

Monthly Energy Bulletin

TSKB Economic Research

May 2020 #24

Can Hakyemez hakyemez@tskb.com.tr
Emre Yanik yanikem@tskb.com.tr

Terms amended to support domestic parts in plants which generate electricity from renewable energy resources

According to the amendment published in the Official Gazette dated May 28, there will be justification for support where the parts constitute at least 55% of the parts in the facility, with the facility required to have “related” parts. In the event of any capacity increase, modernization, renewal or partial acceptance of the units, which have benefited from the additional price the domestic contribution in the previous period, the applicants will be required to submit documents related to the new units to the Ministry and/or the institution assigned by the Ministry by 1 August.

In addition, the efficiency value of the cogeneration system used for biomass energy-based production facilities to benefit from the addition of domestic additives will be required to be at least 85% and the primary energy resource saving rate will be at least 10%. During the construction and/or installation of the production facilities seeking to benefit from the domestic additive additional price, the components and integrative parts left underground or underwater, or which should be closed in order to be able to be detected from outside will be inspected by the Ministry and/or the institution appointed by the Ministry before the construction or assembly is completed.

According to the final Renewable Energy Source (YEK) list for 2020, a total of 173 licensed power plants with a total installed power of 4,379.9 MW_e were found eligible for the domestic contribution additional price through the Renewable Energy Resources Support Mechanism (YEKDEM). While the weighted average domestic contribution in hydroelectric power plants is USD 1.38 per kilowatthour (kWh), while the stated contribution amount is USD cent 1.19/kWh, USD cent 1.15/kWh, USD cent 1.07/kWh and USD cent 0.44/kWh for geothermal, wind, biomass and solar power plants, respectively.

20.72
TWh

May Gross
Generation

203.22
TL/MWh

Average
MCP

-17.2%

Electricity generation in May decreased by 17.2% compared to the same period of the previous year.

[Click](#) for details.

First Five Months in Electricity Generation

In May, the effect of the COVID-19 outbreak was observed more deeply in the amount of electricity generated from licensed power plants.

[Click](#) for details.

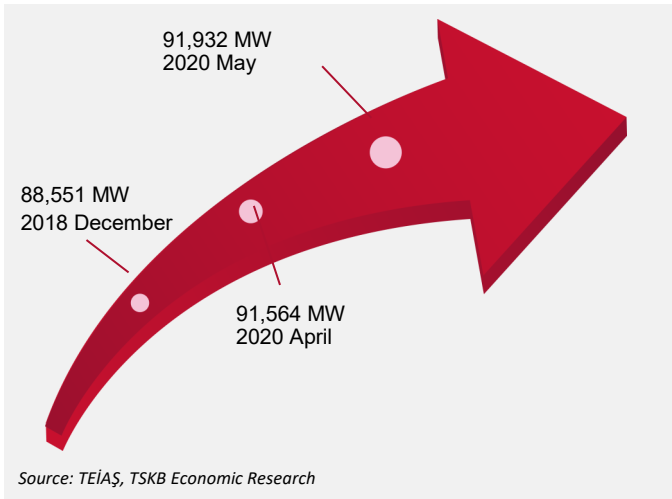
IEA World Energy Investments 2020 Report

IEA predicts the biggest drop in history in global energy investments with the COVID-19 crisis.

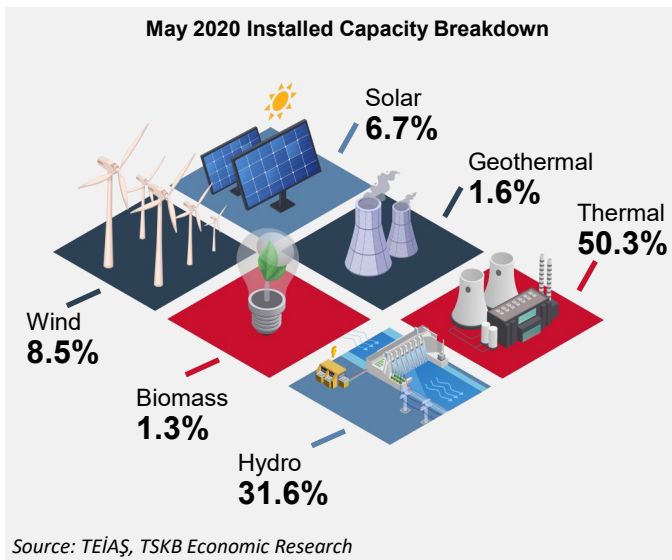
[Click](#) for details.

Installed Capacity Analysis

Turkey's total installed capacity, which had reached 91,267 megawatts (MW) at the end of 2019, edged up to 91,932 MW by the end of May 2020. During this period, hydroelectric power plants with a total installed capacity of 302 MW were commissioned. The total installed capacities of licensed and unlicensed solar power plants and wind power plants increased by 47.3 MW and 17.7 MW, respectively. In the meantime, the total installed capacities of renewable waste and natural gas power plants slightly increased and edged up by 2.8 Mw and 1.6 MW, respectively. There was no change in the installed capacity of geothermal and coal power plants operating with imported coal. The total installed capacity of coal power plants operating with domestic coal decreased by 3.7 MW.

