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Overview of the global electricity and coal market

Global electricity consumption



Electricity is becoming a key factor in the development of the modern economy and daily life, especially against the backdrop of rapid technological advancements such as electric vehicles and heat pumps. According to the International Energy Community, in 2024, global electricity demand increased by 3%, reaching about 28,000 TWh that exceeds the 2.4% growth recorded in 2022. The main contribution to this growth was made by China, followed by the USA and India, reflecting a shift in the global energy balance and the growing influence of emerging markets.⁵

While many developing economies are experiencing steady growth in electricity demand, Africa is lagging behind. Despite progress in recent years, 600 million people in sub-Saharan Africa still lack access to reliable electricity.

Emerging markets are showing significant growth in electricity demand, supported by economic development and electrification of residential and transport sectors. Key drivers of growth also include rapidly expanding energy-intensive production of solar panels, batteries, electric vehicles, and related materials. Meanwhile, developed economies have shown a decline in demand: in the EU, it is expected to return to 2021 levels only by 2027, after a significant decline in 2022 and 2023 caused by the energy crisis.

Forecast for the Future Period

Electricity demand growth is projected to accelerate to a higher level of 4% that by 2027 will lead to a record 3,500 TWh – an indicator exceeding Japan's annual consumption. This growth continues the trend established in 2023, with key drivers being China, India, Southeast Asian countries, and the USA. The distribution of electricity consumption between these regions reflects the transformation of global energy markets, emphasising the growing role of emerging economies in the global energy system.

Coal market



Coal remains the largest source of electricity and the power generation industry is its largest consumer, accounting for two-thirds of the market.

According to preliminary data from BigMint, global coal exports (both thermal and metallurgical) in 2024 increased by more than 4% compared to 2023 and reached 1,587 million tonnes (1.58 billion tonnes) compared to 1,524 million tonnes a year earlier.

Indonesia remains the leader in exports, supplying around 563 million tonnes of coal to the global market, up 7% from 524 million tonnes in 2023. The growth in export volumes is due to increased domestic production, which has allowed the country to increase shipments by almost 200 million tonnes since 2022.

Australia became the world's second-largest coal exporter with total shipments of about 360 million tonnes in 2023, slightly below the 2020 figure (367 million tonnes).

Other major exporters in 2024 included Russia and the US, which supplied 199 million tonnes and 138 million tonnes of coal, respectively. At the same time, Russian exports decreased by about 5% compared to 2023, while the US increased supplies by more than 6%.

Notably, Mongolia, despite being landlocked, increased coal exports by more than 20%, while Africa's largest exporter, South Africa, recorded a decrease in supply volumes by about 4%.6

Forecast for the future period

In most developed countries, coal demand has already peaked and is projected to continue declining until 2027. The rate of decline will depend on the adoption of tough policy measures implemented in the European Union, as well as the availability of alternative energy sources. In particular, cheap natural gas in the USA and Canada plays a key role in the gradual displacement of coal from the energy mix.⁷



⁶ https://www.metallplace.ru/news100225_12/

⁷ https://www.iea.org/news