

September 2019

#16

Monthly Energy Bulletin

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A month which saw oil prices surge

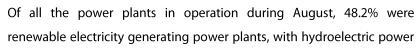
An airstrike took place against Saudi-based oil processing and production facilities in Abqaiq and Khurais, owned by Saudi Arabia's oil company, Saudi Aramco. The attack precipitated a cut in daily oil production of 5.7 million barrels of oil, corresponding to about 5% of global oil supply, and 2 billion cubic feet of natural gas. Saudi Arabia is the world's third largest oil producer after the United States of America (USA) and Russian Federation and world's largest oil exporter.

In the early hours of September 16, the first business day after the attack, the price of Brent oil rose surged by 19% to USD72 /barrel, but quickly eased lower.

Weak demand on the back of the global macro uncertainty and the weakness on the growth side, as well as the statements made by the Saudi Arabian authorities are thought to have helped bring oil prices back on an even keel during the week. The authorities later announced that the Saudi Arabia's daily oil production had returned its previous levels after the attack sooner than expected - while Brent oil prices fell back to their pre-attack levels.

Installed Capacity Analysis

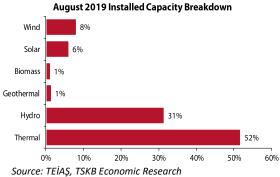
After reaching 88,551 megawatts (MW) at the end of 2018, Turkey's total installed capacity had reached 90,404 MW by the end of August 2019. There was a slight decrease in installed capacity when compared to the previous month, with the total installed capacity of natural gas power plants decreasing by 127 MW, while there was no change in the installed capacity of coal power plants operating with imported coal. During this period, licensed and unlicensed wind farms with a total installed capacity of 42 MW were commissioned. Solar and hydroelectric power plants recorded an increase of 15 MW and 13 MW in their installed capacity, respectively. The total Installed capacity of renewable waste power plants increased by a mere 9 MW, while there was no recorded change in the total installed capacity of geothermal power plants and coal power plants operating with domestic coal.



Installed Capacity Breakdown

Instal

Source: TEİAŞ, TSKB Economic Research



plants accounting for 31.5% of the total installed renewables capacity. Wind power and solar power plants, which had a 13.6% of total share in capacity at the end of 2018, raised their share to 14.2% by the end of August 2019.



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Electricity Generation Analysis

Approximately 25.26 terawatthours (TWh) of electricity was generated in September 2019, while total electricity generation in August reached 27.50 TWh. There was a decrease of 5.1% in average daily electricity generation in September 2019 when compared to August 2019, with the effect of the seasonal base effect on demand in September thought to have been behind this.

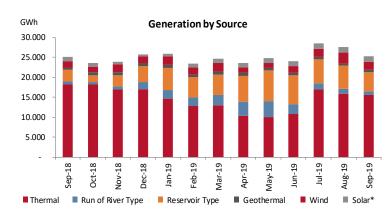
Thermal power plants, which had supplied 57.9% of all electricity in August, generated 61.7% of the total electricity generated in September 2019, with the decrease in the electricity generation through hydroelectric and wind power plants likely to have been the main reason for the 3.8-point increase.

Accounting for 9.6% of electricity generated in August, wind provided 7.8% of the total electricity generated in September.

Another noteworthy development was the increase in the share of renewable power plants in electricity generation, from an average of 32.8% in the first nine months of 2018 to 47.4% for the same period in 2019, despite the decrease in the July-September period.

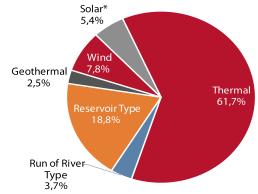
The average daily generation of licensed plants in September 2019 stood at 805,318 megawatthours (MWh). The highest electricity generation from licensed power plants was realized on Tuesday, September 3, at 901,080 MWh, with the lowest being on Sunday, September 22, at 665,516 MWh.

