

Monthly Energy Bulletin

TSKB Economic Research

January 2020 #20

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Statements from Fatih Dönmez regarding the energy sector

The Minister of Energy and Natural Resources, Fatih Dönmez, stated that for the mini solar Renewable Energy Resource Areas (YEKA) project, tenders with capacities of 10 megawatts (MW) will be opened in about 40 provinces and a legal amendment is planned to be made to the YEKA. Fatih Dönmez added that the tender announcements may be announced in February with the tenders taking place in April or May.

Dönmez noted that there was the potential for 4,000-5,000 MW of generation in solar rooftop applications, adding, "We have received applications from approximately 800 industrial plants to establish rooftop solar power plants with a total capacity of 800 MW. About 1,200 -1,300 applications have been received, for a total capacity of 10 MW, to install the plants on residential buildings."

Dönmez also noted that the Renewable Energy Resources Support Mechanism (YEKDEM) would remain in place, but the conditions would be changed to take account of the development of technologies, increased efficiency and lower costs. Stating that YEKDEM was working on a model which would both protect investors' rights while not bringing additional costs to the system, Mr. Dönmez said that the preparations had been largely completed. He also stated that the views of the relevant public institutions would be taken under the coordination of the Presidency. The Minister stressed that YEKDEM would continue under different conditions, while the ceiling price in the market would be updated on a resource basis; he specified that the support for the use of domestic components and support for the use of domestic products will remain.

Dönmez stated that electric cars had become widespread and that Turkey's domestic electric car would also be on the roads in 2022-2023. He added that there would be over 1 million electric cars in Turkey by 2030 and preparations were being planned for this in the grid.

26.99
TWh

January Gross
Generation

314.61
TL/MWh

Average
MCP

2.38 TWh

The wind farms produced the second-highest monthly production of all time, after 2.64 TWh in August 2019 in January.

[Click](#) for details.

Electricity

Turkey Electricity Transmission Company (TEİAŞ) announced gross electricity consumption and production data for 2019.

[Click](#) for details.

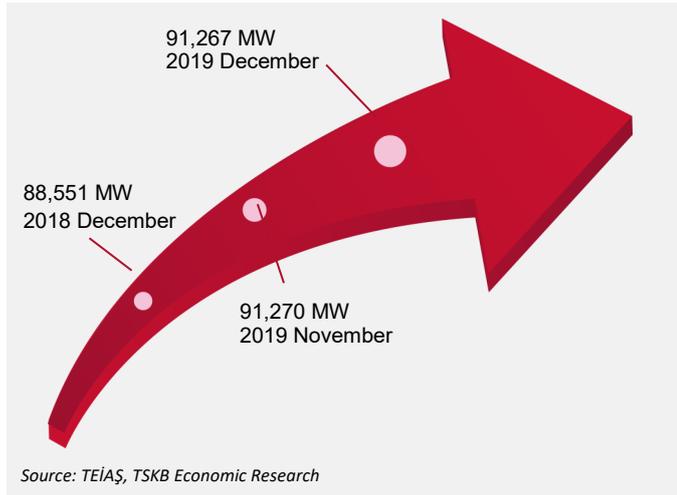
Natural Gas

The Energy Market Regulatory Authority (EMRA) has published the "Natural Gas Market Monthly Sector Report".

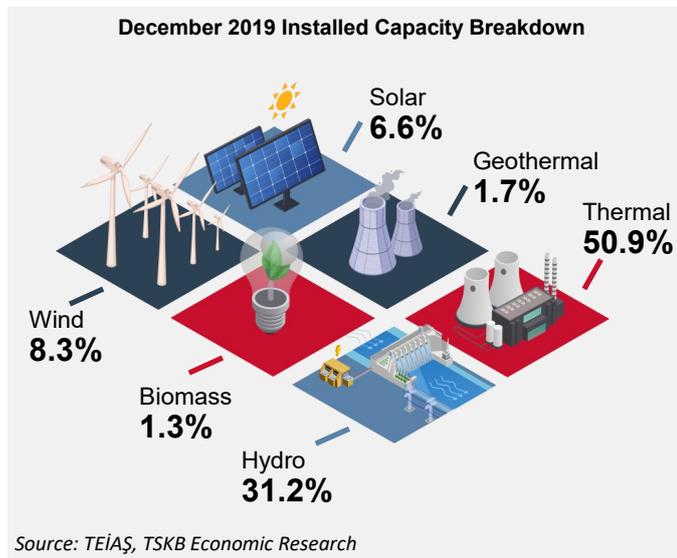
[Click](#) for details.

Installed Capacity Analysis

Turkey's total installed capacity, which had reached 88,551 megawatts (MW) at the end of 2018, edged up to 91,267 MWs by the end of 2019, although there was a slight decrease in installed capacity in December when compared to the previous month. During this period, licensed and unlicensed solar power plants with a total installed capacity of 101 MW were commissioned. Wind farms with a total installed capacity of 36 MW were commissioned in December. The total installed capacity of renewable waste and hydroelectric power plants increased by 17 MW and 3 MW, respectively. There was no change in the installed capacity of geothermal and coal power plants operating with domestic/imported coal. The total installed capacity of natural gas power plants and fuel oil power plants decreased by 133 MW and 27 MW, respectively.

