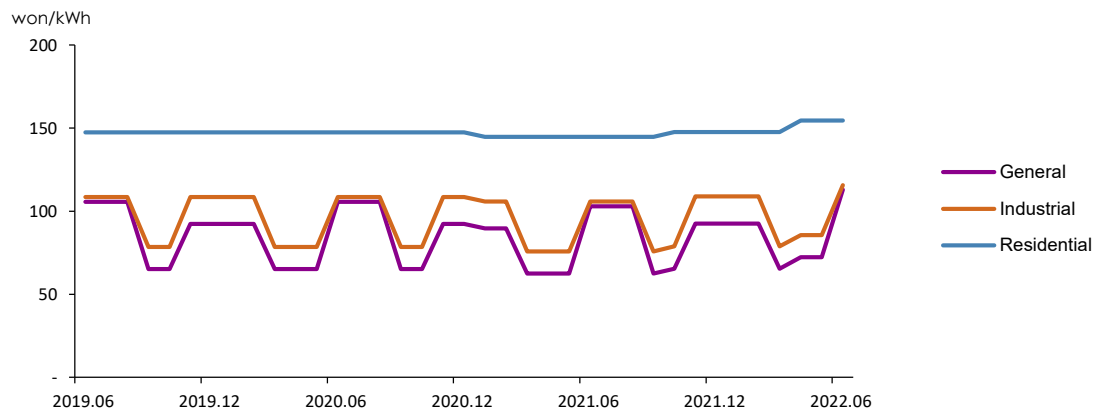
- Korea Electric Power Corporation (KEPCO) raised energy charge and climate change & environmental charge by KRW 4.9/kWh and KRW 2.0/kWh respectively in April.
- The fuel cost pass-through adjustment rate was set at KRW 33.6/kWh in 3Q. However, KRW 5.0/kWh is to be applied due to the upper limits in the range of the adjustment.

► **City gas rates by end-use sectors**



Source: Seoulgas

► **Electric rates by end-use sectors**



Note: The electric rates by end-use sectors refer to the prices for residential use ([high voltage], the 2<sup>nd</sup> stage price), general use ([A], low voltage) and Industrial use ([B], high voltage B middle load), including Climate Environmental Price

Source: KEPCO



### 3. Energy Supply

- **The total energy import volume dropped by 3.2% year-on-year in June, as the import of major energy sources all declined except anthracite.**
  - The import volume of crude oil fell by 7.6% year-on-year, owing to the scheduled maintenance at some refineries amid high oil prices.
  - The import volume of petroleum products decreased by 19.6% year-on-year, with naphtha and LPG leading the downward slide.
  - The import volume of bituminous coal slid by 0.9% yoy, as demand fell in the domestic power generation sector amid a steady growth in global coal prices, which was attributed to the supply chain disruption caused by Russia's war and strong coal demand for power generation.
  - The import volume of gas dropped by 19.1% year-on-year due to the high base effect of the same month last year (21.3%) and a drop in domestic gas consumption amid high natural gas price in international markets.
  - The energy import value has been decreasing since March, but energy's share of the total import value slightly increased to 30.1% in June.

#### ► Import and domestic production of energy

	2021p			2022p			
		M1~6	M6	M1~6	M4	M5	M6
Import volume							
Crude oil (Mbbbl)	960.1 (-2.1)	468.2 (-6.1)	80.2 (7.4)	501.5 (7.1)	86.2 (3.4)	81.6 (0.8)	74.1 (-7.6)
Petroleum product (Mbbbl)	392.3 (12.9)	182.5 (-2.8)	33.0 (10.8)	184.6 (1.1)	28.7 (-6.2)	28.6 (-7.5)	26.5 (-19.6)
Bituminous coal (Mton)	108.0 (-6.4)	50.3 (-9.3)	8.5 (-7.8)	51.1 (1.5)	7.4 (-3.8)	8.6 (4.5)	8.4 (-0.9)
Anthracite (Mton)	6.5 (3.0)	3.0 (2.1)	0.4 (-25.4)	3.1 (1.6)	0.3 (-45.1)	0.7 (31.6)	0.7 (86.4)
LNG (Mton)	45.9 (14.9)	23.1 (9.9)	3.1 (21.3)	22.8 (-1.5)	3.4 (21.4)	3.4 (-0.2)	2.5 (-19.1)
Import volume (Mtoe)	335.6 (3.1)	161.1 (-2.8)	26.1 (2.7)	167.1 (3.7)	25.9 (3.5)	27.6 (1.4)	25.3 (-3.2)
Import value (billion US\$, CIF)	137.2 (58.5)	56.9 (18.9)	10.4 (107.8)	102.5 (80.3)	17.3 (79.5)	17.1 (75.5)	16.0 (54.7)
Energy share of total import value (%)	22.1	19.9	20.6	28.2	28.7	26.9	30.1
Foreign energy dependence (%)*	92.8	92.6	92.2	92.0	91.1	91.0	91.6
Domestic production							
Hydropower (TWh)	6.74 (-5.7)	3.39 (6.3)	0.69 (33.9)	3.13 (-7.5)	0.47 (-15.0)	0.54 (-15.5)	0.56 (-19.0)
Anthracite (Mton)	0.90 (-11.9)	0.46 (-13.2)	0.08 (-10.9)	0.43 (-7.8)	0.08 (-14.6)	0.07 (2.9)	0.07 (-13.4)
Natural gas (Mton)	0.04 (-70.3)	0.03 (-69.1)	0.00 (-90.5)	- (-100.0)	- (-100.0)	- (-100.0)	- (-100.0)
Renewable energy (Mtoe)	20.04 (5.6)	10.13 (8.5)	1.67 (10.9)	11.42 (12.8)	1.96 (10.0)	2.08 (14.2)	1.81 (8.5)

Note: p means provisional, ( ) is year-on-year growth rates (%), \*Foreign energy dependence (%) including Nuclear energy  
Source: Monthly energy statistics(KEEI)

## 4. Energy Consumption

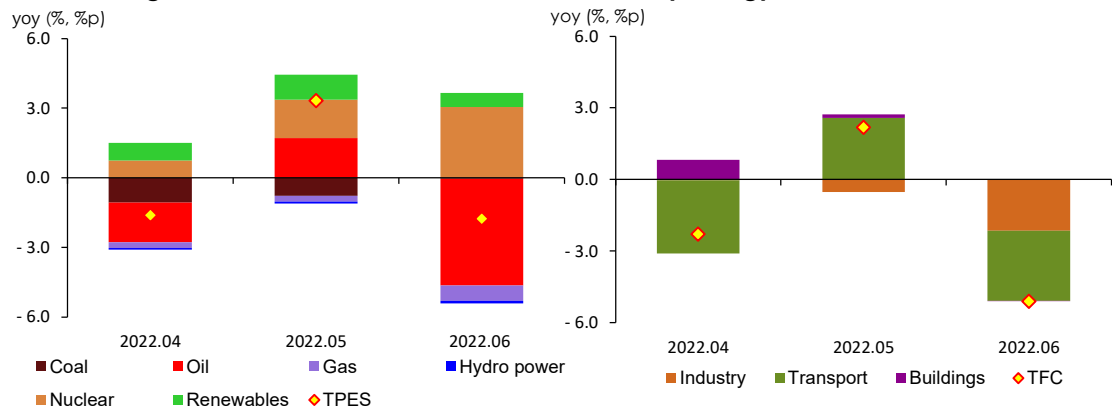
- **Total Primary Energy Supply (TPES) went down by 1.8% year-on-year in June, despite growing use of nuclear energy, as petroleum and gas use decreased.**
  - Coal use grew by 0.6% year-on-year, even though it declined for two consecutive months in the power generation sector due to growing generation cost, as industrial coal use increased, driven by a surge in anthracite use, though bituminous coal use declined.
  - Petroleum use plunged by 11.0% year-on-year, because industrial petroleum use dropped faster partly due to the sluggish petrochemical business, and it also fell sharply in the transport sector ahead of the additional fuel tax cut.
  - Gas use declined faster in the power generation sector amid a surge in nuclear generation and international LNG price hikes, and gas use in buildings also declined, led by the residential sector due to higher gas rates and fewer hours spent at home, while industrial gas use slightly increased.
- **Total Final Consumption (TFC) was down 5.1% year-on-year (in June), with the industrial and transport sectors posting a sharp fall in energy use.**
  - Industrial energy use dropped by 3.3%, mostly in the large energy consuming industries, which was attributed to fewer work days (-2 days) with provincial elections, the slowdown of domestic and global economies, logistical disruptions due to a strike staged by the cargo truckers' union (June 7-14) and high energy prices.
  - Transport energy use fell by 16.0% year-on-year, as stockpiling demand plunged ahead of the additional fuel tax cut (7%p) in July, and as energy use for cargo transport by road plunged due to the strike launched by the cargo truckers' union and higher diesel price, which surpassed that of gasoline.
  - Energy use in buildings remained flat, although it declined in the residential sector following the termination of social distancing restrictions (Apr 18), because it increased in the commercial sector.

