

Monthly Energy Bulletin

TSKB Economic Research

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Can Hakyemez

hakyemez@tskb.com.tr

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Applications for YEKA GES-4 contest to be received by March 30, 2022

The Ministry of Energy and Natural Resources published the Contest Announcement for Solar Power Renewable Energy Resource Fields and Capacities (YEKA GES-4) in the Official Gazette. The maximum tariff within the scope of the YEKA GES-4, which will constitute 15 contests with a total capacity of 1,000 megawatts (MW) will be 40 kuruş (kr) per kilowatthour (kWh).

The YEKAs, which will be assigned, are located in Bor (300 MW), Erzin (200 MW) and Viranşehir (500 MW) regions. Three of the five contests, which are planned with 100 MW of installed capacity, will be held in Bor District of Niğde Province, with two held in the Erzin District of Hatay Province. The capacity to be assigned for each of the other 10 contests is planned as 50 MW for Viranşehir District of Şanlıurfa Province.

The electricity purchase period for each MW value of the transmission capacity will be as much as the duration of the first 23 gigawatthours (GWh) generated starting from the first acceptance date of the GES and continuing up to the transmission and/or distribution system.

The submission of bids in all contests within the scope of YEKA GES-4 shall be received between 10.00 and 14.00 on March 30, 2021.

30.84
TWh

July Gross
Generation

518.37
TL/MWh

Average
MCP

10.9%

Daily average licensed electricity generation increased by 10.9% MoM and 7.2% YoY in July.

[Click](#) for details.

74.9%

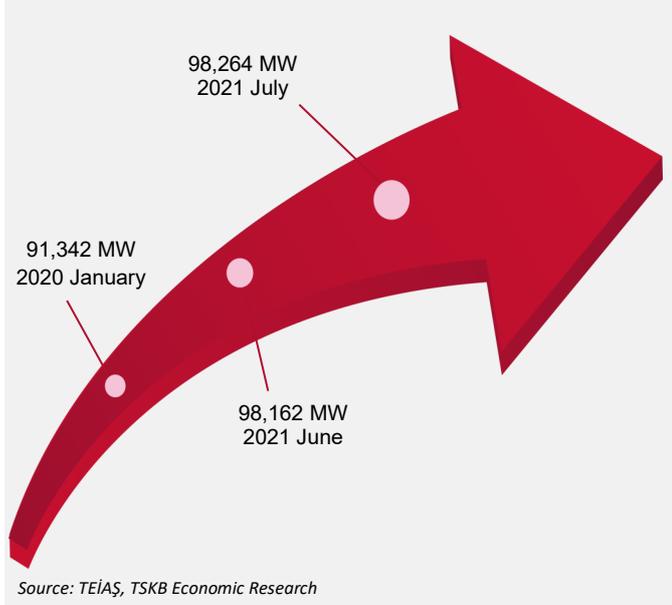
Market Clearing Price (MCP) increased by 74.9% YoY and by 28.9% MoM in July.

[Click](#) for details.

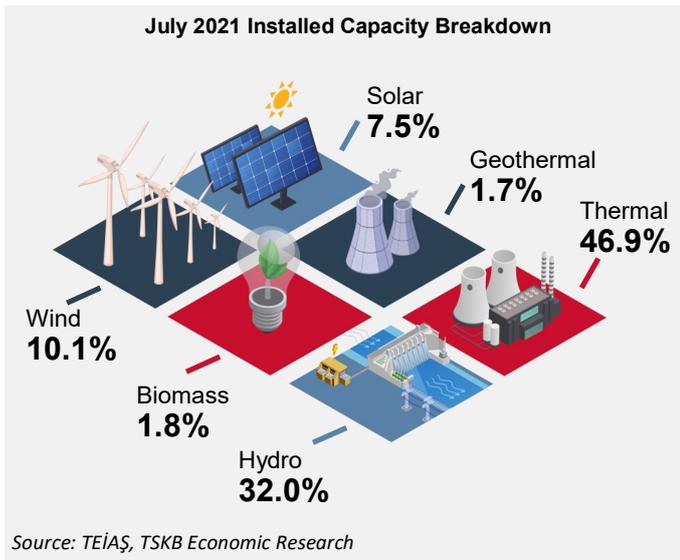


Installed Capacity Analysis

Turkey's total installed capacity, which reached 98,162 MW at the end of June, increased to 98,264 MW at the end of July. In July, wind power plants with a total net installed capacity of 110.6 MW was commissioned. In the same period, the total net installed capacity of solar and renewable waste power plants increased by 104.4 MW and 68.6 MW, respectively.