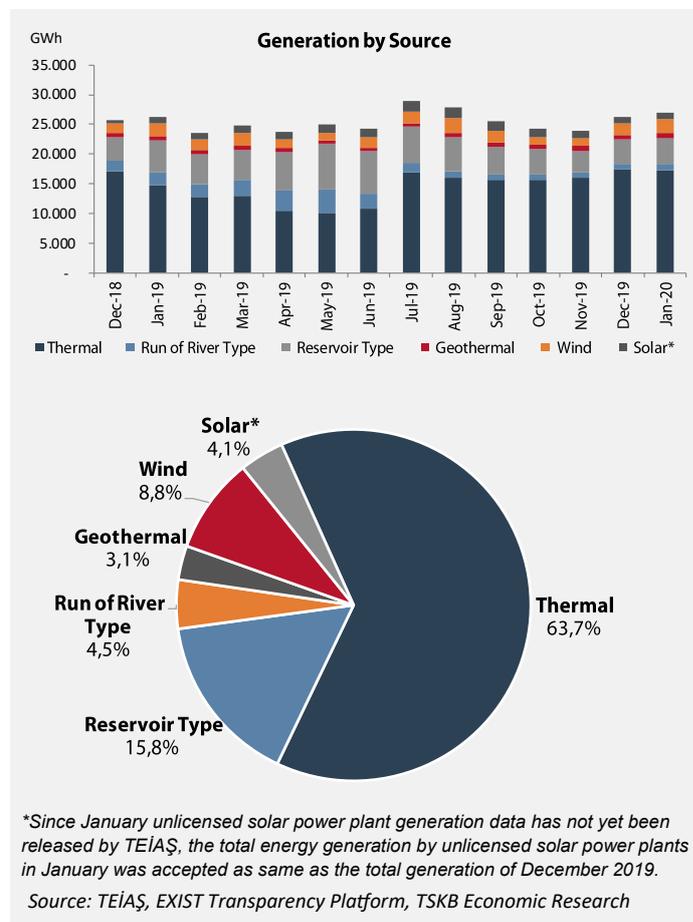


Of all the power plants in operation during December, 49.1% were generating electricity from renewable sources, with hydro-electric power plants accounting for 31.2% of the total installed renewables capacity. This was the first time renewable resources exceeded 49% of the total installed capacity. Wind power and solar power plants saw their combined share increase to 14.9% by the end of December 2019.



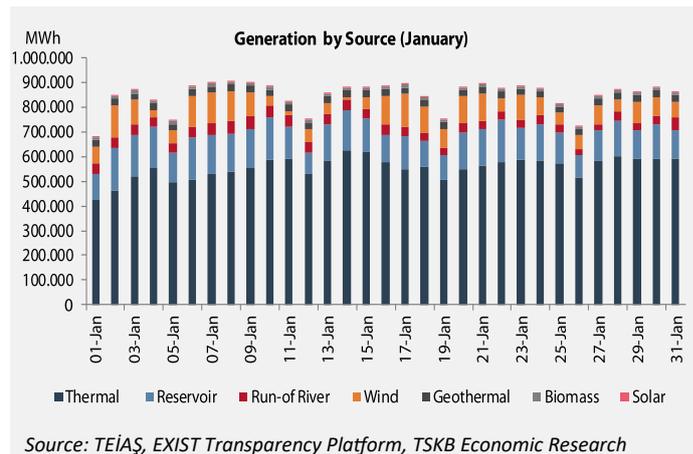
Electricity Generation Analysis

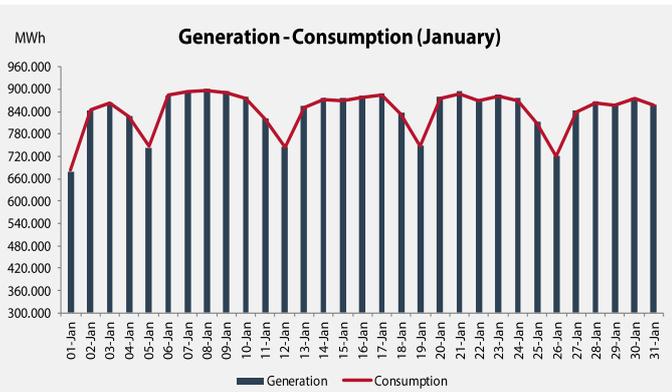
Approximately 26.2 terawatt-hours (TWh) of electricity was generated in December 2019, while total electricity generation in January 2020 reached approximately 27 TWh. There was an increase of 3% in average daily electricity generation in January 2020 when compared to December 2019.



Thermal power plants, which had supplied 66.2% of all of the electricity generated in December, were responsible for 63.7% of the total electricity generated in January 2020, with the increase in the electricity generation from run-of-river type hydroelectric and wind power plants likely to have been the main reason for the 2.5-point decrease.

After accounting for 7.1% of electricity generated in December, wind farms provided 8.8% of the total electricity generated in January 2020. Wind power plants realized their **second highest ever monthly production value after the 2.64 TWh generated in August 2019 with the 2.38 TWh in January 2020**. Another noteworthy point was that renewable power plants, which had an average share of 44.5% in electricity generation throughout 2019, accounted for 36.3% of all electricity generation in the first month of 2020, below the 43.9% in the same period of 2019.





Source: TEİAŞ, EXIST Transparency Platform, TSKB Economic Research

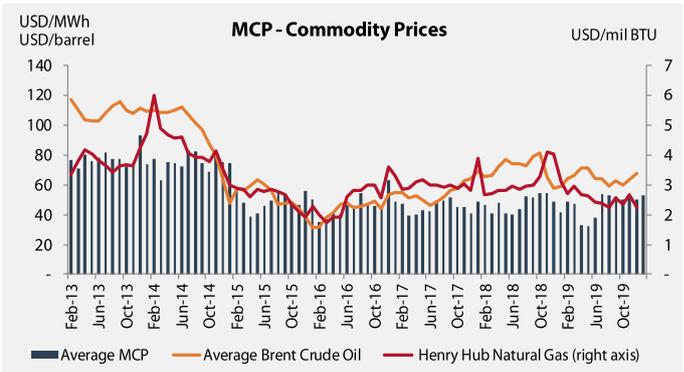
The average daily generation of licensed plants in January 2020 stood at 845,807 megawatthours (MWh). The highest electricity generation from licensed power plants was realized on Wednesday, January 8th, at 900,536 MWh, with the lowest being on Wednesday, January 1st, at 678,426 MWh.

Daily consumption averaged 842,700 MWh in January 2020, peaking at 896,941 MWh on Wednesday, January 8th, while the lowest level of electricity consumption, of 682,945 MWh, recorded on Wednesday, January 1st.

When compared to the December 2019 average, the average MCP for January 2020 was 8% higher.

The daily average MCP for January stood at TL 328.61 /MWh for peak hours (from 8AM to 8PM), 4.5% higher than the daily average value. The highest peak-hour average recorded was TL 343.14 /MWh on Friday, January 10th, while the lowest peak-hour average was TL 289.93 /MWh, recorded on Sunday, January 26th.

The average pricing in off-peak hours (from 8PM to 8AM) for the same period stood at TL 300.61 /MWh. The highest off-peak hour average was TL 325.43 /MWh, recorded on Sunday, January 26th, with the lowest off-peak-hour average of TL 255.35 /MWh recorded on Monday, January 6th.



Source: EXIST, CBRT, EIA, TSKB Economic Research

The annual average MCP in 2018 was USD 47.39 /MWh while the annual average MCP was USD 45.98 /MWh in 2019. The average MCP in January stood at USD 53.16 /MWh.