Daily consumption averaged 804,020 MWh in September 2019, peaking at 901,080 MWh on Tuesday, September 3, while the lowest electricity consumption, of 662,281 MWh, was recorded on Sunday, September 22.



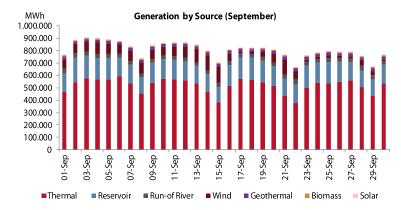
Source: TEİAŞ, YTBS Daily Reports, TSKB Economic Research

**Since September unlicensed solar power plant generation data has not yet been released by TEİAŞ, the total energy generation by unlicensed solar power plants in September was accepted as same as the total generation of August 2019.

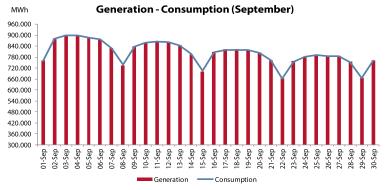


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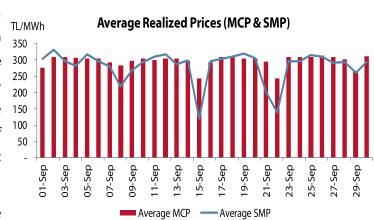
Electricity Price Analysis

The average market-clearing prices (MCP) and system marginal price (SMP) fluctuated between TL121 /MWh and TL333 /MWh in September 2019. In the same period, the average MCP stood at TL297.90 /MWh, while the SMP averaged TL281.93 /MWh. The lowest average MCP, of TL243.08 /MWh, and the lowest average SMP, of TL121.27 /MWh was recorded on Sunday, September 22 and Sunday, September 15, respectively.

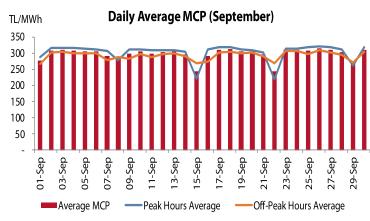
When Compared to the August 2019 average, the average MCP for September 2019 was 0.1% lower.

The daily average MCP for September stood at TL302.85 /MWh for peak hours (from 8AM to 8PM), 1.7% higher than the daily average value. The highest peakhour average recorded was TL320.80 /MWh on Thursday, September 26, while the lowest peak-hour average was TL218.57 /MWh on Sunday, September 22.

The average pricing in off-peak hours (from 8PM to 8AM) for the same period was calculated as TL292.95 /MWh. The highest off-peak hour average was TL307.79 /MWh on Thursday, September 26, with the lowest off-peak-hour average of TL267.38 /MWh



Source: EXIST, TSKB Economic Research



Source: EXIST, TSKB Economic Research

recorded on Sunday, September 1. A noteworthy point was that the daily average MCP exceeded TL300 /MWh on 20 days during September. In the same period, the hourly MCP was did not fall below TL250 /MWh except on the 15th and the 11th.

The annual average MCP in 2018 was USD47.39 /MWh, while the average MCP in August stood at USD53.03 /MWh, while in September 2019 it stood at USD52.15 /MWh.

The MCP decreased by 1.7% in dollar terms in September when compared to August, mainly as a result of the limited decline in the TL-denominated electricity price and the depreciation in the lira against the dollar.

Brent crude oil prices exceeded USD70 /barrel in April and May 2019, while in August 2019, the price of Brent

USD/MWh **MCP - Commodity Prices** USD/mil BTU USD/barrel 140 120 6 100 5 80 60 40 20 Jan-15 Jan-16 Jan-14 Sep-Jan-1 Average MCP — Average Brent Crude Oil — Henry Hub Natural Gas (right axis)

and May 2019, while in August 2019, the price of Brent Source: EXIST, CBRT, International Energy Agency (IEA), TSKB Economic Research

oil declined to an average of USD59.04 /barrel, a fall of 7.6% compared to the previous month.

