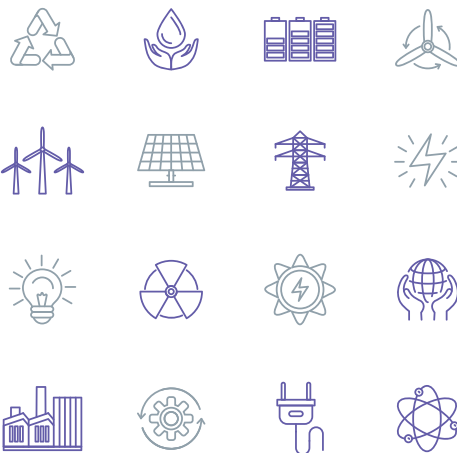


KEEI

MONTHLY KOREA ENERGY TRENDS



COAL -7.9%
PETROLEUM 0.4%
LNG 1.5%
NUCLEAR 0.3%
NEW & RENEWABLE 5.3%
FEBRUARY, 2021

This publication is derived from Energy Demand & Supply
Statistics and Energy Price Statistics issued until February
2021.



Table of Contents

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



1. The Economy and the Industry

- **Mining & manufacturing production index showed a year-on-year growth of 0.9% in February thanks to business recovery in the semiconductor and automobile sectors, despite the declined number of working days**
 - The total number of working days decreased by three on a year-on-year basis due to Lunar New Year holidays and last year's leap year effects, serving as a factor to slow down industrial production
 - Even in the face of the decreased working days, the semiconductor production index grew by 19.9% year-on-year driven by a continuous increase in demand for semiconductor for PCs and servers as 'contact-free' work and online classes became common
 - Automobile production index also showed a year-on-year increase of 21.9% thanks to a base effect, caused by the decrease on the same month last year, as well as increased export volume and a continuous rise in sales based on newly-launched car models
 - Meanwhile, the production indexes for base chemical materials, petroleum refining and steel industries declined 4.4%, 6.0% and 6.5% year-on-year, respectively, due to sluggish business amidst COVID-19 pandemic and decreased working days
- **Service production index increased by 0.7% year-on-year, showing signs of recovery mainly in wholesale & retail sectors as Social Distancing regulations have been loosened**

► Major economic and industrial indicators

	2019	2020p				2021p	
		M1	M2		M12	M1	M2
GDP (trillion won)	1 849.0	-	-	1 831.3	481.5	-	-
	(2.0)	-	-	(-1.0)	(-1.2)	-	-
Total export (\$billion, customs clearance basis)	539.9	43.1	40.9	512.5	51.3	48.0	44.7
	(-10.7)	(-6.6)	(3.6)	(-5.1)	(12.4)	(11.4)	(9.3)
Industrial production index (2015=100)	106.7	102.2	99.7	106.3	118.1	110.2	100.6
	(0.3)	(-3.3)	(11.0)	(-0.3)	(2.6)	(7.8)	(0.9)
Semi-conductors	188.0	203.9	204.2	230.6	272.6	244.7	244.8
	(11.7)	(37.5)	(44.5)	(22.6)	(17.5)	(20.0)	(19.9)
Basic chemical products	108.9	114.7	108.0	102.3	105.1	108.1	103.3
	(-1.4)	(-0.2)	(4.8)	(-6.0)	(-8.5)	(-5.8)	(-4.4)
Iron&Steel	98.3	94.7	95.3	92.1	98.4	96.4	89.1
	(-2.2)	(-8.9)	(6.7)	(-6.3)	(0.3)	(1.8)	(-6.5)
Cars	93.4	77.3	65.2	84.1	89.9	91.1	79.5
	(-0.6)	(-21.2)	(-13.6)	(-9.9)	(-5.1)	(17.9)	(21.9)
Service production index (2015=100)	108.4	106.7	100.7	106.2	116.3	104.8	101.4
	(1.4)	(0.9)	(1.3)	(-2.0)	(-2.1)	(-1.8)	(0.7)
Wholesale & Retail	104.6	103.1	92.3	101.9	108.6	101.0	95.4
	(-0.4)	(-2.0)	(-0.2)	(-2.6)	(-1.0)	(-2.0)	(3.4)
Restaurant & Accommodation	97.5	94.7	73.9	79.5	66.4	59.9	65.5
	(-1.0)	(-2.2)	(-14.9)	(-18.5)	(-39.6)	(-36.7)	(-11.4)

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 Prices¹

Global Energy Prices

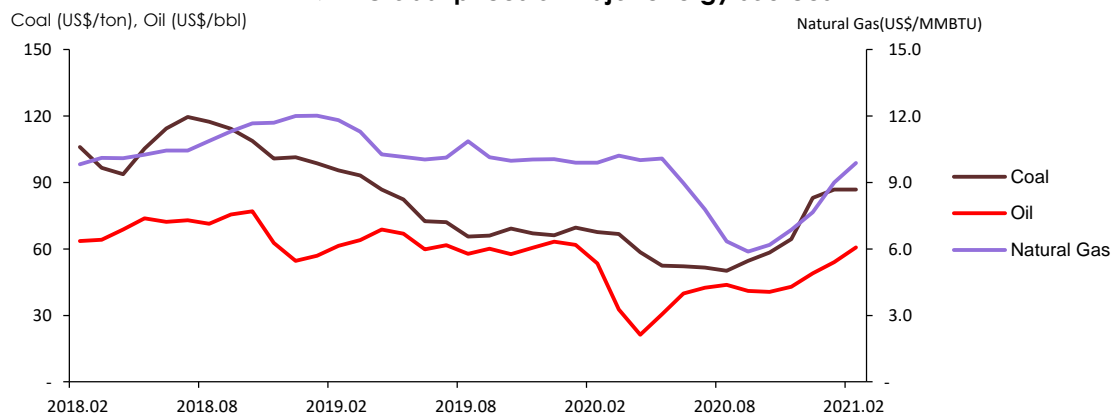
- **Global oil price rose by 12.3% in February from previous month due to the cold snap enveloping Northeastern area in the United States and the output cut-down policy adopted by OPEC+**
 - Starting from early February in Northeastern areas, the subzero weather and record heavy snow covered around 25 states, letting heating oil and power consumption in the United States skyrocket. On top of it, some states including Texas witnessed disruptions in crude oil production and petroleum product supply
 - In a meeting on February 3 Wednesday, the Joint Ministerial Monitoring Committee (JMMC) of OPEC+ decided to keep production cut at a large scale for February
 - International natural gas prices grew by 9.7% month-on-month to a level similar to that of a year earlier, driven by the increase in global oil prices and a rise in heating demand amidst record cold snap worldwide
 - Despite the increase in global oil prices, international coal prices stayed at last month's level as China imported less thermal coal

► Global energy prices

	2018	2019	2020				2021	
			M1	M2		M12	M1	M2
Crude oil (US\$/bbl)	68.6 (29.5)	61.6 (-10.2)	61.8 (8.6)	53.4 (-12.9)	41.6 (-32.4)	49.0 (-22.5)	54.1 (-12.5)	60.7 (13.7)
Natural gas (US\$/MMBTU)	10.7 (24.0)	10.6 (-1.1)	9.9 (-17.7)	9.9 (-16.2)	8.3 (-21.3)	7.7 (-23.8)	9.0 (-8.9)	9.9 (-0.2)
Coal (US\$/ton)	107.0 (20.9)	77.9 (-27.3)	69.7 (-29.3)	67.6 (-29.1)	60.8 (-21.9)	83.0 (25.5)	86.8 (24.6)	86.7 (28.2)

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, World Bank(Commodity Markets)

► Global prices of major energy sources



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

Domestic energy prices

- **Gasoline and diesel prices jumped in February by 1.5% and 1.7%, respectively, thanks to the continuous rise in global oil prices**
 - The average prices of gasoline and diesel at gas stations soared for three consecutive months as global oil prices have been on the significant rise. However, the growth in gas station prices was smaller than that in international oil prices
 - Bunker-C oil prices showed a month-on-month rise of 13.6% on the back of a recent increase in global oil prices. In terms of year-on-year difference, however, the prices continued to decrease posting a decline of 22.3% due to IMO 2020 environmental regulations
- **Propane and butane prices increased in February by 4.5% and 6.4% month-on-month, respectively, as LPG supply prices rose due to the increase in global prices in January**
 - Saudi Aramco's January international propane and butane prices increased by 22.2% and 15.2%, respectively, serving as a possible factor which could increase the domestic LPG supply prices by more than 100KRW/kg. However, LPG supply prices actually rose by 88KRW/kg, lower than the expected increase level

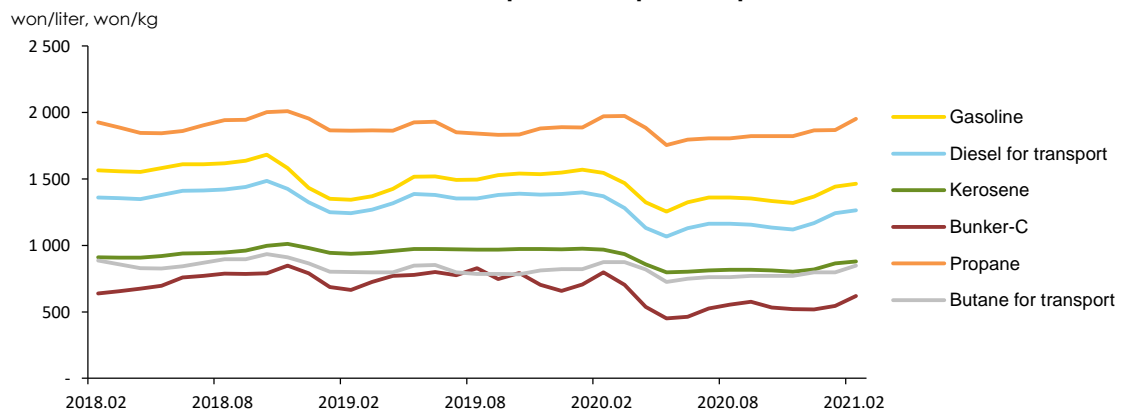
► Domestic petroleum product prices

	2018	2019	2020				2021	
			M1	M2		M12	M1	M2
Gasoline (won/liter)	1 581.4 (6.0)	1 472.6 (-6.9)	1 568.4 (16.1)	1 545.3 (15.0)	1 381.2 (-6.2)	1 367.8 (-11.7)	1 441.8 (-8.1)	1 463.2 (-5.3)
Diesel for transport (won/liter)	1 392.0 (8.5)	1 340.6 (-3.7)	1 398.4 (11.9)	1 369.9 (10.2)	1 189.5 (-11.3)	1 168.3 (-15.7)	1 242.4 (-11.2)	1 263.4 (-7.8)
Bunker-C (won/liter)	735.2 (18.7)	744.5 (1.3)	706.5 (3.0)	797.7 (19.8)	572.9 (-23.0)	518.9 (-21.1)	545.5 (-22.8)	619.6 (-22.3)
Propane (won/kg)	1 920.5 (4.7)	1 869.6 (-2.6)	1 887.6 (1.2)	1 971.5 (5.8)	1 850.3 (-1.0)	1 865.2 (-1.3)	1 868.1 (-1.0)	1 952.5 (-1.0)
Butane for transport (won/liter)	874.6 (5.8)	806.3 (-7.8)	820.8 (2.4)	874.5 (9.5)	790.8 (-1.9)	796.9 (-2.9)	797.2 (-2.9)	847.8 (-3.0)