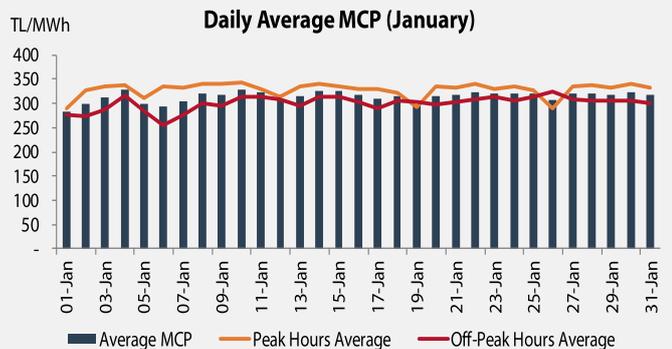
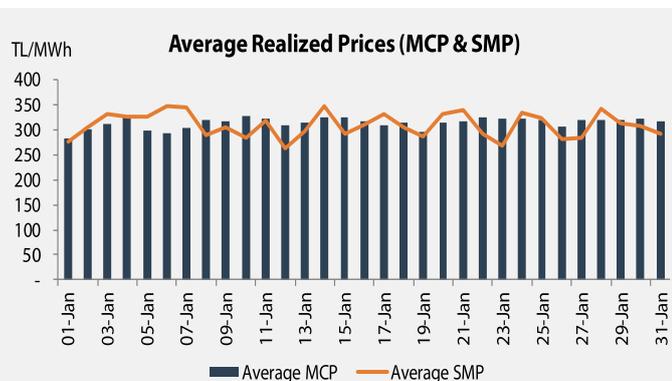
The MCP increased by 6.5% in dollar terms in January when compared to December, mainly as a result of the 8% increase in TL electricity price despite the depreciation of the lira against the dollar.

Brent crude oil prices, which had exceeded USD 70 per barrel in April and May 2019, averaged USD 64.36 per barrel while in 2019. Brent oil barrel price increased by 6.5% in December compared to the previous month, maintaining the upward trend which started in October.

The average price of Henry Hub natural gas was USD 2.22 /mBTU in December, having averaged USD 2.57 /mBTU for 2019 as a whole.

Electricity Price Analysis

The average market-clearing prices (MCP) and system marginal price (SMP) fluctuated between TL 263 /MWh and TL 348 /MWh in January 2020. In the same period, the average MCP stood at TL 314.61 /MWh, while the SMP averaged TL 284.06 /MWh. The lowest average MCP, of TL 284.04 /MWh was recorded on Wednesday January 1st, and the lowest average SMP, of TL 263.80 /MWh was recorded on Sunday, January 12th.



Source: EXIST, TSKB Economic Research



Electricity generation and consumption in 2019



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Gross electricity consumption in Turkey decreased by 0.16% in 2019 to 303.7 terawatt-hours (TWh). According to figures released by the TEİAŞ, gross electricity consumption in 2018 stood at 304.2 TWh. The slowdown in industrial production is thought to have had an impact on this decline in gross electricity consumption.

Months	2018 (TWh)	2019 (TWh)	Change (%)
January	26.6	26.0	-2.1
February	23.6	23.4	-0.8
March	25.1	24.9	-0.8
April	23.9	23.6	-1.3
May	24.3	24.8	2.1
June	24.2	24.3	0.6
July	29.6	28.8	-2.4
August	27.9	27.8	-0.5
September	25.4	25.5	0.4
October	23.8	24.1	1.3
November	24.1	24.1	-0.1
December	25.7	26.3	2.2
Total	304.2	303.7	-0.16

A more detailed look at the monthly data finds that gross electricity consumption, which contracted for seven months in total in 2019, grew in May, June, September, October and December. Contractions of more than 2% were observed in January and May, while more than 2% growth was recorded in May and December.

Looking at gross electricity generation values, there was a decrease of 0.18% in parallel with electricity consumption, with gross electricity generation recorded at 304.2 TWh. Coal-fired power plants accounted for 37.2% of the gross electricity generation in 2019 with natural gas power plants accounting for 18.6% of the total. With the high contribution from hydroelectric power plants in the first three quarters of the year, the share of hydroelectric power plants in total gross electricity generation exceeded the 29.2% share of natural gas power plants. The share of geothermal, wind and solar power plants, which are also renewable energy resources, stood at 13.2%.

Resources	2018 Share(%)	2019 Share (%)
Coal	37.15	37.18
Hydro-electric	19.66	29.21
Natural Gas	30.34	18.64
Geothermal+ Wind +Solar	11.54	13.24
Renewable Waste	1.19	1.49
Liquid Fuels	0.11	0.24

Compared to 2018, the biggest difference is the change in the share of natural gas power plants. It is considered that the 49.5% rise that came to the natural gas used by natural gas power plants producing electricity in August 2018 is a major factor in this decrease. Another highlight in 2019 is the remarkable increases in the amount of electricity generated from hydroelectric power plants and wind power plants. While the share of hydroelectric power plants in total gross electricity generation increased to 46% in May, wind power plants produced approximately 20% of the total gross electricity on Sunday, December 22th.

Source: TEİAŞ, TSKB Economic Research

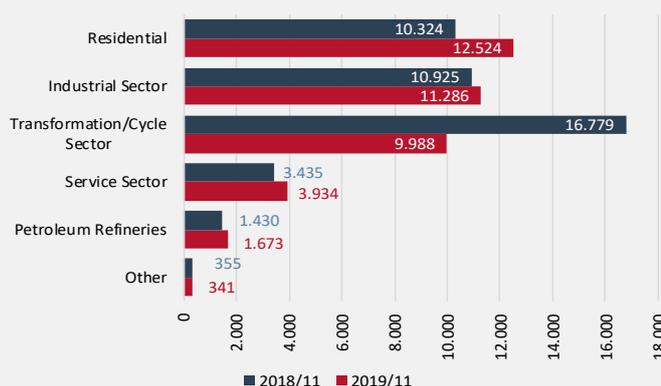
Natural Gas Consumption



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According to the Natural Gas Market Monthly Sector Report published by EMRA, natural gas consumption, which stood at 43.2 million Sm³ in the first 11 months of 2018, edged down to 39.7 million Sm³ in the first 11 months of 2019. The conversion/cycle sector, which contracted by 40%, was the key factor behind the 8.1% decline observed in the mentioned period. An analysis of the sub-breakdown of the decrease in natural gas consumption in the transformation/cycle sector finds that the decline in natural gas consumption of power plants was the main reason for this decrease. The transformation/conversion sector, which accounted for 39% of natural gas consumption in the first 11 months of 2018, saw its share in total natural gas consumption fall to 25% in the same period of 2019, behind the residential and industrial sectors in natural gas consumption. Likewise, in the first 11 months of 2018, natural gas cycle power plants which had been operating with an average capacity utilization rate (CUR) of 46% were working with a CUR of 25% in the same period of 2019. The share of natural gas power plants, which had stood at 30% in 2018, in total electricity generation, decreased to 19% in 2019 due to this decline.

