



ENERGY OUTLOOK

2025

TSKB

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Abbreviations

BCM: Billion Cubic Meters
BOTAŞ: Petroleum Pipeline Company
BPP: Bioenergy Power Plant
COP: Conference of the Parties
EIA: U.S. Energy Information Administration
EMRA: Energy Market Regulatory Authority
EXIST: Energy Markets Management Joint Stock Company
FSRU: Floating Storage Gasification Unit
GPP: Geothermal Power Plant
GW: Gigawatt
HPP: Hydroelectric Power Plant
LNG: Liquefied Natural Gas
MCM: Million Cubic Meters
MCP: Market Clearing Price
MENR: Ministry of Energy and Natural Resources
MTEP: Million Tons of Oil Equivalent
MW: Megawatt
MWh: Megawatthour
NEEAP: National Energy Efficiency Action Plan
NPP: Nuclear Power Plant
NZEB: Nearly Zero Energy Buildings
RES: Renewable Energy Source
SPP: Solar Power Plant
TEİAŞ: Turkish Electricity Transmission Corporation
TSKB: Industrial Development Bank of Türkiye
TTF: Title Transfer Facility
TWh: Terawatthours
USA: The United States of America
VAP: Efficiency Increasing Project
WPP: Wind Power Plant
YEKA: Renewable Energy Resource Area
YEKDEM: Renewable Energy Resources Support Mechanism

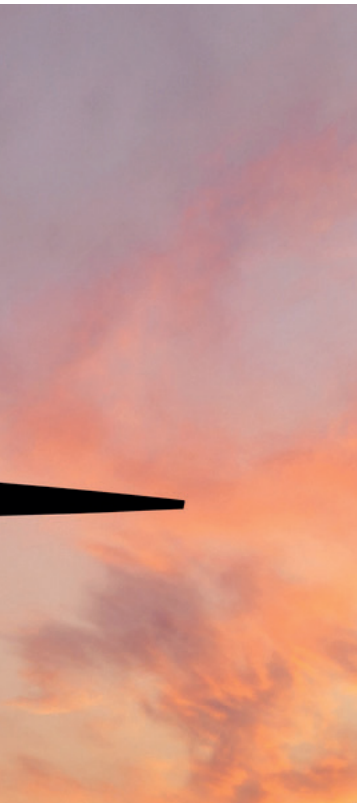
Energy Outlook 2025

Introduction

The energy market has strategic importance for economic growth, industrial production and the sustainability of welfare in Türkiye, as it does throughout the world with an increasing trend in Türkiye's energy demand since the 2000s. This rise in demand which has come about as a result of population growth, economic growth, industrialization, urbanization and climatic conditions, plays an important role in Türkiye's current account balance with the country being a net importer of energy. Accordingly, ensuring energy supply security, widening resource diversity and turning to low-carbon sources of energy are among Türkiye's main priorities.

In order to meet the growing demand for electricity in Türkiye, policies are being pursued to increase the share of domestic and renewable resources with important steps being taken to strengthen the transmission and distribution infrastructure to bring about further integration of renewable energy sources. In addition, investments continue to commission electricity storage systems in order to ensure the flexibility of the grid.





Diversifying sources of natural gas supply for supply security came under the spotlight in 2022 and 2023 amid the energy crisis between Europe and Russia and remain very much on the agenda in Türkiye. In this vein, the agreements signed in 2025 offer hints of Türkiye's path in natural gas imports in the coming period. Renewable energy sources form an increasingly significant portion of Türkiye's energy mix, with investments in renewable energy sources being ramped up with the aim of transitioning to a low-carbon energy system. In addition, within the framework of 2053 net zero targets, the pace of integration of renewable energy sources into the system has grown even more important. Energy efficiency, on the other hand, is deemed to be a strategic component both in maintaining the supply-demand balance and ensuring economic and environmental sustainability. Energy efficiency programs carried out in industry, transportation, buildings and the public sector are contributing considerably towards reducing energy intensity and increasing competitiveness. In this context, electricity storage, support for renewable energy sources and energy efficiency projects and low-carbon energy transformation will enable Türkiye to move faster to reach its net zero targets.

In light of these developments, this report is being prepared by the Industrial Development Bank of Türkiye (TSKB) to assess the dynamics, developments and expectations of the energy sector. This report analyses and evaluates Türkiye's energy outlook within the framework of current developments in the electricity, natural gas and renewable energy markets and energy efficiency with a holistic approach.





The electricity market in Türkiye continues its development by focusing on the 2053 net zero target, which is critical in ensuring energy supply security and tackling the ecosystem crisis. The transformation which started with the separation of electricity generation and distribution activities in the 1990s, gained momentum with the legal

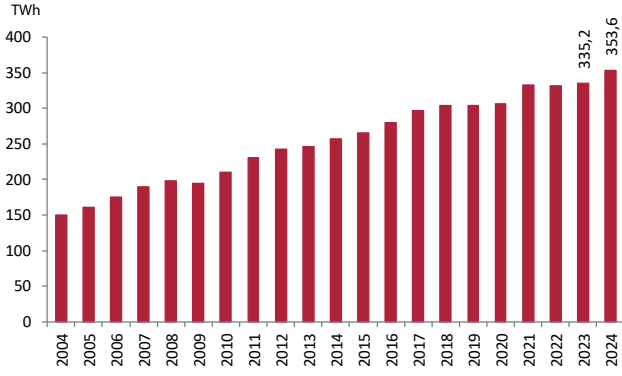
regulations and liberalization steps taken in the 2000s. The electricity market continues to contribute to economic growth by maintaining its multi-stakeholder and competitive structure, in parallel with the rise in renewable energy investments, grid modernization and technological transformation.

1.1. Electricity Demand

2024, decreasing only in 2009, 2019 and 2022. The tragic earthquake which struck in 2023 negatively affected gross electricity demand, especially in the first quarter of the year, but as the industrial and service sectors started to recover in the following months, demand started to grow again to reach

335.2 Terawatthours (TWh) by the end of the year. The growth in gross electricity demand regained its momentum on the back of the recovery in economic activity and clement weather, reaching 353.6 TWh marking an increase of 5.5% year-on-year.

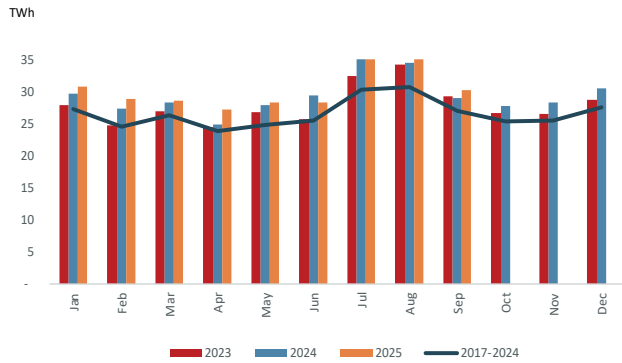
Graph 1. Gross Electricity Demand by Year



Source: Turkish Electricity Transmission Corporation (TEİAŞ), TSKB

As of the first 9 months of 2025, gross electricity demand remained higher than in the previous two years. Gross electricity demand had reached 275.3 TWh in the first 9 months of 2025, an increase of 5.1% compared to the same period of 2024, while demand for electricity in the summer months reached the highest values in the last 9 years, due to the effects of the hot summer.