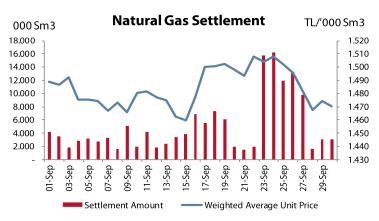
The price of a barrel of Brent crude oil averaged USD64.91 in the first eight months of 2019. The average price of Henry Hub natural gas was USD2.22 /mBTU in September, while averaging USD2.63 /mBTU in the first eight months of 2019.



Natural Gas Settlements

According to natural gas coupling data published by the Organized Wholesale Natural Gas Market operated by EXIST, the total natural gas settlement was 151.73 million Sm³ in September. On Tuesday, September 24, settlements for a total of 16.27 million Sm³ of natural gas settlements were recorded, while on Saturday, September 21 settlements totaled 1.43 million Sm³.

In September, the weighted average settlement unit price was calculated as TL1,487.77 /000 Sm³.



Source: EXIST Natural Gas Platform, TSKB Economic Research

Sector News

Local News

- Turkish Statistical Institute (TurkStat) announced electricity and natural gas prices for January-June period. According to the announcement, households paid an average of TL0.538 per kilowatthour (kWh) while the industry paid TL0.481 per kWh of electricity. Household natural gas consumers paid an average of TL1.356 per cubic meter (m³), while the industry consumers paid an average of TL1.67 /m³ of natural gas in the first half of 2019. (September 30, 2019)
- Restrictions on promotions for shopping by credit card at petrol stations have been lifted. The Energy Market Regulatory Authority (EMRA) took a Board Decision on the Promotions Applied in the Petroleum and Liquefied Petroleum Gas (LPG) Markets. According to the decision, free fuel and LPG may be offered within the scope of campaigns organized with credit cards and debit cards. Moreover, distributors will be allowed to continue offering loyalty card promotions. However, the costs of the promotions will not be reflected to dealers. Existing contracts and campaigns may continue until June 30, 2020. (September 30, 2019)
- New record in hydroelectric generation. According to the Turkey Electricity Transmission Company (TEİAŞ), the total amount of electricity generated in hydroelectric power plants, which have an installed capacity of 28.4 gigawatt (GW), reached an all-time high in annual electricity generation as of August 2019. Previously, the highest annual electricity generation from hydroelectric power plants had stood at 67.2 gigawatt hours (GWh) in 2016, while 68.3 GWh of electricity was generated in the first 8 months of 2019, and as of September 26th, the generation had exceeded 73 GWh. The increase in capacity of both dam-type (40.7%) and river-type (42.6%) hydroelectric power plants as of the first 8 months of 2019 was behind the increase. (September 27, 2019)
- Hakan Yildirim, the CEO of Kalyon Energy Group, stated that the first modules of the integrated solar panel plant will be produced in May within the scope of the Renewable Energy Resource Area for solar (YEKA GES-1) competition. Hakan Yildirim stated that the power plant would have an installed capacity of 1,300 MW and would cover an area of 20,000 hectares. It is stated that the consortium partner is about to complete the construction of a factory and R&D center in the YEKA wind farm, and that it had reached the final stage in financing. (September 27, 2019)
- Manisa to generate electricity from waste. MOSBIO Energy Generation Inc. will generate electricity from waste with the 15.4 MW 'Cogeneration Type Biomass Power Plant and Waste Incineration Plant" to be established in Manisa. Within



scope of the project, which has a budget of approximately TL78 million, 500 tonnes of paper mill pulp waste, 750 tonnes of sewage sludge, 98 tonnes of animal waste, 110.1 tonnes of agricultural waste and 164 tonnes of forest waste will be burned each day to generate electricity. (September 26, 2019)