Distribution of Natural Gas Consumption to Sectors (million Sm³)



Source: EMRA November Monthly Natural Gas Report, TSKB Economic Research

In addition, EMRA announced its forecast for national natural gas consumption for 2020. In line with the decision of the board published in the Official Gazette dated 29 January, its projection for natural gas consumption in 2020 was announced as approximately 52 billion Sm³. According to EMRA Transparency Platform data, the forecasting mentioned is approximately 11% higher than the volume of natural gas consumption in 2019, which had stood at around 47 billion Sm³. In addition to the natural gas consumption in the residential and industrial sectors, the conversion/cycle sector consumption lead by electricity generation plants will be effective in realizing this predicted level.



Sector News

Local News

- **Natural gas prices set for February.** Oil Transportation by Petroleum Pipeline Corporation (BOTAŞ) left its natural gas tariffs unchanged in January. Thus, the price of every 1,000 cubic meters of natural gas sold for residential use was maintained as TL 1,251. The price of gas for electricity production was determined as TL 1,600 /'000 m³. Natural gas sold to organized industrial zones was left unchanged at TL 1,542 /'000 m³ and natural gas sold to industrial facilities was fixed at TL 1,550 /'000 m³. (January 31, 2020)

- **Aksa Energy's application to the Turkish Electricity Transmission Corporation (TEİAŞ) to stop production at its Şanlıurfa Natural Gas Combined Cycle Power Plant (NGCCPP) was accepted.** Earlier in a statement to the Public Disclosure Platform (KAP), it was stated that an application had been submitted to TEİAŞ to halt production at the Şanlıurfa NGCCPP, which has an installed power of 147 MW, citing the lower probability of generating electricity within Turkey's borders at a competitive price under free market conditions. It was also mentioned that the Şanlıurfa power plant would be able to resume production in a short space of time if the appropriate market conditions were reached, since the application made was only to stop production without license cancellation. Generation has since ceased at the facility. (January 31, 2020)

- **Borusan EnBW Energy provides USD 74 million of financing for the Kiyıköy Wind Power Plant which it purchased in 2017.** In this context, Borusan EnBW Energy plans to build an additional capacity of 72 MW by constructing 20 turbines with a capacity of 3.6 MW. The European Bank for Reconstruction and Development (EBRD) and ICBC Bank of Turkey will provide loans to finance the USD 100 million investment project. Both banks will contribute an equal amount to a total loan of

USD 74 million. Following the completion of the project, the Kiyıköy Wind Power Plant will have a total installed capacity of 100 MW to be obtained from 34 turbines. (January 30, 2020)

- **Turkey's largest biomass power plant (BPP) commissioned.** The Afyon Eber Power Plant was planned to generate 200 gigawatt-hours (GWh) of electricity through the burning of an average of 260,000 tonnes of agricultural waste per year. The installed power of the facility, which is owned by Mimsan, is 27 MW. (January 29, 2020)

- **Kangal Thermal Power Plant starts production.** A unit of the Kangal Thermal Power Plant, one of 6 power plants to be completely or partially shut down for failing to carry out required environmental investments on January 1st, 2020, received a "temporary certificate of activity". The power plant, which has a total installed power of 457 MW, has no flue gas treatment plant in its two units. The third unit, which has an installed capacity of 157 MW, started production with a temporary operating certificate, as a flue gas treatment plant was present. (January 29, 2020)

- **Special consumption tax (SCT) rate for diesel re-set.** According to the Presidential Decree published in the Official Gazette, duties on diesel with a sulfur rate not exceeding 0.001% by weight was determined as TL 1.9059 per litre. Previously the SCT rate (duty) was TL 1.7945 per litre. (January 29, 2020)

- **First 1 billion cubic meters of gas delivered from TurkStream.** Gazprom stated that 54% of the first 1 billion cubic meters of natural gas had been transferred to Turkey and 46% to the Bulgarian-Turkish border through TurkStream, which became operational at the beginning of the month. (January 28, 2020)

- **Amount of natural gas transported from TANAP reaches 3.7 billion cubic meters.** The CEO of SOCAR Turkey, Zaur gahramanov, reported that the amount of gas transported from the TANAP natural gas pipeline, which became operational on 30 June 2018, had reached 3.7 billion cubic meters as of the end of 2019. (January 28, 2020)

- **Regulation on the Amendment to the Regulation on Increasing Efficiency in the Use of Energy Resources and Energy enters force after publication in the Official Gazette by the Ministry of Energy and Natural Resources.** (January 27, 2020)

- **Petroleum Products Employers Union (PÜİS) and Solaray Energy to join forces to meet the energy needs of petrol stations from the sun.** According to the statement, the aim of the cooperation is to meet the current electrical needs of thousands of petrol stations from solar panels to be built on their roofs. (January 24, 2020)

- **TL 38 billion incentive support provided to power plants which generate electricity from renewable energy sources.** According to EPIAŞ figures, TL 38 billion incentive support was provided for electricity generation derived from the wind, hydro-power, geothermal, biomass and solar energy resources under the YEKDEM in 2019. (January 23, 2020)

- **Declaration to be given for tires, batteries and electronic items.** Within the scope of the regulation, which entered effect on January 1, 2020, a requirement to reclaim the recovery contribution for products such as tires, accumulators, batteries, oil and electronic goods was introduced. The recovery contribution amount is TL 2-10 for tires, TL 0.05-0.50 per kilogram for accumulators, TL 2-15 per kilogram for batteries, TL 0.10-0.50 per kilogram for oils, TL 0.20-0.30 per kilogram for electricity and electronics, TL 0.01 per box or bottle for medicines and TL 0.01 -0.10 per liter of packaging. (January 23, 2020)

- **TL 400 million in financing provided to EnerjiSA.** Garanti BBVA provided TL 400 million in TLREF-indexed and long-term financing to the electricity distribution and sales company, EnerjiSA, within the scope of financing infrastructure and grid investments. (January 22, 2020)