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

► Domestic petroleum product prices



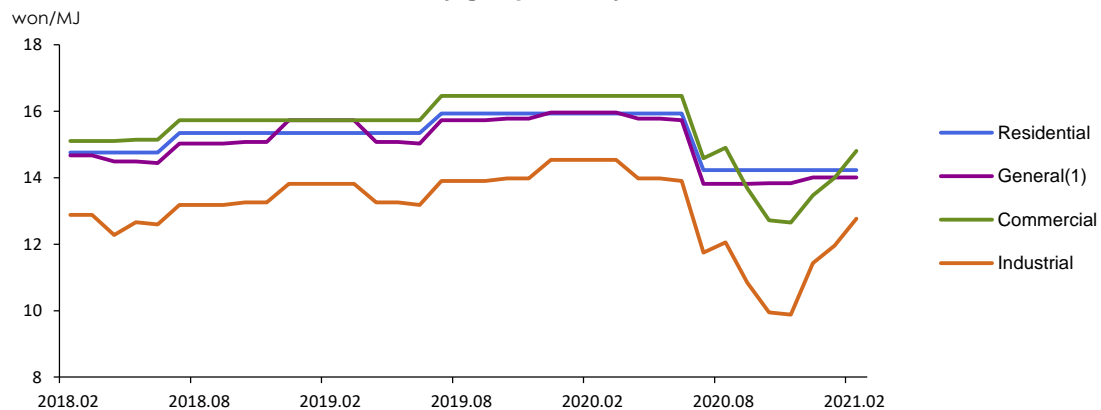
□ **City gas prices for commercial heating and industrial uses increased by 5.8% and 6.8% respectively in February, compared to the previous month**

- City gas prices for business heating and industrial uses, adjusted on a monthly basis under Fuel Adjustment Mechanism (FAM), increased for three consecutive months driven by the increase in international oil and LNG prices while the prices for households and general use were frozen at the level of the previous month

□ **February electricity rates stayed at the same level as last month, in which the electricity rates dropped for all uses with Fuel Adjustment Mechanism (FAM) being implemented**

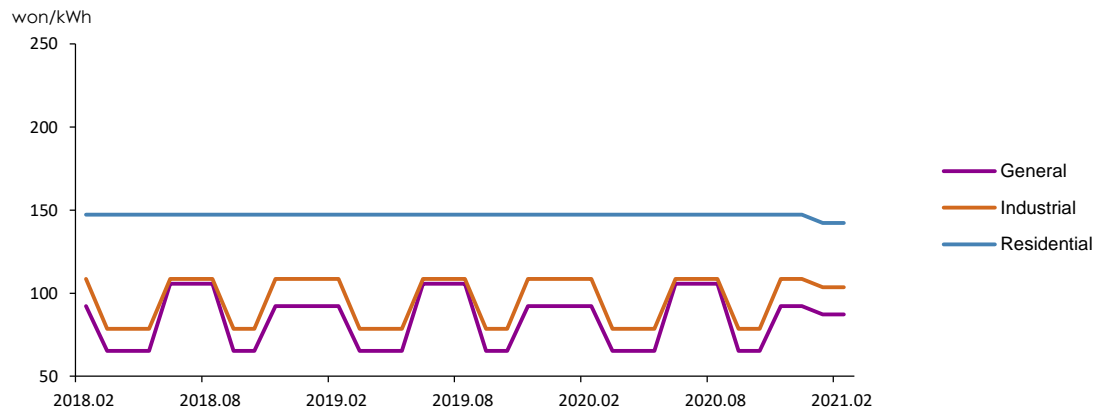
- With Fuel Adjustment Mechanism (FAM) starting from January 1, 2021, Climate Environment Cost of 5KRW/kWh was separated from the existing electricity price to form a new price category of Climate Environmental Price of 5.3KRW/kWh. The actual electricity prices fell by 2.7KRW/kWh from the previous month as Fuel Cost Adjustment rate was reduced by 3KRW/kWh
- As the electricity prices were reduced by 2.7KRW/kWh for each use, the prices for general, industrial and household uses decreased by 2.9%, 2.5% and 1.8% respectively from the previous month

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



Source: Seoulgas

► **Electricity prices by end-use sectors**



Source: KEPCO

3. Energy Supply

- **The total energy import volume in February dropped by 5.7% year-on-year as all energy imports decreased except for LNG**
 - In spite of a decline in import unit prices, the volume of crude oil imports showed a year-on-year decrease of 13.1% as crude oil input dropped by 10.6% with petroleum product production decreased
 - Petroleum product imports posted a year-on-year decrease as Bunker-C oil and naphtha imports declined by 29.5% and 8.1%, offsetting the impact of a 6.7% increase in LPG imports
 - The import volume of bituminous coal decreased by 5.9% year-on-year, posting a 14-month consecutive decrease as coal demand for power generation kept falling off
 - The import volume of LNG jumped by 9.3% year-on-year as the volume of base-load generation decreased and as a result, demand for gas power generation went up
- **Renewable and other energy production showed a year-on-year growth of 5.3% as Renewable Portfolio Standard mandatory ratio inched up by 1%p and power generation capacity expanded**

► Import and domestic production of energy

	2019	2020p				2021p	
		M1	M2		M12	M1	M2
Import volume							
Crude oil (Mbbbl)	1 071.9	92.7	86.3	980.3	84.4	76.9	75.0
	(-4.0)	(-0.4)	(-12.3)	(-8.6)	(-5.6)	(-17.1)	(-13.1)
Petroleum product (Mbbbl)	352.1	39.4	31.7	347.3	28.3	28.9	30.0
	(3.1)	(30.6)	(40.2)	(-1.4)	(-21.5)	(-26.7)	(-5.3)
Bituminous coal (Mton)	132.7	10.3	8.4	115.5	10.2	8.8	7.9
	(0.9)	(-11.5)	(-21.7)	(-13.0)	(-11.9)	(-15.0)	(-5.9)
Anthracite (Mton)	6.9	0.7	0.3	6.3	0.8	0.6	0.2
	(-16.4)	(21.4)	(-62.8)	(-8.7)	(32.2)	(-2.2)	(-21.2)
LNG (Mton)	40.7	4.1	4.7	40.0	4.3	4.4	5.2
	(-7.4)	(8.6)	(24.9)	(-1.8)	(-10.6)	(6.9)	(9.3)
Import volume (Mtoe)	349.2	31.4	28.8	325.4	29.0	27.8	27.2
	(-1.5)	(0.3)	(1.9)	(-6.8)	(-11.0)	(-11.5)	(-5.7)
Import value (billion US\$, CIF)	126.7	12.2	10.6	86.4	7.7	8.1	9.5
	(-13.2)	(8.4)	(-5.2)	(-31.8)	(-32.0)	(-33.2)	(-10.5)
Energy share of total import value (%)	25.2	28.5	28.6	18.4	17.2	18.4	22.5
Foreign energy dependence (%)*	93.5	94.3	93.7	93.1	93.9	94.0	93.5
Domestic production							
Hydropower (TWh)	6.2	0.5	0.5	7.1	0.5	0.5	0.5
	(-14.1)	(-1.1)	(12.1)	(14.4)	(-0.7)	(-4.0)	(-9.5)
Anthracite (Mton)	1.1	0.1	0.1	1.0	0.1	0.1	0.1
	(-9.7)	(-20.0)	(11.1)	(-6.0)	(-8.9)	(-3.8)	(-30.0)
Natural gas (Mton)	0.2	0.0	0.0	0.1	0.0	0.0	0.0
	(-15.2)	(-12.4)	(-9.7)	(-28.6)	(-38.1)	(-58.2)	(-69.7)
Renewable energy (Mtoe)	17.7	1.4	1.4	17.7	1.5	1.5	1.5
	(3.3)	(-8.8)	(4.1)	(0.0)	(2.6)	(10.8)	(5.3)

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”) in February decreased by 0.8% year-on-year as the growth in gas consumption slowed down and the coal consumption fell to post a decline

- In terms of petroleum consumption for industrial use, the decreasing trend in naphtha use became subdued while LPG consumption increased. In the transport sector, gasoline and diesel picked up as petroleum product consumption in the road transport sector showed signs of recovery. The building sector also spent more petroleum with a decrease in oil prices. As a result, total petroleum consumption posted a year-on-year increase of 0.4%
- Coal consumption declined by 7.9% on a year-on-year basis as coal use for power generation shrank fast with limitations on coal thermal power generation strengthened, dwarfing the effect of an increase in the steel industry amidst a recovery in electric steel production
- Gas consumption increased by 1.5% driven by city gas and gas use for power generation. City gas use jumped up thanks to a recovery in industrial production and gas rate drop, and gas consumption for electricity generation also climbed up as electricity consumption went up and coal-fired generation dwindled. However, the growth trend became mitigated significantly as electricity consumption increased at a slower rate than a month earlier

□ As energy consumption in the industrial sector rebounded to post an increase, following a recent decrease, Total Final Consumption (“TFC”) grew by 1.1% year-on-year

