

The 2025 International Energy Situation as Based on EI Statistics (1): Energy Consumption

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On June 30, the Energy Institute (EI), a London-based international professional body representing stakeholders in the energy industry, released the latest edition of The Energy Institute (EI) Statistical Review of World Energy 2026 (hereafter referred to as the *EI Statistical Review*). Until the 2022 edition, this publication was issued as the well-known BP Statistical Review of World Energy, before responsibility for publication was transferred from BP to the Energy Institute in 2023. As has been noted repeatedly in my previous articles in this series, both the former BP Statistical Review and its successor, the EI Statistical Review, are among the most authoritative annual statistical compilations on global energy supply and demand. Owing to their comprehensive coverage and timely reporting of energy-related data, these statistics have become indispensable reference materials for energy professionals worldwide. Importantly, all of the statistical data are freely accessible to users.

The year 2025 witnessed the inauguration of the second Trump administration in the United States ("Trump 2.0"), which brought about significant shifts in both domestic and international U.S. energy policy. These policy changes exerted substantial influence on geopolitical developments, including the situations in Ukraine and the Middle East, making geopolitical risk a critical factor in understanding developments in the international energy landscape. While decarbonization remained a central global policy objective, growing concerns over energy security continued to dominate policy discussions. These concerns were reinforced by the emergence of new challenges, including the sharp increase in electricity demand associated with the rapid expansion of generative artificial intelligence and data centers, which highlighted the importance of maintaining reliable power supplies. Meanwhile, the introduction of reciprocal tariff measures beginning in April generated considerable uncertainty in both the global economy and international energy markets. Against this backdrop, this three-part series examines the major characteristics of the international energy situation in 2025 through an analysis of data contained in the EI Statistical Review. The first installment focuses on developments in global energy consumption.

First, global primary energy consumption reached 600.3 exajoules (EJ) in 2025, representing an increase of 1.7% year-on-year, equivalent to 8.1 EJ. Looking at recent trends, global primary energy consumption fell sharply by 4.3% in 2020 due to the COVID-19 pandemic, followed by a significant

rebound of 5.4% in 2021. In 2022, the year marked by the outbreak of the Ukraine crisis, consumption growth slowed considerably to 1.5%. Subsequently, annual growth rates remained around 2% through 2024. Despite economic disruptions arising from reciprocal tariff disputes and other uncertainties, global energy consumption continued to expand steadily in 2025, supported by ongoing economic growth and population increases worldwide. It is noteworthy that the 2025 growth rate of 1.7% exceeded the average annual increase of 1.4% recorded over the previous decade by 0.3 percentage points. Thus, even amid persistent turbulence in the international energy environment, global energy demand continued to exhibit a resilient upward trajectory.

Second, an examination of global primary energy consumption by region reveals significant differences in growth patterns. Africa recorded the highest growth rate at 2.5%, followed by North America (2.0%), Asia-Pacific (1.8%), and the Middle East (1.8%), all exceeding the global average of 1.7%. Although Africa and North America exhibited higher growth rates, the Asia-Pacific region accounted for the largest absolute increase in energy demand, adding 4.3 EJ, which represented more than half of the total global increase. In this sense, the Asia-Pacific region continued to serve as the principal engine of global energy demand growth. In contrast, Europe, which continues to struggle with economic weakness in the aftermath of the Ukraine crisis, recorded only 0.7% growth in primary energy consumption. Similarly, the former Soviet region, including Russia, experienced growth of merely 0.7%, reflecting slower economic momentum. A comparison between OECD and non-OECD economies further highlights this divergence. Energy demand in OECD countries increased by 1.1%, whereas non-OECD economies recorded a substantially stronger increase of 2.0%. As a result, non-OECD countries remained the primary drivers of global energy demand growth. Consequently, the OECD share of global energy consumption stood at 37%, compared with 63% for non-OECD economies.