- **Yapı Kredi Bank issues USD 50 million green bonds.** Yapı Kredi Bank issued its first green bond issue, raising USD 50 million with five year maturity bonds to be used in financing renewable energy projects. (January 22, 2020)

- **Competition Authority permission given to Polat Energy.** The Competition Authority allowed Polat Energy to take over Doruk Energy and Poyraz Energy. (January 22, 2020)

- **Global Investment Holdings subsidiary, Naturelgaz, applies to Capital Markets Board (CMB) to carry out amendments to public offering in its articles of association.** Operating in the compressed and liquefied natural gas sector; the firm sells and distributes bulk compressed natural gas (CNG) to industrial and commercial customers such as factories, power plants, hotels and asphalt plants, as well as towns and cities which do not have access to the natural gas pipeline due to economic or geographical constraints. (January 22, 2020)

- **SOCAR to establish energy facility for Star Refinery in USD 17 million investment.** The facility, which is planned to be established in the free industrial zone in Aliağa, will meet the energy needs of the Star Refinery and other industrial facilities. The combined cycle power plant to be built will generate 125.6 MW of electricity and 169.6 MW of thermal energy. The installation work for the plant is expected to start in June or July. (January 22, 2020)

- **Istanbul Gas Distribution Company (İGDAŞ) provides option to pay natural gas bills by installments.** (January 22, 2020)

- **Call for oil exploration from Somalia.** President Recep Tayyip Erdogan said the Somali government had urged Turkey to conduct oil exploration in its seas. Speaking on his return from a summit dealing with the issue of Libya in Berlin, he said it was crucial to explore for oil found in Somalia's seas. (January 21, 2020)

- **Possibility of new contractor for Sinop Nuclear Power Plant.** The Minister for Energy and Natural Resources, Fatih Dönmez, stated that the feasibility study prepared for the nuclear power plant planned to be built in Sinop was not satisfactory either in terms of timetable or cost. There is a possibility that a nuclear plant may be built with another contractor. (January 21, 2020)

- **OYAK Group buys Total and M Oil.** According to a Habertürk report, OYAK Group bought Total and M Oil within Demirören Holding for a total of USD 450 million. (January 21, 2020)

- **Greek state natural gas company, DEPA, reportedly wins EUR 200 million lawsuit against BOTAS.** BOTAS and DEPA are expected to meet to agree on the payment and to pay by offsetting instead of cash. (January 21, 2020)

- **EMRA announces licenses issued in December.** The list in the Official Gazette dated January 18 contains 12 new production licenses, one Organized Industrial Zone (OIZ) production license, two supply licenses and three OIZ distribution licenses. (January 20, 2020)

- **Nine oil exploration licenses allocated to the Turkey Petroleum Corporation (TPAO).** Edirne, Tekirdağ, Çanakkale, Kahramanmaraş, Gaziantep, Şanlıurfa and Adıyaman are among the cities for which licenses have been issued for a five year period. (January 20, 2020)

- **Minister of Transport and Infrastructure, Mehmet Cahit Turhan, announces that the government has launched a carbon-free airport project.** Emphasizing that measures would be taken to prevent waste generation in line with the principle of zero waste at the airports, Turhan said all efforts would be taken to ensure that waste would be collected separately at source, and would be recycled at a high a rate as possible, with remaining waste disposed of under appropriate conditions. Cahit Turhan added that the carbon emissions causing greenhouse warming originating from the airport would be calculated in accordance with international standards, and verification processes will be completed. Pointing out the government's aim to expand the use of electric vehicles in renewable energy investments and airports in line with the principle of efficient use of energy. Turhan also added that carbon emissions would be reduced with these efforts. (January 17, 2020)



- **President Erdoğan speaks at “Smart Cities and Municipalities Congress and Exhibition”.** President Erdogan stated that the issue of smart cities had been included in the 11th Development Plan and added that the Ministry of Industry and Technology was carrying out studies to support smart city applications. Erdoğan said that within the framework of the municipalities’ smart city concept, there had been wide potential in areas such as infrastructure, security, energy, management, education and health. Speaking at the same event, the Minister for the Environment and Urbanization, Murat Kurum said, "we will build all urban transformation areas and 100,000 social housing projects in accordance with the smart neighborhood concept. Together with our governorships and municipalities, we will carry out all smart city applications in the fastest order, in view of the priority order we set. Thus, we will carry out a municipalism where investments are more efficient and resources are not wasted. We will contribute at least TL 25-30 billion annually to our economy by 2023." (January 16, 2020)

- **The Minister for Energy and Natural Resources, Fatih Dönmez, said that "We aim to have the first hydrogen entry into distribution lines in Turkey by the end of 2021 at the latest."** In his speech at the workshop on "Energy Search Meetings: Hydrogen", Dönmez said that the main goal in energy policies was to secure energy supply security in the short and medium term. Noting that the government aims to obtain four main benefits through the use of hydrogen, Dönmez listed them as "adding more renewable energy to the system, making the heat sector carbon-emission free, realizing hydrogen production from domestic coal, increasing the use of boron as hydrogen storage and conservation". (January 16, 2020)

- **A total of 233.18 million barrels of crude oil shipped from the Baku-Tbilisi-Ceyhan (BTC) crude oil pipeline's naval terminal in Ceyhan in 2019.** According to BOTAŞ figures, more than 3.3 billion barrels of oil have been shipped to the world market by tanker so far from the Heydar Aliyev Marine Terminal in the Ceyhan district of Adana, the last stop of the BTC Crude Oil Pipeline, which was officially opened on July 13, 2006. In 2019, the highest number of shipments were made in the month of May, with 22,149,000 barrels. (January 16, 2020)

- **Fatih Dönmez, Minister of Energy and Natural Resources, provides statement regarding support for the Productivity Enhancing Project (VAP).** Dönmez said in his speech that 229 VAP projects with an investment amount of TL 103.5 million had been paid TL 25 million of support since 2009. Dönmez added each unit of efficiency support provided by the public had paved the way for 3.5 units of savings, preventing 598 million cubic meters of natural gas imports. Fatih Dönmez added that TL 89 million had been saved since 2009 with VAP projects. (January 15, 2020)