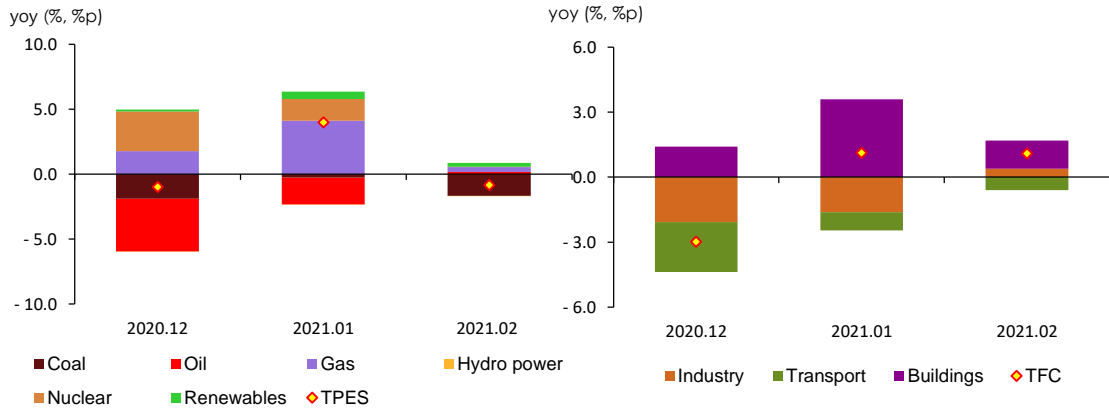
- The energy consumption in the iron & steel and fabricated metal industries grew up and the petrochemical sector’s energy use rebounded with expanded capacity. As a result, the total energy consumption in the industrial sector increased by 0.7% on a year-on-year basis in spite of less working days (-3 days) due to Lunar New Year holidays
- When it comes to the energy consumption in the transport sector, it continued decreasing mainly in the air transport sector with prolonged implementation of Social Distancing restrictions despite a decrease in oil prices. However, as the energy use in the road transport sector kept recovering, the decreasing trend in energy consumption in the overall transport industry became subdued for three consecutive months
- Despite the decreased number of heating degree days, the energy consumption in the building sector climbed up by 4.9% thanks to an increase in work time from home and a fall in energy rates

► Energy consumption

	2019	2020p				2021p	
		M1	M2		M12	M1	M2
TPES (Mtoe)	303.1	27.1	24.8	290.1	27.7	28.2	24.6
	(-1.5)	(-7.1)	(-1.7)	(-4.3)	(-1.0)	(4.0)	(-0.8)
- Non-energy oil&coal excluded	219.6	19.9	18.2	210.6	20.8	21.4	17.9
	(-1.5)	(-9.5)	(-2.2)	(-4.1)	(0.6)	(7.6)	(-1.6)
TFC (Mtoe)	231.4	21.3	19.5	222.0	21.0	21.6	19.7
	(-0.9)	(-5.1)	(-2.3)	(-4.0)	(-3.0)	(1.1)	(1.1)

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

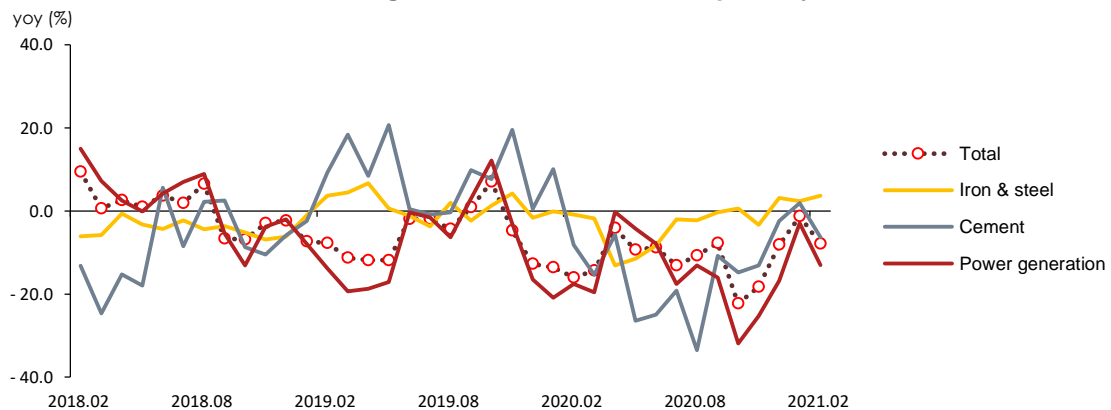
- **Coal consumption posted a year-on-year decrease of 7.9% driven by a dramatic fall in the power generation sector, offsetting the effect of an increase in the industrial sector**
 - Despite the decreased number of working days, industrial coal consumption rose by 1.6% year-on-year as the consumption of bituminous coal used as feedstock material went up
 - Coal consumption in the power generation sector declined by 13.0% year-on-year as the cut-down on coal thermal generation was strengthened in an effort to reduce fine dust emissions

► Coal consumption

	2019	2020p				2021p	
		M1	M2		M12	M1	M2
Coal (Mton)	133.0	10.7	9.3	116.5	10.0	10.5	8.5
	(-5.7)	(-13.6)	(-16.0)	(-12.4)	(-8.1)	(-1.3)	(-7.9)
Industry	47.6	4.0	3.4	45.3	4.3	4.1	3.4
	(-1.7)	(2.7)	(-13.3)	(-4.8)	(6.4)	(1.6)	(1.1)
-Coking-coal	35.0	2.9	2.7	33.8	3.0	3.0	2.8
	(1.0)	(-0.1)	(-0.9)	(-3.3)	(3.2)	(2.4)	(3.7)
Buildings	0.6	0.1	0.0	0.5	0.1	0.1	0.0
	(-29.3)	(-39.4)	(-16.1)	(-20.8)	(4.1)	(-5.2)	(-20.8)
Power generation	84.8	6.6	5.8	70.7	5.7	6.4	5.1
	(-7.6)	(-20.8)	(-17.5)	(-16.6)	(-16.8)	(-3.0)	(-13.0)

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

► The growth rate of coal consumption by use



6. Petroleum

- **Despite a decrease in petroleum use in the transport sector, the use picked up in the industrial and building sectors, driving total petroleum consumption to post a year-on-year increase of 0.4% in February**

- Petroleum use inched up by 0.6% year-on-year in the industrial sector, as existing NCC facilities resumed operation, while facilities were added and expanded.
- Petroleum consumption in the transport sector dropped by 3.0% year-on-year as the air transport industry suffered from a continuous low demand due to travel ban restrictions imposed by nations worldwide
- In spite of mild weather, the residential and commercial sectors showed 9.2% and 5.7% increases, respectively, in petroleum consumption due to more work time from home and decreased oil prices, making the total consumption in the building sector soar by 5.8% on a year-on-year basis

► Petroleum product consumption by end-use sectors

	2019	2020p				2021p	
		M1	M2		M12	M1	M2
Petroleum (Mbbl)	927.1	80.7	71.9	873.3	75.6	75.5	72.2
	(-0.5)	(-5.2)	(-2.1)	(-5.8)	(-11.1)	(-6.4)	(0.4)
Industry	566.2	51.3	44.6	543.0	45.7	45.6	44.9
	(0.4)	(3.1)	(0.8)	(-4.1)	(-12.0)	(-11.1)	(0.6)
-Naphtha	438.6	39.5	35.5	405.3	33.6	34.6	34.6
	(-2.8)	(-0.2)	(-0.1)	(-7.6)	(-12.5)	(-12.5)	(-2.5)
Transport	303.2	22.7	21.9	273.9	22.8	21.3	21.2
	(0.3)	(-16.1)	(-5.8)	(-9.6)	(-13.8)	(-6.1)	(-3.0)
Buildings	49.1	5.9	4.9	50.1	6.1	7.1	5.2
	(-8.6)	(-17.8)	(-3.7)	(2.1)	(8.5)	(19.5)	(5.8)
Power generation	8.6	0.8	0.4	6.2	0.9	1.6	0.9
	(-26.9)	(-32.8)	(-41.8)	(-27.7)	(-8.1)	(104.5)	(93.0)

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

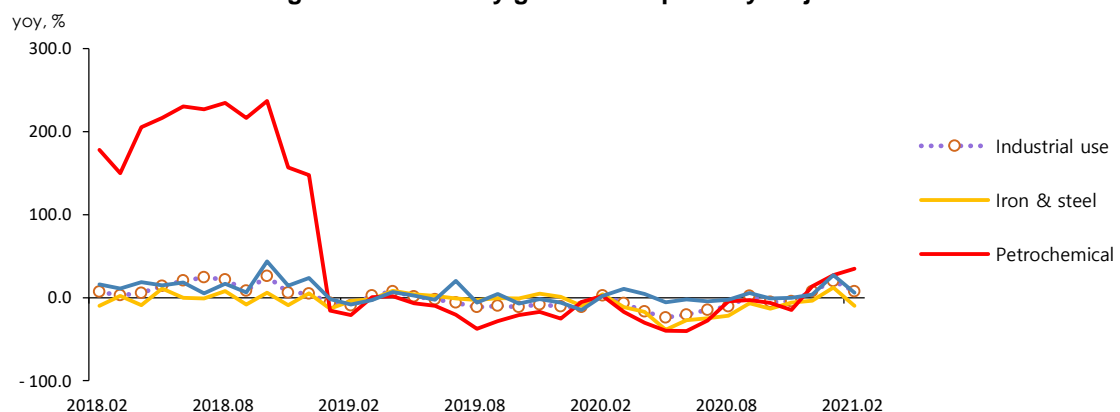
- **Natural gas consumption grew by 1.5% in February on a year-on-year basis, driven by increased consumption for power generation and city gas uses**
 - Gas consumption for power generation increased by 3.5% from the same month last year, reflecting an increase in electricity consumption (1.5%) and a fall in coal power generation (-11.0%)
- **Final consumption of city gas went up by 4.0% year-on-year thanks to an increase in the industrial and building sectors**
 - Industrial city gas use went up by 0.8% year-on-year, because the fabricated metal and petrochemical industries grew fast driven by facility expansion by Yecheon NCC while the iron & steel sector suffered a decline with sluggish production mainly in the steel material manufacturing industry
 - City gas use in the building sector rose by 6.3% year-on-year as gas use in the public and residential sectors increased due to more work time from home and city gas price reduction

► Natural gas and city gas consumption

	2019	2020p				2021p	
		M1	M2		M12	M1	M2
LNG (Mton)	41.0	4.9	4.4	41.4	5.4	5.8	4.5
	(-3.1)	(-2.4)	(7.5)	(1.1)	(7.6)	(17.4)	(1.5)
Power generation	17.9	1.9	1.7	18.6	2.1	2.2	1.8
	(-3.0)	(9.2)	(20.3)	(3.6)	(4.1)	(12.7)	(3.5)
City gas production	21.0	2.7	2.5	21.0	3.0	3.3	2.5
	(-1.5)	(-8.5)	(1.1)	(-0.2)	(10.4)	(20.3)	(0.3)
City gas (bm³)	26.1	3.4	3.1	26.0	3.4	3.9	3.2
	(-0.6)	(-7.1)	(-0.2)	(-0.5)	(8.4)	(16.4)	(4.0)
Industry	11.1	1.0	1.0	11.1	1.2	1.2	1.0
	(3.5)	(-4.7)	(8.9)	(-0.2)	(9.9)	(13.1)	(0.8)
Buildings	13.8	2.2	2.0	13.8	2.1	2.7	2.1
	(-3.6)	(-8.2)	(-4.3)	(0.0)	(8.5)	(19.1)	(6.3)