- Demirtaş Organized Industrial Zone (DOSAB) to obtain 50% of its energy requirements from the sun. According to the statement issued by the DOSAB President, Ersan Özsoy, the first stage of the project will be commissioned at the end of September, with 50% of the zone's electricity consumption to be met from the sun. Özsoy also stated that an electricity generation facility with a total capacity of 3 MW would be established at a total cost of USD1.8 million. (September 25, 2019)
- President Recep Tayyip Erdoğan gave a speech at the United Nations General Assembly at the Climate Summit. Erdogan pointed out that Turkey was aware that action must be taken at the local level in order to successfully tackle climate change. Erdoğan said that: "Together with Istanbul, we have expanded the use of natural gas, in the place of solid fuels, in all Turkey's 81 provinces. We currently generate more than 30% of our electricity from renewable energy. We will increase the share of renewable energy in electricity generation to about 39% in 2023." Erdoğan also added that the use of plastic bags had fallen by 75%. Moreover, as of 2023, about 400,000 buildings will have completed the transition to a zero-waste system. (September 24, 2019)
- Nordex Group received order for 110 MW wind farm to be built by Ulusoy Energy in Söke, consisting of 23 N149/4.0-4.5 wind turbines. According to the statement, Nordex Group will be responsible for the maintenance of these turbines for a period of 10 years. The installation of the turbines, which will have a height of 105 metres and are expected to generate 286 GWh electricity per year, will be completed by the end of 2020. (September 24, 2019)
- Ministry of Energy and Natural Resources (ETKB) achieves savings of 658 megawatt hours (MWh) under Zero Waste Project. The project's 15-month implementation provided raw materials for recycling 47 tons of plastic waste and producing textile products containing fiber, waste and waste water pipes, greenhouse covers, plastic bags, detergent bottles, garbage cans and similar materials. Moreover, the recycling of plastic waste has so far saved 658 MWh of energy. The project paved the way for the recovery of 150 tonnes of paper while saving 2,411 mature trees from being felled. Thus, greenhouse gas emissions were eliminated, while supporting the natural production of oxygen. (September 23, 2019)
- **GURIS Holding commissioned its second wind farm abroad.** The total investment of the 32.4 MW Ovid Wind Farm in Ukraine is EUR55 million. The plant is expected to generate 118 GWh of electricity per year. (September 23, 2019)
- Amendment made to regulation regulating the support provided for the use of domestic components in renewable energy-derived electricity generation. With the regulation published in the Official Gazette, equipment produced for the first time in wind power generation facilities and whose type certification is not completed shall be eligible for one or more of the certificates within the scope of the standard that is required by the relevant standards and the Certificate of Conformity Certificate. In addition, the provisional article added to the related regulation must also be submitted by October 11, 2019. (September 20, 2019)
- Energy efficiency guide for public buildings published. The guidance published on the Ministry's website defines the work and operations to be carried out in public buildings with a total annual energy consumption of over 250 tonnes of oil equivalent (toe) or more, or a total construction area of at least 10,000 m², in line with the Energy Efficiency Law. According to the guidance, the arithmetic average of energy consumption in toe terms for 2016, 2017 and 2018 will be



referenced for the targeted 15% savings target by 2023 and submitted to the Ministry by the end of March 2020 at the latest. The energy efficiency measures to be implemented will be economically viable and the simple repayment period of investments will be less than 10 years unless otherwise stated. The realization rates of energy savings targets will be submitted by the Ministry to the Presidency in the first half of 2024. Public institutions whose savings are less than 14% will be classified as "unsuccessful", while those with savings between 14% and 16% will be classified as "successful" and those with savings above 16% will be classified as "superior successful". (September 20, 2019)