- **TL 5.85 million in grants for solar electricity for irrigation provided to 9,046 farmers affiliated to irrigation cooperatives by the Antalya Metropolitan Municipality in 2019.** According to a statement issued by Cemal Kafa, the Head of the Agricultural Services Department, the municipality provided the electricity farmers needed for irrigation with 6.8 million kilowatt-hours (kWh) of electricity generated annually from the solar power plants it established. With these new power plants to be established, the municipality targets TL 12 million in support in 2020. (January 14, 2020)

- **Serhat Çeçen, Chairman of the Board of Association of Distribution System Operators (ELDER), issues statements concerning electric vehicles.** Çeçen stated that the integration of electric vehicle charging stations into the grid was one of the important items on the agenda in the sector, adding "the installation of electric vehicle charging stations should be carried out under the control of distribution companies. In this regard, we are in talks with Turkey's Automobile Joint Venture Group Inc. (TOGG) and working together with public institutions." Çeçen said that the electricity distribution sector, which is committed to investing TL 28.5 billion between 2016 and 2020, has invested approximately TL 20.0 billion, of which TL 7 billion was invested in 2016, TL 7.7 billion in 2017 and TL 5.2 billion in 2018. Çeçen added that a high level of importance had been given to Turkey's growing renewable energy capacity and ensuring applications such as roof type solar power plants integrate seamlessly with the grid in the digitization processes. (January 13, 2020)

- **US energy company to invest USD 200 million in Turkey.** Taronis Technologies, one of the leading renewable fuel producers in the global natural gas market, announced that a gasification unit production facility would be established in Turkey. It was stated that the 300-kilowatt gasification units would be produced at the facility to be established in an investment of USD 200 million. All equipment to be used in production will be procured from Turkey. (January 13, 2020)

- **Energy "can be used 40% more efficiently in Turkey".** The chairman of the Energy Efficiency Association, Murat Kalsın, speaking to mark Energy Efficiency Week between 6-12 January, said that Turkey had the potential to reduce energy density by 40%, adding that this potential should be utilized. Stating that energy consumption was projected to increase by 50% globally by 2050, he warned that emissions should be reduced by 50% by 2030, and carbon neutral technologies should be adopted by 2050 in order to prevent climate change. Kalsın said, "Energy is one of the most important issues when it comes to sustainable growth and the future. We need to increase energy efficiency by 3% every year." (January 10, 2020)

- **Sales of electric and hybrid cars triple in 2019.** According to the Turkey Electric and Hybrid Vehicles Association (TEHAD) data, the market reached a total sales figure of 4,031 units in 2018 to conclude 2019 with sales of 11,237 electric and hybrid vehicles. While 222 of the motor vehicles sold in 2019 were 100% electric models, 11,015 were hybrid engine options. (January 10, 2020)

- **TurkStream Natural Gas Pipeline, which will carry Russian natural gas through the Black Sea to Turkey and Europe, completed and opened in an official ceremony.** The opening was attended by President Recep Tayyip Erdoğan, the President of the Russian Federation, Vladimir Putin, the President of the Republic of Serbia, Aleksandar Vučić, Prime Minister of the Republic of Bulgaria, Boyko Borisov, and the Minister of Energy and Natural Resources, Fatih Dönmez. Speaking at

the opening ceremony of the TurkStream Natural Gas Pipeline, the President of the Russian Federation, Vladimir Putin, said, "The natural gas coming from the first line comes from the Western Siberian deposits. The second line of gas goes to the Balkans through Turkey, Bulgaria, Serbia and Greece. This will have a positive impact not only on the Turkish economy but also for many Southern European economies." Turkish President Recep Tayyip Erdogan said that the 15.75 billion cubic meters out of 31.5 billion cubic meters of natural gas would reach Turkey, thus meeting the natural gas needs for 15 million households. The Minister for Energy and Natural Resources, Fatih Dönmez, also said that with the TurkStream Natural Gas Pipeline's official opening, Turkey's natural gas supply security problems were no longer an issue. Dönmez emphasized that the daily capacity of Turkey's natural gas network had reached 318 million cubic meters, adding "with the capacity increases of our storage facilities, TANAP and TurkStream working at full capacity, the capacity will exceed 450 million cubic meters per day in 2021." (January 9, 2020)

- EMRA issues board decision for unlicensed electricity generation investors who are participants of the OIZ or the OIZ legal entity. According to the decision, depending on whether these consumers exercise their eligible consumer rights, different charges will be applied in the clearing transactions. According to the publication in the Official Gazette, the clearing transactions for the OIZ participants or the OIZ legal entities within the scope of the "Resource Supply Tariff Communiqué" are based on the "retail one-time active energy price" pertaining to their subscriber groups, and if not used, until consumption. For the excess production, the price determined in accordance with the communiqué for production will be carried out over the "retail single-time active energy price belonging to their subscriber groups". In accordance with the decision, the YEKDEM unit cost per unit energy amount approved by EMRA will be used in calculations to be made within the scope of the communiqué. (January 9, 2020)

- Zorlu Energy awarded approximately EUR 3.5 million with 6 different projects under the Horizon 2020 Program, the EU's largest research and innovation program. According to the statement issued by the company, Zorlu Energy obtained three of its grants from the EU with the projects it developed in the field of geothermal energy and the other three in the field of electricity distribution. (January 8, 2020)

- Rent and sales transactions no longer need an Energy Identity Certificate. The Ministry of Environment and Urbanization, the General Directorate of Land Registry and Cadastre and the Department of Land Registry forwarded an announcement to the land registry offices regarding the implementation of the Energy Identity Certificate. The announcement reiterated that in line with the provisions of the Energy Efficiency Law and the Energy Performance Regulation in Buildings, the Energy Identity Certificate will be sought in purchases, sales and rentals as of January 1, 2020, and if the parties have a joint declaration, these transactions will not require this document. (January 7, 2020)

- Gas delivery from the TurkStream Natural Gas Pipeline started for Bulgaria, as well as Greece and Northern Macedonia. According to the statement, the Trans Balkan Natural Gas Pipeline is not currently in use, but has been reversible and that gas can be transferred to Turkey, Romania, Moldova and Ukraine if needed. The Russian state-owned energy giant, Gazprom, had begun the transfer of around 3 billion cubic meters of natural gas from TurkStream's reception station in Turkey, Kıyıköy to Bulgaria, on 1 January 2020. (January 7, 2020)

- Secoya International agrees to purchase Aksu Energy through private placement method. According to the statement from Aksu Energy to the KAP, the total capital of TL 16.5 million, with the restriction of pre-emptive rights of the existing shareholders, was raised by TL 4.1 million to TL 20.6 million, free of cash and completely free of any collusion. All shares representing the increased capital amount, without being offered to the public, will be sold to Secoya International Inc. (January 6, 2020)