Graph 2. Monthly Total Gross Electricity Demand



Source: TEİAŞ, TSKB

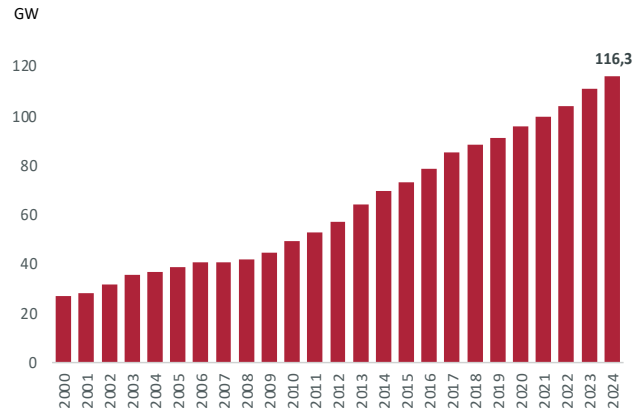
According to Türkiye's 2053 Long-Term Climate Strategy¹, submitted to the United Nations in November 2024 during the 29th United Nations Conference of Parties (COP29), electricity consumption is projected to reach 455.3 TWh in 2030 and 510.5 TWh in 2035. The planned increase in electrification, outlined in the strategy, is expected to play a role in this rise in electricity consumption. A detailed examination of the targets which are also reflected in the "Türkiye National Energy Plan" published in 2022, predicts an average annual increase of 3.7% in the industrial sector, 2.3% in residential use and 2.2% in the services sector throughout the forecast period.²

1.2. Electricity Generation Capacity

Türkiye's total electricity generation capacity increased from 27.3 gigawatts (GW) in 2000 to 116.3 GW by the end of 2024. This increase, which has largely come on the back of the rise in renewable energy capacity, has also been driven by the incentives provided to power plants generating electricity from renewable sources. An average of 4.7 GW of new capacity was commissioned annually between 2011 and 2023, resulting in a net additional 5.4 GW of new capacity in 2024. According to the figures, an average of 3.4 GW of renewable energy capacity was commissioned each year between 2011 and 2023. In 2024, approximately 0.6 GW of capacity was decommissioned, with a total of 6 GW of new capacity being commissioned. Renewable energy sources accounted for all of the 6 GW in new capacity commissioned during 2024, with solar power plants accounting for the lion's share of that, at 4.6 GW.

As of the end of September 2025, Türkiye's total capacity had reached 121 GW with approximately 5 GW of new capacity commissioned in the first nine months of the year. In this period, the capacity of solar power plants overtook the capacity of hydro-electric power plants for the first time. The share of renewable energy sources, including hydro, in total electricity generation capacity increased to 61.2%.

Graph 3. Electricity Generation Capacity By Year



Source: TEİAŞ, TSKB

According to the "2024-2028 Strategic Plan" published by the Ministry of Energy and Natural Resources (MENR) in November 2024³ Türkiye's total capacity is expected to reach 145.3 GW by the end of 2028. In the same period, the capacity of solar power plants is expected to increase to 33.1 GW and the capacity of wind farms to 19.3 GW while a 4.8 GW nuclear power plant is planned to be commissioned. The "Renewable Energy Roadmap" for 2035, announced by the Ministry of Energy and Natural Resources in October 2024, sets out that total solar and wind capacity will increase to 120 GW in 2035.⁴

¹ Ministry of Environment, Urbanization and Climate Change, Türkiye's 2053 Long-Term Climate Strategy, 2024. https://unfccc.int/sites/default/files/resource/Turkiye_Long_Term_Climate_Strategy.pdf

² Ministry of Energy and Natural Resources (MENR), Türkiye's National Energy Plan, 2022. https://enerji.gov.tr/Media/Dizin/EIGM/tr/Raporlar/TUEP/T%C3%BCrkiye_Ulusal_Enerji_Plan%C4%B1.pdf

³ MENR, "2024-2028 Strategic Plan", 2024. Source: https://enerji.gov.tr/Media/Dizin/SGB/tr/Kurumsal_Politikalar/ETKB_2024-2028_Stratejik_Planı.pdf

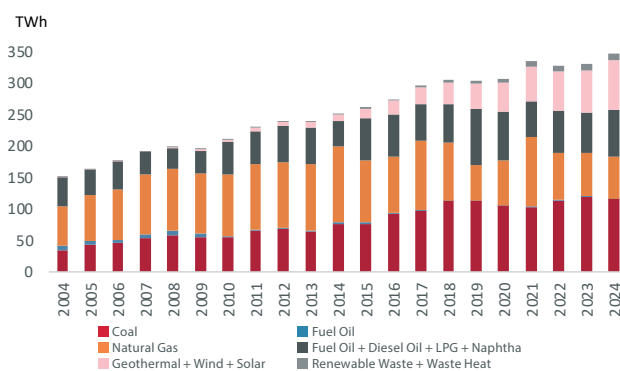
⁴ MENR, "2035 Roadmap Launch Presentation in Renewable Energy", 2024. Source: <https://enerji.gov.tr/duyuru-detay?id=30481>



1.3. Electricity Supply

Due to the low import and export capacities and quantities of the electricity market in Türkiye, the electricity supply moves in parallel with gross electricity demand. While the supply of electricity has increased in line with investments undertaken to meet growing electricity needs, decarbonization policies and renewable energy investments have also significantly altered the resource composition.

Graph 4. Gross Electricity Supply By Source



Source: TEİAŞ, TSKB

Total electricity supply rose by 7.1% from 331 TWh in 2023 to 354.6 TWh in 2024, driven largely by the commissioning of new solar and wind capacity. In 2024, the share of coal-based generation decreased to 32.6%, natural gas to 18.9%, hydroelectric power plants to 21.1%, while the share of generation from solar, wind and geothermal sources in the total increased to 22.2%.

In the first ten months of 2025, Türkiye's electricity supply increased by 3.0% compared to the same period last year, reaching 294.6 TWh. The share of thermal power plants in total generation reached 58.1%, with 176.1 TWh of generation while the share of renewable resources stood at approximately 41.9%. In the first ten months of 2024, the share of electricity generated from renewable energy sources stood at 45.2%. The most important reason for the decrease in this rate was the decline in the amount of electricity generated from hydroelectric power plants.

The 2024-2028 Strategic Plan prepared by the Ministry of Energy and Natural Resources (MENR) sets out the goal of increasing the share of clean energy-based electricity generation in total generation, with the aim of increasing the share of renewables-based electricity generation in total generation from 43% at the end of 2023 to 50% in 2028.

1.4. Electricity Trading

Türkiye's electricity trade (imports and exports) is generally limited due to capacity. In 2023, total electricity imports amounted to approximately 1.8% of the country's gross electricity demand while electricity exports amounted to around 0.6% of the electricity supply. In 2024, electricity imports decreased to 0.76% of the total, with exports increasing to 1.04% with the year 2024 ending with a positive foreign trade balance in electricity trade. The ratio of electricity imports in electricity demand in the first ten months of 2025 stood at 0.6% with electricity exports having a 1.2% share in electricity supply.

Looking at the country-based breakdown, Türkiye is trading electricity with Bulgaria, Georgia, Syria, Greece and Iraq. According to the figures published by the Energy Market Regulatory Authority (EMRA), Georgia accounted for the largest share of Türkiye's electricity exports in the first 8 months of 2025, with a 41.2% share, with Iraq comprising the highest share of imports at 42.7%. Electricity imports from Georgia which has the largest share in exports, are negligible.

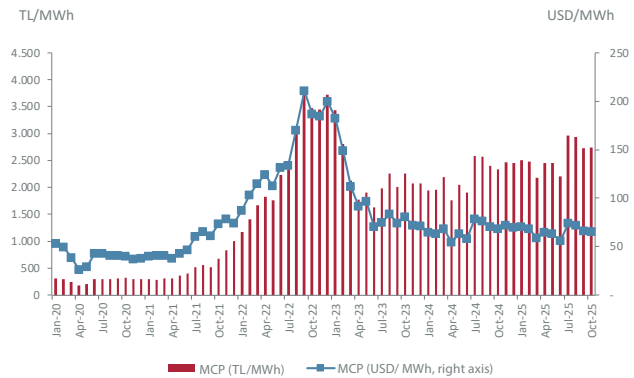


1.5. Electricity Prices

In Türkiye, the price of the hourly electricity is formulated by a supply curve with price-quantity pairs listed in ascending order and combined into a single bid. The demand curve is formulated similarly and the intersection of the supply and demand curves determines the market clearing price (MCP) for that hour. While electricity prices depend on power plant availability, the weather and economic and geopolitical factors, electricity prices in Türkiye react readily to changes in commodity prices.