### ► Energy consumption

	2021p			2022p			
		M1~6	M6	M1~6	M4	M5	M6
<b>TPES (Mtoe)</b>	<b>305.4</b>	<b>150.2</b>	<b>23.8</b>	<b>153.6</b>	<b>23.5</b>	<b>24.8</b>	<b>23.4</b>
	(4.6)	(3.2)	(4.8)	(2.3)	(-1.6)	(3.3)	(-1.8)
- Feedstock exclude	217.8	107.9	16.8	111.8	16.4	17.9	16.9
	(2.5)	(2.4)	(3.8)	(3.7)	(-1.9)	(6.4)	(0.3)
<b>TFC (Mtoe)</b>	<b>234.7</b>	<b>117.1</b>	<b>18.3</b>	<b>118.4</b>	<b>18.4</b>	<b>18.9</b>	<b>17.3</b>
	(5.5)	(3.9)	(6.9)	(1.2)	(-2.3)	(2.2)	(-5.1)

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

## ► The growth rates of TPES & TFC and contribution by energy sources and end-use sectors



## 5. Coal

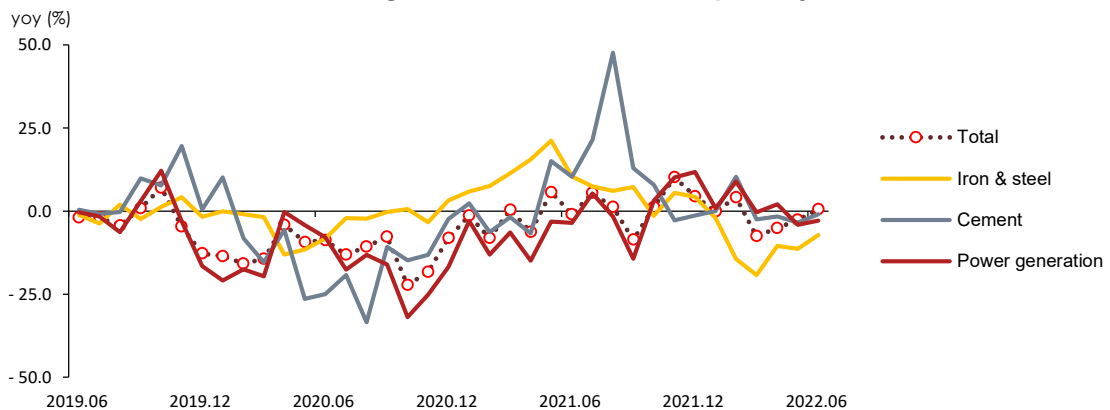
- Coal use grew by 0.6% year-on-year in June, as it rebounded in the industrial sector, though it continued to decline in the power generation sector.
  - Industrial coal use increased, as anthracite use surged, replacing other energy source, although the production index of iron & steel and cement all declined due to poor performance of the iron & steel and construction sectors.
  - Coal use for power generation declined compared to the same month last year, despite the eased voluntary cap on coal-fired generation, because a steady rise in fuel cost led to a drop in coal-fired generation (-6.8%).

### ► Coal consumption

	2021p			2022p				
		M1~6	M6		M1~6	M4	M5	M6
<b>Coal (Mton)</b>	<b>116.8</b>	<b>54.9</b>	<b>9.5</b>	<b>53.9</b>	<b>7.9</b>	<b>8.9</b>	<b>9.5</b>	
	(0.2)	(-1.9)	(-1.0)	(-1.7)	(-5.1)	(-2.6)	(0.6)	
Industry	47.4	23.3	3.7	22.1	3.3	4.0	3.9	
	(4.6)	(6.6)	(3.4)	(-4.9)	(-13.4)	(-0.8)	(5.8)	
-Coking-coal	35.3	17.6	2.8	16.2	2.6	2.8	2.7	
	(4.5)	(8.0)	(6.5)	(-7.7)	(-7.2)	(-8.3)	(-3.8)	
Buildings	0.4	0.2	0.0	0.1	0.0	0.0	0.0	
	(-12.0)	(-18.1)	(-14.3)	(-3.2)	(-10.5)	(28.6)	(33.3)	
Power generation	68.9	31.5	5.8	31.7	4.6	4.8	5.6	
	(-2.5)	(-7.2)	(-3.6)	(0.7)	(2.0)	(-4.1)	(-2.9)	

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 use plunged by 11.0% year-on-year in June, owing to a sharp drop in the transport and industrial sectors.

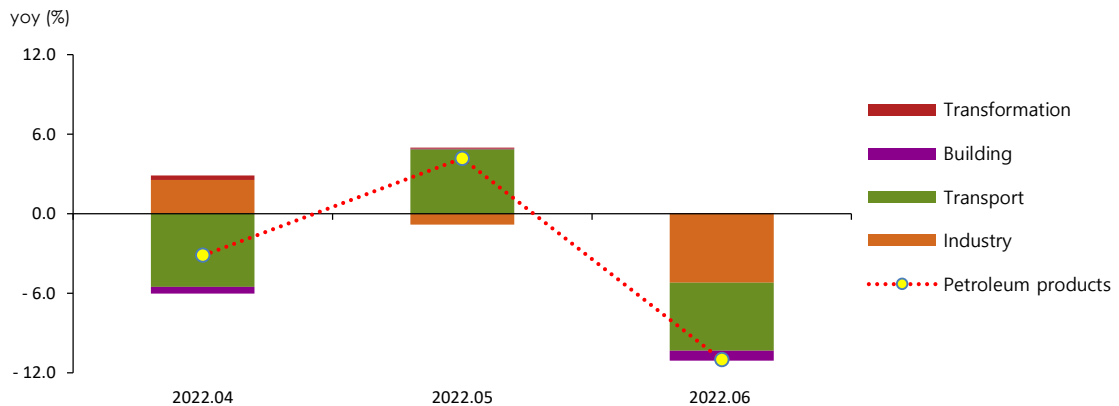
- Industrial petroleum use declined by 8.2% year-on-year, which was driven by decreased naphtha use amid sluggish petrochemical business.
- Transport petroleum use went down by 16.0% year-on-year, with the road transport sector posting around 20% decline in petroleum use ahead of the additional fuel tax cut.

#### ► Petroleum product consumption by end-use sectors

	2021p			2022p			
		M1~6	M6		M1~6	M4	M5
<b>Petroleum (Mbbbl)</b>	<b>932.4</b>	<b>452.9</b>	<b>76.9</b>	<b>461.4</b>	<b>73.3</b>	<b>79.3</b>	<b>68.4</b>
	(6.9)	(2.7)	(8.1)	(1.9)	(-3.1)	(4.2)	(-11.0)
Industry	597.2	287.0	48.8	296.5	50.3	48.3	44.8
	(9.8)	(3.0)	(9.1)	(3.3)	(4.0)	(-1.3)	(-8.2)
-Naphtha	450.9	215.6	34.9	221.7	38.7	35.6	33.5
	(11.3)	(2.3)	(3.9)	(2.8)	(4.3)	(-0.3)	(-4.2)
Transport	281.7	138.0	24.8	135.0	19.7	27.6	20.8
	(1.6)	(1.5)	(5.7)	(-2.1)	(-17.5)	(15.5)	(-16.0)
Buildings	44.7	23.7	2.8	23.4	2.7	2.8	2.2
	(-0.1)	(-0.6)	(10.0)	(-1.0)	(-12.2)	(1.5)	(-20.1)
Power generation	8.8	4.3	0.5	6.4	0.6	0.5	0.6
	(34.0)	(52.6)	(34.1)	(50.8)	(61.9)	(12.9)	(9.3)

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

#### ► The growth rates of petroleum product consumption & contribution(%p) by end-use sectors



## 7. Gas

□ **Gas use posted a year-on-year drop of 3.9% in June, as it dropped faster in the power generation sector, though its industrial use slightly increased.**

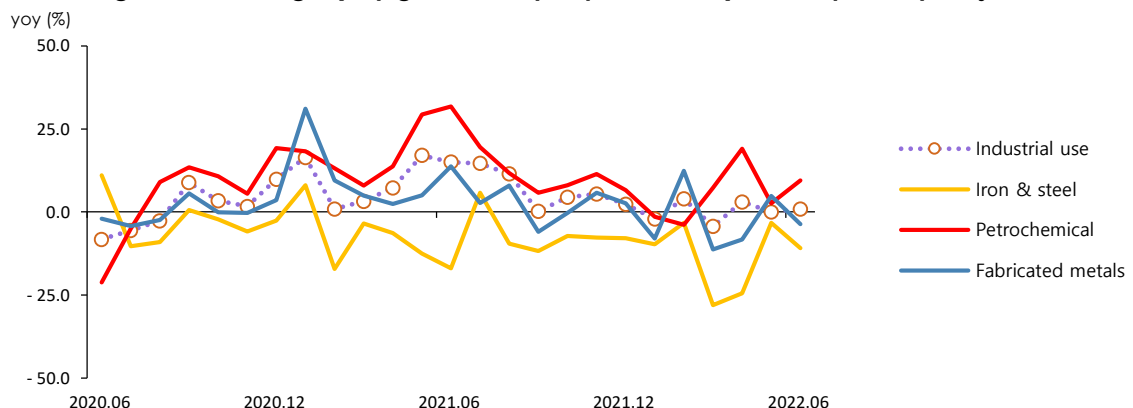
- Gas use for power generation fell by nearly 10% yoy, as gas-fired generation continued to decline due to slower growth in electricity consumption, a surge in nuclear generation and high natural gas prices.
- Industrial gas use grew by less than 1%, as gas use increased in the petrochemical sector instead of LPG, although it declined in the fabricated metals sector due to high base effect of the same month last year (13.7%) and also decreased in the primary metals sector amid sluggish businesses in some sectors that are major source of demand such as the construction sector.
- Gas use in buildings jumped 17.7%, led by the commercial sector where production picked up (4.0%), especially in the face-to-face service industry, though it dropped by 12.3% year-on-year in the residential sector, owing to the increased city gas rate (11.6%) and less time spent at home.