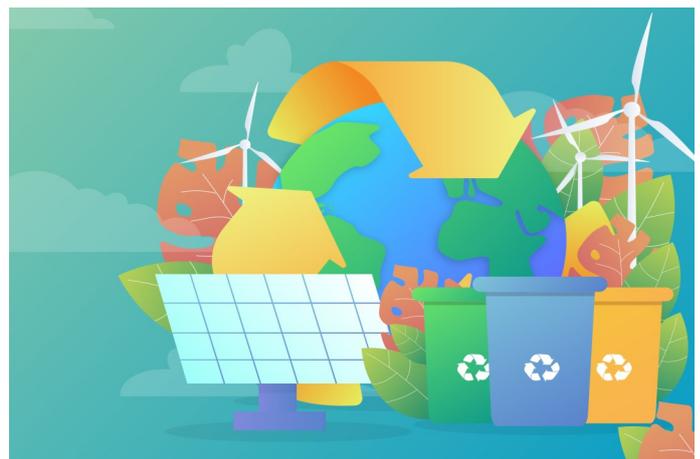
- No change in the plastic bag price in 2020. Deputy Minister for the Environment and Urbanization, Mehmet Emin Birpınar, announced that prices of plastic bags in 2020 would remain unchanged at TL 0.25. (January 3, 2020)

- Turkey Electricity Transmission Company publishes list of amounts to be paid to manufacturing plants to benefit from the capacity mechanism in November 2019. In this context, TL 151 million will be paid to 39 power plants in November. When evaluated in the January-November period, the facilities were entitled to receive a total of TL 1.72 billion, while approximately TL 282 million remained for December. In the same period, the Soma-B Thermal Power Plant will receive the highest payment, at TL 152.8 million. (January 3, 2020)

- Naturel Renewable Energy announces the signing of a share purchase agreement with Girişim Electricity to purchase 20 solar power plants (SPP) with a capacity of 22.35 MW. Based on the sales price, the company has paid a TL 1 million down payment to Girişim Electricity. With this acquisition, the installed capacity of the Company's solar power plants has reached 44.07 MW. According to the announcement, the solar plants will generate 34.2 million kWh of electricity and USD 4.1 million net income in 2020. (January 2, 2020)

- Regulation on Amendment of the Regulation on YEKA published by the Ministry of Energy and Natural Resources and entered force. According to the change;

- Legal entities who have won the YEKA connection capacity allocation contest and signed the YEKA Usage Rights Agreement will propose the candidate YEKA to the general directorate with the requested information and documents within the period specified in the specification, within the period specified in the specification.
- A change regarding the examination of the applications took place within the period of the Commission's detailed document review. The Commission was granted a 30-day period for this transaction, which had previously been completed in 20 days. The commission will also be able to use an additional 30-day period when proceedings cannot be completed.



- If the Commission deems it necessary during the detailed document review process, it will be able to request a detailed explanation from the applicants for any incomplete, erroneous and incomprehensible application documents and information and documents presented within the scope of the one-off correction and specification.
- The installation period of the generation facility, which was previously reported as "in the time specified in the specification for not exceeding 36 months", was determined in the specification, "The total installation time of the electricity generation facility is specified in the specification." (January 2, 2020)

- Joint press conference held in Ankara on 1 January 2020 with the Minister of Environment and Urbanization, Murat Kurum, and Minister of Energy and Natural Resources, Fatih Dönmez, to discuss ending the activities of coal thermal power plants that had not fulfilled their environmental investments. The Ministry for the Environment and Urbanization, Murat Kurum, announced that the decision had been taken to shut down 5 thermal power plants completely, and one thermal power plant partially, in accordance with the Environment Law. The Minister stated that 4 of the 7 thermal power plants examined had been awarded temporary activity certificates and three of the power plants had received the necessary environmental permits. Kurum said that the Kahramanmaraş Afşin A, Kütahya Seyitömer, Kütahya Tunçbilek, Sivas Kangal and Zonguldak Çatalağzı thermal power plants had been completely closed and that the Manisa Soma Thermal Power Plant had been partially closed. The management of the closed thermal power plants will not be permitted to operate unless the necessary environmental investments are carried out. The Bursa Orhaneli, Muğla Yatağan, Kahramanmaraş Afşin B and Ankara Çayırhan thermal power plants were issued with temporary activity certificates; they are only required to apply to the Ministry for an environmental permit and license certificate within 6 months, in line with the legislation. The Muğla Kemerköy, Muğla Yeniköy and Çanakkale 18 March Çan Thermal Power Plants have all obtained environmental permits within the scope of environmental legislation. The Minister for Energy and Natural Resources, Fatih Dönmez, stated that 7 out of 13 power plants would continue to generate electricity. Dönmez explained that the government would not hesitate to take action if the plants delayed taking measures to ensure environmental compliance, warning that there were many issues with the plants in addition to flue gas, such as the repair of monitoring units and storage of ash waste. (January 2, 2020)



News From Abroad

- Share of electricity from renewable sources in European Union (EU) reaches 18%. The European Statistical Office (Eurostat) published 2018 statistics on the share of renewable energy in the gross final consumed energy in the EU, consisting of 28-member countries. Accordingly, the share of electricity generated from renewable resources such as wind, solar and biomass increased to 18% in gross final electricity consumption, up from 17.5% in 2017. (January 30, 2020)

- Germany approves draft bill to phase out coal in 2038. The German cabinet reported that it supported the plan to end the use of coal as an energy source by 2038 as part of Berlin's climate protection efforts. A spokesperson for the German government announced that the cabinet had approved the draft for the gradual phasing out of coal. The German government will pay USD 45 billion to four regions to be affected by the plan to phase out the use of coal over the next 20 years. (January 30, 2020)

- Vestas aims to produce zero waste turbines by 2040. Setting its goal of becoming a carbon-neutral company by 2030, the Danish Vestas, one of the largest wind turbine manufacturers in the world, announced the goal of eliminating non-recyclable waste in the production, operation and decommissioning activities of wind turbines by 2040. (January 30, 2020)

- Microsoft to also absorb emissions from the atmosphere by 2050 and reset the carbon emissions it has caused to date by setting a carbon negative target in all supply chains in 2030. According to the company statement, Microsoft is responsible for a total of 16 million tonnes of emissions per year. Microsoft has also announced that it would launch a new Sustainability Calculator for users to calculate cloud computing emission impacts. It has also been announced that the company will provide a USD 1 billion innovation fund for the development of carbon reduction and carbon capture technologies. (January 27, 2020)