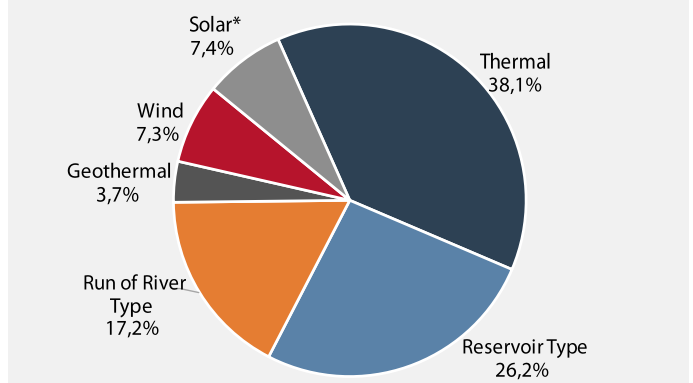
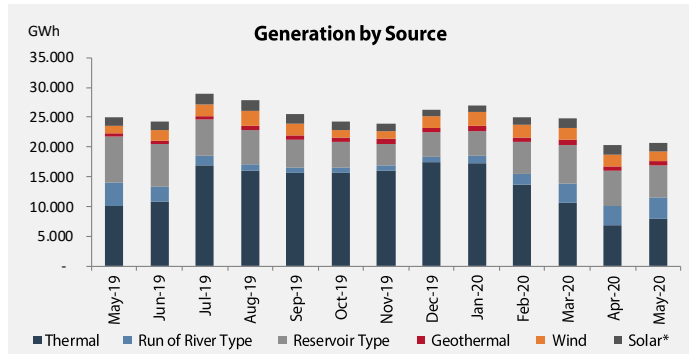


Of all the power plants in operation during May, 49.7% were generating electricity from renewable resources, with hydroelectric power plants accounting for 31.6% of the total installed capacity. Thus, the combined share of wind farms and solar power plants increased to 15.2% by the end of May 2020.



Electricity Generation Analysis

Approximately 20.3 terawatt-hours (TWh) of electricity was generated in April 2020, while total electricity generation in May 2020 increased slightly to 20.7 TWh, marking a fall of 1.3% in average daily electricity generation when compared to the previous month. Moreover, in May 2020, electricity generation decreased by 17.2% when compared to the same month of the previous year.

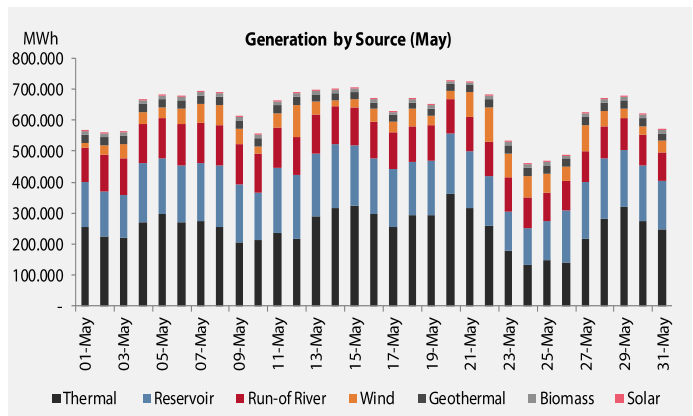


*Since May unlicensed solar power plant generation data has not yet been released by TEİAŞ, the total energy generation by unlicensed solar power plants in May was accepted as same as the total generation of April 2020.

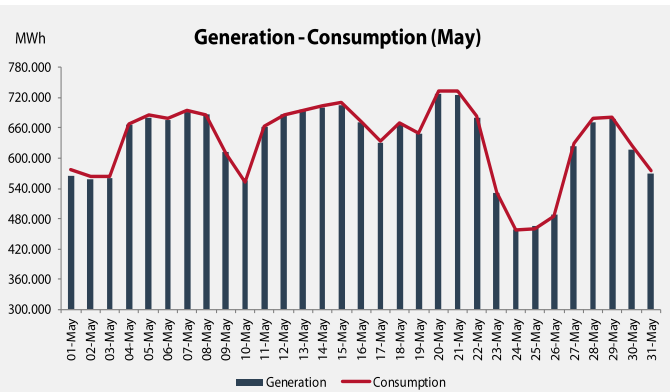
Source: TEİAŞ, YTBS Daily Reports, TSKB Economic Research

Thermal power plants, which had supplied 34% of all of the electricity generated in April, accounted for 38.1% of the total electricity generated in May 2020, with a decrease in the share of renewable energy resources in total electricity generation, despite the increase in the share of electricity generated in run-of-type hydroelectric power plants, likely to have been the main reason for the 4.1-point increase.

After accounting for 44.8% of electricity generated in April, hydroelectric power plants provided 43.4% of the total electricity generated in May 2020. Another noteworthy development was that renewable power plants, which had an average share of 44.5% in electricity generation throughout 2019, accounted for 61.9% of all electricity generated in May 2020, an increase of 2.2-percentage points over the share in the same period of 2019.



Source: TEİAŞ, YTBS Daily Reports, TSKB Economic Research



Source: TEİAŞ, YTBS Daily Reports, TSKB Economic Research

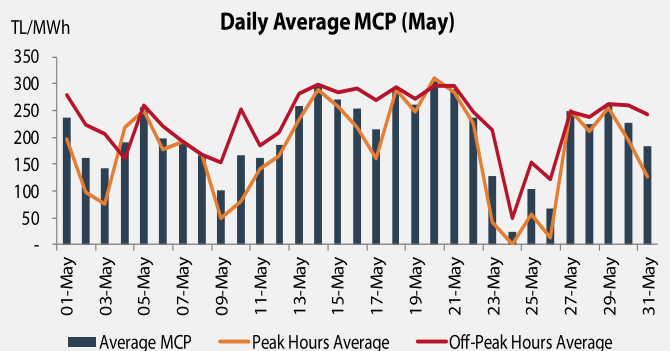
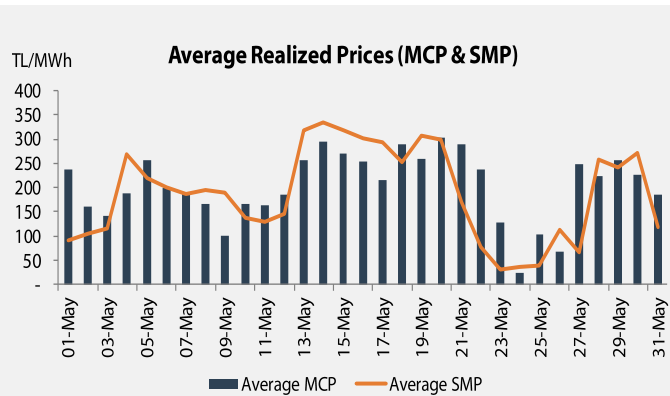
The average daily generation of licensed plants in May 2020 stood at 630,646 megawatt-hours (MWh). The highest level of electricity generation from licensed power plants was realized on Wednesday, May 20th, at 728,263 MWh, with the lowest being on Sunday, May 24th, at 458,777 MWh, which was the first day of Ramadan with lockdown imposed in 81 provinces.