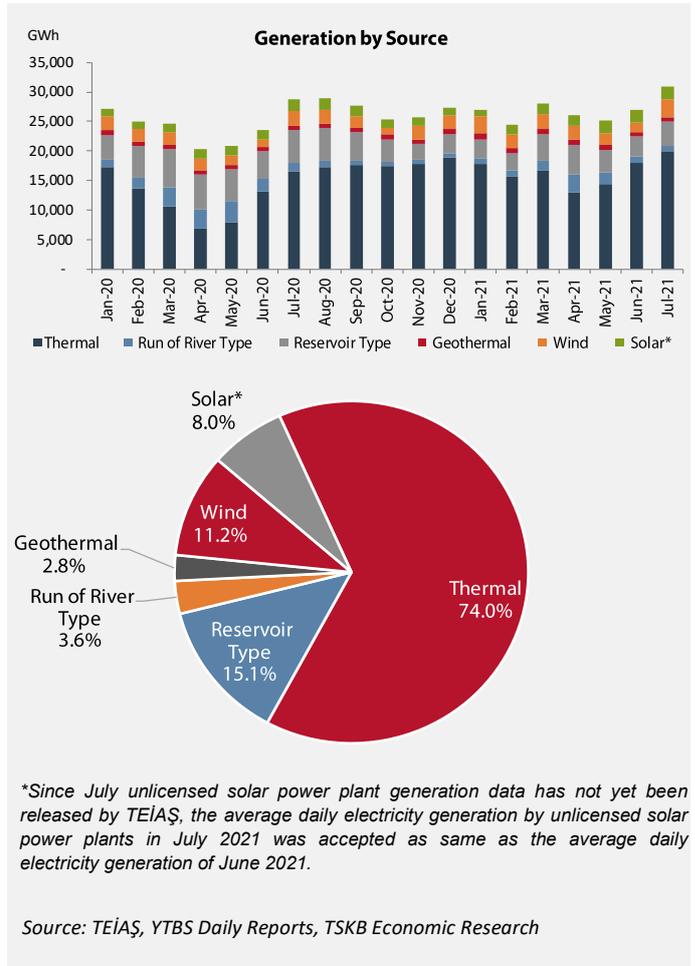


Of all the power plants in operation during July, 53.1% of the capacity consisted of power plants generating electricity from renewable resources. Thus, the share of renewable power plants in total installed capacity continued to reach 53% levels. Hydroelectric power plants (HEPP) accounted for 32.0% of Turkey's total installed capacity in July, while the combined share of wind and solar power plants amounted to 17.6%.