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

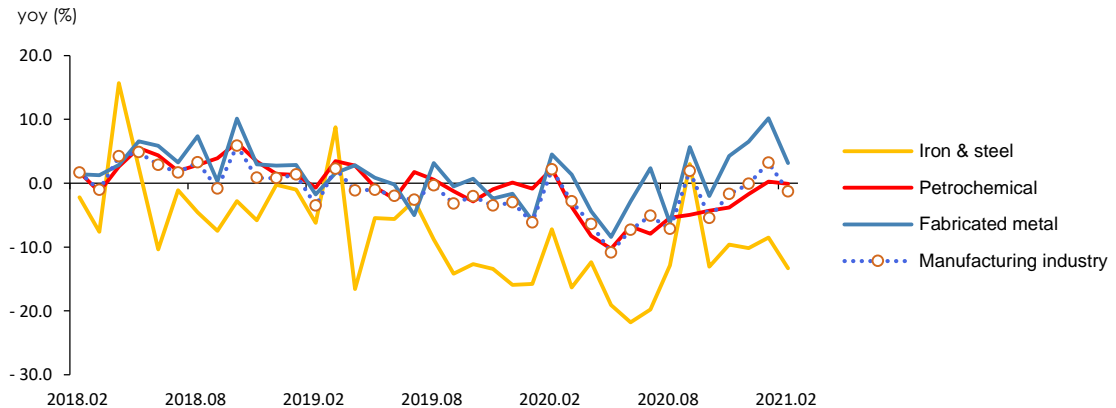
- February electricity consumption posted a year-on-year increase of 1.5% driven by increased electricity consumption in buildings despite the decrease in the industrial sector
 - With an increase in fabricated metal and a decrease in steel, the electricity consumption in the industrial sector ended up declining by 0.4% year-on-year
 - Electricity consumption in the building sector rose by 3.6% year-on-year as both residential and commercial sectors experienced an increase

► Electricity consumption by end-use sectors

	2019	2020p				2021p	
		M1	M2		M12	M1	M2
Electricity (TWh)	520.5	46.3	44.5	509.3	45.0	48.8	45.2
	(-1.1)	(-4.8)	(0.3)	(-2.2)	(0.7)	(5.2)	(1.5)
Industry	279.8	23.5	22.4	268.7	23.7	24.5	22.3
	(-1.4)	(-6.3)	(1.4)	(-4.0)	(0.3)	(4.1)	(-0.4)
Transport	2.9	0.2	0.2	2.7	0.3	0.2	0.2
	(-2.0)	(-9.0)	(-7.0)	(-5.9)	(12.8)	(-11.2)	(-3.5)
Buildings	237.8	22.5	21.8	237.8	21.1	24.0	22.6
	(-0.7)	(-3.1)	(-0.7)	(0.0)	(0.9)	(6.6)	(3.6)
Residential	70.5	6.3	6.3	74.1	6.2	6.9	6.7
	(-0.3)	(0.2)	(2.1)	(5.1)	(6.3)	(10.8)	(6.6)
Commercial	135.2	13.2	12.7	132.5	11.9	13.8	13.0
	(-0.9)	(-4.6)	(-2.1)	(-2.0)	(-1.5)	(4.3)	(1.9)

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

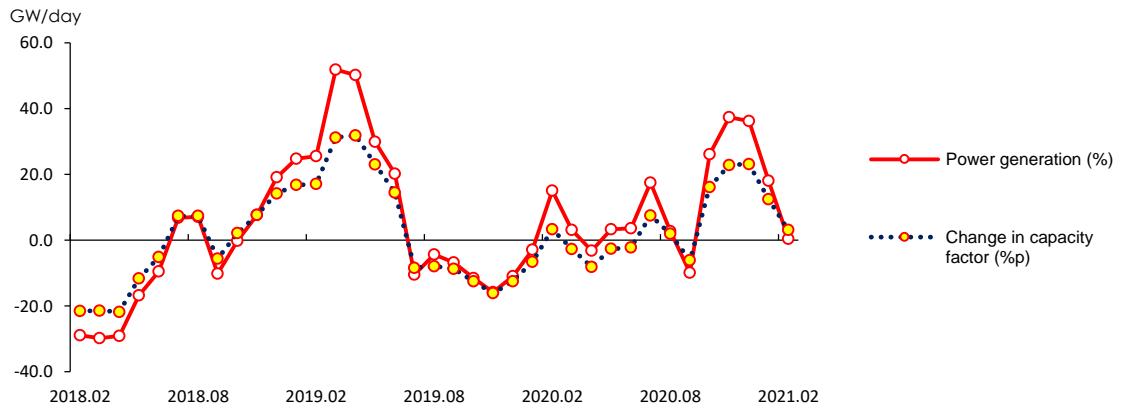
- **February nuclear power generation increased slightly by 0.3% year-on-year as capacity utilization rate climbed up with a decreasing number of preventive maintenance**
 - Nuclear power capacity factor rose by 3.1%p year-on-year to 81.5% as the number of reactors stopped operation due to preventive maintenance went down
 - As the nuclear generation increased, its share of the total power generation went up by 1.0%p year-on-year to 28.3%.

► Nuclear power plants operation status

	2020												2021			2020												2021		
	2	3	4	5	6	7	8	9	10	11	12	1	2	2		3	4	5	6	7	8	9	10	11	12	1	2			
Kori2														Hanul1																
Kori3															Hanul2															
Kori4															Hanul3															
Shinkori1														Hanul4																
Shinkori2														Hanul5																
Shinkori3																	Hanul6													
Shinkori4															Hanbit1															
Wolsong2														Hanbit2																
Wolsong3																	Hanbit3													
Wolsong4															Hanbit4															
Shinwolsong1														Hanbit5																
Shinwolsong2															Hanbit6															

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

► The growth rate of nuclear generation & average capacity factor



10. Heat and Renewable energy

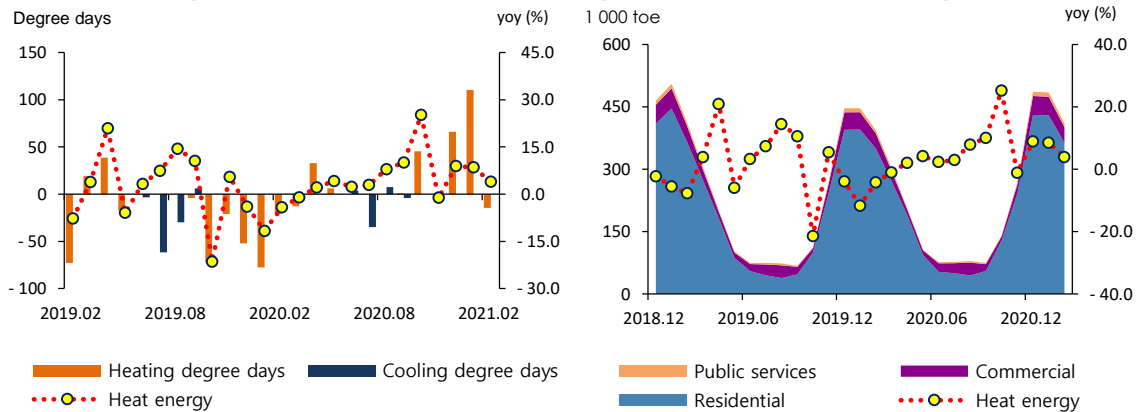
□ February heat energy consumption increased by 3.9% year-on-year in all sectors thanks to the price effect

- In spite of a slight decrease in heating degree days (-14.5 days), heat energy consumption went up by 3.9% and 4.2% in the residential sector and commercial/public sector, respectively, as the rate for heating service was reduced in July 2020 and the reduced rate has been put in place

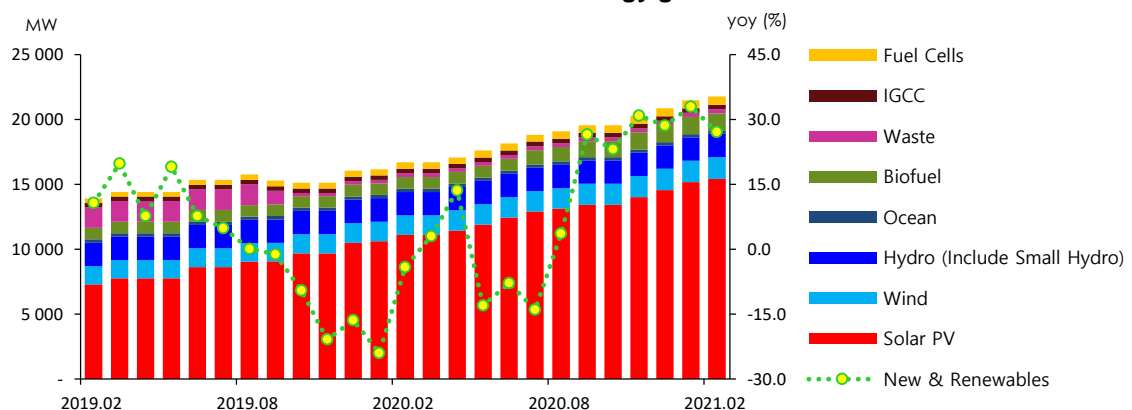
□ Renewable energy generation² soared by 27.1% year-on-year driven by solar PV, fuel cells and wind

- Renewable energy generation jumped up compared to the same month last year, driven by strengthened Renewable Portfolio Standard mandatory ratio and increased facility capacity of major energy sources

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



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



² Renewable energy installed capacity and power generation data was derived from KEPCO's Monthly Electricity Statistics. In Energy Balance, renewable and 'the other' energy generation excludes hydropower and includes non-renewable waste energy.