In 2024, the average MCP increased by 3.3% compared to the previous year to TL 2,261.90/MWh. In dollar terms, the average MCP in 2024 decreased by 25.2% compared to the previous year's average of USD 92.0 /MWh and decreased to USD 68.9 /MWh. In the first 10 months of 2025, the average MCP increased by 15.3% compared to the same period of the previous year to TL 2,567.6 /MWh. This increase in the TL-based MCP in 2025 was driven by the increase in demand in the summer months, changes in exchange rates, macroeconomic developments and the rise in production costs for some natural gas and imported coal power plants. In dollar terms, the MCP averaged USD 66.0 /MWh.

Graph 5. Monthly Average MCP (2020-2025)



Source: EPİAŞ, TSKB



The natural gas trade in Türkiye has a 40 year history starting with the first natural gas agreement signed by Petroleum Pipeline Company (BOTAŞ) with the Soviet Union in 1986. Natural gas consumption in Türkiye has risen in parallel with the growth in population and industrial production. As the periodic natural gas demand varies according to prevailing conditions and generation from hydroelectric power plants (HPP), the amount of natural gas supplied from different sources also varies from year to year.

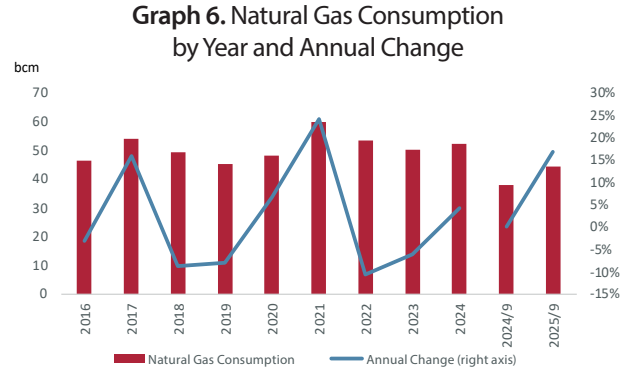
Türkiye, which has produced natural gas below 1% of its natural gas consumption for years, is a net importer of natural gas. This rate exceeded 1% in 2023 and 2025 when natural gas discovered in the Black Sea was produced and supplied to the system.

MENR has included its natural gas-related targets in its Strategic Plans. Accordingly, the Strategic Plan for 2024-2028 includes targets such as strengthening natural gas infrastructure, increasing natural gas exploration and production and developing grid and storage capacity. In addition, the development of green hydrogen and renewable natural gas chains is also included in the Strategic Plan. The targets for natural gas are also emphasized in the 2024-2028 Development Plan published by the Directorate of Strategy and Budget.

According to the National Energy Plan published, natural gas consumption is expected to increase in quantity in 2030 compared to 2025, while this amount is expected to decrease slightly in 2035. According to the plan, the share of natural gas in primary energy consumption is expected to decrease from 24.2% in 2025 to 24% in 2030 and 22.5% in 2035.

2.1. Natural Gas Consumption

When the natural gas consumption in Türkiye in recent years is examined, the highest consumption was realized in 2021 with 58.9 billion cubic meters (bcm). Türkiye's natural gas consumption which fell below 50 bcm in 2023, increased by 4.6% in 2024 and rose again to 52.3 bcm with a realization of over 50 bcm. In the first 9 months of 2025, natural gas consumption increased by 16.9% compared to the same period of 2024 and reached 44.4 bcm. Changes in natural gas consumption are due to the climatic conditions experienced throughout the year.



Source: EPDK, TSKB

2.2. Natural Gas Production

The discoveries announced in the Black Sea in 2020 and 2025 played an important role in Türkiye's natural gas production. Türkiye's natural gas production, which was recorded at 400 million cubic meters (mcm) until the announcement of the discoveries, increased by approximately 111.5% in 2023 compared to the previous year and reached 804.4 mcm. In 2024, production continued to increase, reaching 2.26 bcm, up 181.1% year-on-year. According to monthly EMRA data, natural gas production was recorded as 2.3 bcm in the first 9 months of 2025, an increase of 47.1% compared to the same period of the previous year. This amount of natural gas produced was approximately 5.2% of the consumption in the first 9 months.

While 30.3% of the total natural gas produced in 2023 took place in Tekirdağ, production in the region increased by 10.2% in 2024 compared to 2023 but Tekirdağ's share in total production decreased to 11.9% in 2024 with the introduction of natural gas discovered in the Black Sea into the system. In 2023, Kırklareli, which accounted for 13.5%, and İstanbul, with a share of 7%, provided 5% and 2.8%



of total natural gas production, respectively in 2024. Zonguldak's share in total natural gas production increased from 42% in 2023 to 79.2% in 2024. In this direction, it is noteworthy that the most critical region in Türkiye's natural gas production has shifted from the Marmara Region to the Black Sea Region.

The natural gas discovered in the Black Sea in 2020 and supplied to the system as of 2023 has caused major changes in Türkiye's natural gas production over the years. In August and October 2020, a total of 405 bcm of natural gas discoveries were announced, 320 bcm and 85 bcm, respectively. However, in May 2025, it was stated that another natural gas reserve with a potential of 75 bcm was discovered in the Karadeniz Göktepe 3 Field.

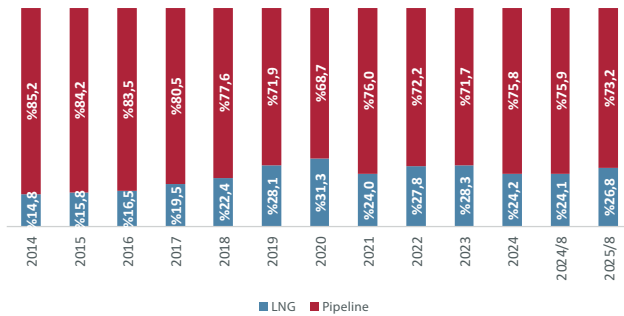
2.3. Natural Gas Trading

Türkiye meets most of its natural gas consumption through imports. Türkiye's natural gas imports increased by 3.4% in 2024 compared to the previous year and amounted to 52.2 bcm. In the first 9 months of 2025, natural gas imports increased by 17.3% compared to the same period of the previous year and reached 41.2 bcm.

Natural gas imports in Türkiye are made in the form of pipelines and liquefied natural gas (LNG). While the share of pipelines in supply was recorded as 76.0% in 2021, this rate decreased to 72.2% in 2022. In 2023, the decline in the share of pipelines continued and stood at 71.7%. In 2024, this rate increased to 75.8%. The first eight months of 2025 also saw an increase of approximately 10 percentage points compared to the same period of the previous year with the share of pipelines recorded at 73.2%.

As the years progressed, Türkiye made agreements with different countries on natural gas supply to diversify the source countries and routes in natural gas supply. For this purpose, Floating LNG Storage and Gasification Unit (FSRU) pier and connection lines investments have been started and completed. In addition, BOTAŞ has signed LNG supply agreements with various companies in both 2024 and 2025. The agreements made by BOTAŞ in 2024 include a total of 3.5 bcm of LNG supply in a 10 year period starting from 2027.^{5,6}

Graph 7. Share of LNG and Pipelines in Natural Gas Imports



Source: EPDK, TSKB

In September 2025, short, medium and long-term LNG agreements made by BOTAŞ came to the fore. Türkiye has signed LNG purchase agreements worth a total of 14.4 bcm over three years during the GasTech process held in Italy. According to the statements of the Minister of Energy and Natural Resources, Alparslan Bayraktar⁷, LNG purchase agreements were signed with BP, Shell and Eni, respectively 4.8 bcm, 2.4 bcm and 1.5 bcm. In addition, the amount of agreements made with Hartree, JERA, Cheniere, SEFE and Equinor companies reached a total of 5.7 bcm.⁸

Table 1. BOTAŞ September 2025 LNG Agreements

Company	Amount (bcm)	Agreement Period
Shell	2.4	2026-2028
BP	4.8	2026-2029
ENI	1.5	2026-2030
Equinor	1.5	2026-2031
Cheniere	1.2	2026
Hartree	0.6	2026-2027
JERA	0.6	2026
SEFE	1.8	2026-2028
Mercuria	70.0	2026-2045
Woodside	5.8	2030-2039

Source: ETKB, TSKB

LNG agreements continued to be on the agenda in Türkiye's negotiations with the United States of America (USA) in the same period, and within this framework, BOTAŞ signed an LNG supply agreement with Mercuria in the USA for 20 years. According to this agreement, within the scope of deliveries starting as of 2026, approximately 4 bcm of LNG equivalent to natural gas per year and approximately 70 bcm in total will be received from both loading terminals in the USA and gasification facilities in Türkiye, Europe and North Africa.