- EMRA published Spot Pipe Gas Import Quantity and Application Method for Determination of Procedures and Principles in the Official Gazette. The procedures and principles cover the application methods for determining the quantities subject to the import of spot natural gas to be carried out through the pipeline within a calendar year and for ensuring these quantities are subject to capacity reservations at the entry points. Entry points for liquefied natural gas (LNG) terminals in the transmission network will be outside these regulations. With the arrangement, companies with spot pipe gas import licenses will be able to buy gas through the pipeline with shorter-term contracts. Thus, the resulting price competition will enable the supply of cheaper gas to the domestic market. (September 19, 2019)
- Regulation amending Natural Gas Market License regulation published in the Official Gazette by EMRA and enters force. Applications for license renewal requests for import (spot), wholesale, auto LNG wholesale, LNG transmission and compressed natural gas (CNG) licenses can be made, at the earliest one year before the end of the license period and at the latest 3 months, within 9-month period, according to the Regulation. (September 19, 2019)
- **EMRA starts investigation into Shell Petroleum.** According to a statement by EMRA, the investigation was launched on the grounds that Shell Petroleum did not provide its dealers with the required amount of fuel, or provided a very limited amount of fuel, even though there was no shortage of supply. (September 19, 2019)
- **Record set for wind power generation.** According to the Turkish Electricity Transmission Corporation (TEİAŞ), the 132.9 GWh of electricity generated on Sunday, September 15 represents an all-time record of total daily electricity generation from wind farms. (September 17, 2019)
- Capacity mechanism application process for 2020 started. TEİAŞ announced that electricity generation investors seeking to benefit from capacity mechanism support in 2020 must complete their applications by the end of working hours on October 15, 2019. (September 17, 2019)
- Turkish Wind Energy Association (TWEB) publishes statistical study on the current state of the Turkish wind energy sector. According to the study, as of the end of July, there were 183 wind farms in Turkey with a total installed capacity of 7,615 MW, with 17 wind farms, which will have a total installed capacity of 619 MW, under construction. The report states that as of July 2019, 7.4% of Turkey's total electricity needs were being met by the electricity generated from wind farms. (September 13, 2019)
- Vodafone invests in roof type solar energy for its own internal consumption at the Adana Cloud Technology Center. When the TL4 million project is completed, an average of 768 MWh of electricity will be generated per year and 20% of the center's annual electricity needs will be met from renewable energy. The project, which also supports Vodafone's Green Data Centre Strategy, will contribute to the company's target of reducing its carbon footprint, by reducing its CO2 emissions by 389 tonnes per year. Vodafone aims to reduce greenhouse gas emissions by 50% and obtain 100% of the electricity it uses from renewable sources to mitigate the effects of climate change around the world



by 2025. (September 12, 2019)