11. Industry

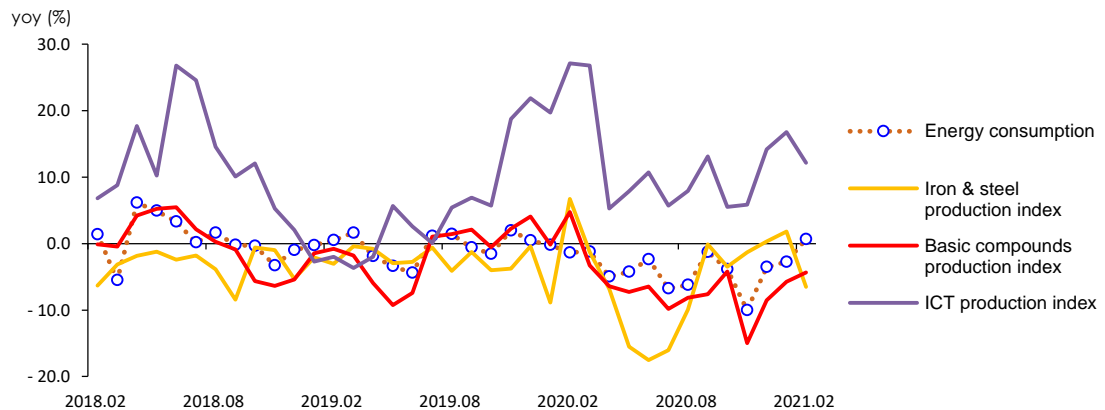
- Despite the declined working days (-3 days), energy consumption in the industrial sector posted a year-on-year increase of 0.7% as business in the manufacturing sector kept picking up
 - With Lunar New Year holidays, energy consumption in the fabricated metal sector and iron & steel industries increased at a rate slower than the previous month due to a decrease in working days. On contrast, the petrochemical sector rebounded in energy use thanks to expanded facilities, following a recent decline

► Industrial energy consumption

	2019	2020p				2021p	
		M1	M2		M12	M1	M2
Industry (Mtoe)	142.9	12.5	11.2	137.4	12.2	12.2	11.3
	(-0.4)	(-0.2)	(-1.4)	(-3.9)	(-3.5)	(-2.8)	(0.7)
Petrochemical	72.0	6.6	5.8	69.1	5.9	6.0	5.9
	(-0.1)	(3.2)	(2.7)	(-4.1)	(-9.3)	(-9.2)	(0.6)
- Naphtha	53.8	4.8	4.4	49.7	4.1	4.2	4.2
	(-2.8)	(-0.2)	(-0.1)	(-7.6)	(-12.5)	(-12.5)	(-2.5)
Iron & Steel	29.5	2.5	2.3	28.3	2.5	2.5	2.3
	(0.4)	(-2.1)	(0.1)	(-4.1)	(1.4)	(1.7)	(0.1)
-Coking coal	24.4	2.0	1.9	23.6	2.1	2.1	2.0
	(1.0)	(-0.1)	(-0.9)	(-3.3)	(3.2)	(2.4)	(3.7)
Fabricated metal	11.4	1.0	1.0	11.4	1.1	1.2	1.0
	(-0.1)	(-8.3)	(4.0)	(-0.1)	(6.5)	(15.0)	(4.4)
Share of feedstock (%)	58.3	57.9	58.8	57.7	56.2	56.1	59.2

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

► Industrial energy consumption & production index



12. Transport

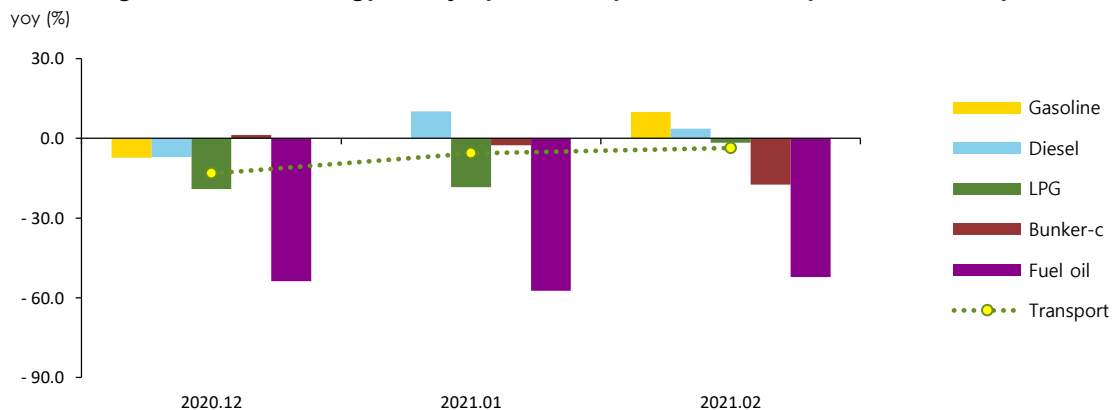
- February energy consumption in the transport sector fell by 3.7% year-on-year as the air transportation industry kept suffering from low demand amidst COVID-19 pandemic
 - Energy consumption rose by 3.8% in the road transport sector as the reduction of fuel tax ended and the base effect, caused by dwindled energy consumption amidst COVID-19 pandemic, came into play
 - Energy consumption took a free-fall to post a year-on-year decline of 52.2% as the number of international flights kept falling due to travel ban restrictions worldwide

► The growth rate of petroleum consumption in the transport sector

	2019	2020p				2021p	
		M1	M2		M12	M1	M2
Transport (Mtoe)	43.0	3.2	3.1	38.9	3.2	3.0	3.0
	(0.0)	(-16.1)	(-5.2)	(-9.4)	(-13.2)	(-5.7)	(-3.7)
Road	35.1	2.5	2.5	33.1	2.8	2.5	2.6
	(1.9)	(-20.3)	(-5.9)	(-5.6)	(-8.0)	(2.9)	(3.8)
Navigation	2.6	0.3	0.2	3.0	0.2	0.3	0.2
	(-17.1)	(2.1)	(0.5)	(12.3)	(-3.7)	(-1.0)	(-8.5)
Aviation	4.9	0.4	0.4	2.6	0.2	0.2	0.2
	(-1.7)	(3.4)	(-4.1)	(-48.2)	(-53.7)	(-57.4)	(-52.2)
Rail	0.3	0.0	0.0	0.3	0.0	0.0	0.0
	(-2.8)	(-12.6)	(-7.1)	(-7.6)	(9.4)	(-10.8)	(-5.8)

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

□ February energy consumption in the building sector grew by 4.9% on a year-on-year basis for all type of buildings driven by the price effect

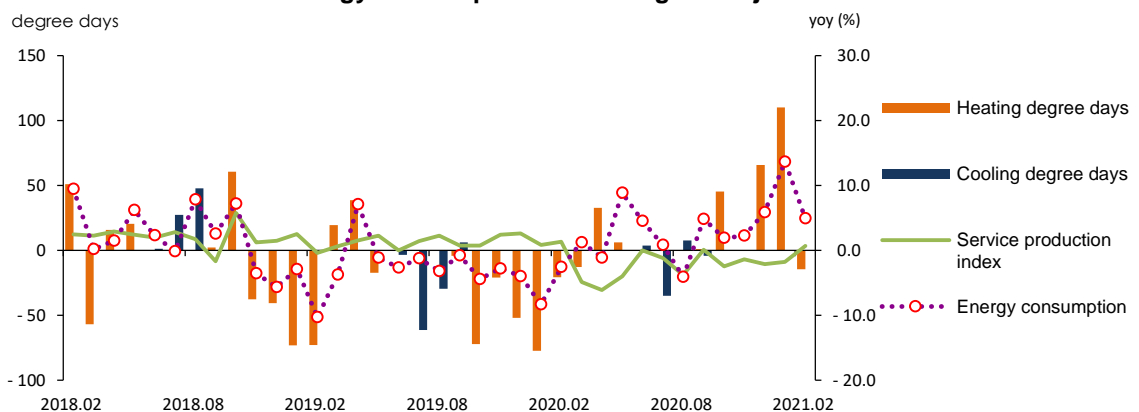
- Energy consumption in the building sector rose by 4.9% year-on-year mainly in city gas and electricity categories, offsetting the effect of decreased heating degree days (-14.5 days)
- The residential building sector showed a year-on-year increase of 7.1% in energy consumption driven by Lunar New Year holidays and increased work time from home with COVID-19 preventive measures being implemented
- Energy consumption in the commercials grew by 1.7% year-on-year as production activity index for the service sector went up (production index 0.7%) mainly driven by the wholesale & retail industries

► Energy consumption in buildings

	2019	2020p				2021p	
		M1	M2		M12	M1	M2
Buildings (Mtoe)	45.5	5.6	5.1	45.7	5.5	6.4	5.4
	(-3.1)	(-8.3)	(-2.6)	(0.5)	(5.9)	(13.7)	(4.9)
Residential	22.6	3.2	2.9	23.2	3.2	3.9	3.2
	(-3.6)	(-9.8)	(-3.3)	(2.7)	(9.9)	(19.4)	(7.1)
Commercial	17.5	1.8	1.7	17.1	1.7	1.9	1.7
	(-2.3)	(-6.4)	(-2.8)	(-2.2)	(0.9)	(5.3)	(1.7)
Public-others	5.4	0.5	0.5	5.4	0.5	0.6	0.5
	(-3.2)	(-5.5)	(3.0)	(-0.4)	(-0.8)	(8.1)	(2.8)
Heating degree days	2 342.9	470.9	416.2	2 382.7	536.1	581.1	401.7
	(-9.8)	(-14.1)	(-4.8)	(1.7)	(14.0)	(23.4)	(-3.5)
Cooling degree days	120.4	-	-	92.5	-	-	-
	(-42.4)	-	-	(-23.2)	-	-	-

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

► Energy consumption in buildings & major indicators



14. Transformation

- Although electricity consumption slightly increased in February, total generation and energy input for generation fell by 3.1% and 2.7% year-on-year, respectively
 - Nuclear power generation lingered at the same level as a year earlier while coal thermal generation dropped by more than 10%, making the base load generation decrease by 6.0%. Meanwhile, gas generation responsible for peak load stayed at the same level as a year earlier

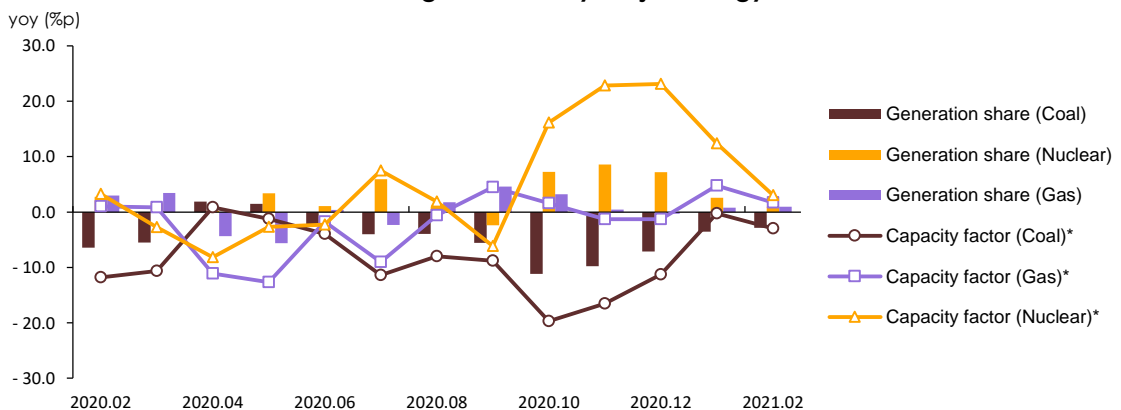
► Energy consumption in the power generation sector