Daily consumption averaged 633,549 MWh in May 2020, peaking at 733,877 MWh on Thursday, May 21st, while the lowest level of electricity consumption, of 457,272 MWh, was recorded on Sunday, May 24th.

Electricity Price Analysis

The average market-clearing prices (MCP) and system marginal price (SMP) fluctuated between TL 24 /MWh and TL 334 /MWh in May 2020. In the same period, the average MCP stood at TL 203.22 /MWh, while the SMP averaged TL 188.30 /MWh. The lowest average MCP, of TL 24.86 /MWh was recorded on Sunday, May 24th, and the lowest average SMP of TL 29.50 /MWh was recorded on Saturday, May 23rd.

The average MCP for May 2020 increased by 12.2% when compared to the April average. The decrease in the share of renewable power plants in total electricity generation is thought to have been the main reason for this decline.

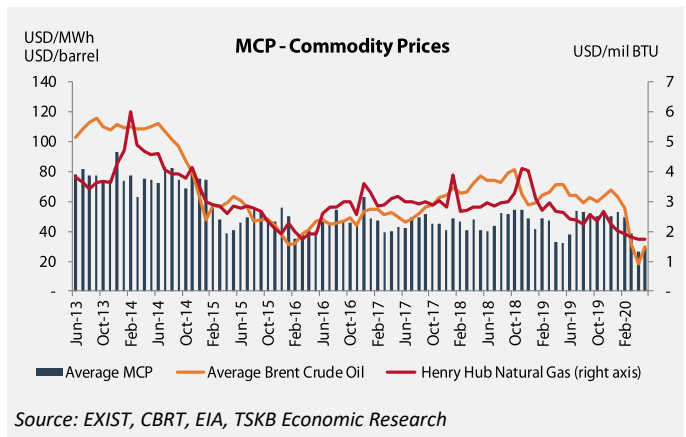


Source: EXIST, TSKB Economic Research

The daily average MCP for May stood at TL 176.51 /MWh for peak hours (from 8AM to 8PM), 13.1% lower than the daily average value. This indicates that the intensity of electricity consumption shifted outside peak hours. The highest peak-hour average recorded was TL 310.75 /MWh on Wednesday, May 20th, while the lowest peak-hour average was TL 1.49 /MWh, recorded on Sunday, May 24th.

Average pricing in off-peak hours (from 8PM to 8AM) for the same period stood at TL 229.94 /MWh. The highest off-peak hour average was TL 298.97 /MWh, recorded on Thursday, May 14th, with the lowest off-peak-hour average of TL 48.24 /MWh recorded on Sunday, May 24th.

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 May edged down to USD 29.23 /MWh, while the average MCP in first quarter was USD 47.11 /MWh. The downward trend in the MCP in 2020 stalled.



Source: EXIST, CBRT, EIA, TSKB Economic Research

The MCP increased by 10% in dollar terms in May when compared to April, mainly as a result of the decrease of more than 10% in TL-denominated electricity prices, despite the depreciation of the lira against the dollar.

Brent crude oil prices averaged USD 29.38 per barrel in May, compared to USD 64.36 per barrel in 2019, which signaled a turn from the bottom. Brent crude oil prices increased by 60% in April when compared to the previous month while they were also 59% lower than their level at the same period of the previous year. The average price of Henry Hub natural gas was USD 1.75 /mBTU in May, slightly higher than the USD 1.74 /mBTU average for April 2020.



First Five Months in Source-Based Electricity Production

In May, the effect of the COVID-19 outbreak was observed more deeply in the amount of electricity generated from licensed power plants (LPP). According to Energy Exchange Istanbul (EXIST) Transparency Platform data, electricity generation from LPP, which had an annual decline of 15.4% in April, decreased by 16.8% in May. An analysis of cumulative generation finds that since the beginning of 2020, the contraction in electricity generation from LPP, which started in April with a fall of 1.2%, deepened to a 4.3% fall in May.

Looking at electricity generation on the basis of resources, generation from natural gas power plants (NGPP), which had increased significantly in the first two months of the year compared to the previous year, started to decrease in April and May, with double digit falls from March. The decline in the volume of electricity generated from NGPPs was around 8.5% at the end of the first five months, when compared to the same period of the previous year. The double-digit decrease in generation from domestic coal power plants has continued throughout the year. The contraction in these plants, already 10% at the end of January, extended to around 19.7% for the January-May period. The situation is somewhat different when it comes to the amount of electricity generated in licensed hydroelectric power plants (HEPP). HEPPs, which started the year with a decrease of 28.5% in generation, generated more electricity in March when compared to the previous year, but had risen by only 1.3% in the first quarter of this year when compared to the first quarter of last year. In parallel with the decrease in generation in April and May, cumulative electricity generation in HEPPs also decreased to 8.5% in the January-May period. Power stations using imported coal, wind farms and other plants generating electricity from other renewable resources were among the plants to increase electricity generation in the first five months of the year.