- Turkey's installed electricity capacity declined in August. According to data published by TEİAŞ, Turkey's total installed capacity declined by 45.3 MW in August to 90,403 MW. The decline was driven by the decommissioning of natural gas plants with an installed capacity of 127.3 MW and a slowdown in renewable energy investments. Wind farms exhibited the greatest increase in installed power, with 42 MW, while the installed power of solar power plants increased by 14.8 MW, the installed power of river-type hydroelectric power plants increased by 12.6 MW and the installed power of biomass power plants increased by 8.3 MW. (September 12, 2019)
- Banks Association of Turkey (TBB) releases statement on reconstruction developments for energy companies. The current debt stock of the Turkish electricity generation and distribution sector is around USD47 billion, while the loan portfolio in need of restructuring is in the region of USD12-13 billion according to the TBB statement. According to the statement, the restructuring of a USD10 billion portion of that total amount is expected to be completed in 2019. The TBB added that even in the most negative scenario, the effect of the energy sector on the capital adequacy ratio would be about 0.23%, even if all of the loans were provisioned. (September 11, 2019)
- Petroleum Industry Association (PETDER) announces a 0.64% rise in petroleum sales in July 2019 compared to the same month previous year. According to PETDER's monthly newsletter, diesel sales fell by 3.83% to 2.9 million m³ in July, while fuel-oil sales fell 7.56% to 21,650 tonnes. In the first 7 months, gasoline sales increased by 0.56% to 1,816,000 tonnes, diesel sales decreased by 7.74% to 16.8 million m³. (September 10, 2019)
- Garanti BBVA provides Gender equality loan to Polat Energy. Polat Energy provided a USD 44 million gender equality loan from Garanti BBVA for the Soma-4 Wind Farm project, which will have an installed capacity of 48 MW. As a result of each year's evaluation within the scope of the loan, there will be reductions in cash loan interest and non-cash loan commission during the loan maturity, depending on if the performance of the project improves. (September 9, 2019)
- BloombergHT holds interview with Fatih Dönmez, Minister of Energy and Natural Resources. Fatih Dönmez, who also discussed the latest developments regarding electricity assistance to families with low incomes, said that the figure paid in this context had reached TL275 million as of the end of August. Dönmez added that the government had increased its energy efficiency support within the scope of the circular issued on increasing energy efficiency in public buildings, adding that the government was providing TL1 million in every TL5 million of investment in cash. Fatih Dönmez added that despite the suspension of the Sinop Nuclear Power Plant (NGS) project, Turkey's cooperation with Japan in the energy sector would continue. He stated that the first unit of the Akkuyu Nuclear Power Plant would be commissioned in 2023 and the construction permit for the second unit would be issued as soon as possible. (September 6, 2019)
- Banking Regulation and Supervision Agency (BDDK) asks banks to report the loans they have provided to some energy projects as non-performing loans. The BDDK requested that loans to at least three natural gas-fired power generation plants be classified as non-performing loans, according to a report on Bloomberg News. These plants include ACWA's USD1 billion facility in Kırıkkale, Gama's USD900 million project near Ankara, and a 1 billion-dollar-facility operated by Ansaldo Energia SpA and its partners in Gebze. (September 6, 2019)
- Capacity utilization rate at dam type hydro-electric plants increased. According to the Ministry of Agriculture and



Forestry, in the October 2018-September 2019 period, cumulative rainfall average across Turkey was 19.4% higher than the long-term average, and 18.8% higher than in the previous period. As of 2019, the capacity utilization rate at the Atatürk Dam HEPP stood at 53.8%, while the capacity utilization rate of the Karakaya Dam HEPP had increased from 25.5% to 69%, while for the Keban Dam HEPP it had increased from 50% to 79%. (September 6, 2019)

- Mini YEKA auctions to be held in the last quarter of 2019. Kutay Kaleli, the Chairman of the Board of Directors of the International Solar Energy Community Department of Turkey, Halil Demirdag, Chairman of the Solar Energy Industrialists and Industry Association and Cem Özkok, Chairman of the Solar Energy Investors Association, visited Fatih Dönmez, the Minister of Energy and Natural Resources, in his office. It is stated that the mini YEKA auctions for installations in 35-40 provinces whose capacities will range from 10 to 50 MW will be held in the last quarter of 2019. (September 5, 2019)
- **Decline in the share of natural gas in electricity generation.** In the January-August period, the share of natural gas in total electricity production fell to 17%, a decrease of about 14 percentage points compared to the same period last year. (September 5, 2019)
- Rise in the share of liquefied natural gas (LNG) in natural gas imports. According to EMRA figures, Turkey's LNG imports increased by 14% in the first half of the year compared to the same period last year to 7,136 million cubic meters (mcm). During this period, the share of LNG in total natural gas imports increased to over 30%. Turkey imports the most LNG from Algeria, Qatar and the United States. In January-June period, imports of piped gas decreased by 18% compared to the same period last year to 16,152 mcm. (September 4, 2019)
- A total of TL119.2 million to be paid to 39 electricity generation plants for July within the scope of the electricity capacity mechanism. In the statement issued by TEİAŞ, the highest payment is TL10.6 million for electricity generation from the Soma Thermal Power Plant will be made in July. Boyabat Electricity Generation, owner of Boyabat Dam and Hydroelectric Power Plant, will receive a payment of TL2.43 million. (September 3, 2019)
- **Gama Holding to pull out of its operations in Ireland.** The Dünya newspaper reported that Gama Holding was transferring its 40% stake in Tynagh Energy, based in the Galway region, to the Prague-based EGH Group. The Czech company will hold a 40% stake in Gama, along with the US-based GE Energy Financial, a 40% partner in Tynagh Energy. As a result, the Czech company, EPH, will hold an 80% share in Tynagh Energy. (September 2, 2019)