### ► Natural gas and city gas consumption

	2021p			2022p			
		M1~6	M6	M1~6	M4	M5	M6
<b>LNG (Mton)</b>	<b>45.8</b>	<b>24.1</b>	<b>3.1</b>	<b>24.2</b>	<b>3.4</b>	<b>3.0</b>	<b>2.9</b>
	(8.9)	(13.7)	(25.2)	(0.3)	(-1.3)	(-1.5)	(-3.9)
Power generation	21.5	10.9	1.7	10.3	1.6	1.6	1.6
	(15.7)	(25.5)	(39.4)	(-5.6)	(-3.5)	(-0.9)	(-9.7)
City gas production	19.3	10.7	1.0	11.2	1.4	1.1	1.0
	(5.9)	(8.4)	(14.1)	(4.5)	(4.2)	(-1.9)	(4.4)
Industry (Direct private importer)	2.7	1.3	0.2	1.3	0.2	0.2	0.2
	(-1.4)	(-0.0)	(3.7)	(0.4)	(-10.7)	(-8.4)	(-12.6)
<b>City gas (Bm<sup>3</sup>)</b>	<b>27.1</b>	<b>15.3</b>	<b>1.6</b>	<b>15.8</b>	<b>2.2</b>	<b>1.7</b>	<b>1.6</b>
	(4.2)	(6.3)	(10.2)	(3.5)	(6.1)	(-2.1)	(-0.2)
Industry (including directly imported)	12.0	6.0	0.9	6.0	1.0	0.9	0.9
	(7.8)	(9.6)	(15.0)	(0.1)	(3.1)	(0.0)	(0.9)
Buildings	14.1	8.7	0.6	9.3	1.2	0.7	0.5
	(2.0)	(4.7)	(5.4)	(6.2)	(9.7)	(-4.7)	(-1.0)

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

### ► The growth rate of gas(city gas+directly imported LNG)consumption by major industries



## 8. Electricity

□ Electricity use went up by 2.3% year-on-year in June, as it rapidly increased in the commercial sector. However, the pace of growth has been slowing.

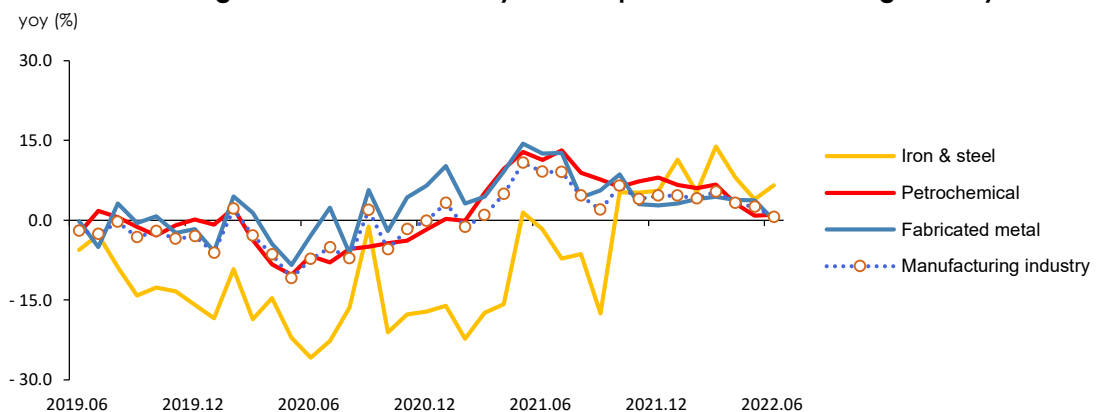
- Electricity use increased in the iron & steel sector and remained flat in the fabricated metals and petrochemical sectors. Consequently, the total industrial electricity use grew by mere 1.2%.
- In the building sector, electricity consumption dramatically increased in the commercial sector, affected by a recovery in the service industry, while it was stagnant in the residential sector due to less time spent at home.

### ► Electricity consumption by end-use sectors

	2021p			2022p			
		M1~6	M6	M1~6	M4	M5	M6
<b>Electricity (TWh)</b>	<b>533.4</b>	<b>261.8</b>	<b>42.0</b>	<b>272.2</b>	<b>43.8</b>	<b>42.2</b>	<b>43.0</b>
	(4.7)	(3.8)	(5.7)	(4.0)	(4.4)	(3.3)	(2.3)
Industry	282.4	139.1	23.0	144.3	23.7	23.6	23.3
	(5.1)	(4.6)	(8.8)	(3.7)	(3.5)	(2.7)	(1.2)
Transport	3.4	1.6	0.3	1.7	0.3	0.3	0.3
	(7.3)	(8.4)	(14.5)	(3.7)	(-0.3)	(7.4)	(-3.7)
Buildings	247.7	121.0	18.7	126.2	19.8	18.3	19.5
	(4.3)	(2.8)	(2.1)	(4.3)	(5.6)	(4.1)	(3.8)
Residential	77.6	36.7	5.8	37.2	6.1	5.6	5.8
	(4.7)	(3.0)	(1.4)	(1.4)	(3.2)	(0.2)	(-0.5)
Commercial	136.6	67.8	10.3	72.8	11.1	10.3	11.1
	(3.4)	(1.6)	(1.2)	(7.3)	(7.8)	(6.9)	(7.3)

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

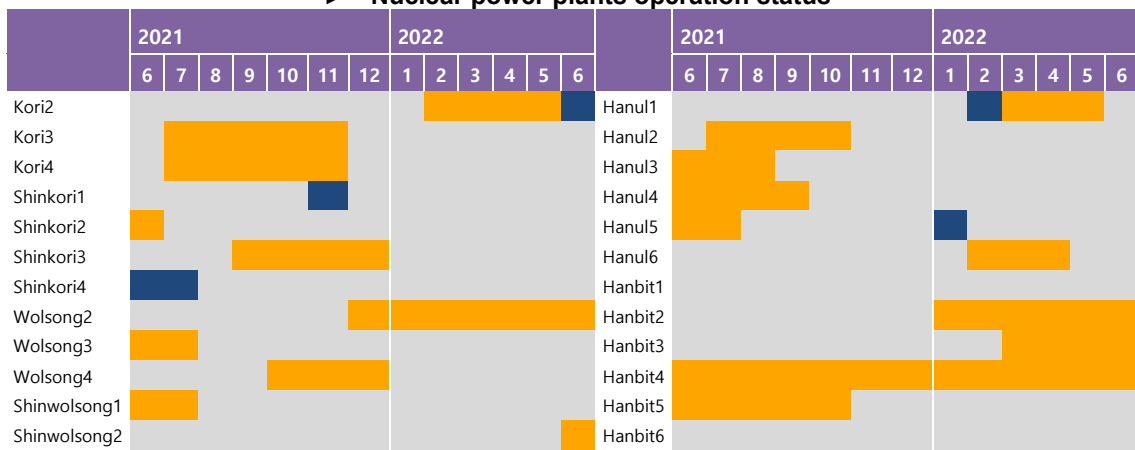
### ► The growth rate of electricity consumption in manufacturing industry



## 9. Nuclear

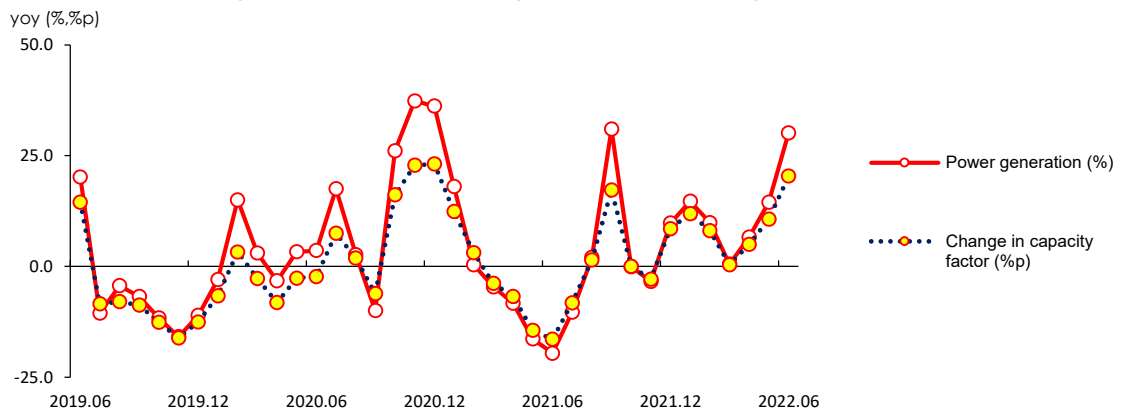
- The total nuclear generation went up by 30.2% year-on-year in June, as its capacity factor increased due to a drop in the number of reactors that were under planned preventive maintenance.
  - The nuclear capacity factor increased by 20%p year-on-year, as the number of reactors that were under planned preventive maintenance dropped by three than the same month last year, and one reactor experienced an unplanned shutdown, as was the case in June last year.
  - Nuclear energy's share of the total power generation rose by 6.2%p year-on-year, surpassing 30% for two consecutive months. In the generation mix, coal gained the largest share (32.7%), followed by nuclear (30.9%) and gas (26.3%).