In summary, the demand-based decline in electricity generation due to the measures taken in the COVID-19 process have affected each source. The increase in the capacity of wind farms and other renewable power plants is inevitable.



Can HAKYEMEZ - Manager
TSKB Economic Research

Period	Natural Gas	Domestic Coal	Imported Coal	Hydro	Wind	Other Renewables
Jan.	%36	-%10	%22	-%28	%9	%20
Jan.-Feb.	%35	-%10	%12	-%15	%14	%21
Jan.-Mar.	%10	-%13	%11	-%1	%9	%21
Jan.-Apr.	-%2	-%18	%6	-%4	%14	%21
Jan.-May.	-%8	-%20	%7	-%9	%16	%20

Source: EXIST Transparency Platform, TSKB Economic Research

IEA World Energy Investments 2020 Report

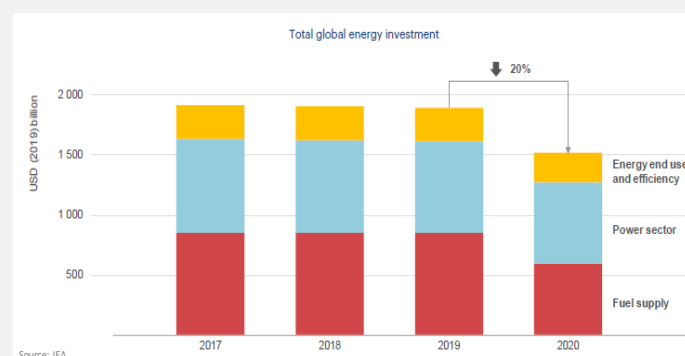
The International Energy Agency (IEA) published the World Energy Investments 2020 Report on May 27, 2020. The report, which had set out the IEA's expectation of moderate growth before the COVID-19 outbreak, warned of the biggest decrease in history. According to the report, while USD 1.9 trillion in energy investments was made globally in 2019, this is expected to decrease by 20% to USD 1.5 trillion in 2020. The

report predicted that global energy investments would increase by 2% in 2020, based on forecasts made by the IEA at the beginning of 2020. In the first half of 2020, the speed and scale of the decline in energy investments is considered to be unprecedented.

The oil and gas sectors are expected to account for the biggest share of energy investments, which are expected to decrease by approximately USD 400 billion annually. Investments in these two sectors are also expected to decrease by 32% this year. The oil sector stands out as the sector most affected by the shock due to the slump in air transportation and the restrictions in global mobility, which make up approximately 60% of the global oil demand. The report stated that in April, more than 4 billion people around the world had been quarantined, with oil demand falling by 25 million barrels/day on an annual basis. The IEA notes that oil consumption in 2020 could decline to its 2012 levels, decreasing an average of 9 million barrels/day. Although the electricity sector, which accounted for 38% of investments in 2019, was relatively unscathed compared to other sectors, it is expected to decrease by 10% in 2020. In addition, coal investments are expected to decrease by 15%, and energy efficiency investments by 12%. The IEA expects global carbon dioxide (CO₂) emissions to decline to levels a decade ago in this period. This indicates a decrease of 2.6 gigaton (Gt) or 8%.



Emre YANIK - Associate
TSKB Economic Research



Although COVID-19 has precipitated a global crisis, the share of renewable electricity generation has exhibited a positive increase, with a sharp fall in CO₂ emissions during the period when half of the world's population was under lockdown measures. The report cautions that we must work harder to ensure the sustainability of the effects of these developments, not only in the short term but also in the medium-long term, and work to ensure that they are permanent, while urging us to be more willing to direct their declining investments in 2020 to renewable resources and energy efficiency in the coming periods.



Sector News

Local News

- **Energy Market Regulatory Authority (EMRA) publishes Electricity Market Sector Report for March.** According to the report, 45% of the billed electricity consumption was realized by industry subscribers, with 26.1% by residential subscribers and 24.3% by commercial subscribers. The report stated that lighting accounted for 2.4% of the remaining consumption with agricultural irrigation accounting for 2.2% of the total. Of the electricity billed in February, 42.9% was consumed by industry, 27.6% by commercial subscribers and 27.4% by residential subscribers. (May 29, 2020)

- **52.5% of Turkey's total natural gas imports in March were liquefied natural gas (LNG).** Turkey's total natural gas imports declined by 8.2% to 3.94 billion cubic meters in March compared to the same month of the previous year. LNG accounted for 2.07 billion cubic meters of the total natural gas imported, while Qatar provided the highest amount of the LNG imports. This was followed by the United States, Algeria, Nigeria, Cameroon and Egypt. Nearly half of the 1.87 billion cubic meters of gas imported by pipeline were sourced from Azerbaijan. In terms of gas imported via pipeline, Azerbaijan was followed by Iran and Russia. Petroleum Pipeline Company (BOTAŞ) realized 95.3% of the total imports. (May 29, 2020)

- **Ministry of Environment and Urbanization launches 30 environmental infrastructure investment projects in the fields of drinking water, wastewater and solid waste management in 25 different cities.** The Minister of the Environment and Urbanization, Murat Kurum, reported that 30 of the 48 projects with an investment of approximately EUR 1 billion have been completed within the scope of the European Union Instrument for Pre-Accession Assistance (IPA). Kurum told Anadolu Agency that the government would implement 18 envi-

ronmental infrastructure projects and 15 technical support projects within the scope of the IPA-2 program. (May 29, 2020)