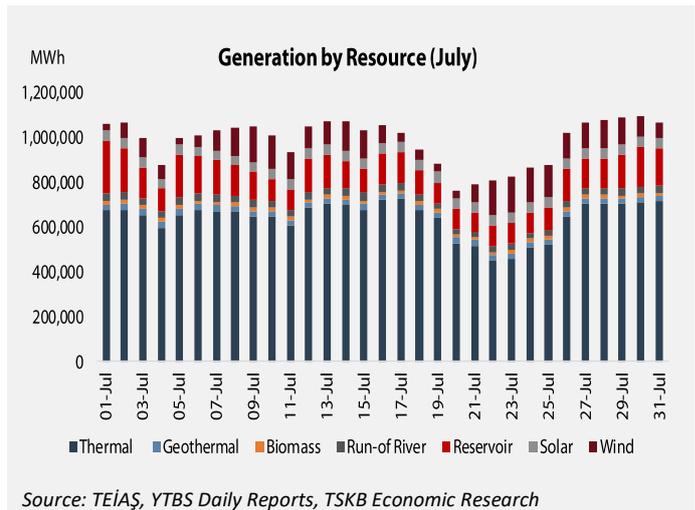
Electricity Generation Analysis

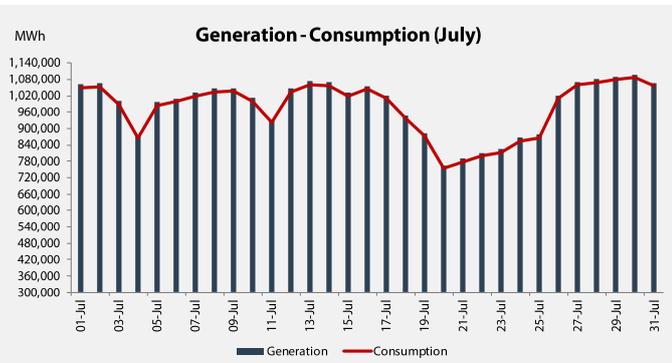
A total of 30.84 terawatt-hours (TWh) in electricity was generated in July, compared to the 26.91 TWh in June. Daily average electricity generation in July recorded a 10.9% increase when compared to June, and an increase of 7.2% when compared with the same month of the previous year.



Thermal power plants, having provided 66.7% of the electricity generated in June, generated 64.6% of the total electricity in July. HEPPs, which had provided 16.7% of electricity in June, generated 16.3% of all electricity in July.

The share of renewable energy power plants in the electricity generation was 42.5% in 2020, and was realized at a rate of 35.4% in July, 2021. In the same period, dam-type HEPPs contributed 13.2% to total generation while wind power plants accounted for 9.8% of total generation.





Source: TEİAŞ, YTBS Daily Reports, TSKB Economic Research

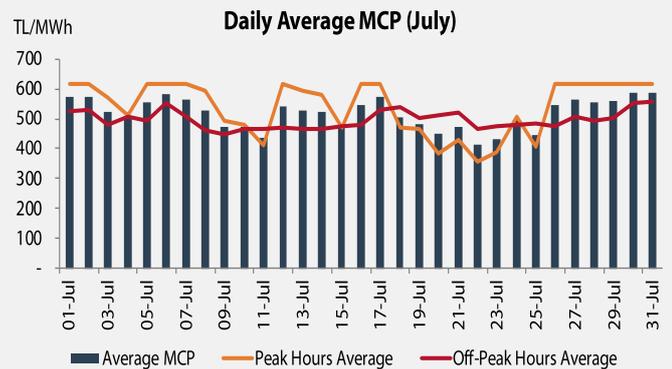
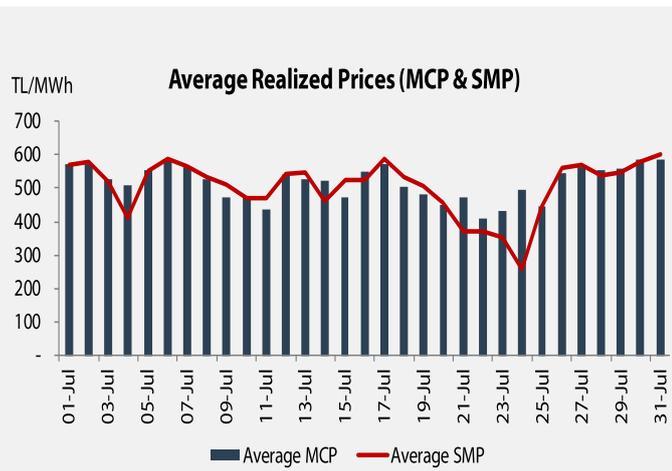
The daily average electricity generation of licensed power plants was realised as 986,628 megawatt-hours (MWh) in July. The maximum generation from licensed power plants during July was recorded on Friday, July 30 (1,099,193 MWh) while the minimum in the same period was recorded on Tuesday, July 20 (764,877 MWh).