### ► Nuclear power plants operation status



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

### ► The growth rate of nuclear generation & average capacity factor



Note: Capacity factor = Ratio of actual power generated to possible power generation when utilizing 100% of available facility. Facility capacity values are based on end-of-the-month data



## 10. Heat and Renewable energy

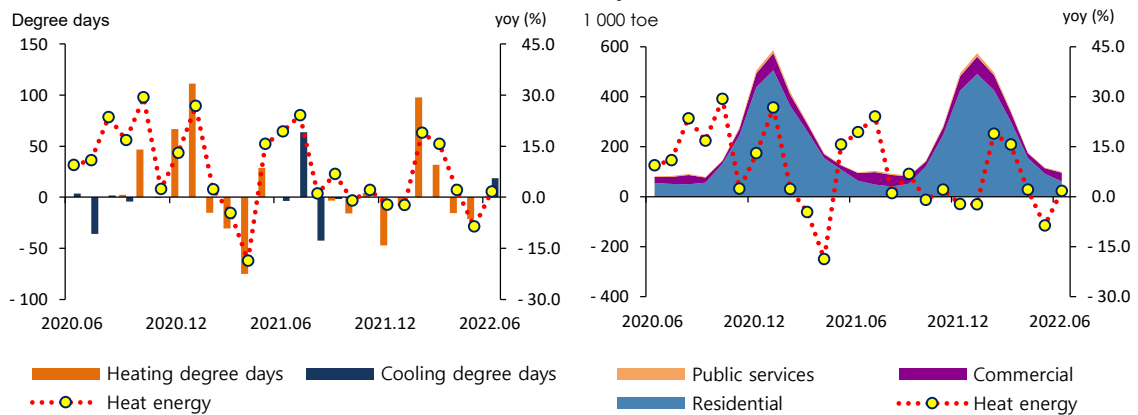
□ **Heat energy use posted a year-on-year growth of 1.7% in June, as it grew in all sub-sectors except the residential sector.**

- Heat energy use dropped by 4.0% year-on-year in the residential sector, which accounts for a large share of the total heat energy use, partly because people spent less time at home.
- Heat energy use climbed 12.0% year-on-year in the commercial sector, as service production increased (4.0%, based on the production index) after the removal of social distancing measures and amid a drop in Covid-19 infections.

□ **Renewable & other energy use went up by 8.5% year-on-year (in June), with the power generation sector leading the growth.**

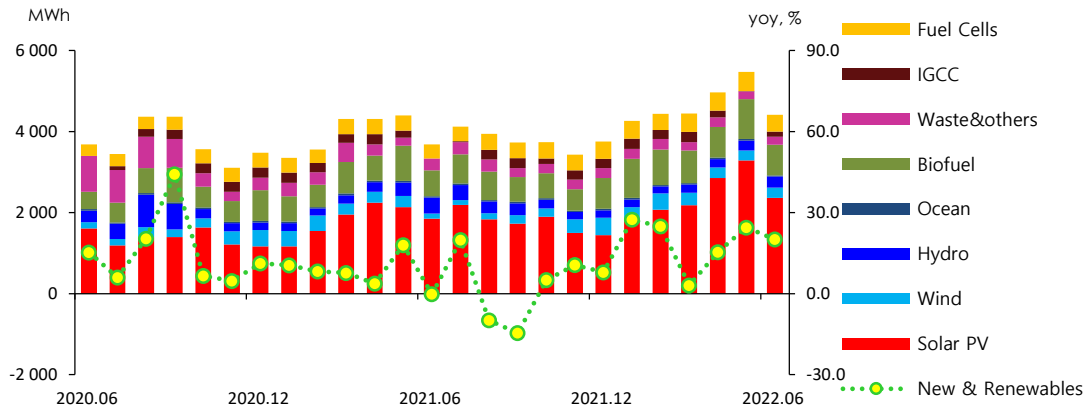
- Renewable & other energy generation<sup>2</sup> was up 20.0% year-on-year, driven by strong growth in wind power and solar PV generation.
- The final consumption of renewable & other energy slid by 0.1%, even though it grew by 1.5% year-on-year in the building sector, because it declined by 0.4% in the industrial sector, which makes up a large share of the total consumption, and it fell by 1.8% in the transport sector.

### ► Heat energy consumption by sector and the growth rate of total heat energy consumption



<sup>2</sup> The power generation from and installed capacity of renewable & other energy sources are based on the data from KEPCO's 'The Monthly Report on Electric Power Statistics'. In the current Energy Balance report, renewable & other energy and hydropower (including pumped storage) data are collected in separate categories, and therefore, hydropower is not included in the renewable & other energy category.

► **New & renewable energy generation by source and the growth rate of total new & renewable energy generation**



## 11. Industry

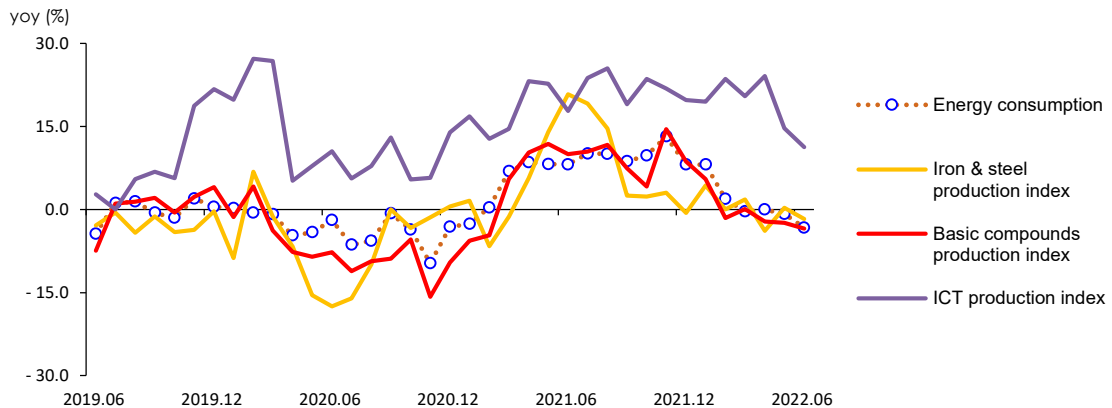
- Industrial energy use decreased by 3.3% year-on-year in June, as it declined in all of the major industrial sectors that consume a large amount of energy.
  - As the number of work days declined by two days compared to the same month last year partly due to the provincial elections, energy use continued to decline in the petrochemical and primary metals sectors, and it started to decline in the fabricated metals sector, especially city gas.

### ► Industrial energy consumption

	2021p			2022p			
		M1~6	M6	M1~6	M4	M5	M6
<b>Industry (Mtoe)</b>	<b>148.1</b>	<b>72.3</b>	<b>11.9</b>	<b>73.0</b>	<b>12.0</b>	<b>12.1</b>	<b>11.5</b>
	(7.3)	(4.8)	(8.1)	(0.9)	(-0.0)	(-0.8)	(-3.3)
Petrochemical	76.7	36.9	6.1	38.2	6.6	6.2	5.9
	(11.0)	(4.7)	(10.8)	(3.7)	(5.1)	(-0.2)	(-4.0)
- Naphtha	55.3	26.4	4.3	27.2	4.7	4.4	4.1
	(11.3)	(2.3)	(3.9)	(2.8)	(4.3)	(-0.3)	(-4.2)
Iron & Steel	29.7	14.8	2.4	13.4	2.2	2.3	2.2
	(5.2)	(7.5)	(6.5)	(-9.5)	(-9.9)	(-9.5)	(-6.3)
-Coking coal	24.6	12.2	2.0	11.3	1.8	1.9	1.9
	(4.5)	(8.0)	(6.5)	(-7.7)	(-7.2)	(-8.3)	(-3.8)
Fabricated metal	12.2	6.1	1.0	6.3	1.0	1.0	1.0
	(7.0)	(9.2)	(12.4)	(2.2)	(2.1)	(3.9)	(-0.5)
Share of feedstock (%)	59.0	58.5	58.4	57.1	58.9	56.6	56.3

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

### ► Industrial energy consumption & production index



## 12. Transport

- **Transport energy use fell by 15.2% year-on-year in June, driven by a sharp drop in the road transport sector, although it grew in the aviation sector.**
  - Energy use plunged by 19.2% year-on-year in the road transport sector, because stockpiling demand decreased after the 7%p additional fuel tax cut was announced.
  - Energy use grew by 13.2% year-on-year in the aviation sector, as the international flights resumed and the number of flights increased.
  - Energy use increased by 10.7% year-on-year in the navigation sector, as diesel consumption that has been rapidly growing posted a year-on-year growth of 54.4%.