- **Turkey's total oil imports decline 7.2% YoY in March.** According to the EMRA's "Oil Market Sector Report", for March, crude oil imports, the largest item in Turkey's total oil imports, rose by 7.2% to 2.7 million tonnes. Diesel imports decreased by 37% in the said period. The remaining portion of imports consisted of aviation and maritime fuels, fuel-oil types and other products. Thus, Turkey's total oil imports amounted to 3.5 million tonnes in March. The highest oil imports came from Iraq, Russia and Kazakhstan. (May 28, 2020)

- **YoY decline of 16.3% in Turkey's liquefied petroleum gas (LPG) imports in March.** According to the EMRA's "Liquefied Petroleum Gas Market Sector Report", for March, a total of 207.8 tonnes of LPG were imported from the United States, Algeria, Kazakhstan, Norway, Russia and Nigeria. LPG production also reached 95,100 tonnes, with a 14.6% increase in March. (May 28, 2020)

- **Çetin Dam and HEPP starts generating electricity at full capacity.** The Minister for Agriculture and Forestry, Bekir Pakdemirli, said that the Çetin HEPP had a total installed capacity of 420 MW and emphasized that the dam would generate 1.175 million kWh of electricity annually and contribute TL 500 million to the economy each year. (May 28, 2020)

- **Aksa Energy establishes a company for investment of a natural gas combined cycle power plant in Uzbekistan.** In a statement issued by Aksa to the Public Disclosure Platform (KAP), it was stated that a company named "AKSA Energy Tashkent LLC" had been established with the aim of establishing a natural gas combined cycle power plant with 240 MW of

installed capacity, selling electricity generated in the power plant for a period of 25 years in exchange for the guaranteed capacity price. According to the statement, the construction is planned to be completed and commissioned within a maximum of 12 months after the necessary space is allocated. (May 28, 2020)

- Share of domestic resources in electricity generation reaches a record 90%. The Minister for Energy and Natural Resources, Fatih Dönmez, said "On May 24, we generated 90% of our electricity from domestic and renewable resources, and set a new record in daily generation." According to the information given by Mr. Dönmez, on May 24th, 43.7% of hydroelectric resources, 16.5% of domestic coal power plants, 14.5% of wind power plants, 7.2% of solar power plants, 5.3% of geothermal power plants and 2.6% of biomass plants were utilized. (May 27, 2020)

- TL 5 billion of support was provided to renewable energy in April. According to EXIST figures, a total of incentive payment of TL 5.07 billion was made to the plants under the YEKDEM in April. TL 915.61 million of this amount was allocated to power plants generating unlicensed electricity. The plants within the scope of the YEKDEM generated 8.58 million MWh of electricity in April, of which 7.56 million MWh was licensed and 1.02 million MWh was generated by unlicensed power generation plants. (May 27, 2020)

- EXIST announces "Natural Gas Market Weekly Products" service, where natural gas market participants can trade in a manner similar to daily spot transactions, will be launched on June 1, 2020. According to the announcement published on the EXIST website, it will be possible to conduct direct transactions with weekly products without the need for a separate registration process for participants and a separate authorization process for users. With this practice, market participants will be given the opportunity to flexibly manage imbalances as they span a longer period. In addition to the daily spot product, participants will be given the opportunity to organize their trading activities with the option of "Weekly Products" with delivery for up to 7 days. (May 27, 2020)

- Fall of 8.2% YoY in Turkey's lignite production in the first quarter of the year. According to the Solid Fuel Statistics announced by the Turkey Statistical Institute (TurkStat), saleable lignite production stood at 15.8 million tonnes between January and March 2020. In the same period, thermal power plants producing solid fuel received a total of 18.4 million tonnes of coal, of which 5.7 million tonnes was hard coal and 12.7 million tonnes was lignite. The total amount of lignite delivered in March was 4.8 million tonnes and the amount of hard coal was 2.98 million tonnes. When the distribution of solid fuels by delivery locations is analyzed, 56% of hard coal was delivered to thermal power plants, 21.6% to coke plants and 9.6% was delivered to industry other than iron and steel. On the other hand, 87.2% of lignite delivery thermal power plants and 9.7% were made to industry other than iron and steel. (May 22, 2020)

- Increase in the YEKDEM cost estimate for May. According to the EMRA decision published in the Official Gazette, the YEKDEM cost amount projection for May 2020 was revised from TL 128/MWh to TL 216.89 /MWh. In line with updates made by EMRA, the annual average estimated cost of YEKDEM was revised from TL 102.74 /MWh to TL 111.48 / MWh. (May 22, 2020)

- Turkey Electricity Transmission Company (TEİAŞ) publishes 2025-2030 Regional Connectable Capacity Report. Within the scope of the report, TEİAŞ published the capacities that can be connected to the electricity transmission system in the 2025-2030 period. According to the study published by the institution, 16,917 MW will be available for 2025 and an additional 5,866 MW of capacity will be available by 2030. TEİAŞ's installed power projection was 119,069 MW for 2025 and 133,702 MW for 2030. The institution's peak projection is 63,105 MW for 2025 and 72,993 MW for 2030. (May 22, 2020)

- EMRA announces preparation of the Draft Procedures and Principles Regarding the Determination of the Power Plant Areas of the Generation Facilities Subject to Pre-license or Licenses in the Electricity Market. The announcement stated that the opinions and suggestions regarding the draft could be forwarded to the institution by the end of working hours on June 5, 2020. (May 22, 2020)

- Ilisu Dam and HEPP started electricity generation. The first of six 200MW turbines of Ilisu HEPP, which with a total installed capacity of 1,200 MW, started electricity generation. Speaking at the ceremony, President Recep Tayyip Erdoğan stated that the total investment cost of Ilisu HEPP, work on which started in 2008, was TL 18 billion. President Erdoğan added that the aim was to commission a turbine every month in Ilisu HEPP. (May 20, 2020)