	2019	2020p				2021p	
		M1	M2		M12	M1	M2
Total Generation (TWh)	563.0	49.8	46.4	552.1	51.6	53.2	45.0
	(-1.3)	(-5.9)	(3.3)	(-1.9)	(2.6)	(6.8)	(-3.1)
Coal	227.4	18.5	16.2	196.3	15.8	17.8	14.5
	(-4.6)	(-16.8)	(-12.7)	(-13.7)	(-16.7)	(-3.6)	(-11.0)
Oil	3.3	0.3	0.1	2.3	0.3	0.3	0.1
	(-42.6)	(-23.4)	(-38.4)	(-31.5)	(-31.3)	(-4.4)	(13.8)
Gas	144.4	15.8	13.8	146.1	16.6	17.3	13.8
	(-6.0)	(8.7)	(14.8)	(1.2)	(1.7)	(9.3)	(-0.0)
Nuclear	145.9	11.9	12.7	160.2	15.1	14.0	12.7
	(9.3)	(-2.9)	(15.0)	(9.8)	(36.2)	(18.0)	(0.3)
Hydro/other renewables	39.2	2.6	2.9	41.9	3.5	3.3	3.5
	(0.6)	(-21.9)	(-2.7)	(6.9)	(26.4)	(28.9)	(23.8)
Baseload	373.3	30.4	28.9	356.5	30.9	31.8	27.2
	(0.4)	(-11.9)	(-2.4)	(-4.5)	(2.7)	(4.9)	(-6.0)

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

	2018	2019	2020				2021		
			12 월	1 월	2 월		12 월	1 월	2 월
GDP (trillion won)	1 812.0 (2.9)	1 849.0 (2.0)	487.4 (2.3)	- -	- -	1 831.3 (-1.0)	481.5 (-1.2)	- -	- -
Private consumption	875.6 (3.2)	890.2 (1.7)	228.5 (1.9)	- -	- -	846.3 (-4.9)	213.6 (-6.5)	- -	- -
Facilities investment	166.3 (-2.3)	153.9 (-7.5)	40.8 (-2.0)	- -	- -	164.3 (6.8)	43.2 (5.7)	- -	- -
Construction investment	269.8 (-4.6)	262.9 (-2.5)	72.6 (2.6)	- -	- -	262.6 (-0.1)	70.8 (-2.5)	- -	- -
Consumer price index (2015=100)	104.5	104.9	105.1	105.8	105.8	105.4	105.7	106.5	107.0
USD to KRW exchange rate (won)	1 100.2	1 165.4	1 175.8	1 164.3	1 193.8	1 180.3	1 095.1	1 097.5	1 111.7
Benchmark rate (%)	1.5	1.6	1.3	1.3	1.3	0.7	0.5	0.5	0.5
Coincident composite index (2015=100)	110.1	111.7	113.3	113.8	113.2	112.3	114.0	113.9	114.3
Mining & manufacturing production index (2015=100)	106.3	106.7	115.1	102.2	99.7	106.3	118.1	110.2	100.6
Manufacturing operation ratio index (2015=100)	98.8	98.4	102.5	91.5	90.2	95.6	103.5	96.6	88.6
Average temperature	13.0	13.5	2.8	2.8	3.6	13.2	0.7	- 0.7	3.7
- year-on-year difference	- 0.1	0.5	1.7	2.5	1.3	- 0.3	- 2.1	- 3.6	0.0
Heating degree days	2 597.8 (3.2)	2 342.9 (-9.8)	470.2 (-10.0)	470.9 (-14.1)	416.2 (-4.8)	2 382.7 (1.7)	536.1 (14.0)	581.1 (23.4)	401.7 (-3.5)
Cooling degree days	209.0 (57.5)	120.4 (-42.4)	- -	- -	- -	92.5 (-23.2)	- -	- -	- -
Energy intensity	0.17 (-1.0)	0.16 (-3.4)	0.16 (-3.8)	- -	- -	0.16 (-3.5)	0.16 (-2.5)	- -	- -
Per capita consumption									
oil (bbl)	18.1 (-1.0)	17.9 (-0.7)	1.6 (1.8)	1.6 (-5.4)	1.4 (-2.2)	16.9 (-5.9)	1.5 (-11.3)	1.5 (-6.4)	1.4 (0.4)
Electricity (MWh)	10.2 (3.1)	10.1 (-1.3)	0.9 (-1.5)	0.9 (-4.9)	0.9 (0.2)	9.8 (-2.3)	0.9 (0.5)	0.9 (5.2)	0.9 (1.5)
City gas (1 000 m ³)	0.5 (6.9)	0.5 (-4.3)	0.1 (-5.7)	0.1 (-9.0)	0.1 (-2.6)	0.4 (-3.6)	0.1 (7.5)	0.1 (18.4)	0.1 (6.0)
Total energy (toe)	6.0 (1.3)	5.9 (-1.6)	0.5 (-3.4)	0.5 (-7.2)	0.5 (-1.9)	5.6 (-4.4)	0.5 (-1.1)	0.5 (3.9)	0.5 (-0.9)

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 & Operating Ratio by Sectors

(2015=100)

(2013=100)

	2018	2019	2020				2021		
			M12	M1	M2		M12	M1	M2
Industrial production index									
All industry	107.5 (1.6)	108.6 (0.9)	121.8 (4.4)	104.6 (-0.8)	100.8 (4.8)	107.3 (-1.2)	120.9 (-0.7)	106.2 (1.5)	101.2 (0.4)
Mining & manufacturing	106.3 (1.5)	106.7 (0.3)	115.1 (6.4)	102.2 (-3.3)	99.7 (11.0)	106.3 (-0.3)	118.1 (2.6)	110.2 (7.8)	100.6 (0.9)
Semiconductor	168.3 (21.2)	188.0 (11.7)	232.0 (35.3)	203.9 (37.5)	204.2 (44.5)	230.6 (22.6)	272.6 (17.5)	244.7 (20.0)	244.8 (19.9)
Iron & steel	100.5 (-2.7)	98.3 (-2.2)	98.1 (-0.4)	94.7 (-8.9)	95.3 (6.7)	92.1 (-6.3)	98.4 (0.3)	96.4 (1.8)	89.1 (-6.5)
Cement	100.0 (-8.8)	94.3 (-5.7)	95.6 (4.6)	66.8 (-19.4)	72.2 (9.1)	86.6 (-8.2)	93.1 (-2.6)	67.5 (1.0)	71.2 (-1.4)
Basic compound	110.4 (0.0)	108.9 (-1.4)	114.9 (4.1)	114.7 (-0.2)	108.0 (4.8)	102.3 (-6.0)	105.1 (-8.5)	108.1 (-5.8)	103.3 (-4.4)
Transport equipment	93.9 (-1.2)	93.4 (-0.6)	94.7 (-4.5)	77.3 (-21.2)	65.2 (-13.6)	84.1 (-9.9)	89.9 (-5.1)	91.1 (17.9)	79.5 (21.9)
Electric & electronic	106.5 (-0.2)	109.6 (2.9)	120.8 (8.3)	98.4 (-6.5)	97.3 (7.6)	108.7 (-0.8)	126.4 (4.6)	109.1 (10.9)	97.4 (0.1)
Service	106.9 (2.2)	108.4 (1.4)	118.8 (2.6)	106.7 (0.9)	100.7 (1.3)	106.2 (-2.0)	116.3 (-2.1)	104.8 (-1.8)	101.4 (0.7)
Wholesale and retail	105.0 (1.8)	104.6 (-0.4)	109.7 (0.1)	103.1 (-2.0)	92.3 (-0.2)	101.9 (-2.6)	108.6 (-1.0)	101.0 (-2.0)	95.4 (3.4)
Food & Accommodation	98.5 (-1.9)	97.5 (-1.0)	109.9 (0.9)	94.7 (-2.2)	73.9 (-14.9)	79.5 (-18.5)	66.4 (-39.6)	59.9 (-36.7)	65.5 (-11.4)
Production output									
Iron & steel - Pig iron	47 124.3 (0.1)	47 520.7 (0.8)	3 948.5 (-3.2)	3 959.9 (-1.3)	3 575.2 (-2.4)	45 359.6 (-4.5)	4 115.2 (4.2)	4 113.5 (3.9)	3 724.9 (4.2)
Iron & steel - Crude steel	72 464.0 (2.0)	71 411.9 (-1.5)	5 879.7 (-4.6)	5 739.9 (-8.2)	5 417.4 (2.8)	67 078.8 (-6.1)	5 909.6 (0.5)	6 042.6 (5.3)	5 489.5 (1.3)
Petrochemical - Basic oil	31 139.2 (1.9)	31 804.1 (2.1)	2 884.2 (6.9)	2 913.9 (3.3)	2 629.1 (3.6)	30 323.6 (-4.7)	2 395.2 (-17.0)	2 597.4 (-10.9)	2 605.7 (-0.9)
Petrochemical - Intermediate raw material	16 981.8 (2.9)	16 014.0 (-5.7)	1 401.3 (-5.7)	1 459.4 (-2.3)	1 367.9 (1.5)	15 355.4 (-4.1)	1 293.2 (-7.7)	1 338.8 (-8.3)	1 300.1 (-5.0)
Petrochemical - 3 major products	21 793.6 (-1.1)	21 584.7 (-1.0)	1 808.1 (-3.6)	1 913.5 (-2.8)	1 811.5 (4.6)	21 251.7 (-1.5)	1 788.3 (-1.1)	1 861.1 (-2.7)	1 719.3 (-5.1)
The number of cars	4 028.7 (-2.1)	3 950.6 (-1.9)	337.5 (-5.4)	251.6 (-29.0)	189.2 (-26.4)	3 506.8 (-11.2)	296.9 (-12.0)	314.2 (24.9)	260.8 (37.8)

Note: p means provisional

Source: Monthly Energy Statistics, Korea Petrochemical Industry Association, Automobile Manufacturers Association