July's daily average electricity consumption was realised as 975,538 MWh. The maximum consumption in July was recorded on Friday, July 30 at 1,089,83 MWh, while the minimum electricity consumption was recorded on Tuesday, July 20 at 753,343 MWh.

Electricity Price Analysis

The daily average market clearing price (MCP) and the system marginal price (SMP) in July moved between TL 255 /MWh and TL 605 /MWh. July's average MCP was TL 518.37 /MWh, while the average SMP in the same period was TL 504.99 /MWh. The minimum average MCP was TL 411.23 /MWh on Thursday, July 22, while the minimum average SMP was realised on Saturday, July 24 at TL 257.90 /MWh.

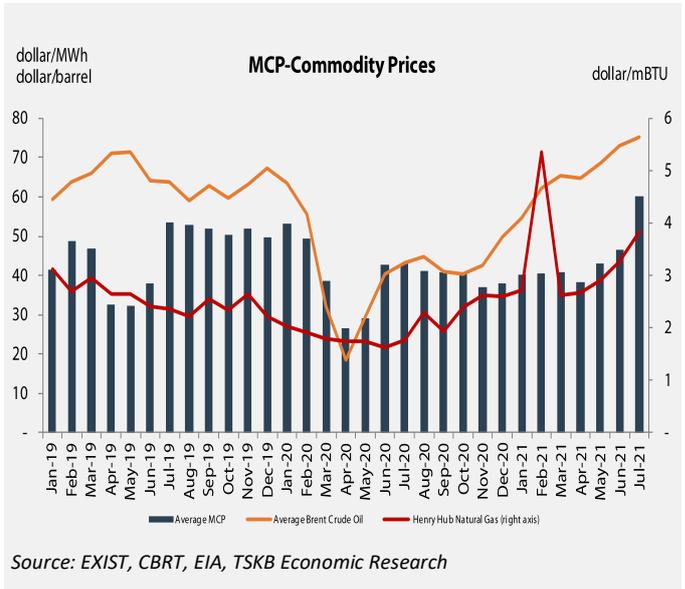
July's average MCP was 28.13% higher than the June average.



Source: EXIST, TSKB Economic Research

An analysis of the daily MCP for July finds that the peak hours average (between 8AM and 8PM) was 4.2% higher than the daily average, at TL 540.25 /MWh. The average of maximum peak hours, TL 617.00 /MWh was recorded in 10 days in July. The Minimum average peak hours rate was TL 357.19 /MWh, recorded on Thursday, July 22.

In the same period, the average off-peak hours rate (between 8PM and 8AM) was TL 496.48 /MWh. While the maximum average off-peak rate was realised on Saturday, July 31 at TL 555.28 /MWh, the minimum average for off-peak hours was recorded on Friday, July 9 at TL 447.88 /MWh.



Source: EXIST, CBRT, EIA, TSKB Economic Research

June's average MCP came in at USD 46.68 /MWh, while July's average MCP was USD 60.08 /MWh. The USD based MCP was 39.13% higher than in the same period of the previous year.

The Brent crude oil price, which has averaged USD 41.76 per barrel so far 2021, averaged USD 75.17 per barrel in July, 2021 and continued to climb. In July, the average price of Brent crude was 2.7% higher than in the previous month and 73.8% higher than in the same period of previous year.

The price of Henry Hub natural gas, having been realised at USD 3.26 /mBTU in June, increased by 17.8% to an average of USD 3.84 /mBTU in July. An increase of 116.9% was observed in July when compared with the same period of the previous year.