- General Electrics (GE) Renewable Energy and Fina Energy reported to be establishing a wind farm with a total installed capacity of 193 MW. In a written statement issued by GE Renewable Energy, it was stated that the installation will be made for Fina Energy's Bağlama, Tayakadın, Yalova and Pazarköy wind energy plants located in Turkey. It was also stated that the projects will be able to provide electricity to 195,000 homes, and the production of the 156 blades to be used in these projects will be carried out in GE's LM Wind Power factory in Bergama, İzmir. (May 20, 2020)

- Yeşil Yapı acquired shares in Ortadoğu Energy. According to the announcement released on the KAP, Yeşil Yapı Endüstrisi A.Ş., a partner of Ortadoğu Energy, increased its total share in Ortadoğu Energy to 29.9% by purchasing 128,700 Ortadoğu Energy shares. The total value of the shares, which are valued by the Industrial Development Bank of Turkey, was determined to be approximately TL 1,21 billion. (May 18, 2020)



- **EMRA publishes its 2019 Activity Report.** In 2019, a total of 217 license applications were made, six of which are Organized Industrial Zones (OIZ) distribution licenses, one being an OIZ production license, 103 being production pre-licenses, 12 being supply licenses and 95 being production licenses. Following the evaluation of these applications, a total of 245 licenses, six of which are OIZ distribution licenses, one being an OIZ production license, 82 being production pre-licenses, 12 being supply licenses and 144 being production licenses were issued. In addition, last year, 160 licenses were terminated, 79 of which were production pre-licenses, 9 were procurement and 72 were production licenses. Again, a total of 6 licenses, one of which was a production pre-license, one of which was a supply license and four of which were production license, were canceled. (May 18, 2020)

- **Turkey's natural gas consumption declines by 9% in 2019.** According to the "2019 Natural Gas Distribution Sector Report" prepared by the Natural Gas Distribution Companies Association of Turkey's (GAZBİR), Turkey's natural gas consumption in 2019 stood at 44.9 billion cubic meters. According to the report, the number of people using natural gas actively increased by 3% YoY to 52.2 million. The amount of natural gas used for electricity generation in natural gas power plants decreased by 38% in 2019 compared to the previous year to 11.2 billion cubic meters. (May 15, 2020)

- **Small-Scale Renewable Energy Resource Areas (mini-YEKA) competitions to be completed in the third quarter of this year, according to Minister of Energy and Natural Resources, Fatih Dönmez.** According to a report published in the Habertürk newspaper, Fatih Dönmez spoke in a videoconference as part of the Turkish Energy Summit. Dönmez stated that, "in the process we are in, given the delays, the necessary participation cannot be achieved, the necessary preparation cannot be made, and we therefore cannot obtain the expected benefit in time. We have met again now - the sector is willing to do this. We will have completed these competitions in the third quarter." Mr. Dönmez pointed out that there had been a change in the composition of demand during the pandemic, with an increase of 15% in demand for electricity and natural gas in homes, but a decrease of 10-15% nationally. (May 15, 2020)



- **The Ministry of Energy and Natural Resources (MENR) Deputy Minister, Alparslan Bayraktar, speaks in teleconference meeting entitled "The effects of COVID-19 on the global energy sector and its repercussions in Turkey" organized by the Atlantic Council in Turkey.** According to a report in Bloomberg HT, Bayraktar stated that demand for energy in Turkey had experienced a significant decline with the effect of measures taken to tackle the fallout of the pandemic. Bayraktar added that demand for natural gas and electricity fell by an average of 14% in April and May. Referring to the developments in the natural gas market, Bayraktar said that daily production of natural gas had risen to approximately 320 million cubic meters with a regasification capacity of 120 million cubic meters per day. Bayraktar also provided some information regarding the share of LNG in natural gas consumption, with the share of LNG in natural gas consumption rising from 28% in 2019 to 44% in the first four months of 2020. (May 15, 2020)

- **EMRA carries out amendments to Electricity Market License Regulation.** According to the amendment published in the Official Gazette, it was concluded that the documents, which previously could only be requested from the applicant for evaluation, could also be requested from the applicant or relevant institutions and organizations. The "10 MW_m" phrases in Article 24 entitled "Amendment of the Pre-License" and Article 24 entitled "Examination, evaluation and finalization of license amendment applications" were changed to "10 MW". With the amendments made in the article entitled "License fees" of the Regulation, provisions for additional modification and license fees will be applied for transactions which are not made within the required periods. The sub-clause c of Article 51 entitled "Indirect share ownership" has been removed. With the amendment made to Article 59 of the regulation entitled "Merger and Division", the decision was taken for merger and division approval transactions, which were brought with certain obligations, to become void automatically if the obligations could not be fulfilled within the prescribed time other than force majeure. In the current regulation, Board decision was required for the cancellation of this approval process. (May 14, 2020)

- **BOTAŞ to be entitled to bid with bargaining procedure.** According to the President's Decision published in the Official Gazette, goods related to situations that come under the ruling of the President or the MENR, which are related to security or should be carried out confidentially, which require special security measures during the execution of the contract or require the protection of basic interests related to state security, service procurements and such work will be tendered by the bargaining method. (May 14, 2020)

- **BOTAŞ will not renew LNG storage and gasification terminal (FSRU) contract signed for 2.5 year period with Japanese Mitsui O.S.K Lines (MOL).** It was reported in the Habertürk newspaper that the FSRU ship ordered by BOTAŞ to Hyundai in South Korea would arrive in September and will serve in Hatay/Dörtyol. A total of 28 million cubic meters of gas will be given to the system from the ship, the order of which was given 2 years ago. (May 14, 2020)

- **European Bank for Reconstruction and Development (EBRD) to provide USD 125 million in Turkish liras financing to EnerjiSA Energy.** According to the statement issued by the EBRD, the USD 125 million in financing to be provided to EnerjiSA Energy will be given in Turkish lira equivalent within the scope of the bank's Turkish Lira Overnight Reference Rate (TLREF) mechanism. (May 13, 2020)