International Energy Prices

	2018	2019		2020					2021	
			M12	M1	M2		M12	M1	M2	
Crude oil (USD/bbl)										
WTI	64.8 (27.1)	57.0 (-11.9)	59.8 (22.1)	57.5 (11.6)	50.5 (-8.1)	39.4 (-30.9)	47.1 (-21.3)	52.1 (-9.4)	59.1 (16.9)	
Dubai	69.4 (30.5)	63.5 (-8.5)	64.9 (13.2)	64.3 (8.9)	54.2 (-16.0)	42.2 (-33.6)	49.8 (-23.2)	54.8 (-14.8)	60.9 (12.3)	
Brent	71.5 (30.5)	64.2 (-10.3)	65.2 (13.0)	63.7 (5.7)	55.5 (-13.9)	43.2 (-32.7)	50.2 (-22.9)	55.3 (-13.1)	62.3 (12.3)	
Unit value of import (C&F)	71.4 (34.0)	65.5 (-8.2)	66.2 (-0.7)	69.1 (12.1)	64.2 (1.7)	44.8 (-31.7)	46.7 (-29.4)	52.7 (-23.7)	58.3 (-9.3)	
LNG										
From Indonesia (USD/MMBTU)	10.7 (24.0)	10.6 (-1.0)	10.1 (-16.2)	9.9 (-17.7)	9.9 (-16.2)	8.3 (-21.3)	7.7 (-23.8)	9.0 (-8.9)	9.9 (-0.2)	
Unit value of import (USD/ton, CIF)	526.3 (26.4)	505.4 (-4.0)	455.4 (-20.7)	470.2 (-19.9)	446.9 (-27.3)	390.2 (-22.8)	358.5 (-21.3)	413.3 (-12.1)	531.3 (18.9)	
Bituminous coal (USD/ton)										
From Australia	107.0 (20.9)	77.9 (-27.2)	66.2 (-34.7)	69.7 (-29.3)	67.6 (-29.1)	60.8 (-22.0)	83.0 (25.5)	86.8 (24.6)	86.7 (28.2)	
Unit value of import (CIF)	113.6 (8.9)	100.7 (-11.3)	85.1 (-25.3)	86.7 (-18.7)	85.8 (-22.3)	77.7 (-22.9)	72.2 (-15.2)	76.3 (-12.0)	79.5 (-7.3)	
Petroleum product (USD/bbl)										
Gasoline	79.9 (17.4)	72.5 (-9.3)	74.8 (24.7)	71.3 (16.8)	64.5 (-2.7)	46.7 (-35.7)	53.5 (-28.5)	60.1 (-15.7)	67.9 (5.4)	
Kerosene	84.8 (29.8)	77.3 (-8.9)	77.8 (9.3)	75.4 (5.0)	63.1 (-19.0)	44.7 (-42.1)	53.9 (-30.7)	58.0 (-23.0)	65.2 (3.3)	
Diesel	84.9 (27.9)	78.2 (-7.9)	79.2 (13.2)	76.5 (5.4)	66.0 (-16.4)	49.4 (-36.8)	55.4 (-30.0)	60.0 (-21.6)	67.9 (3.0)	
Bunker-C	65.2 (31.3)	57.5 (-11.8)	43.3 (-23.3)	51.9 (-10.2)	46.7 (-27.0)	39.2 (-31.9)	47.4 (9.5)	51.5 (-0.9)	57.6 (23.4)	
Propane	542.1 (16.0)	434.6 (-19.8)	440.0 (-1.1)	565.0 (31.4)	505.0 (14.8)	397.1 (-8.6)	450.0 (2.3)	550.0 (-2.7)	605.0 (19.8)	
Butane	539.2 (7.5)	441.7 (-18.1)	455.0 (9.6)	590.0 (40.5)	545.0 (16.0)	403.8 (-8.6)	460.0 (1.1)	530.0 (-10.2)	585.0 (7.3)	
Naphtha	67.0 (24.5)	56.9 (-15.1)	63.5 (22.7)	60.9 (17.8)	52.3 (-7.2)	40.5 (-28.9)	47.6 (-25.0)	55.6 (-8.6)	61.6 (17.8)	

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

Domestic Energy Prices

	2018	2019	2020				2021		
			M12	M1	M2		M12	M1	M2
Petroleum product									
Gasoline (won/liter)	1 581.4 (6.0)	1 471.9 (-6.9)	1 548.5 (8.0)	1 568.4 (16.1)	1 545.3 (15.0)	1 381.6 (-6.1)	1 367.8 (-11.7)	1 441.8 (-8.1)	1 463.2 (-5.3)
Diesel (won/liter)	1 391.9 (8.5)	1 340.1 (-3.7)	1 385.4 (4.6)	1 398.4 (11.9)	1 369.9 (10.2)	1 189.8 (-11.2)	1 168.3 (-15.7)	1 242.4 (-11.2)	1 263.3 (-7.8)
Bunker-C (won/liter)	734.8 (18.6)	743.9 (1.2)	658.0 (-16.6)	706.5 (3.0)	797.7 (19.8)	573.6 (-22.9)	518.9 (-21.1)	545.5 (-22.8)	619.6 (-22.3)
Propane (won/kg)	1 920.5 (4.7)	1 869.7 (-2.6)	1 889.7 (-3.3)	1 887.6 (1.2)	1 971.5 (5.8)	1 850.7 (-1.0)	1 865.2 (-1.3)	1 868.1 (-1.0)	1 952.5 (-1.0)
Butane (won/liter)	874.6 (5.8)	806.2 (-7.8)	820.6 (-4.9)	820.8 (2.4)	874.5 (9.5)	791.1 (-1.9)	796.9 (-2.9)	797.2 (-2.9)	847.8 (-3.0)
City gas(won/MJ)									
Residential	15.1 (-4.3)	15.6 (3.9)	15.9 (3.8)	15.9 (3.8)	15.9 (3.8)	15.1 (-3.6)	14.2 (-10.7)	14.2 (-10.7)	14.2 (-10.7)
General(1)	14.9 (-3.8)	15.6 (4.9)	16.0 (1.5)	16.0 (1.5)	16.0 (1.5)	14.9 (-4.7)	14.0 (-12.3)	14.0 (-12.3)	14.0 (-12.3)
Commercial	15.4 (-4.4)	16.1 (4.4)	16.5 (4.7)	16.5 (4.7)	16.5 (4.7)	15.1 (-6.4)	13.5 (-18.2)	14.0 (-15.0)	14.8 (-10.1)
Industry	13.0 (-2.3)	13.8 (6.0)	14.5 (5.2)	14.5 (5.2)	14.5 (5.2)	12.6 (-8.4)	11.4 (-21.4)	12.0 (-17.8)	12.8 (-12.2)
Heat(won/Mcal)									
Residential	64.5 (-2.7)	65.7 (1.8)	67.1 (3.8)	67.1 (3.8)	67.1 (3.8)	66.2 (0.7)	65.2 (-2.8)	65.2 (-2.8)	65.2 (-2.8)
Commercial	83.8 (-2.7)	85.3 (1.8)	87.2 (3.8)	87.2 (3.8)	87.2 (3.8)	85.9 (0.7)	84.7 (-2.8)	84.7 (-2.8)	84.7 (-2.8)
Public	73.2 (-2.7)	74.5 (1.9)	76.1 (3.8)	76.1 (3.8)	76.1 (3.8)	75.1 (0.7)	74.0 (-2.9)	74.0 (-2.9)	74.0 (-2.9)
Electricity(won/kWh)									
Residential	147.3 -	147.3 -	147.3 -	147.3 -	147.3 -	147.3 -	147.3 -	142.3 (-3.4)	142.3 (-3.4)
General	84.4 -	84.4 -	92.3 -	92.3 -	92.3 -	84.4 -	92.3 -	87.3 (-5.4)	87.3 (-5.4)
Industry	96.0 -	96.0 -	108.5 -	108.5 -	108.5 -	96.0 -	108.5 -	103.5 (-4.6)	103.5 (-4.6)

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

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

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

Domestic Energy Prices

	2018	2019			2020				2021
			M11	M12	M1		M11	M12	M1
Petroleum product									
Gasoline (won/liter)	1 581.4 (6.0)	1 471.9 (-6.9)	1 535.7 (-2.9)	1 548.5 (8.0)	1 568.4 (16.1)	1 381.6 (-6.1)	1 319.6 (-14.1)	1 367.8 (-11.7)	1 441.8 (-8.1)
Diesel (won/liter)	1 391.9 (8.5)	1 340.1 (-3.7)	1 380.5 (-3.1)	1 385.4 (4.6)	1 398.4 (11.9)	1 189.8 (-11.2)	1 119.6 (-18.9)	1 168.3 (-15.7)	1 242.4 (-11.2)
Bunker-C (won/liter)	734.8 (18.6)	743.9 (1.2)	703.5 (-16.9)	658.0 (-16.6)	706.5 (3.0)	573.6 (-22.9)	520.0 (-26.1)	518.9 (-21.1)	545.5 (-22.8)
Propane (won/kg)	1 920.5 (4.7)	1 869.7 (-2.6)	1 879.3 (-6.4)	1 889.7 (-3.3)	1 887.6 (1.2)	1 850.7 (-1.0)	1 822.2 (-3.0)	1 865.2 (-1.3)	1 868.1 (-1.0)
Butane (won/liter)	874.6 (5.8)	806.2 (-7.8)	810.5 (-11.0)	820.6 (-4.9)	820.8 (2.4)	791.1 (-1.9)	770.6 (-4.9)	796.9 (-2.9)	797.2 (-2.9)
City gas(won/MJ)									
Residential	15.1 (-4.3)	15.6 (3.9)	15.9 (3.8)	15.9 (3.8)	15.9 (3.8)	15.1 (-3.6)	14.2 (-10.7)	14.2 (-10.7)	14.2 (-10.7)
General(1)	14.9 (-3.8)	15.6 (4.9)	15.8 (4.7)	16.0 (1.5)	16.0 (1.5)	14.9 (-4.7)	13.8 (-12.3)	14.0 (-12.3)	14.0 (-12.3)
Commercial	15.4 (-4.4)	16.1 (4.4)	16.5 (4.7)	16.5 (4.7)	16.5 (4.7)	15.1 (-6.4)	12.7 (-23.2)	13.5 (-18.2)	14.0 (-15.0)
Industry	13.0 (-2.3)	13.8 (6.0)	14.0 (5.4)	14.5 (5.2)	14.5 (5.2)	12.6 (-8.4)	9.9 (-29.3)	11.4 (-21.4)	12.0 (-17.8)
Heat(won/Mcal)									
Residential	64.5 (-2.7)	65.7 (1.8)	67.1 (3.8)	67.1 (3.8)	67.1 (3.8)	66.2 (0.7)	65.2 (-2.8)	65.2 (-2.8)	65.2 (-2.8)
Commercial	83.8 (-2.7)	85.3 (1.8)	87.2 (3.8)	87.2 (3.8)	87.2 (3.8)	85.9 (0.7)	84.7 (-2.8)	84.7 (-2.8)	84.7 (-2.8)
Public	73.2 (-2.7)	74.5 (1.9)	76.1 (3.8)	76.1 (3.8)	76.1 (3.8)	75.1 (0.7)	74.0 (-2.9)	74.0 (-2.9)	74.0 (-2.9)
Electricity(won/kWh)									
Residential	147.3 -	147.3 -	147.3 -	147.3 -	147.3 -	147.3 -	147.3 -	147.3 -	142.3 (-3.4)
General	84.4 -	84.4 -	92.3 -	92.3 -	92.3 -	84.4 -	92.3 -	92.3 -	87.3 (-5.4)
Industry	96.0 -	96.0 -	108.5 -	108.5 -	108.5 -	96.0 -	108.5 -	108.5 -	103.5 (-4.6)

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

2.Electricity prices are based on Residential(High-voltage, 201~400kWh), General((A) I, 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)