Sector News

Local News

- **EMRA (Energy Market Regulatory Authority) published its sector market reports for May.** According to the "Electricity Market Sector Report", licensed electricity generation increased by 21.13% in May 2021 compared with the same month of the previous year, reaching 23.91 TWh. HEPPs accounted for 24.3% of the licensed electricity generation, imported and domestic coal fired power plants accounted for 31% and natural gas fired power plants accounted for a 29.1% share. The share of the electricity generated by hydroelectric power plants was 45.7% in May, 2020. According to the "Natural Gas Market Sector Report", Turkey's natural gas imports increased by 34.9% in May when compared to the same period of the previous year, to reach 3.6 billion cubic meters (bcm). Boru Hatları ile Petrol Taşıma A.Ş. (BOTAŞ) was responsible for approximately 88.9% of the imports (3.2 bcm) with private firms accounting for the remaining 11.1%. BOTAŞ had accounted for 94.5% of the imports in May, 2020. Natural gas consumption increased by 61.4% in May to reach 3.65 bcm. According to the "Oil Market Sector Report", Turkey's total crude oil imports increased by 11% when compared with the same month of the previous year to reach 2.59 million tonnes. Crude oil had 76.41% share in the total imports of oil products. (July 30, 2021)

- **Natural gas discovered in the Black Sea planned to be extracted over a 25 to 30-year period.** The Minister for Energy and Natural Resources, Fatih Dönmez, stated in a speech that the natural gas discovered in the Black Sea would start being pumped to the national system in 2023 and, according to the existing figures, it will provide approximately 30-35% of Turkey's annual natural gas needs. Fatih Dönmez remarked that between 3 billion and 5 billion cubic meters of natural gas would be included into the system in 2023 and this level would

increase to between 10 bcm and 15 bcm in 2028. While discussing the privatization of Türkiye Elektrik İletim A.Ş. (TEİAŞ), Mr. Dönmez added that after the public offering of TEİAŞ, the management and supervision of the majority stake would be kept public and there would be no change in employees' personal rights. (July 13, 2021)

- **Natural gas extraction gets underway in the Şah Deniz-2 Southeastern field in the Caspian Sea.** The natural gas is aimed to contribute 0.4 bcm to current total extraction, meeting the natural gas needs of 2 million homes. Türkiye Petrolleri Anonim Ortaklığı (TPAO) holds a 19% stake in the consortium which has operated the Şah Deniz field since the discovery of natural gas there in 1999. More than 140 bcm of natural gas and over 33 million tonnes of condensate have been extracted from the Şah Deniz field so far. (July 8, 2021)

- **Turkcell to purchase stake in Boyut Grup Enerji.** Turkcell Enerji Çözümleri and Elektrik Satış Ticaret A.Ş. (Turkcell Enerji), a 100% subsidiary of Turkcell, has signed an assignment of share contract to purchase all of the shares held by Boyut Grup Enerji Elektrik Üretim and İnşaat Sanayi ve Ticaret A.Ş. (Boyut Grup Enerji). In the statement submitted to the Public Disclosure Platform, it was stated that the price of the aforementioned transaction was USD 29.6 million and that Turkcell Enerji would record a cash outflow of USD 11.5 million. (July 8, 2021)

- **TEİAŞ has been included in the scope of privatization.** With the Presidential Decree published in the Official Gazette, the preparation process related to public offering of TEİAŞ, which has been included in the privatization program, will be conducted by the Ministry of Energy and Natural Resources and the Privatization Administration. The privatization of TEİAŞ is scheduled to be completed by December 31, 2022. (July 5, 2021).

- **Electricity and natural gas prices being increased.** According to the July tariff published by BOTAŞ, a 12% increase in tariffs will be applied for residential consumption with a 20% increase in tariffs for industrial consumption and electricity generation power plants. Thus, the sales price which BOTAŞ applies to natural gas distribution companies for residential consumers will be determined as TL 1,448.09 per 1,000 cubic meters of natural gas, and the price for industrial subscribers has been determined as TL 1,783.35 per 1,000 cubic meters. The tariff applied for electricity generation power plants is TL 2,060 for 1,000 cubic meters of natural gas. According to the electricity tariff which EMRA, a 15% increase will be applied to the final electricity sales price for all subscriber groups with effect from July 1. In addition, the green energy tariff has been increased by 23.9%. Within this scope, the price which residential customers will pay for 100 kWh of electricity from July 1, has been as TL 91.56 including the taxes and funds. (July 1, 2021)

- **The distribution price for unlicensed power plants has been raised.** With the update published by the EMRA, the distribution price has been determined as 5.6882 kr/kWh for unlicensed electricity production facilities which started operating before December 31, 2017, and 22.7527 kr/kWh for the unlicensed electricity production facilities which started operating after December 31, 2017. (July 1, 2021)