- Brent oil price to average USD 62 per barrel in first half of 2020 according to the U.S. Energy Information Administration (EIA). In a statement, the EIA, it was reminded that the price of barrels of Brent crude oil reached up to USD 70 due to the increase in tensions between the USA and Iran at the beginning of the month. It was stated that the risks decreased in the market due to the decrease in the tension between the two countries, and the price of barrels of Brent crude oil is expected to be an average of USD 62 in the first half of the year. In the statement, it was emphasized that concerns over a supply shortage in the global oil market had eased and that no upward movement in prices was expected in the first half of the year. (January 24, 2020)

- Fatih Birol, IEA President, expects supply surplus of 1 million bbl / day in the first half of 2020. Speaking in Davos, Fatih Birol, the President of the International Energy Association, stated that an increase in oil prices would not be expected under normal conditions, while warning that mounting instabilities in Iraq could change the situation. Birol stressed that the IEA expected global oil demand to increase by 1 million bbl / day mainly in 2020, driven by emerging economies, while non-OPEC producers such as the USA, Brazil and Norway would increase their oil supply by 2 million bbl /day. (January 22, 2020)

- **Subaru to sell electric vehicles.** Subaru has announced that it will only sell electric vehicles from the first half of 2030. According to the statement, 40% of sales are expected to consist of hybrid or electric models in 2030. (January 22, 2020)

- **Kia to invest USD 25 billion by 2025.** Kia announced that it will invest USD 25 billion by 2025 as part of its "Plan S" strategy, which includes electric vehicles, mobile services, connectivity and autonomous driving. Kia aims to sell 500,000 electric vehicles annually with 11 electric vehicle models by 2026, targeting a 6.6% share in the global electric vehicle market. (January 22, 2020)

- **Serbian President Aleksandr Vucic expresses his hope of receiving the first gas from his country's TurkStream Natural Gas Pipeline by the end of this year.** In a statement by Aleksandr Vucic to Sputnik, "Hopefully, we will start to receive the first natural gas from TurkStream by the end of this year. We have done our job. Now we expect Bulgaria to complete its business and join pipes. And then, I hope, we will receive the first transfer of gas by the end of the year." (January 22, 2020)

- **IEA publishes report on "Oil and Gas Industry in Energy Transformation".** The report stated that fossil fuels had been driving companies' recent returns, but warned that ignoring the increased pressures to reduce greenhouse gas emissions could threaten company profitability. IEA President Dr. Fatih Birol pointed out that all energy companies would be affected by the transition to clean energy, adding, "Every field of industry has to think about how it will respond. Doing nothing is not an option for them." (January 21, 2020)

- **United Kingdom (UK) will not invest in coal.** Prime Minister Boris Johnson announced that the UK would no longer invest in new coal mining or coal-based electricity generation projects. "As of today, the UK government will not grant new direct official development assistance, investment, export credits or commercial incentives to thermal coal mining or coal power plants abroad," said Johnson, speaking at the UK-Africa investment summit in London. (January 21, 2020)

- **IEA leaves its global oil demand growth forecasts unchanged for 2019 and 2020.** According to the "Oil Market Report – January 2020" report, oil demand forecasts for 2019 and 2020 were left unchanged at 1 million and 1.2 million barrels/day respectively. While the 2020 growth expectation for oil supply outside the Organization of Petroleum Exporting Countries (OPEC) remained at 2.1 million barrels / day, its growth forecast for 2019 was increased from 1.9 million barrels / day to 2 million barrels / day. (January 17, 2020)

- **Fall in energy revenues in Russia.** According to the Russian Federal Customs Service, the country's oil export revenues fell by 5.8% in the 11-month period of 2019 compared to the same period of the previous year, to USD 111.6 billion. In this period, natural gas export revenues decreased by 15.4% to USD 37.7 billion. In the period in question, natural gas export volumes decreased by 1.6% to 199 billion cubic meters, while oil export volumes increased by 3.8% to 245.9 million tonnes. In the same period, Russia's liquefied natural gas (LNG) export revenues increased to USD 7.6 billion. (January 16, 2020)

- **Decline in OPEC crude oil production in December.** According to the oil market report published by OPEC, OPEC's daily crude oil production decreased by 161,000 barrels in December to 29.44 million barrels. Global oil supply meanwhile decreased by 60,000 barrels per day when compared to

the previous month to 100.28 million barrels. In the same period, oil production in non-OPEC countries increased by 110,000 barrels per day to 70.84 million barrels per day. The report also projected that global demand for oil in 2020 would stand at 100.98 million barrels per day. (January 16, 2020)

- **Israel starts shipping natural gas to Egypt from Leviathan field in Eastern Mediterranean.** In a written statement, Israel's Energy Ministry announced that Israeli natural gas had begun to be transferred to Egypt, a step that would serve the economic interests of both countries. The statement also said that some of the gas being transferred from Israel would be liquefied in Egypt and exported to Europe. Israel began exporting gas from the Leviathan field to Jordan on 1 January. (January 16, 2020)

- **Bulgaria purchases 20% stake in the Alexandropolis (Dedeağaç) Floating LNG Storage and Regasification Unit (FSRU) project in northern Greece.** The Prime Minister of Bulgaria, Boyko Borissov, announced that Bulgaria's state-owned natural gas company, Bulgartransgaz, had acquired a 20% stake in Gastrade, a sub-unit of the Greek energy company Copelouzos, which is building the FSRU plant, as part of its efforts to diversify natural gas supplies. (January 10, 2020)

- **South Korea to provide USD 1 billion to the electric vehicle industry in 2020.** The incentive will be provided to consumers, charging stations and R&D activities. According to the press release issued by the South Korean news agency, Yonhap, affiliated with the country's Ministry of Commerce, Industry and Energy, the incentive will be provided within the scope of the government's targets of reducing fossil fuel consumption and its target that 25% of motor vehicle exports be green vehicles. (January 8, 2020)

- **Total cut in oil production extended from 1.2 million barrels a day to 2.1 million barrels as of January 1, 2020 as decision to reduce oil production by OPEC and non-OPEC countries enters force.** The decision was taken at the end of the 7th Ministerial Meeting in Vienna, Austria, on December 6th, 2019. (January 2, 2020)





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