In addition, the preliminary agreement for long-term LNG supply signed by BOTAŞ with the Australian company Woodside Energy is expected to start in 2030 and last for 9 years. The agreement will cover the supply of 5.8 bcm of natural gas equivalent LNG to BOTAŞ, primarily from the Louisiana LNG Project in the USA. With all these short, medium and long-term agreements, Türkiye has taken steps towards diversifying its LNG supply until 2045.

Accordingly, Russia's share in natural gas imports decreased from 55.8% in 2014 to 33.6% in 2020 and rose to 44.9% in 2021 as a result of increasing demand. In 2022, Russia's share declined again to 39.5%, followed by 42.3% and 41.3% in 2023 and 2024, respectively. When the data for the first 9 months of 2025 are examined, the share of natural gas imported from Russia was recorded as 38.9%, 1.3 percentage points lower than the same period of the previous year.

Azerbaijan ranks second in Türkiye's natural gas imports. Azerbaijan's share of natural gas imports was 20.3% and 22% in 2023 and 2024, respectively. Its share in natural gas imported from Azerbaijan in

⁵ Shell. <https://www.shell.com.tr/medya/media-2024/botas-ve-shell-uzun-vadeli-lng-tedarik-sozlesmesi-imzaladi.html>

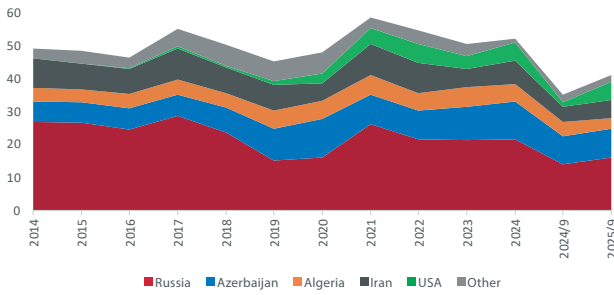
⁶ BloombergHT. <https://www.bloomberght.com/botas-total-ile-lng-anlasmasi-imzaladi-2360488>

⁷ MENR. <https://enerji.gov.tr/haber-detay?id=21573>

⁸ MENR. <https://enerji.gov.tr/haber-detay?id=21576>

the first 9 months of 2025 was similar to these levels. Algeria is the third country from which the most natural gas imports are imported, while Algeria's share in imports was 11.8% in the first 9 months of 2024, this share decreased to 7.8% in the same period of 2025. In the first 9 months of 2025, the amount of natural gas imported from Iran, which ranked fifth with a share of 10.7% in total imports in 2024, was 13.2%. The share of the USA, another country from which natural gas is imported, has increased since 2020 and reached 13.5% in the first 9 months of 2025.

Graph 8. Breakdown of Natural Gas Imports by Country over the years



Source: EPDK, TSKB

2.4. Natural Gas Storage

Investments in natural gas storage in Türkiye led to significant increases in underground storage and LNG terminal capacity. However, despite these increases, the annual consumption coverage ratio of Türkiye's storage capacities stand 11%, while the coverage level in Europe is 25-30%.⁹ As of the end of 2024, the total capacity of natural gas underground storage facilities stood at 5.8 bcm with the storage capacity of LNG terminals reaching 1.05 bcm. In view of these figures, Türkiye had a total natural gas storage capacity of 6.85 bcm as of the end of 2024.

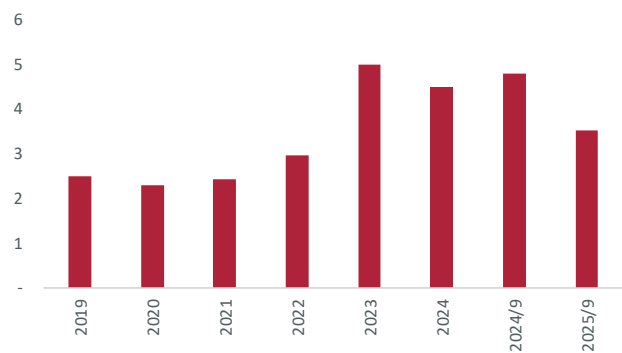
Looking at the monthly average natural gas stock data on an annual basis, the monthly average natural gas stocks decreased by 10% in 2024 compared to 2023 and decreased to 4.5 bcm. An average monthly natural gas stock of 4.8 bcm was recorded in the first 9 months of 2024, while in the first 9 months of 2025, the average monthly natural gas stock was 3.5 bcm.

Underground storage activities play a critical role in contributing to natural gas supply security and diversity. There are two underground natural gas storage facilities in Türkiye; one being the storage capacity in the Silivri Natural Gas Underground Storage Facility (North Marmara Natural Gas Underground Storage Facility), which had a capacity



of 4.6 bcm¹⁰ at the end of 2023 and the other being the Tuz Gölü Natural Gas Underground Storage Facility, with a capacity of 1.2 bcm with capacity expansion efforts ongoing. Accordingly, the capacity of the Tuz Gölü Natural Gas Underground Storage Facility to 8.8 bcm.¹¹

Graph 9: Monthly Average Natural Gas Stocks by Year



Source: EPDK, TSKB

In addition, the storage capacity of the five LNG terminals in operation which were established and operated on the storage, gasification and transmission of LNG, increased to 1.05 bcm. These are the Marmara Ereğlisi LNG Terminal (1994-BOTAŞ), Ege Gaz A.Ş. LNG Terminal (2006-Ege Gaz), Etki Port LNG Facility (2016-Etki Port), the BOTAŞ Dörtüol Floating Storage and Regasification Unit (FSRU) and the Saros FSRU LNG facilities which were commissioned in 2017.

⁹ Directorate of Strategy and Budget. <https://www.sbb.gov.tr/wp-content/uploads/2025/10/2026-Yili-Cumhurbaskanligi-Yillik-Programi.pdf>

¹⁰ BOTAŞ. <https://www.botas.gov.tr/Sayfa/silivri-dogal-gaz-depolama-tesisi/21>

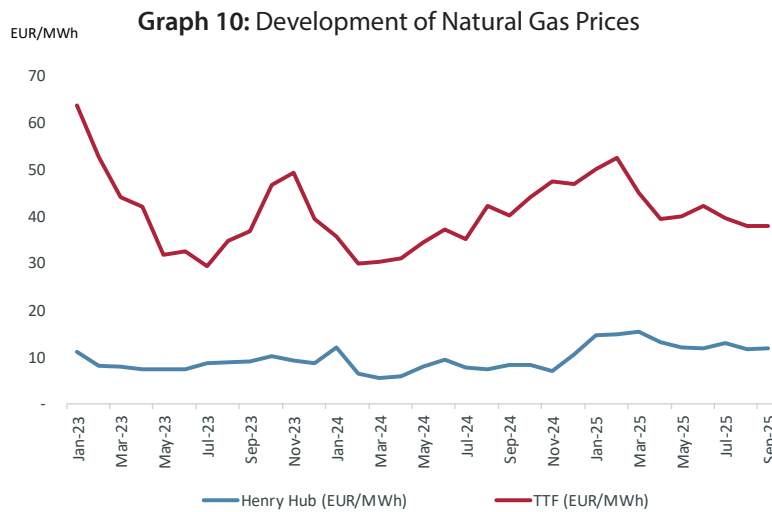
¹¹ Directorate of Strategy and Budget, 2025. <https://www.sbb.gov.tr/wp-content/uploads/2025/10/2026-Yili-Cumhurbaskanligi-Yillik-Programi.pdf>

2.5. Natural Gas Prices

Natural gas prices in Türkiye vary in line with the prices set out in BOTAŞ's long-term contracts, global natural gas prices, oil prices and exchange rate movements.