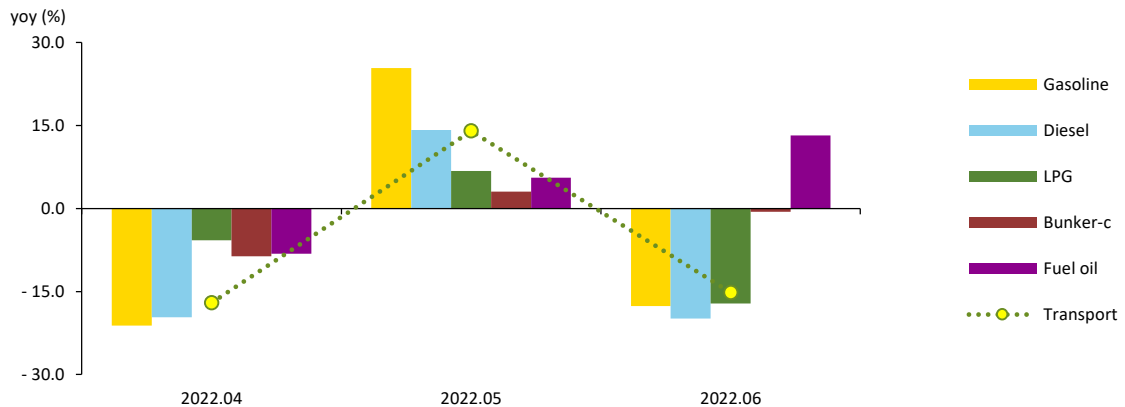
### ► The growth rate of petroleum consumption in the transport sector

	2021p	2022p		2022p			
		M1~6	M6	M1~6	M4	M5	M6
<b>Transport (Mtoe)</b>	<b>40.03</b>	<b>19.63</b>	<b>3.54</b>	<b>19.22</b>	<b>2.83</b>	<b>3.90</b>	<b>3.00</b>
	(1.5)	(1.4)	(5.2)	(-2.1)	(-17.0)	(14.0)	(-15.2)
Road	34.09	16.71	3.06	15.96	2.35	3.31	2.47
	(1.9)	(2.9)	(6.6)	(-4.5)	(-19.7)	(14.8)	(-19.2)
Navigation	3.18	1.58	0.24	1.78	0.28	0.33	0.27
	(2.3)	(0.3)	(-12.4)	(12.4)	(4.6)	(13.0)	(10.7)
Aviation	2.46	1.19	0.21	1.34	0.18	0.24	0.24
	(-3.9)	(-13.2)	(9.6)	(12.2)	(-8.1)	(5.6)	(13.2)
Rail	0.31	0.15	0.03	0.15	0.02	0.02	0.02
	(-4.5)	(-5.9)	(5.9)	(-2.7)	(-6.2)	(0.4)	(-11.0)

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

Source: Monthly energy statistics

### ► The growth rates of energy & major petroleum product consumption in the transport sector



## 13. Buildings

□ **Energy use in buildings remained almost flat in June on a year-on-year basis, as decreased energy use in the residential sector was offset by increased energy use in the commercial sector.**

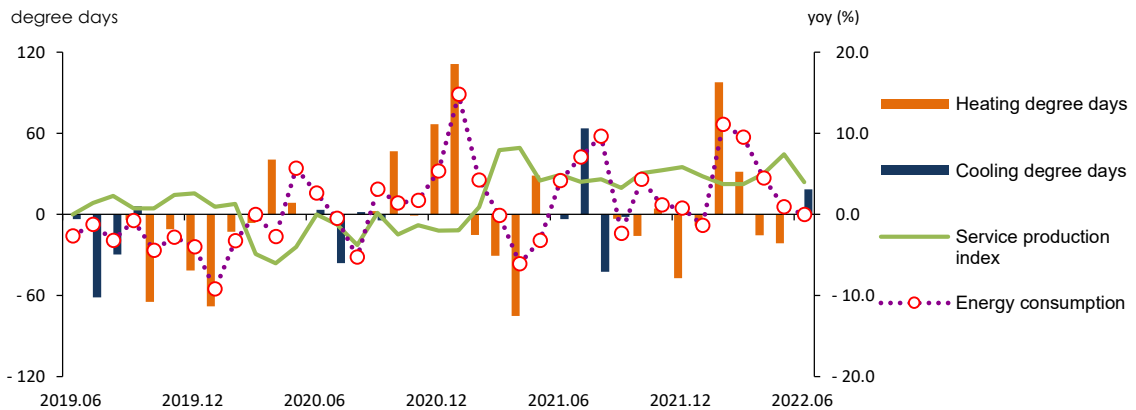
- Energy use dropped by 7.6% year-on-year in the residential sector, as people spent less time at home amid a slowdown in the spread of Covid-19.
- Energy use grew by 6.9% year-on-year in the commercial sector, which was affected by the recovery of the service industry, partially offsetting the decline in buildings' energy use.

### ► Energy consumption in buildings

	2021p	2022p		2022p			
		M1~6	M6	M1~6	M4	M5	M6
<b>Buildings (Mtoe)</b>	<b>46.6</b>	<b>25.1</b>	<b>2.8</b>	<b>26.2</b>	<b>3.6</b>	<b>2.9</b>	<b>2.8</b>
	(3.2)	(3.4)	(4.2)	(4.4)	(4.5)	(0.9)	(-0.0)
Residential	23.7	13.6	1.1	14.0	1.8	1.3	1.0
	(2.4)	(3.8)	(5.6)	(3.0)	(3.6)	(-7.4)	(-7.6)
Commercial	17.3	8.7	1.3	9.4	1.3	1.3	1.3
	(3.6)	(2.1)	(3.4)	(7.9)	(6.2)	(9.0)	(6.7)
Public:others	5.6	2.8	0.4	2.8	0.4	0.4	0.4
	(5.8)	(5.8)	(2.9)	(0.1)	(3.2)	(5.7)	(-0.4)
Heating degree days	2 404.7	1 492.3	-	1 577.8	130.8	36.1	1.4
	(-1.8)	(1.3)	-	(5.7)	(-10.5)	(-37.3)	-
Cooling degree days	101.3	-	-	18.5	-	-	18.5
	(18.9)	(-100.0)	-	-	-	-	-
Service production index (2015=100)	110.9	108.4	113.5	113.6	115.0	117.6	118.0
	( 4.3)	( 4.0)	-	( 4.8)	-	-	-

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

### ► Energy consumption in buildings & major indicators



## 14. Transformation

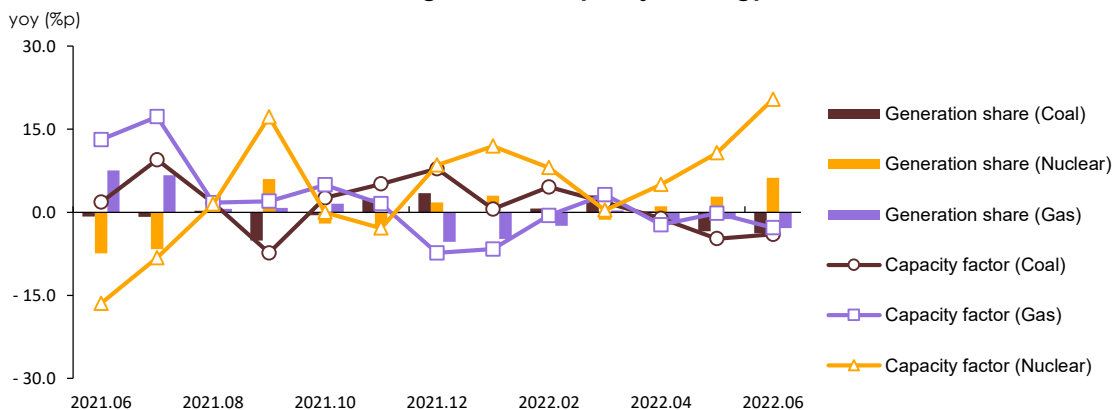
- The total power generation and fuel input increased by 3.9% and 5.8% respectively in June on a year-on-year basis, driven by strong growth in electricity consumption.
  - Nuclear and renewable & other energy generation surged from the same month last year, while coal and gas-fired generation decreased.
  - The nuclear capacity factor and generation rose by 20.4%p and 30.2% year-on-year, as the number of reactors that were under planned preventive maintenance dropped by three, while the installed capacity remained the same compared to the same month last year.