Although the Asia-Pacific region contributed the largest increase in energy demand, its growth rate of 1.8% in 2025 was lower than the 3.1% recorded in 2024 and the 4.6% recorded in 2023. This slowdown primarily reflected moderating growth in China, the world's largest energy-consuming nation. China's influence on both regional and global energy demand growth remains profound. Although China's energy consumption growth slowed from 3.1% in 2024 to 2.4% in 2025, the country's absolute demand increase amounted to 3.4 EJ in 2025, accounting for approximately 80% of the total increase in the Asia-Pacific region. Within Asia-Pacific, countries other than China that recorded notable growth rates included Bangladesh (10.7%), Indonesia (5.5%), Sri Lanka (5.1%), and Vietnam (4.0%). However, in terms of absolute demand growth, the principal contributors were Indonesia (0.6 EJ), India (0.3 EJ), and Vietnam (0.2 EJ). Although India and Southeast Asia are widely expected to become major engines of future energy demand growth, their impact in 2025 remained relatively limited compared with the overwhelming influence exerted by China.

Third, analysis by energy source indicates that renewable energy recorded the fastest growth in 2025, expanding by 10.2%. This was followed by natural gas (1.6%), nuclear energy (1.3%), oil (1.2%), and coal (0.7%). In absolute terms, renewable energy also made the largest contribution to demand growth, increasing by 3.2 EJ, followed by natural gas (2.0 EJ) and oil (1.9 EJ). These three energy sources collectively accounted for the majority of global energy demand growth during the year. Among fossil fuels, oil remained the largest primary energy source. Oil demand grew robustly in non-OECD economies, particularly in the Asia-Pacific region, with consumption increasing by 1.7% and 2.0%, respectively. North America, led by the United States, also posted oil demand growth of 1.2%, matching the global average. In contrast, oil consumption declined in Europe as economic stagnation persisted, highlighting substantial regional disparities. Coal, the world's second-largest energy source, recorded demand growth of 0.7%, below the global average for primary energy consumption. Nevertheless, global coal consumption has continued its gradual upward trend since 2020. Growing concerns over energy security and affordability supported continued coal demand growth in the Asia-Pacific region, which accounts for 83% of global coal consumption. Particularly noteworthy was the strong rebound in North American coal consumption, which increased by 9.0%, largely driven by the strong growth in the United States. Natural gas, the third major primary energy source, recorded a global consumption increase of 1.6%, the fastest among fossil fuels. Demand grew steadily by 1.6% in North America, the world's largest gas-consuming region with a 27% share of global consumption, while consumption in the Asia-Pacific region, accounting for 23% of global demand, also increased modestly.

Turning to non-fossil energy sources, renewable energy exhibited particularly remarkable expansion. Driven primarily by solar power, renewable energy continued to register double-digit growth in 2025. The most important factor behind this expansion was China, the world's largest renewable energy user and producer, where renewable consumption increased by an extraordinary 22.3%. China's renewable energy demand increased by 1.8 EJ, accounting for 56% of the global increase of 3.2 EJ. Nuclear energy also expanded, particularly within the Asia-Pacific region, where consumption grew by 4.0%, exceeding the global average. China again played a central role, recording nuclear energy consumption growth of 7.9%. As a result of these developments, the global energy mix in 2025 consisted of oil (33.5%), coal (27.7%), natural gas (25.1%), renewables (5.9%), nuclear energy (5.2%), and hydropower (2.7%). The share of fossil fuels declined only marginally, from 86.6% in 2024 to 86.2% in 2025, indicating that the global energy system remained overwhelmingly dependent on fossil fuels.

Fourth, as a consequence of these energy consumption trends, global energy-related carbon dioxide (CO₂) emissions increased by 1.1% in 2025, reaching 35.81 billion tonnes. This growth rate slightly exceeded the average annual increase of 0.9% observed over the previous decade. Although non-fossil energy consumption continued to expand, particularly in renewable energy, global fossil fuel consumption also continued to rise, resulting in an overall increase in emissions. From a longer-term

perspective, CO₂ emissions have generally followed an upward trajectory, except during periods of severe global economic contraction such as the Global Financial Crisis and the COVID-19 pandemic. This underscores the continuing difficulty of achieving meaningful reductions in global emissions. Regionally, CO₂ emissions increased in all major regions. Particularly notable was North America, where emissions growth reached 2.7%, significantly exceeding the global average. This increase was driven primarily by developments in the United States.

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