Following the high levels of natural gas prices seen during the energy crisis in 2022, the monthly TTF price averaged EUR 41.3 /MWh 2023, decreasing to EUR 32.4 /MWh in 2024. The TTF price averaged EUR 34.8 /MWh each month in the first 9 months of 2025.

Another benchmark price for natural gas, the US-based Henry Hub price, stands out with its pipeline connection, proximity to production centres and access to growing natural gas export markets.¹² Since 2023, monthly average Henry Hub prices have tended to be lower than the TTF. In 2023, the average price of Henry Hub natural gas was recorded at EUR 8.7 /MWh. In 2024, the monthly average decreased by 7.3% compared to the previous year to EUR 8.9 /MWh. In the first 9 months of 2025, the average Henry Hub price increased by 68.1% compared to the same period of the previous year to EUR 13.1 /MWh. From this perspective, in view of Türkiye's LNG agreements with USA, keeping abreast of the Henry Hub price is vital.



Source: Reuters, US Energy Information Administration (EIA), TSKB

Natural gas prices are subject to volatility in line with global developments with Türkiye experiencing the effects of these developments during the period. In the coming period, the affect natural gas market in Türkiye will be affected by macroeconomic developments, the use of natural gas in electricity generation, the amount of natural gas stored, the incidence of drought and temperatures.



¹² EIA. Source: <https://www.eia.gov/todayinenergy/detail.php?id=63504>



The primary energy sources which constitute one of the two pillars of the energy sector, consist of fossil fuels, nuclear energy, and renewable energy. Diversifying energy sources, increasing domestic and renewable energy production capacities, and ensuring accessible and sustainable energy are among Türkiye's priorities with the aim of bringing about a more flexible energy system. Furthermore, the net-zero energy target for 2053, set in recent years, further emphasizes the importance of renewable sources of energy.



3.1 Renewable Energy Capacity

The capacity of Türkiye's renewable energy sources has been following an increasing trend over the years. Capacity based on renewable energy sources which stood at 49.6 GW in 2020, reached 69.1 GW in 2024, with the share of renewable sources of energy in total capacity increasing from 51.8% in 2020 to 59.6%. This growth in capacity continued in 2025, especially for solar and wind energy. Accordingly, the share of renewable sources of energy in total capacity increased by 2.6 percentage points from 59.3% in October 2024 to 61.9% in October 2025. While HPPs had a 62.5% share of the renewable energy resources capacity in 2020, this share has decreased over the years, especially due to the rise in wind and solar power plants (WPP & SPP). Even so, HPP still accounted for the highest share among renewables with a rate of 43.4% as of September 2025. With the rapid growth in investments in unlicensed power plants in recent years, the shares of solar and wind energy among the installed renewables capacity had reached 32.4% and 18.7%, respectively, as of September 2025.

Table 2: Renewable Energy Capacity by Year (GW)

Source	2020	2021	2022	2023	2024	2024/9	2025/9
Hydroelectric	31.0	31.5	31.6	32.0	32.2	32.2	32.3
Wind	8.8	10.6	11.4	11.8	12.9	12.4	13.9
Solar	6.7	7.8	9.5	15.7	19.9	18.7	24.1
Geothermal	1.6	1.7	1.7	1.7	1.7	1.7	1.7
Biomass	1.5	2.0	2.3	2.4	2.4	2.4	2.3
Total	49.6	53.6	56.4	63.6	69.1	67.4	74.3

Source: TEİAŞ, TSKB

The 2024-2028 Strategic Plan published by the MENR in November 2024, which takes account of our country's renewable energy potential, sets out a target to reach 91.4 GW of renewable energy capacity by 2028, with renewables by then accounting for 62.9% of total capacity. According to the plan, capacities are projected to reach 19.3 GW for wind and 33.1 GW for solar by 2028 with hydro, geothermal (GPP) and bioenergy (BPP) reaching a combined capacity of approximately 39 GW. Additionally, the installed capacity of battery storage is expected to reach 10 GW by 2028.

Table 3: Targeted Capacity (GW) in the Framework of the 2024-2028 Strategic Plan

Source	2026	2027	2028
HPP, GPP and BPP	38.0	38.6	39.0
SPP	26.1	29.6	33.1
WPP	16.3	17.8	19.3
Renewable Resources	80.4	86.0	91.4
Total	130.0	138.3	145.2

Source: ETKB, TSKB

According to the Energy Transition 2035 Roadmap published by the MENR in November 2024, a total capacity of 120 GW is targeted for wind and solar energy with 5 GW of offshore wind capacity by 2035. The 2026 Presidential Annual Program published in October 2025 sets out the target of increasing SPP capacity by 3.5 GW, WPP by 1.5 GW and HPP capacity by 0.43 GW in 2026.¹³

¹³ Directorate of Strategy and Budget, "2026 Presidential Annual Program", 2025. <https://www.sbb.gov.tr/wp-content/uploads/2025/10/2026-Yili-Cumhurbaskanligi-Yillik-Programi.pdf>

3.2. Generation from Renewable Energy Sources

Türkiye benefits from significant resources in terms of wind, geothermal and solar energy. The development of these resources is vital both in tackling climate change and also in reducing dependence on imports and fossil fuels for energy. With the electricity storage legislation that has entered effect in the last two years, the possibility of using readily available capacity, especially from solar and wind energy sources, will trigger investments in these resources. Furthermore, with the capacity created within the scope of self-generated energy production and the commissioning of hybrid power plants, the transition towards renewable resources is expected to continue in the near future.

The share of electricity generated from renewable energy sources in total electricity generation, which has exceeded 42% since 2022, was recorded at 50.3% at the end of 2024, the highest annual share. In terms of the breakdown, HPP accounted for the highest share of generation from renewable energy until the end of 2024, while the share of electricity generated from SPP and WPP has increased over the years in parallel with their increasing capacity. As of the end of 2024, the share of electricity generated from SPP and WPP in total electricity generation from renewables had reached 41.1% while the share of electricity generated by SPP and WPP had reached 49% of electricity generated in the first 9 months of 2025, surpassing generation from hydro-electric power plants.

Table 4: Electricity Generation from Renewable Energy Sources

Source	2020	2021	2022	2023	2024	2024/9	2025/9
HPP	77.8	55.5	66.6	64.0	74.9	62.0	47.4
WPP	24.5	30.9	34.6	34.1	36.8	27.3	30.7
SPP	14.4	16.5	20.2	22.1	30.7	24.9	31.0
GPP	9.3	10.1	10.2	11.1	11.1	8.2	8.6
BPP	4.1	5.9	7.5	10.1	10.8	7.2	7.7
Total	130.1	118.9	139.1	141.4	164.3	129.6	125.4

Source: TEİAŞ, TSKB

According to the 2024-2028 Strategic Plan published by the MENR in November 2024. The share of electricity generation from renewables in total electricity generation is expected to reach 50% by 2028, with the share of WPP in total electricity generation is expected to reach 13%, SPP contributing 13% and hydro, GPP and BPP contributing 20%.

3.3. Renewable Energy Resources Support Mechanism (YEKDEM)

The USD-based support mechanism known as YEKDEM-1, which was in place until the first half of 2021, played a major role in increasing of Türkiye's renewable energy capacity. YEKDEM has been a driving force behind increasing the share of renewable energy power plants in Türkiye's total capacity to more than 50%. The TL-based YEKDEM model, known as YEKDEM-2, which entered effect in the second half of 2021 with the change in macroeconomic conditions, has been updated on a quarterly basis with an escalation formula based on a 52% weighting to price indices and a 48% weighting to foreign currency. As YEKDEM-2 was found lacking by industry stakeholders, the model was updated again in May 2023 and was referred to as YEKDEM-3. Although the prices have moved below MCP prices, YEKDEM-3 prices have been positively received by the sector stakeholders.