### ► Electricity Generation in the power generation sector

	2021p			2022p			
		M1~6	M6	M1~6	M4	M5	M6
<b>Electricity Generation (TWh)</b>	<b>576.7</b>	<b>279.0</b>	<b>45.8</b>	<b>291.6</b>	<b>44.9</b>	<b>46.2</b>	<b>47.6</b>
	(4.5)	(3.3)	(4.5)	(4.5)	(2.8)	(4.2)	(3.9)
Coal	198.0	89.5	16.7	90.7	13.3	13.6	15.5
	(0.8)	(-4.9)	(2.2)	(1.3)	(3.3)	(-6.6)	(-6.8)
Oil	2.4	1.0	0.2	1.2	0.1	0.1	0.1
	(4.4)	(22.5)	(85.1)	(16.5)	(-9.6)	(-27.2)	(-29.8)
Gas	168.3	85.7	13.3	83.0	12.8	12.2	12.5
	(15.4)	(23.5)	(41.1)	(-3.2)	(-4.9)	(-0.3)	(-6.2)
Nuclear	158.0	77.2	11.3	86.7	13.4	14.6	14.7
	(-1.4)	(-5.9)	(-19.6)	(12.3)	(6.7)	(14.5)	(30.2)
Hydro/other renewables	50.1	25.5	4.3	30.0	5.3	5.8	4.7
	(5.5)	(8.1)	(9.8)	(17.6)	(13.6)	(22.7)	(9.1)
Baseload	356.0	166.7	28.0	177.4	26.7	28.2	30.3
	(-0.2)	(-5.4)	(-7.9)	(6.4)	(5.0)	(3.3)	(8.2)

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

### ► Power generation by major energy sources



## <Appendix> Major indicators & statistics of energy supply and demand

### Major Statistics & Indicators of the Economy

	2020	2021					2022			
			M1~6	M4	M5	M6	M1~6	M4	M5	M6
GDP (trillion won)	1 839.5 (-0.7)	1 915.8 (4.1)	932.0 (4.2)	- (-)	- (-)	478.3 (6.2)	959.5 (3.0)	- (-)	- (-)	492.2 (2.9)
Private consumption	851.0 (-4.8)	882.5 (3.7)	432.7 (2.6)	- (-)	- (-)	217.0 (-)	450.6 (4.1)	- (-)	- (-)	225.6 (3.9)
Facilities investment	166.6 (7.2)	181.6 (9.0)	93.3 (14.1)	- (-)	- (-)	48.3 (-)	87.3 (-6.4)	- (-)	- (-)	45.1 (-6.6)
Construction investment	269.3 (1.5)	265.0 (-1.6)	127.4 (-1.7)	- (-)	- (-)	73.0 (-1.2)	121.7 (-4.5)	- (-)	- (-)	70.3 (-3.7)
Consumer price index (2015=100)	105.4	102.5	101.8	102.0	102.1	102.1	106.4	106.9	107.6	108.2
USD to KRW exchange rate (won)	1 180.3	1 144.0	1 117.4	1 119.4	1 123.3	1 121.3	1 232.2	1 232.3	1 269.9	1 277.4
Benchmark rate (%)	0.7	0.6	0.5	0.5	0.5	0.5	1.5	1.5	1.8	1.8
Coincident composite index (2015=100)	112.5	116.9	115.7	116.3	116.6	116.9	120.9	120.7	121.0	121.4
Mining & manufacturing production index (2015=100)	106.4	114.3	112.1	114.0	111.5	117.2	117.0	118.1	119.9	118.7
Manufacturing operation ratio index (2015=100)	95.3	99.8	98.3	100.4	98.6	102.9	102.0	103.6	105.1	103.1
Average temperature	13.0	13.3	10.4	13.2	16.6	21.7	10.2	13.8	18.0	22.4
- year-on-year difference	-0.4	0.3	-0.3	2.5	-0.9	-1.0	-0.3	0.6	1.4	0.6
Heating degree days	2 448.0 (3.3)	2 404.7 (-1.8)	1 492.3 (1.3)	146.2 (-33.9)	57.6 (99.3)	- (-)	1 577.8 (5.7)	130.8 (-10.5)	36.1 (-37.3)	1.4 (-)
Cooling degree days	85.2 (-29.2)	101.3 (18.9)	- (-100.0)	- (-)	- (-)	- (-100.0)	18.5 (-)	- (-)	- (-)	18.5 (-)
Energy intensity	0.16 (-3.1)	0.16 (0.4)	0.16 (-0.8)	- (-)	- (-)	0.15 (-1.9)	0.16 (-0.6)	- (-)	- (-)	0.15 (-2.8)
Per capita consumption										
oil (bbl)	16.8 (-6.0)	18.0 (7.1)	8.8 (2.9)	1.5 (10.6)	1.5 (-2.2)	1.5 (8.3)	8.9 (2.1)	1.4 (-2.9)	1.5 (4.4)	1.3 (-10.8)
Electricity (MWh)	9.8 (-2.3)	10.3 (4.9)	5.1 (4.0)	0.8 (3.7)	0.8 (6.7)	0.8 (5.9)	5.3 (4.2)	0.8 (4.7)	0.8 (3.6)	0.8 (2.6)
City gas (1 000 m <sup>3</sup> )	0.4 (-3.7)	0.5 (5.3)	0.3 (7.3)	0.0 (-4.4)	0.0 (8.7)	0.0 (12.1)	0.3 (4.1)	0.0 (9.0)	0.0 (-0.7)	0.0 (3.0)
Total energy (toe)	5.6 (-3.8)	5.9 (4.7)	2.9 (3.4)	0.5 (4.6)	0.5 (3.6)	0.5 (5.0)	3.0 (2.5)	0.5 (-1.4)	0.5 (3.6)	0.5 (-1.5)

Note: Figures are based on the real price of 2010, p means provisional, ( ) is year-on-year growth rates (%)  
Source: BOK Economic statistics system, Korea Statistical Information Service, Monthly Energy Statistics

## The Index of Production Ratio & Output by Sectors

(2015=100)

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Note: p means provisional

Source: Monthly Energy Statistics, Korea Petrochemical Industry Association



## International Energy Prices

	2020	2021					2022			
			M1~6	M4	M5	M6	M1~6	M4	M5	M6
Crude oil (USD/bbl)										
WTI	39.4 (-30.9)	67.9 (72.4)	62.0 (67.4)	61.7 (269.5)	65.2 (128.4)	71.4 (86.2)	101.4 (63.6)	101.6 (64.7)	109.3 (67.7)	114.3 (60.3)
Dubai	42.2 (-33.6)	69.3 (64.1)	63.5 (56.2)	62.9 (208.6)	66.3 (117.7)	71.6 (75.5)	101.8 (60.4)	102.8 (63.4)	108.2 (63.0)	113.3 (58.2)
Brent	43.2 (-32.7)	70.8 (63.8)	65.1 (54.5)	65.3 (145.3)	68.3 (110.8)	73.4 (80.1)	104.6 (60.8)	105.9 (62.1)	112.0 (63.9)	117.5 (60.1)
Unit value of import (C&F)	44.8 (-31.7)	70.2 (56.9)	63.4 (37.7)	65.1 (91.2)	67.5 (158.0)	70.6 (136.7)	101.5 (60.2)	110.2 (69.2)	109.9 (62.8)	116.5 (65.0)
LNG										
TTF (USD/MMBTU)	3.2 (-32.5)	16.1 (396.9)	7.7 (212.3)	7.2 (239.0)	8.9 (465.9)	10.3 (486.8)	32.1 (319.6)	32.2 (348.5)	29.2 (227.3)	33.5 (225.6)
JKM (USD/MMBTU)	4.2 (-25.4)	17.8 (324.9)	9.5 (219.3)	7.6 (204.3)	9.6 (364.1)	11.5 (441.0)	29.2 (206.4)	30.5 (299.7)	23.0 (140.5)	28.9 (151.0)
Import price(Japan) (USD/MMBTU)	8.3 (-21.3)	10.8 (29.5)	8.9 (-9.3)	8.3 (-17.3)	8.9 (-11.5)	9.6 (7.2)	15.9 (77.8)	16.3 (96.8)	16.7 (87.1)	15.5 (61.5)
Unit value of import (USD/ton, CIF)	390.2 (-22.8)	550.7 (41.2)	439.7 (-4.8)	385.4 (-19.5)	408.1 (-13.0)	460.9 (3.9)	863.2 (96.3)	694.9 (80.3)	723.3 (77.2)	762.1 (65.4)
Bituminous coal (USD/ton)										
From Australia	60.3 (-22.8)	136.0 (125.8)	96.9 (57.2)	93.9 (54.4)	100.4 (94.4)	125.3 (133.2)	313.9 (223.8)	306.6 (226.6)	390.4 (288.7)	395.0 (215.3)
Unit value of import (CIF)	77.7 (-22.9)	115.1 (48.1)	88.5 (4.0)	91.4 (2.1)	94.5 (13.2)	98.0 (29.9)	229.2 (159.0)	253.4 (177.2)	266.9 (182.5)	259.1 (164.4)
Petroleum product (USD/bbl)										
Gasoline	46.7 (-35.7)	80.3 (72.2)	72.0 (59.1)	74.0 (260.7)	76.2 (127.7)	80.4 (77.3)	128.2 (78.0)	127.0 (71.5)	147.0 (92.9)	155.2 (93.2)
Kerosene	44.7 (-42.1)	75.1 (67.9)	67.4 (50.3)	66.8 (214.0)	71.7 (148.3)	75.9 (84.3)	129.5 (92.1)	134.4 (101.4)	143.0 (99.3)	164.3 (116.4)
Diesel	49.4 (-36.8)	77.6 (57.2)	69.9 (38.8)	68.9 (119.2)	73.9 (104.9)	78.8 (69.1)	138.5 (98.2)	148.8 (116.1)	153.5 (107.6)	176.8 (124.3)
Bunker-C	39.2 (-31.9)	64.4 (64.3)	58.9 (62.9)	59.0 (153.0)	59.7 (124.0)	64.7 (75.6)	96.1 (63.2)	111.1 (88.3)	104.5 (74.9)	99.1 (53.1)
Propane	397.1 (-8.6)	647.9 (63.2)	560.8 (39.1)	560.0 (143.5)	495.0 (45.6)	530.0 (51.4)	825.0 (47.1)	940.0 (67.9)	850.0 (71.7)	750.0 (41.5)
Butane	403.8 (-8.6)	629.6 (55.9)	540.0 (28.3)	530.0 (120.8)	475.0 (39.7)	525.0 (59.1)	829.2 (53.5)	960.0 (81.1)	860.0 (81.1)	750.0 (42.9)
Naphtha	40.5 (-28.9)	70.6 (74.6)	63.4 (68.3)	62.2 (259.2)	65.7 (149.6)	70.5 (80.9)	94.3 (48.8)	96.6 (55.3)	94.7 (44.2)	84.3 (19.6)