News From Abroad

- World's first liquefied natural gas (LNG) powered container ship launched in Shanghai, China. The first giant container ship developed in China using LNG as its main source of fuel has been launched in Shanghai. The ship's carbon emissions are stated as being 20% lower than ships of similar type. The container ship, which has a load capacity of 220,000 tonnes, is scheduled to officially enter service in April 2020. (September 27, 2019)
- European Union (EU) countries agree to classify financing of environmentally friendly investments. EU countries have agreed that classification should be implemented in 2022 to determine environmentally friendly and sustainable economic activities. Under the classification, economic activities that tackle climate change, protect water and marine resources, contribute to the cyclical economy, prevent pollution and preserve ecosystem and biodiversity will be classified as sustainable. The agreed implementation requires the approval of the European Parliament to enter force. (September 26, 2019)



- International Energy Agency (IEA) publishes its first semester electricity Statistics study for 2019. The study stated that electricity production in OECD countries declined by 1.5% in the first half of the year compared to the same period a year ago, while the share of electricity generation from renewable energy sources increased by 4% compared to the same period a year earlier. The share of renewable energy in total electricity production was 29.4%. The share of wind power increased from 7.3% in the first half of 2018 to 8.1% in the first half of this year, while the share of solar power plants rose from 3% to 3.5%. During the same period, the share of coal in electricity production fell from 24.7% to 22%. (September 20, 2019)
- IEA President Dr. Fatih Birol offers assurance that supply in the global oil market was sufficient following attack on Saudi Arabia's oil facilities. Mr. Birol stated that IEA member states had an emergency stockpile of about 1.55 billion barrels, enough to sustain global oil demand for 15 days, and 2.9 billion barrels of industrial stock as of the end of July, of which 650 million barrels is ready for immediate release. Birol also pointed out that recent events demonstrated that the importance of oil security should not be underestimated, stressing that energy security was an important part of the global economy. (September 19, 2019)
- **Discovery of natural gas in the Norwegian Sea.** Equinor and its partners, AkerBP and Wellesley Petroleum, discovered natural gas at the Ørn drilling well south west of the Marulk field in the Norwegian Sea. The well is estimated to have gas reserves equivalent to 50-88 million barrels of oil. (September 19, 2019)
- European Union (EU) Commission provides conditional approval for German energy company E.ON to purchase Innogy's assets in the distribution and electricity generation area. According to a statement from the EU Commission, E.ON reportedly agreed to conditional approval of Innogy's acquisition of its operations in the fields of electricity distribution, consumer solutions and electricity generation. In a statement, to avoid competition concerns, E.ON has pledged to dispose of some of its units in Germany, the Czech Republic and Hungary. (September 18, 2019)
- Ban on use of single-use plastics to enter force in India. The ban, which will come into effect on October 2, 2019, will cover plastic bags, cups, plates, straws, small bottles and various sacs, Reuters reported. The ban will cover the production and import of these products. The government of India aims to reduce the consumption of plastic by 5-10% with this step. (September 18, 2019)
- Bulgaria's Supreme Administrative Court authorized the construction of "Turkish Stream" pipeline through Bulgaria. The Supreme Administrative Court dismissed the case against the Commission's decision for the protection of competition in the selection of a builder for the "Turkish Stream" gas project on Bulgarian territory. The court's decision upheld the Competition Commission's decision that the builder of the "Turkish Stream" line through Bulgarian territory remained the Saudi "Arcad" Consortium. (September 17, 2019)
- Organization of Petroleum Exporting Countries (OPEC) agree oil production cuts with Iraq and Nigeria. OPEC has agreed to cut oil production from Iraq and Nigeria in line with its targets, in an effort to avoid a glut of supplies due to the increased oil production from the U.S. and a slowing global economy, Reuters reported. Iraq, OPEC's second-largest oil producer, has pledged to cut production by 175,000 barrels per day by October, while Nigeria has pledged to cut its output by 57,000 barrels per day. (September 13, 2019)
- Production at Europe's largest natural gas field to be terminated early. Production at Groningen, Europe's largest
 natural gas field, could be terminated in 2022, 8 years before the date of completion of work at the site, according to a
 statement by the Dutch government. Following the earthquake in January 2018, the government had pledged to end