Prices in the TL-based YEKDEM, which has been in force since the second half of 2021, change depending on macroeconomic developments. In May 2023, the escalation model of TL-based prices for renewable energy power plants was updated in favor of using foreign currency with a ceiling and floor price was introduced in dollar terms, and changes were made so qualifying power plants could benefit and the utilization periods. In this new YEKDEM model, referred to as YEKDEM-3, the prices determined for the Renewable Energy Source (RES) certified generation facilities that will be brought into operation from 1 July, 2021 to 31 December, 2030 will be updated on a monthly basis, indexed 60% to foreign currency (EUR and USD) and 40% to price developments (producer price index and consumer price index).

The number of renewable energy plants seeking to benefit from dollar-based prices has increased due to the exchange rate advantage of the YEKDEM-1 incentive provided to renewable energy plants. In this vein, the number of power plants benefiting from YEKDEM increased to 1,036 and the total capacity increased to 22,982 MW in 2022. The number of power plants benefiting from YEKDEM decreased to 887 in 2023 and 784 in 2024 with the total capacity decreasing to 18,684 MW in 2023 and 17,670 MW in 2024. In addition to the high course of the MCP, the fact that YEKDEM prices which returned to a TL basis, were not attractive to producer companies played a role in this decline.

The decline continued in 2025 with the number of power plants benefiting from YEKDEM decreasing to 755 and total capacity to 17,082 MW. The number of renewable energy power plants benefiting from the guaranteed price within the scope of YEKDEM, and their installed capacities, over the years is as follows:

Table 5: Number of Renewable Energy Power Plants and their Capacities (MW)

Capacity	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
HPP	9,561	11,096	11,706	12,588	12,372	12,221	11,510	7,442	6,768	6,304
WPP	4,320	5,239	6,200	6,496	6,456	6,702	8,173	7,740	6,751	6,805
GPP	599	752	997	1,253	1,404	1,462	1,557	1,524	1,447	1,368
BPP	204	300	349	503	654	857	1,273	1,509	2,189	2,136
SPP (Licensed)	-	13	14	82	163	289	469	469	469	469
Total	14,684	17,400	19,266	20,922	21,050	21,530	22,982	18,684	17,624	17,082

Number of Plants	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
HPP	388	418	447	463	461	447	426	315	248	216
WPP	106	141	151	160	165	198	224	196	170	183
GPP	20	29	37	45	49	52	57	55	51	51
BPP	42	57	70	100	125	183	293	285	273	269
SPP (Licensed)	-	2	3	9	17	30	36	36	36	36
Total	556	647	708	777	817	910	1,036	887	778	755

Source: EPDK, TSKB

An examination of the data on prices for the May-October period finds that YEKDEM prices calculated for the HPP, offshore WPP, GPP, BPP and pumped storage HPP with reservoirs remained above the monthly average MCP. For electricity storage, wave and run-of-river type HPP, YEKDEM prices were calculated on the basis of the MCP except in August. In onshore WPP, SPP and BPP (refuse), it was observed that prices remained below the MCP in the May-October period. This raises the possibility that WPP and SPP will sell the electricity they generate at the MCP instead of through the YEKDEM in the coming years.

Table 6: Comparison between YEKDEM and MCP (TL/MWh)

Source	May-25	Jun-25	July-25	Aug-25	Sep-25	Oct-25
Dam Type HPP	2,910	2,979	3,054	3,129	3,175	3,237
Run-of-River Type HPP	2,728	2,793	2,863	2,933	2,977	3,034
Onshore WPP	2,142	2,193	2,248	2,303	2,337	2,382
Offshore WPP	2,910	2,979	3,054	3,129	3,175	3,237
GPP	4,083	4,180	4,284	4,390	4,454	4,541
BPP (refuse)	2,142	2,193	2,248	2,303	2,337	2,382
BPP (Biomethanization)	3,496	3,579	3,669	3,759	3,815	3,888
BPP (Thermal)	2,727	2,791	2,861	2,932	2,975	3,032
SPP	2,142	2,193	2,248	2,303	2,337	2,382
Electricity Storage	2,526	2,586	2,651	2,716	2,756	2,810
Pumped Storage HPP	4,083	4,180	4,284	4,390	4,454	4,541
Wave Power Plants	2,728	2,793	2,863	2,933	2,977	3,034
MCP	2,458	2,202	2,589	2,939	2,729	2,749

Source: EPIAŞ, TSKB

3.4. Renewable Energy Resource Area (YEKA) Model

With the YEKA Regulation published in the Official Gazette dated 9 October, 2016, a new investment model started to be implemented in evaluating renewable energy resources. This model was aimed at the more effective and efficient use of renewable energy resources through the creation of a YEKA model for public and treasury immovables and privately owned immovables. It was additionally aimed at commissioning renewable energy facilities with high domestic contribution rates and promoting the use of advanced technology.

YEKA projects support Türkiye's energy supply security, domestic and renewable energy resources strategy. These projects are also important in realising the sustainable energy goals. After the first tender held in 2017, various tenders covering wind farms and solar power plants were held with the MENR announcing that the YEKA model would continue, as hinted in the National Energy Plan. In this context, new candidate YEKA (offshore WPP, onshore WPP and SPP) were announced on 4 August, 15 August, 30 September and 16 October, 2023. In a statement released in August 2023, the MENR announced that four offshore wind farm areas in Bandırma, Bozcaada, Gelibolu and Karabiga had been determined as candidate YEKA projects.

In October 2024, the new YEKA model was announced within the scope of the "Renewable Energy 2035 Roadmap" published by the MENR. YEKA tenders of at least 2,000 MW of capacity were planned to be held under the new model every year with the purchase guarantee at the tender price being extended to 20 years, so companies planning to invest in renewable energy under the YEKA model would be able to obtain longer-term financing. In addition to the extension of the purchase guarantee period, it was stated that the tender prices would be preventing from falling below a certain threshold, since the tender prices in earlier YEKA tenders had fallen to very low levels, significantly compromising the profitability of the projects. Market sales will be permitted from between 5-6 years following the date of the contract with a base price of USD 49.5 /MWh being applied in market sales. It has been stated that YEKA will have a minimum domestic content requirement and transmission fee exemption, and that a foreign currency-based purchase price will be applied in conjunction with international arbitration to attract international investors.

Following the announcement of the new YEKA model, the 1,200 MW YEKA WPP 2024 competitions were announced on 28 October, 2024, and the 800 MW YEKA SPP 2024 tenders which were previously announced but had been postponed, were announced on 4 November, 2024.

The YEKA WPP 2024 competition was held on 28 January, 2025 and the tender floor price was determined as USD 35 /MWh with the ceiling price determined as USD 55 /MWh. 40 companies submitted bids in the YEKA RES 2024 tenders with Enerjisa Üretim, RT Enerji Turizm, Efor Holding, and ADY Akdeniz Wind Energy winning the tenders.

Table 7: YEKA WPP 2024 Tenders

Power Plant	Province	Capacity (MW)	Winning Company	Purchase Price (USD /MWh)	YEKDEM Contribution Share (USD /MW)
R24-Edirne	Edirne	410	Enerjisa Üretim	35.0	60,000
R24-Balkaya	Kırklareli	340	Enerjisa Üretim	35.0	92,000
R24-Sergen	Kırklareli	200	RT Energy	35.0	140,000
R24-Yellice	Sivas	160	Efor Holding	35.0	140,000
R24-Gürün	Sivas	90	ADY Mediterranean	35.0	148,000

Source: ETKB, TSKB

The YEKA SPP 2024 tender was held on 4 February, 2025 with a tender floor price of USD 32.5 /MWh and a ceiling price of USD 55.0 /MWh. A total of 67 companies applied to the tender with Çumra Güneş, Erdem Soft Tekstil, Chen Güneş, Özerka Energy, Temmuz Güneş and Kalyon YEKA GES 5 companies winning the tender.