	2018	2019	2020p				2021p		
			M12	M1	M2		M12	M1	M2
Coal (Mton)	141.1 (0.9)	133.0 (-5.7)	10.9 (-12.8)	10.7 (-13.6)	9.3 (-16.0)	116.5 (-12.4)	10.0 (-8.1)	10.5 (-1.3)	8.5 (-7.9)
- Coking coal excluded	106.4 (2.9)	98.0 (-7.9)	8.0 (-16.2)	7.8 (-17.7)	6.6 (-21.0)	82.7 (-15.6)	7.0 (-12.3)	7.6 (-2.6)	5.7 (-12.7)
Oil (Mbbbl)	931.8 (-0.6)	927.1 (-0.5)	85.1 (2.0)	80.7 (-5.2)	71.9 (-2.1)	873.3 (-5.8)	75.6 (-11.1)	75.5 (-6.4)	72.2 (0.4)
- Non-energy oil excluded	445.5 (0.4)	451.8 (1.4)	42.9 (3.4)	38.3 (-10.7)	33.7 (-4.5)	424.7 (-6.0)	37.5 (-12.5)	37.3 (-2.6)	34.2 (1.4)
LNG (Mton)	42.3 (16.2)	41.0 (-3.1)	5.0 (2.4)	4.9 (-2.4)	4.4 (7.5)	41.4 (1.1)	5.4 (7.6)	5.8 (17.4)	4.5 (1.5)
Hydro (TWh)	7.3 (3.9)	6.2 (-14.1)	0.5 (-16.7)	0.5 (-1.1)	0.5 (12.1)	7.1 (14.4)	0.5 (-0.7)	0.5 (-4.0)	0.5 (-9.5)
Nuclear (TWh)	133.5 (-10.1)	145.9 (9.3)	11.1 (-11.0)	11.9 (-2.9)	12.7 (15.0)	160.2 (9.8)	15.1 (36.2)	14.0 (18.0)	12.7 (0.3)
Others (Mtoe)	17.1 (8.0)	17.7 (3.3)	1.5 (0.7)	1.4 (-8.8)	1.4 (4.1)	17.7 (0.0)	1.5 (2.6)	1.5 (10.8)	1.5 (5.3)
TPES (Mtoe)	307.6 (1.8)	303.1 (-1.5)	28.0 (-3.2)	27.1 (-7.1)	24.8 (-1.7)	290.1 (-4.3)	27.7 (-1.0)	28.2 (4.0)	24.6 (-0.8)
- Non-energy oil excluded	247.1 (2.7)	244.0 (-1.3)	22.7 (-4.1)	21.9 (-8.7)	20.1 (-2.1)	234.2 (-4.0)	22.9 (0.8)	23.5 (7.1)	19.8 (-1.1)
- Non-energy oil&coal excluded	223.0 (3.5)	219.6 (-1.5)	20.7 (-4.3)	19.9 (-9.5)	18.2 (-2.2)	210.6 (-4.1)	20.8 (0.6)	21.4 (7.6)	17.9 (-1.6)

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

Share of TPES by Sources

(unit: %)

	2018	2019	2020p				2021p		
			M12	M1	M2		M12	M1	M2
Coal	28.2	27.1	24.1	24.3	23.3	24.9	22.4	23.1	21.8
- Coking coal excluded	20.3	19.1	16.8	16.8	15.7	16.8	14.8	15.8	13.8
Oil	38.5	38.7	38.5	37.2	36.6	38.0	34.8	33.8	37.0
- non-energy oil excluded	18.9	19.2	19.7	17.9	17.5	18.7	17.5	16.9	17.8
LNG	18.0	17.7	23.3	23.7	23.1	18.7	25.4	26.7	23.7
Hydro	0.5	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4
Nuclear	9.2	10.3	8.4	9.3	10.9	11.8	11.6	10.6	11.0
Others	5.6	5.8	5.2	5.1	5.6	6.1	5.4	5.4	6.0
TPES	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)

	2018	2019	2020p				2021p		
			M12	M1	M2		M12	M1	M2
Industry	143.5 (0.7)	142.9 (-0.4)	12.7 (0.4)	12.5 (-0.2)	11.2 (-1.4)	137.4 (-3.9)	12.2 (-3.5)	12.2 (-2.8)	11.3 (0.7)
Transport	43.0 (0.4)	43.0 (0.0)	3.7 (-1.2)	3.2 (-16.1)	3.1 (-5.2)	38.9 (-9.4)	3.2 (-13.2)	3.0 (-5.7)	3.0 (-3.7)
Residential	23.5 (4.4)	22.6 (-3.6)	3.0 (-5.2)	3.2 (-9.8)	2.9 (-3.3)	23.2 (2.7)	3.2 (9.9)	3.9 (19.4)	3.2 (7.1)
commercial	17.9 (2.9)	17.5 (-2.3)	1.7 (-1.9)	1.8 (-6.4)	1.7 (-2.8)	17.1 (-2.2)	1.7 (0.9)	1.9 (5.3)	1.7 (1.7)
Public	5.6 (2.0)	5.4 (-3.2)	0.5 (-3.7)	0.5 (-5.5)	0.5 (3.0)	5.4 (-0.4)	0.5 (-0.8)	0.6 (8.1)	0.5 (2.8)
TFC	233.4 (1.2)	231.4 (-0.9)	21.6 (-0.9)	21.3 (-5.1)	19.5 (-2.3)	222.0 (-4.0)	21.0 (-3.0)	21.6 (1.1)	19.7 (1.1)
Coal (Mton)	49.3 (-2.1)	48.2 (-2.2)	4.1 (-5.7)	4.0 (1.7)	3.5 (-13.3)	45.8 (-5.0)	4.4 (6.4)	4.1 (1.5)	3.5 (0.8)
Oil (Mbbbl)	920.0 (-0.7)	918.5 (-0.2)	84.1 (1.8)	79.9 (-4.9)	71.4 (-1.7)	867.1 (-5.6)	74.7 (-11.2)	74.0 (-7.4)	71.3 (-0.1)
Electricity (TWh)	526.1 (3.6)	520.5 (-1.1)	44.7 (-1.3)	46.3 (-4.8)	44.5 (0.3)	509.3 (-2.2)	45.0 (0.7)	48.8 (5.2)	45.2 (1.5)
City gas (Bm ³)	24.3 (7.4)	23.3 (-4.1)	2.8 (-5.5)	3.1 (-8.9)	2.8 (-2.4)	22.5 (-3.4)	3.1 (7.7)	3.6 (18.5)	3.0 (6.0)
Heat others (1 000 toe)	11.8 (6.4)	11.6 (-2.0)	1.2 (-3.2)	1.2 (-5.8)	1.1 (0.8)	11.4 (-0.9)	1.2 (2.5)	1.3 (5.6)	1.1 (-0.2)

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

Source: Monthly energy statistics

Share of the Total Final Consumption by Sources

(unit: %)

	2018	2019	2019p				2020p		
				M1	M2	M1~12	M12	M1	M2
Industry	61.5	61.8	58.7	58.7	57.6	61.9	58.3	56.4	57.4
Transport	18.4	18.6	17.3	15.0	15.9	17.5	15.5	14.0	15.2
Residential	10.1	9.8	13.7	15.2	15.1	10.5	15.5	17.9	16.0
commercial	7.7	7.6	7.9	8.6	8.7	7.7	8.2	9.0	8.8
Public	2.4	2.3	2.4	2.6	2.6	2.4	2.4	2.7	2.6
Final energy	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Coal	13.9	13.9	12.6	12.6	12.0	13.8	13.7	12.6	12.1
Oil	50.1	50.2	49.2	46.9	46.2	49.3	45.4	43.3	45.7
Electricity	19.4	19.3	17.8	18.7	19.7	19.7	18.5	19.4	19.7
City gas	11.6	11.6	14.9	16.2	16.3	12.0	16.6	18.6	16.8
Heat others	5.1	5.0	5.5	5.7	5.8	5.2	5.8	6.0	5.7

Note: p means provisional

Source: Monthly energy statistics

Statistics on Energy Production Facilities

	2018	2019	2020					2021	
			M12	M1	M2		M12	M1	M2
Total capacity (GW)	119.1 (1.9)	125.3 (5.2)	125.3 (5.2)	125.4 (7.7)	125.9 (8.1)	129.2 (8.5)	129.2 (8.5)	128.8 (7.9)	129.1 (8.2)
Nuclear	21.9 (-3.0)	23.3 (6.4)	23.3 (6.4)	23.3 (3.2)	23.3 (3.2)	23.3 (6.4)	23.3 (6.4)	23.3 (6.4)	23.3 (6.4)
Bituminous coal	36.4 (0.7)	36.4 (0.1)	36.4 (0.1)	36.5 (1.0)	36.5 (1.0)	36.5 (0.2)	36.5 (0.2)	35.5 (-2.6)	35.5 (-2.6)
Gas	37.9 (-0.0)	39.6 (4.5)	39.6 (4.5)	41.2 (10.2)	41.2 (10.2)	41.2 (8.8)	41.2 (8.8)	41.2 (8.5)	41.2 (8.5)
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

Statistics on Energy Consumption

	2018	2019	2020					2021	
			M12	M1	M2		M12	M1	M2
The number of household demanding city gas (mil)	19.1 (3.1)	19.7 (2.8)	19.7 (2.8)	19.7 (2.3)	19.8 (2.4)	20.1 (2.3)	20.1 (2.3)	20.2 (2.6)	20.3 (2.5)
Registered cars (mil)	23.2 (3.0)	23.7 (2.0)	23.7 (2.0)	23.7 (2.0)	23.7 (1.9)	24.4 (2.9)	24.4 (2.9)	24.4 (3.0)	24.5 (3.1)
- gasoline	10.6 (2.5)	11.0 (3.1)	11.0 (3.1)	11.0 (3.1)	11.0 (3.1)	11.4 (4.1)	11.4 (4.1)	11.4 (4.2)	11.5 (4.2)
- diesel	9.9 (3.7)	10.0 (0.3)	10.0 (0.3)	10.0 (0.0)	10.0 (-0.1)	10.0 (0.3)	10.0 (0.3)	10.0 (0.4)	10.0 (0.5)
- LPG	2.0 (-3.3)	2.0 (-1.5)	2.0 (-1.5)	2.0 (-1.1)	2.0 (-1.0)	2.0 (-1.3)	2.0 (-1.3)	2.0 (-1.5)	2.0 (-1.6)
- hybrid	0.4 (30.9)	0.5 (26.1)	0.5 (26.1)	0.5 (25.1)	0.5 (24.3)	0.6 (33.1)	0.6 (33.1)	0.7 (34.5)	0.7 (36.2)

Note: () is year-on-year growth rates (%)
Source: Monthly energy statistics