work on the site by 2030. (September 13, 2019)

- Increase in crude oil production from Organization of Petroleum Exporting Countries (OPEC) countries in August. According to the August oil market report, OPEC member states, which have a 30% share in the total global oil supply, increased daily crude oil production by 136,000 barrels in August compared to the previous month, to about 29.74 million barrels per day. During the same period, oil production in non-OPEC countries increased by 700,000 barrels per day to 69.5 million barrels per day. The countries to have increased their daily crude oil production within OPEC in August were Saudi Arabia, Nigeria and Iraq, respectively, while the steepest declines in oil production were in Venezuela, Iran and Libya. (September 12, 2019)
- U.S. Energy Information Administration (EIA) has lowered its oil price forecast for next year. The average price of Brent-type crude oil next year is projected at USD 62 per barrel and the average price of West Texas (WTI) type crude oil in the United States is estimated at USD56.50 /barrel, according to the "Short-Term Energy Outlook Report" prepared by the EIA in September 2019. Thus, the EIA's expectations for next year's price for both types of crude oil have been lowered by USD3 /barrel. (September 12, 2019)
- Global Renewable Energy Investment Trends Report for 2019 published in cooperation with the United Nations (UN) Environment Programme and BloombergNEF. By the end of 2019, the total investment in renewable energy projects realized over the past 10 years will have reached USD 2.577 trillion, according to data from the report. The largest share of this investment was solar power plants (USD 1.349 trillion), followed by wind energy investments (USD 1.023 trillion). (September 11, 2019)
- Saudi Arabia's Oil Minister, Prince Abdulaziz bin Salman, said there would be no dramatic changes to Saudi Arabia's oil policy. Prince Abdulaziz told reporters at the World Energy Congress in Abu Dhabi on Monday that "There is nothing radical in Saudi Arabia. Basically, I think Saudi Arabia's energy policy is focused on a few pillars. These have not changed." The newly appointed Prince Abdulaziz has stressed continuity and is committed to maintaining a dialogue with other producers. (September 10, 2019)
- Novatek plans to build a liquefied natural gas (LNG) plant in Siberia in a USD 21.3 billion investment. Leonid
 Mihelson, the CEO of Novatek, said the plant, which is planned to produce 19.8 mcm of LNG per year, is projected to be
 commissioned in 2023. The Japanese JOGMEC company, the Chinese CNPC -Japanese Mitsui consortium, the CNODC
 company and the French TOTAL Company each have 10% stakes in the project. (September 6, 2019)
- The Organization of Petroleum Exporting Countries (OPEC) increased production in August. Saudi Arabia and Nigeria were the main drivers for this increase, the first time production increased since early 2019, according to a Bloomberg report. In August, Saudi Arabia increased its daily production by 50,000 barrels and Nigeria increased its daily production by 60,000 barrels. OPEC and other oil exporting countries will meet in Abu Dhabi on September 12 to review progress on balancing the world crude oil market. (September 4, 2019)





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