- **Tender period for Ahiköy 1 and 2 HEPPs extended.** The Privatization Administration, under the Ministry of Treasury and Finance of the Republic of Turkey, reported that the deadline for bidding for the privatization of Ahiköy 1 and 2 HEPPs had been extended until 17.00 on 20/07/2020. (May 13, 2020)

- **Incentive certificates for investments which are incomplete due to the outbreak, can be extended for up to one year.** The Resolution on the Amendment to the Decision on State Aid in Investments No. 2501 entered force with its publication in the Official Gazette by the Presidency. For investments which receive investment incentive certificates in accordance with the amendment but are incomplete in natural and biological disasters such as earthquakes and epidemics, additional investments can be completed within up to one year, if requested, in order to complete the investments within the scope of investment incentive documents which were in progress before March 11, 2020. (May 11, 2020)

- **EMRA grants 13 new production licenses and OIZ distribution license in line with the Electricity Market License Regulation.** EMRA also terminated 4 production licenses, 2 supply licenses and one autoproducer license. (May 11, 2020)

- **Minister of Energy and Natural Resources Fatih Dönmez attends "Energy Sector Assembly Meeting" organized by The Union of Chambers and Commodity Exchanges of Turkey (TOBB) via video conference.** Dönmez stated that with the new normalization, production will gradually start again and added, "Oil prices, which have undergone a historical decline due to the sudden drop in demand and excess supply, have deeply affected many international companies. Many have suspended exploration and drilling activities." Rifat Hisarcıklıoğlu, president of the TOBB, said that in a strategic sector such as energy, work was continuing unwaveringly to ensure that the production and supply chain was not disrupted, adding "We have demands that are pending and not yet concluded. In YEKDEM, in particular, measures are required and we demand that costs be reviewed for our manufacturing producers, with a one year extension to the period of benefit from YEKDEM for our energy producing companies." (8 May 2020)

- **Incentives given to 50 energy and 16 mining sector projects in March.** Fifty of the 816 projects that are eligible for investment incentive certificates were announced by the Ministry of Industry and Technology; 16 of them were projects for mining. In March, completion visas for 48 projects were made in the energy sector. The incentive certificates for two of the projects were canceled. The project with the highest investment amount among the projects receiving investment incentive certificates in the mining sector is a lignite production and crushing plant in Ankara, which is being undertaken by Ankara Kömür İşletmeleri Madencilik Sanayi Ticaret Ltd. Şti. The cost of the project is projected to be approximately TL 287 million with 200,000 tonnes lignite production per year capacity. (May 7, 2020)

- **Eight electric cars and 329 hybrid vehicles sold in April, according to Automotive Distributors' Association (ODD) data.** Total sales in the first four months of 2020 were 115 for electric vehicles and 3,832 for hybrid vehicles. (May 7, 2020)

- **Cooperation protocol in field of irrigation signed between the General Directorate of State Hydraulic Works (DSİ) and the Housing Development Administration of Turkey (TOKİ).** According to the statement made by the Ministry of Agriculture and Forestry, the Minister Bekir Pakdemirli emphasized that 25 irrigation projects would be implemented in different provinces

within the framework of the protocol signed. Bekir Pakdemirli added, "In this context, we will be with our farmers with projects that will irrigate 3.2 million decares of land. With the completion of these projects, we aim to provide employment to 300,000 people and contribute TL 2.5 billion annually to the national economy." The total cost of the facilities to be built with the protocol is expected to reach TL 8.5 billion. (May 5, 2020)

- **BOTAŞ determines wholesale natural gas sales tariffs for May.** The price of natural gas was kept constant at TL 1.251 per cubic meter for residential subscribers, excluding taxes, TL 1.550 in industrial subscribers and TL 1.600 for electricity generation. For the commercial subscribers, the sales price for entities with low consumption was determined as TL 1.251 and those with high consumption as TL 1.555. (May 4, 2020)

- **TEİAŞ announces amounts to be paid to production facilities which have benefited from the Capacity Mechanism in March 2020.** TEİAŞ will pay a total capacity of 242.3 million TL to 36 coal, natural gas and hydroelectric power plants, which were difficult to operate in the market conditions in March. (May 4, 2020)

- **EMRA announces monthly natural gas and oil industry reports for February 2020.** According to the Oil Market Sector Report, Turkey's crude oil imports fell 0.7% YoY in February 2020 to 2.3 million tonnes. The highest volumes of crude oil imports during this period were from Iraq, Russia and Kazakhstan, in that order. Total oil imports decreased by 10.7% in Turkey, to total 3.2 million tonnes. According to the Natural Gas Sector Monthly Report on Turkey's natural gas imports in February, there was a 23% YoY increase in imports of natural gas. In February, natural gas imports rose from 4.28 billion cubic meters to 5.26 billion cubic meters, with 2.74 billion cubic meters of imports realized through pipelines and 2.52 billion cubic meters in the form of LNG. LNG imports increased by 49% YoY in February 2020. While Russia remains the main provider of the natural gas imported into Turkey, the USA became the second biggest source due to the LNG imports from the USA. (May 4, 2020)



News From Abroad

- IEA publishes Global Energy Investments 2020 Report.

The IEA announced that energy investments would decrease by 20% in 2020 due to the COVID-19 outbreak, in the steepest annual decline in global energy investment so far. According to the report, USD 1.9 trillion of investment was undertaken in 2019, it is stated that this figure would decrease to USD 1.5 trillion in 2020. In the predictions made by IEA at the beginning of 2020, global energy investments had been expected to increase by 2% in 2020. (May 28, 2020)

- IEA President Fatih Birol highlights renewable energy as the only area without a decline.

