Electricity market 30 kWh

Electricity market 30 kWh

IEA (2023), Electricity Market Report - Update 2023, IEA, Paris https://, Licence: CC BY 4.0

Global electricity demand growth is expected to ease in 2023 before accelerating in 2024. Demand is expected to grow by slightly less than 2% in 2023, down from a rate of 2.3% in 2022 and the average annual growth rate of 2.4% observed over the 2015-2019 period. This moderation is strongly driven by declining electricity demand in advanced economies, which are dealing with the ongoing effects of the global energy crisis and slower economic growth. In 2024, as expectations for the economic outlook improve, global electricity demand growth is forecast to rebound to 3.3%.

Electricity demand in the European Union is set to decline in 2023 for the second year in a row, falling to its lowest level in two decades. EU electricity demand is expected to record a 3% drop in 2023, after already falling 3% in 2022. This is despite strong growth in electrification with a record number of electric vehicles and heat pumps sold. Following these two consecutive declines, which together amount to the region"s largest slump in demand on record, EU electricity demand is set to drop to levels last seen in 2002.

Europe"s energy-intensive industries have not yet recovered from last year"s production slump, as evidenced by the staggering 6% year-on-year decline in total EU electricity demand during the first half of 2023. Almost two-thirds of the net reduction in EU electricity demand in 2022 is estimated to be from energy-intensive industries grappling with elevated energy prices. This trend has continued well into 2023, despite the prices for energy commodities and electricity falling from their previous record highs. As policy developments abroad courting industrial investment put pressure on Europe"s industrial competitiveness, the European Union is at a crossroads. The outcome of policy discussions now underway could determine the future of its energy-intensive industrial sector.

The substantial demand declines in advanced economies contrast sharply with the growth observed in emerging economies such as China and India. Japan is similarly expected to record a significant 3% fall in electricity demand in 2023, while the United States is set to see a decrease of almost 2%. In contrast, China"s electricity demand is expected to increase by 5.3% in 2023 and 5.1% in 2024, slightly below its 2015-2019 average of 5.4%. India is set to have an average annual growth rate of 6.5% over the outlook period, surpassing its 2015-2019 average of 5.2%.

The accelerated pace of new renewable capacity additions shows that renewable generation could surpass coal as early as 2024, if weather conditions are favourable. This is supported by the expectation that coal-fired generation will slightly decline in 2023 and 2024 after rising 1.5% in 2022, when high gas prices boosted demand for alternatives. Increases in coal-fired generation in Asia in 2023 and 2024 are poised to be offset by strong drops in the United States and Europe.

Renewables are set to meet all additional demand in 2023 and 2024. With global demand growth easing in 2023, incremental increases in renewables alone are expected to cover all additional demand not only this year, but also in 2024, when demand growth is expected to accelerate again. By 2024, the share of renewable generation in global electricity supply will exceed one-third for the first time.

Increases in emissions from power generation in China and India are expected to be more than offset by declines in other regions. The European Union alone accounts for 40% of the total decline in emissions from power generation expected to occur in 2023 and 2024, excluding China and India. The EU is followed by the United States, where renewables deployment is growing strongly, and gas is increasingly replacing coal-fired supply. Extreme weather, unexpected economic shocks and changes to government policies can cause an uptick in emissions in specific years. However, the overall trend of global power sector emissions plateauing is expected to persist, with years in which emissions decline, not rise, becoming more frequent.

Wholesale electricity prices remain elevated in many countries despite substantial declines, although there are regional differences. As prices for energy commodities such as gas and coal have fallen significantly in the first half of 2023, wholesale electricity prices in many regions have declined from their previous peaks. European wholesale prices halved from their record highs in 2022, falling closer to their 2021 average. Despite this, average prices in Europe are still more than double 2019 levels. Similarly, average wholesale electricity prices in India in the first half of 2023 were still 80% higher than 2019 levels, and in Japan they were 30% higher compared to 2019. In contrast, wholesale electricity prices in the United States have almost fallen back to 2019 levels.

Thank you for subscribing. You can unsubscribe at any time by clicking the link at the bottom of any IEA newsletter.

Contact us for free full report

Web: https://kary.com.pl/contact-us/
Email: energystorage2000@gmail.com
WhatsApp: 8613816583346