News From Abroad

- **Emissions caused by electricity generation may increase to record level in 2022.** According to the "Electricity Market Report" published by the International Energy Agency (IEA), demand for electricity, having contracted by 1% in 2020, increased by 5% in 2021 and is set to grow by a further 4% in 2022. According to the report, after having declined in the last 2 years, global carbon emissions caused by the electricity sector could reach record high levels, increasing by 3.5% in 2021 and 2.5% in 2022. On the other hand, the report projects that the amount of electricity generated by renewable resources will increase more than 8% in 2021 and by a further 6% in 2022. It is also projected that the amount of electricity generated from coal-fired power stations may reach an all-time high, increasing by 5% in 2021 and 3% in 2022. (July 16, 2021).

- **Global oil demand on course to reach 99.86 million barrels per day in 2022.** According to the June "Petroleum Market Report" published by the Organisation for Petroleum Exporting Countries (OPEC), average oil demand is set to reach 99.86 million barrels per day in 2022 - an increase of 3.4% over the 2021. According to OPEC, global oil demand will reach an average of 100 million barrels/day in the second half of 2022, while predicting that demand will increase by 5.95 million barrels per day in 2021. (July 16, 2021)

- **Average Brent crude price of USD 68.78 per barrel expected in 2021.** According to the June "Short Term Energy Outlook" report published by the US Energy Information Authority (EIA), the average Brent crude oil price in 2021 is projected to increase by 65% in comparison with the previous year average, reaching USD 68.78 per barrel. This compares with the projection of USD 65.19 per barrel announced in the previous month. In addition, the report sets out the expectation that Brent crude prices will average USD 66.64 per barrel in 2022. (July 16, 2021)

- **Oil demand expected to average 99.5 million barrels per day for 2022.** According to IEA's "Oil Market Report" for July, global oil demand will increase to an average of 99.5 million

barrels per day in 2022, marking an increase of 3.1%. The Asia-Pacific Region is expected to take the lead in oil demand next year, with demand of 37.2 million barrels per day, followed by the Americas (31.2 million barrels per day) and Europe (14 million barrels per day). (July 14, 2021)

- **Global energy demand falls 4.5% in 2020.** According to British Petroleum's 2021 World Energy Statistics Report, this decrease caused by the pandemic stands out as the biggest decrease since 1945. The report also states that the lower demand for energy was responsible for a 6.3% fall in global carbon emissions in 2020. According to the report, as global energy demand fell, global oil consumption also decreased in 2020 at a rate of 9.3% in comparison with the previous year. However renewable energy capacity, including biofuels, increased 9.7% in 2020. (July 12, 2021)

- **Brent crude oil prices expected to average USD 68.78 per barrel in 2021.** EIA published its June "Short Term Energy Outlook" report for June. According to the report, Brent crude oil prices are expected to average USD 68.78 per barrel of 2021 – this is a 5.5% increase over the projection set out in the May report. In addition to this, the average crude oil projection for 2022 has been raised by 10.2%, from the previous month's projection to USD 66.64 per barrel. (July 9, 2021)

- **Global hydroelectric power plant capacity set to increase by 230 GW over the next 10 years.** According to IEA's report entitled "Hydroelectric Special Market Report: Analysis and Foresight For 2030", global hydroelectricity capacity is expected to increase by approximately 230 GW between 2021 and 2030, taking the total installed hydroelectric power capacity to 1,557 GW. In addition, approximately USD 540 billion of investment is planned to be undertaken in hydroelectric energy between 2021-2030, with USD 127 billion of this spent solely on the modernization of the old power plants. According to the report, the aforementioned capacity increase is expected to be 23% less than the increase recorded in the last 10 years. (July 1, 2021)





Economic Research

ekonomikarastirmalar@tskb.com.tr

MECLİSİ MEBUSAN CAD.

NO:81 FİNDİKLİ İSTANBUL 34427, TÜRKİYE

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

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