Table 8: YEKA SPP 2024 Tenders

Power Plant	Province	Capacity (MW)	Winning Company	Purchase Price (USD /MWh)	YEKDEM Contribution Share (USD /MW)
Kütahya Solar	Kutahya	40	Cumra Gunes	32.5	162,000
Antalya Solar	Antalya	40	Erdem Soft Textile	32.5	122,000
Van Solar	Van	60	Chen Sun	32.5	270,000
Malatya Solar	Malatya	75	Ozerka Energy	32.5	232,000
Karaman Solar	Karaman	200	July Solar	32.5	150,000
Karapınar Solar	Konya	385	Kalyon YEKA GES 5	32.5	67,000

Source: ETKB, TSKB

In both tenders, the tender prices were reduced to the base prices and the winners were determined by the contributions. The average unit contribution price in the YEKA SPP tenders was USD 167,000 /MW while it was USD 116,000 /MW in the YEKA WPP auctions.

On 28 January, 2025, a total of 10 candidate regions for the YEKA SPP 2025 investments, five in Karaman, two in Erzurum, and one each in Bolu and Kahramanmaraş were announced by the MENR. On 7 May, 2025, the MENR announced that the 2025 YEKA SPP tenders would be held in October and the YEKA WPP tenders would be held in November with application dates and capacities being announced on 9 September, 2025. The YEKA WPP 2025 tenders would cover a total capacity of 1,150 MW in six provinces with the applications to be received by 2 December, 2025.

Table 9: YEKA WPP 2025 Tenders

YEKA WPP 2025 Tenders	Province	Connection Capacity (MW)	Winning Company	Purchase Price (euro/MWh)	YEKDEM Contribution (euro/MW)
Sivas Wind Farm	Sivas	500	Kanat Rüzgar	35.0	56,000
Balıkesir-1 Wind Farm	Balıkesir	160	Soma Enerji	35.0	212,000
Aydın-Denizli Wind Farm	Aydın	140	Stone Enerji	35.0	170,000
Balıkesir-2 Wind Farm	Balıkesir	120	Balıkesir Elk.	35.0	218,000
Kütahya Wind Farm	Kütahya	120	İçdaş Elektrik	35.0	222,000
Balıkesir-3 Rwind Farm	Balıkesir	110	Eksim Enerji	35.0	312,000

Source: MENR, TSKB

The YEKA SPP 2025 tenders, on the other hand, covered a total capacity of 650 MW in eight provinces, with applications received on 18 November, 2025 and the competition held on 25 November, 2025.

Table 10: YEKA SPP 2025 Tenders

Power Plant	Province	Capacity (MW)	Winning Company	Purchase Price (EUR /MWh)	YEKDEM Contribution Share (EUR/MW)
Kahramanmaraş GES	Kahramanmaraş	40	Güçlü GES	32.5	285,000
Mardin GES	Mardin	40	Aydede Enerji	32.5	208,000
Demirköprü Yüzer GES	Manisa	35	Demirköprü Yüzer GES Ortak Girişim Grubu	32.5	225,000
Erzurum-1 GES	Erzurum	100	Stone Enerji	37.5	100,000
Van GES	Van	40	Zincir GES	32.5	187,000
Bolu GES	Bolu	50	Ecogreen Elektrik Enerji	32.5	44,000
Erzurum-3 GES	Erzurum	85	Sertaş Turizm	37.5	120,000
Eskişehir GES	Eskişehir	260	Efor Holding	39.5	105,000

Source: ETKB, TSKB

3.5 Electricity Storage Systems

Electricity storage systems are an important factor in integrating renewable energy sources into the system more effectively and taking flexibility and grid performance to the next level. Storage systems allow the storage of electricity generated from renewable energy plants which generate electricity at certain intervals and intermittently, and are considered as a vital step towards developing alternatives to fossil fuel-based power plants. Incentives have been rolled out to support the establishment of storage facilities in Türkiye in recent years.

Regulations regarding electricity storage facilities in Türkiye started with the Electricity Generation and Electricity Storage Facilities Acceptance Regulation published in the Official Gazette dated 19 February, 2020.¹⁴ In the past three years, the issue has been on the electricity sector's agenda with progress achieved both in terms of regulations and in attracting investors.

In line with the decision published in the Official Gazette dated 6 July, 2022; EMRA will grant a preliminary license to the companies that undertake to establish an electricity storage facility for the establishment of electricity generation facilities based on wind or solar energy, up to the installed capacity of the electricity storage facility they have undertaken to establish.¹⁵ These facilities were also offered the opportunity to benefit from YEKDEM and domestic contribution support.

Regulations regarding YEKDEM were set out in the Official Gazette published on 19 November, 2022¹⁶ According to the regulation, the energy generated in the storage generation facility and given to the grid after being stored is considered to be within the scope of YEKDEM.

676 projects have been pre-licensed by EMRA for a total capacity of 33.1 GW. It was announced in the Official Gazette dated 14 October, 2023 that EMRA would no longer receive applications for the electricity storage facility due to the higher-than-expected volume of applications.¹⁷ Preliminary licenses were issued to a total of 413 projects with a combined installed solar energy capacity of approximately 14.7 GW, and to 263 projects with a combined wind power capacity of 18.4 MW.

According to the 2024-2028 Strategic Plan published by the MENR in November 2024, a target has been set for battery storage capacity to reach 10 GW in 2028.



¹⁴ Official Gazette. Source: <https://www.resmigazete.gov.tr/eskiler/2020/02/20200219-1.htm>

¹⁵ Official Gazette. Source: <https://www.resmigazete.gov.tr/eskiler/2022/07/20220706-3.htm>

¹⁶ Official Gazette. Source: <https://www.resmigazete.gov.tr/eskiler/2022/11/20221119-6.htm>

¹⁷ Official Gazette. Source: <https://www.resmigazete.gov.tr/eskiler/2023/10/20231014-2.htm>

3.6 Aggregation in the Electricity Market

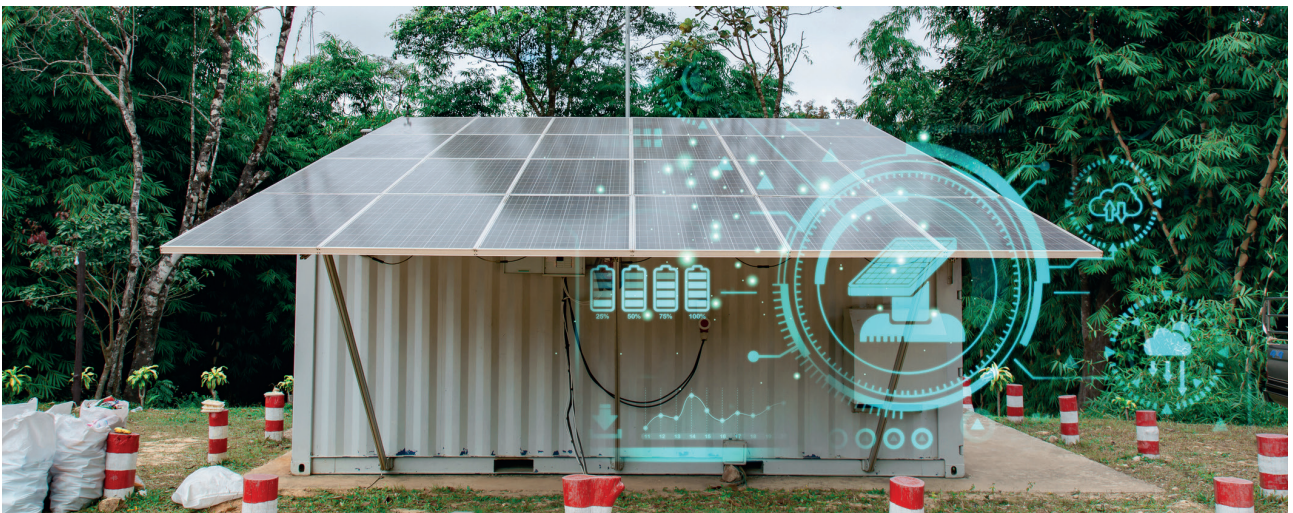
Aggregation activities in the electricity market are defined within the framework of the regulations published in issue 32755 of the Official Gazette dated 17 December, 2024. Aggregation is defined in the regulation as "market activities carried out by an aggregator by combining the production or consumption of one or more grid users". The aim is to consolidate scattered power plants with small installed capacities and operated by small investors under a single portfolio, combining their production and enabling them to act as a single power plant in the electricity market (for example, a solar power plant with 3 MW installed capacity, a wind farm with a 5 MW installed capacity and a hydroelectric power plant with 15 MW of installed capacity could act as a single power plant with a total capacity of 23 MW).