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, World Bank, Monthly energy statistics, CME Group, Korea International Trade Association

## Domestic Energy Prices

	2020	2021					2022			
			M1~6	M4	M5	M6	M1~6	M4	M5	M6
<b>Petroleum product</b>										
Gasoline (won/liter)	1 381.6 (-6.1)	1 590.5 (15.1)	1 511.9 (6.9)	1 534.5 (15.9)	1 541.5 (22.8)	1 577.3 (19.2)	1 886.0 (24.7)	1 976.5 (28.8)	1 967.1 (27.6)	2 084.0 (32.1)
Diesel (won/liter)	1 189.8 (-11.2)	1 391.3 (16.9)	1 310.7 (6.6)	1 332.7 (17.7)	1 338.8 (25.6)	1 374.4 (21.9)	1 796.1 (37.0)	1 906.4 (43.0)	1 964.3 (46.7)	2 089.0 (52.0)
Bunker-C (won/liter)	573.6 (-22.9)	731.7 (27.6)	665.7 (9.2)	730.1 (36.0)	706.4 (56.5)	706.4 (52.6)	1 060.6 (59.3)	1 191.7 (63.2)	1 190.4 (68.5)	1 229.3 (74.0)
Propane (won/kg)	1 850.7 (-1.0)	2 092.6 (13.1)	1 985.7 (5.8)	2 032.9 (7.8)	2 031.6 (15.8)	1 999.6 (11.4)	2 475.9 (24.7)	2 552.2 (25.5)	2 558.2 (25.9)	2 558.8 (28.0)
Butane (won/liter)	791.1 (-1.9)	931.9 (17.8)	870.1 (7.4)	899.2 (9.9)	899.4 (24.1)	878.5 (17.2)	1 106.2 (27.1)	1 163.2 (29.3)	1 134.6 (26.2)	1 133.7 (29.1)
<b>City gas(won/MJ)</b>										
Residential	15.1 (-3.6)	14.2 (-5.7)	14.2 (-10.7)	14.2 (-10.7)	14.2 (-10.7)	14.2 (-10.7)	14.8 (4.4)	14.7 (3.0)	15.9 (11.6)	15.9 (11.6)
General(1)	14.9 (-4.7)	13.9 (-6.5)	13.9 (-12.3)	13.8 (-12.3)	13.8 (-12.3)	13.8 (-12.2)	14.6 (4.8)	14.3 (3.1)	15.5 (12.1)	15.5 (12.1)
Commercial	15.1 (-6.4)	17.2 (14.2)	15.2 (-7.6)	16.1 (-2.4)	15.0 (-8.9)	15.6 (-5.5)	24.5 (61.1)	26.5 (64.7)	22.7 (51.3)	22.7 (46.2)
Industry	12.6 (-8.4)	14.4 (14.2)	12.7 (-11.1)	13.3 (-4.8)	11.8 (-15.5)	12.3 (-11.4)	21.8 (72.6)	23.3 (75.1)	19.7 (67.0)	19.7 (60.0)
<b>Heat(won/Mcal)</b>										
Residential	66.2 (0.7)	65.2 (-1.4)	65.2 (-2.8)	65.2 (-2.8)	65.2 (-2.8)	65.2 (-2.8)	66.1 (1.3)	67.0 (2.7)	67.0 (2.7)	67.0 (2.7)
Commercial	85.9 (0.7)	84.7 (-1.4)	84.7 (-2.8)	84.7 (-2.8)	84.7 (-2.8)	84.7 (-2.8)	85.8 (1.3)	87.0 (2.7)	87.0 (2.7)	87.0 (2.7)
Public	75.1 (0.7)	74.0 (-1.4)	74.0 (-2.9)	74.0 (-2.9)	74.0 (-2.9)	74.0 (-2.9)	75.0 (1.3)	76.0 (2.7)	76.0 (2.7)	76.0 (2.7)
<b>Electricity(won/kWh)</b>										
Residential	147.3 -	142.3 (-3.4)	142.3 (-3.4)	142.3 (-3.4)	142.3 (-3.4)	142.3 (-3.4)	144.8 (1.7)	147.2 (3.4)	147.2 (3.4)	147.2 (3.4)
General	84.4 -	79.4 (-5.9)	76.0 (-6.2)	60.2 (-7.7)	60.2 (-7.7)	100.7 (-4.7)	78.4 (3.2)	65.1 (8.1)	65.1 (8.1)	105.6 (4.9)
Industry	96.0 -	91.0 (-5.2)	88.5 (-5.3)	73.5 (-6.4)	73.5 (-6.4)	103.5 (-4.6)	91.0 (2.8)	78.4 (6.7)	78.4 (6.7)	108.4 (4.7)

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

2.Electricity prices are based on Residential(High-voltage, 201~400kWh), General((A) 1, Low-voltage), Industry((B), High-voltageB, option II mid-load)

Source: www.petronet.co.kr, www.seoulgas.co.kr, cyber.kepco.co.kr

## Total Primary Energy Supply (TPES)

	2020	2021p					2022p			
			M1~6	M4	M5	M6	M1~6	M4	M5	M6
Coal (Mton)	116.6 (-12.4)	116.8 (0.2)	54.9 (-1.9)	8.3 (-6.3)	9.1 (5.7)	9.5 (-1.0)	53.9 (-1.7)	7.9 (-5.1)	8.9 (-2.6)	9.5 (0.6)
- Coking coal excluded	82.8 (-15.6)	81.5 (-1.6)	37.3 (-5.9)	5.5 (-13.4)	6.1 (0.8)	6.7 (-3.8)	37.7 (1.1)	5.3 (-4.0)	6.1 (0.2)	6.8 (2.4)
Oil (Mbbbl)	872.4 (-5.9)	932.4 (6.9)	452.9 (2.7)	75.7 (10.4)	76.1 (-2.4)	76.9 (8.1)	461.4 (1.9)	73.3 (-3.1)	79.3 (4.2)	68.4 (-11.0)
- Non-energy oil excluded	423.6 (-6.2)	429.6 (1.4)	212.2 (1.2)	34.3 (5.1)	35.8 (-5.8)	36.9 (9.4)	216.9 (2.2)	31.1 (-9.3)	39.7 (10.9)	31.4 (-15.0)
LNG (Mton)	42.1 (2.7)	45.8 (8.9)	24.1 (13.7)	3.4 (13.8)	3.1 (32.9)	3.1 (25.2)	24.2 (0.3)	3.4 (-1.3)	3.0 (-1.5)	2.9 (-3.9)
Hydro (TWh)	7.1 (14.4)	6.7 (-5.7)	3.4 (6.3)	0.6 (8.8)	0.6 (13.3)	0.7 (33.9)	3.1 (-7.5)	0.5 (-15.0)	0.5 (-15.5)	0.6 (-19.0)
Nuclear (TWh)	160.2 (9.8)	158.0 (-1.4)	77.2 (-5.9)	12.6 (-8.3)	12.8 (-16.4)	11.3 (-19.6)	86.7 (12.3)	13.4 (6.7)	14.6 (14.5)	14.7 (30.2)
Others (Mtoe)	19.0 (7.3)	20.0 (5.6)	10.1 (8.5)	1.8 (4.5)	1.8 (17.4)	1.7 (10.9)	11.4 (12.8)	2.0 (10.0)	2.1 (14.2)	1.8 (8.5)
<b>TPES (Mtoe)</b>	<b>292.1</b> (-3.6)	<b>305.4</b> (4.6)	<b>150.2</b> (3.2)	<b>23.9</b> (4.4)	<b>24.0</b> (3.4)	<b>23.8</b> (4.8)	<b>153.6</b> (2.3)	<b>23.5</b> (-1.6)	<b>24.8</b> (3.3)	<b>23.4</b> (-1.8)
- Non-energy oil excluded	236.1 (-3.2)	242.4 (2.7)	120.1 (2.9)	18.7 (1.8)	18.9 (4.1)	18.8 (4.1)	123.1 (2.5)	18.2 (-2.4)	19.8 (4.7)	18.8 (-0.2)
- Non-energy oil&coal excluded	212.5 (-3.2)	217.8 (2.5)	107.9 (2.4)	16.7 (0.8)	16.8 (2.7)	16.8 (3.8)	111.8 (3.7)	16.4 (-1.9)	17.9 (6.4)	16.9 (0.3)