Noting that the biggest impact of COVID-19 on the energy markets was on the oil market, Fatih Birol added: "We think oil consumption will decrease significantly this year, by 9 million barrels per day. When we see the collapse in demand for oil combined with the decline in oil supply of some countries, we can see that the oil markets are facing great turmoil." Emphasizing that there has been a slump in demand for coal and natural gas, IEA President Fatih Birol said, "The only area where there is no decrease is renewable energy. There has actually been some growth, especially in solar and wind energy. This was due to the decline in demand for electricity where many governments guarantee renewable energy in their systems and give priority to connecting to the grid." (May 27, 2020)

- Global emissions decrease by 17% with COVID-19 restrictions.

The new analysis of the Global Carbon Project reveals that the COVID-19 restrictions on a global scale have created an "excessive" drop in carbon dioxide emissions. However, this situation is not expected to be sustained in the long-term. The study, published in the scientific journal Nature Climate Change, shows that daily emissions in April decreased by 17% to 17 million tonnes on a global scale compared to the 2019 average, and fell to a level last seen in 2006. (May 21, 2020)

- IEA publishes Renewable Energy Market Update Report.

According to the report, the additional renewable energy capacity that will come into effect this year is expected to decrease by 13% compared to the previous year to be 167 GW. Global renewable energy capacity is projected to increase by 6% to 2,860 GW. (May 21, 2020)

- Electricity consumption in U.S. expected to drop by 4.6% in 2020.

The U.S. Energy Information Administration (EIA) predicted that electricity consumption in the U.S. would decrease from 3,897 billion kWh to 3,716 billion kWh in 2020, while it expected it to recover to 3,754 billion kWh in 2021. (May 18, 2020)

- IEA now expecting smaller decrease in oil demand in 2020.

The IEA has reduced its global oil demand loss expectation by 0.7 million barrels per day for 2020, from 9.3 million barrels a day to 8.6 million barrels a day. According to the May 2020 "Petroleum Market Report", the global oil demand loss expectation for the second quarter of 2020 decreased by 3.2 million barrels to 19.9 million barrels. (May 15, 2020)

- Global oil production decreases by average of 180,000 barrels per day in April compared to previous month.

According to the "Monthly Petroleum Market Report" published by the Organization of Petroleum Exporting Countries (OPEC), global oil production decreased by an average of 180,000 barrels per day in April 2020, to 99.46 million barrels per day. (May 14, 2020)

- EIA published its "Short Term Energy Outlook" report.

The report revised downwards its forecasts for U.S. crude oil production. According to revised expectations, U.S. crude oil production is projected to decrease by 0.5 million barrels/day in 2020 compared to 2019, to 11.7 million barrels/day. U.S. crude oil production is projected to fall by another 0.8 million barrels per day in 2021. The EIA also revised its expectations for U.S. natural gas production downwards. The report projected that natural gas production would be 89.84 billion cubic feet in 2020 and 84.89 billion cubic feet in 2021. (May 14, 2020)

- IEA publishes World Energy Outlook 2020 pioneering report.

According to the report, energy demand will decrease 6% this year. According to the statements in the report, the decline in energy demand will likely affect developed economies the most. The report predicts a 9% drop in demand in the U.S. and 11% in the European Union. Electricity production from renewable energy sources is expected to increase by 5% in 2020. It is forecasted that the total share of coal and natural gas in global electricity generation and electricity production in nuclear energy will decrease by 3%. (May 4, 2020)





Economic Research

ekonomikarastirmalar@tskb.com.tr

MECLİSİ MEBUSAN CAD.

NO:81 FİNDIKLI İSTANBUL 34427, TÜRKİYE

T: +90 (212) 334 50 50 F: +90 (212) 334 52 34

This document was produced by Türkiye Sınai Kalkınma Bankası A.S. (“Industrial Development Bank of Turkey”) (“TSKB”) solely for information purposes and for the use of registered broker or dealer, whether the registered broker or dealer is acting as principal for its own account or as agent for others, or a bank acting in a broker or dealer capacity as permitted by U.S.A. law. This document shall not to be reproduced under any circumstances and is not to be copied or made available to any person other than the recipient. It is produced and distributed in the Republic of Turkey. This document does not constitute an offer of, or an invitation by or on behalf of TSKB or any other company to any person, to buy or sell any security. The information contained herein has been obtained from published information and other sources which TSKB considers to be reliable. No liability or responsibility whatsoever is accepted by TSKB for the accuracy or completeness of any such information. All estimates, expressions of opinion and other subjective judgments contained herein are made as of the date of this document. TSKB may, from time to time, have a long or short position in any of the securities mentioned herein and may buy or sell those securities or options thereon either on their own account or on behalf of their clients. TSKB may, to the extent permitted by law, act upon or use the above material or the conclusions stated above or the research or analysis on which they are based before the material is published to recipients and from time to time provide investment banking, investment management or other services for or solicit to seek to obtain investment banking, or other securities business from, any entity referred to in this document.

Any customer wishing to effect transactions in any securities referred to herein or options thereon should do so only by contacting a representative of TSKB.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior consent of Türkiye Sınai Kalkınma Bankası A.S.

This document does not constitute an offer to sell, or an invitation to subscribe for or purchase, any of the offer shares in any jurisdiction to any person to whom it is unlawful to make such an offer or solicitation in such jurisdiction. The distribution of this document in certain jurisdictions may be restricted by law. Persons into whose possession this document comes are required by TSKB and the managers to inform themselves about and to observe any such restrictions. No person has been authorized to give any information or to make any representation except as contained in this publication.

In making an investment decision investors must rely on their own examination of the Company and the terms of the offering including the merits and risk involved.