Collecting activities can be carried out by legal entities with a collection license. The aggregator may sell the production of the power plants in its portfolio in the day-ahead or intraday market, enter bilateral agreements or operate in the ancillary services market.

Collectors will be able to add licensed power plants with installed capacities of less than 100 MW and unlicensed power plants connected to the distribution or transmission network which have completed the 10-year purchase guarantee period to their portfolio. The total installed capacity of the portfolio may not exceed 2,000 MW, with unlicensed power plants in the portfolio not exceeding 500 MW.

Aggregation is aimed at encouraging more active participation of small investors with scattered power plants who would normally lack sufficient knowledge about the electricity market or have difficulty in competing against the big players in the market. In particular, distributed power plants in close proximity to one other gathered under a portfolio could play a very critical role in terms of balancing. In this context, "Balancing Zones" were declared by TEİAŞ on 31 December, 2024. Where collectors establish their portfolios to include power plants in different balancing zones, these power plants will be evaluated separately in the balancing market by TEİAŞ. If the power plants in the portfolio mainly cover the power plants in the balancing zone, more flexibility will be provided to the market, which is preferable for TEİAŞ.

Aggregation activities also act as a preparation for the transition to demand-side participation in the Turkish Electricity Market. Demand-side participation aims to ensure that electricity consumers play an active part in the market not only with consumption but also with instant consumption changes. For example, an industrial facility within the scope of demand-side participation and which consumes electricity will be able to contribute to the balancing of the market by reducing its consumption during peak electricity consumption hours. Accordingly, both markets will become more flexible and consumers will be able to earn additional income. This system, which is quite commonly applied throughout Europe, is still in the developmental stage in our country. The regulation states that consumption facilities under the collector will be considered as balancing units or ancillary service units, with the electricity supply of the relevant facilities also under the responsibility of the collector.





Population growth, industrialization, urbanization, changes in consumption habits and technological developments increase pressure on the environment and natural resources and lead to increased energy demand. Therefore, the more effective and efficient use of energy resources has gained much more importance. Energy efficiency is the most effective use of resources at all stages of the processes, from service and production to consumption. However, energy efficiency also refers to the reduction of energy consumption without compromising production, service delivery, comfort and social welfare through the use of new technologies.

The Energy Efficiency Law published in 2007 was aimed at increasing efficiency in the use of energy resources and energy in order to use energy effectively, the prevention of waste, the alleviation of the burden of energy costs on the economy and the protection of the environment. A series of secondary regulations were then implemented, and steps were taken to improve energy efficiency

throughout the country with various strategies and policy documents. These documents include the Regulation on Increasing Efficiency in the Use of Energy Resources and Energy, the Regulation on Energy Performance in Buildings, the Regulation on Energy Efficiency Audits, the Regulation on Procedures and Principles for Increasing Energy Efficiency in Transportation and the Framework Regulation on Energy Labelling.

Türkiye's National Energy Plan, published in December 2022, guides energy supply and demand for the period until 2035 and sets out targets for energy efficiency. In the National Energy Plan which evaluates energy efficiency with the use of advanced technology at different levels, energy intensity is expected to have improved by 51% over the 2000-2035 period. Alongside all these documents, energy efficiency action plans have been drawn up and intended to serve as a roadmap in this effort.

4.1. The First National Energy Efficiency Action Plan

The First National Energy Efficiency Action Plan (NEEAP) was published in the Official Gazette in January 2018¹⁸ The Action Plan which covers the period from 2017-2023 and includes 55 actions, aims to reduce primary energy consumption by 14% (saving 23.9 million tonnes of oil equivalent) with an investment of USD 10.9 billion between 2017 and 2023. Carrying out the actions defined in the plan is expected to bring monetary savings of USD 30.2 billion.

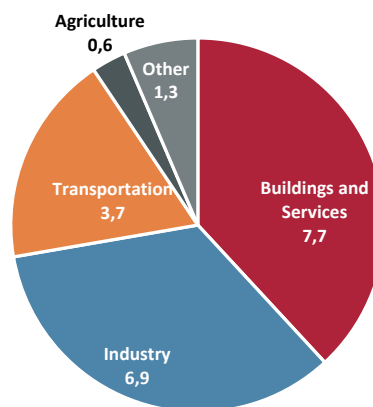
According to statements issued by the Ministry of Economic Affairs, USD 8.4 billion was invested to achieve the targets set in the First NEEAP period with achieved a 14% reduction in primary energy consumption while cutting emissions by 70 million tonnes.¹⁹ In parallel with this, energy intensity declined by 20.4% in 2023 compared to its 2011 level.

4.2. The Second National Energy Efficiency Action Plan

The "Energy Efficiency 2030 Strategy and the Second National Energy Efficiency Action Plan" published by the MENR in January 2024 is focused on the period from 2024 to 2030.²⁰ The plan, which includes 61 actions, sets out USD 20.2 billion of energy investments by 2030 with the aim of saving USD 46 billion by 2040.

Of the planned USD 20.2 billion in investments, USD 7.7 billion is set to be carried out in the building and services sector, USD 6.9 billion in the industrial sector and USD 3.7 billion in the transportation sector. The second NEEAP includes a total of 61 actions across 7 sectors, covering industry, transportation and buildings. To achieve these goals, the second NEEAP aims to ensure that public resources are directed to energy efficiency-focused investments while also mobilizing non-public financing institutions and international resources. Achieving these goals would, it is estimated, lead to a 16% decrease in energy consumption and a fall of 100.7 million tonnes in emissions by 2030.

Graph 11: Energy Efficiency Investments Planned under the Second NEEAP (2024-2030)



billion USD

Source: ETKB, TSKB

To achieve the stated goals, public financial resources are to be directed towards energy efficiency-focused investments, improvement programs and incentive applications, taking account of the cost-benefit balance. In addition, importance will be placed on ensuring that non-public financial institutions play a more active role in energy efficiency financing and that international financial resources are effectively mobilized.

¹⁸ Official Gazette. Source: <https://www.resmigazete.gov.tr/eskiler/2018/01/20180102M1-1-1.pdf>

¹⁹ MENR. Source: <https://enerji.gov.tr/evced-enerji-verimliliği-uevep>

²⁰ MENR. https://enerji.gov.tr/Media/Dizin/BHIM/tr/Duyurular/T%C3%BCrkiyeEnerjiVerimlili%C4%9Fi2030StratejisiUlusalEnerjiVerimlili%C4%9FiEylemPlan%C4%B1_202401161407.pdf



4.3. Supports

Within the scope of the Energy Efficiency Law, the Productivity Enhancement Project (VAP) program for energy efficiency projects in industrial enterprises and the Voluntary Agreements Program for efforts to reduce energy intensity are implemented by MENR. According to the 2026 Presidential Annual Program, 724 projects have been supported under the VAP program since 2009, resulting in annual energy savings of 1.6 billion TL.

However, investments by manufacturing facilities that achieve at least 15% energy savings also benefit from the 5th Region Incentives. Furthermore, the "Nearly Zero Energy Buildings (NZEB)" incentives, which support the use of more energy-efficient materials and renewable energy sources in buildings, are also prominent.

To achieve Türkiye's "net-zero emission buildings by 2053" target, buildings larger than 5,000 m² must have an energy performance class of at least "B" and obtain 5% of their energy consumption from renewable energy sources with effect from 1 January, 2023. From January 1, 2025, this requirement will become cover all buildings larger than 2,000 m²,

with the required renewable energy usage rate to increase to 10%. This regulation aims to reduce Türkiye's energy imports by TL 7.5 billions annually.²¹

²¹ Ministry of Environment, Urbanisation, and Climate Change, 2022. <https://meslekihizmetler.csb.gov.tr/neredeyse-sifir-enerjili-binalar-konseptine-geciliyor-haber-267273>



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