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

## Share of TPES by Sources

(unit: %)

	2020	2021p					2022p			
			M1~6	M4	M5	M6	M1~6	M4	M5	M6
Coal	24.7	23.8	22.8	21.8	23.7	24.7	21.8	21.1	22.2	25.1
- Coking coal excluded	16.7	15.7	14.6	13.6	14.9	16.5	14.5	13.3	14.4	17.1
Oil	37.7	38.6	38.1	40.2	40.1	40.8	37.8	39.1	40.5	36.8
- non-energy oil excluded	18.6	18.0	18.1	18.5	19.1	19.7	17.9	16.7	20.5	17.0
LNG	18.8	19.6	21.0	18.8	16.7	16.8	20.6	18.9	15.9	16.4
Hydro	0.5	0.5	0.5	0.5	0.6	0.6	0.4	0.4	0.5	0.5
Nuclear	11.7	11.0	10.9	11.2	11.3	10.1	12.0	12.1	12.6	13.4
Others	6.5	6.6	6.7	7.5	7.6	7.0	7.4	8.4	8.4	7.8
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)

	2020	2021p					2022p			
			M1~6	M4	M5	M6	M1~6	M4	M5	M6
Industry	138.0 (-3.5)	148.1 (7.3)	72.3 (4.8)	12.0 (8.5)	12.2 (8.2)	11.9 (8.1)	73.0 (0.9)	12.0 (-0.0)	12.1 (-0.8)	11.5 (-3.3)
Transport	39.4 (-8.2)	40.0 (1.5)	19.6 (1.4)	3.4 (14.2)	3.4 (-7.0)	3.5 (5.2)	19.2 (-2.1)	2.8 (-17.0)	3.9 (14.0)	3.0 (-15.2)
Residential	23.2 (2.6)	23.7 (2.4)	13.6 (3.8)	1.8 (-12.6)	1.4 (-7.5)	1.1 (5.6)	14.0 (3.0)	1.8 (3.6)	1.3 (-7.4)	1.0 (-7.6)
commercial	16.7 (-4.3)	17.3 (3.6)	8.7 (2.1)	1.3 (0.7)	1.2 (-0.3)	1.3 (3.4)	9.4 (7.9)	1.3 (6.2)	1.3 (9.0)	1.3 (6.7)
Public	5.3 (-2.6)	5.6 (5.8)	2.8 (5.8)	0.4 (5.4)	0.4 (4.5)	0.4 (2.9)	2.8 (0.1)	0.4 (3.2)	0.4 (5.7)	0.4 (-0.4)
<b>TFC</b>	<b>222.6</b> (-3.8)	<b>234.7</b> (5.5)	<b>117.1</b> (3.9)	<b>18.8</b> (6.5)	<b>18.5</b> (3.2)	<b>18.3</b> (6.9)	<b>118.4</b> (1.2)	<b>18.4</b> (-2.3)	<b>18.9</b> (2.2)	<b>17.3</b> (-5.1)
Coal (Mton)	45.8 (-4.9)	47.8 (4.4)	23.4 (6.4)	3.9 (6.2)	4.1 (19.1)	3.7 (3.4)	22.3 (-4.9)	3.3 (-13.4)	4.0 (-0.8)	3.9 (5.9)
Oil (Mbbbl)	865.8 (-5.7)	923.5 (6.7)	448.6 (2.4)	75.3 (10.4)	75.7 (-2.5)	76.3 (8.0)	455.0 (1.4)	72.7 (-3.5)	78.8 (4.1)	67.8 (-11.1)
Electricity (TWh)	509.3 (-2.2)	533.4 (4.7)	261.8 (3.8)	41.9 (3.5)	40.8 (6.6)	42.0 (5.7)	272.2 (4.0)	43.8 (4.4)	42.2 (3.3)	43.0 (2.3)
City gas (Bm³)	22.4 (-3.5)	23.6 (5.1)	13.6 (7.1)	1.8 (-4.6)	1.5 (8.5)	1.3 (11.9)	14.1 (3.8)	2.0 (8.8)	1.5 (-0.9)	1.3 (2.7)
Heat:others (1 000 toe)	12.3 (6.1)	12.5 (2.0)	6.5 (4.3)	1.0 (1.6)	0.9 (9.8)	0.9 (6.0)	6.8 (3.3)	1.0 (1.4)	0.9 (-1.5)	0.9 (0.1)

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

## Share of the Total Final Consumption by Sources

(unit: %)

	2020	2021p					2022p			
			M1~6	M4	M5	M6	M1~6	M4	M5	M6
Industry	62.0	63.1	61.7	63.7	65.8	65.4	61.6	65.2	63.9	66.6
Transport	17.7	17.1	16.8	18.1	18.4	19.4	16.2	15.3	20.6	17.3
Residential	10.4	10.1	11.7	9.3	7.3	6.0	11.9	9.9	6.6	5.9
Commercial	7.5	7.4	7.5	6.7	6.3	6.9	8.0	7.2	6.7	7.8
Public	2.4	2.4	2.4	2.2	2.1	2.3	2.3	2.3	2.2	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	13.7	13.6	13.3	13.6	14.6	13.6	12.5	12.3	13.9	14.8
Oil	49.1	49.7	48.4	50.6	51.6	52.9	48.3	49.4	52.6	49.3
Electricity	19.7	19.5	19.2	19.1	18.9	19.8	19.8	20.4	19.2	21.3
City gas	12.0	11.9	13.4	11.4	9.8	8.8	13.7	12.4	9.4	9.3
Heat:others	5.5	5.3	5.6	5.3	5.1	5.0	5.7	5.5	4.9	5.2

Note: p means provisional  
Source: Monthly energy statistics

## Statistics on Energy Production Facilities

	2018	2019	2021	2022			2022		
				M4	M5	M6	M4	M5	M6
Total capacity (GW)	119.1 (1.9)	125.3 (5.2)	134.0 (3.7)	128.4 (1.7)	129.6 (2.2)	131.1 (2.9)	133.9 (4.3)	134.1 (3.4)	134.2 (2.4)
Nuclear	21.9 (-3.0)	23.3 (6.4)	23.3 -	23.3 -	23.3 -	23.3 -	23.3 -	23.3 -	23.3 -
Bituminous coal	36.4 (0.7)	36.4 (0.1)	36.9 (1.3)	34.3 (-5.8)	35.4 (-2.9)	36.4 (-0.2)	36.3 (5.8)	36.3 (2.5)	36.3 (-0.4)
Gas	37.9 (-0.0)	39.6 (4.5)	41.2 (0.1)	41.2 -	41.2 (-0.0)	41.2 -	41.2 (0.1)	41.2 (0.1)	41.2 (0.1)
Refinery capacity (mil BPSD)	3.2 (3.2)	3.2 -	3.2 -	3.2 -	3.2 -	3.2 -	3.2 -	3.2 -	3.2 -

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

Source: The monthly report on major electric power statistics, Monthly energy statistics

## Statistics on Energy Consumption

	2018	2019	2021	2022			2022		
				M4	M5	M6	M4	M5	M6
The number of household demanding city gas (mil)	19.1 (3.1)	19.7 (2.8)	20.5 (2.0)	20.2 (2.5)	20.2 (2.4)	20.1 (1.8)	20.6 (1.8)	20.6 (1.8)	20.6 (2.3)
Registered cars (mil)	23.2 (3.0)	23.7 (2.0)	24.9 (2.2)	24.6 (2.9)	24.6 (2.8)	24.6 (2.6)	25.1 (2.3)	25.2 (2.4)	25.2 (2.3)
- gasoline	10.6 (2.5)	11.0 (3.1)	11.8 (3.1)	11.5 (4.0)	11.6 (3.8)	11.6 (3.5)	11.9 (2.8)	11.9 (2.8)	11.9 (2.7)
- diesel	9.9 (3.7)	10.0 (0.3)	9.9 (-1.2)	10.0 (0.2)	9.9 (-0.1)	9.9 (-0.3)	9.9 (-1.2)	9.8 (-1.0)	9.8 (-1.0)
- LPG	2.0 (-3.3)	2.0 (-1.5)	1.9 (-1.7)	2.0 (-1.8)	2.0 (-1.9)	2.0 (-2.0)	1.9 (-1.9)	1.9 (-1.9)	1.9 (-1.9)
- hybrid	0.4 (30.9)	0.5 (26.1)	0.9 (34.0)	0.7 (37.7)	0.7 (37.3)	0.8 (36.9)	1.0 (32.5)	1.0 (32.8)	1.0 (32.2)

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

Source: Monthly energy statistics