

Reviewing Japanese and International Energy Situations in 2025

Ken Koyama, PhD
Chief Economist, Senior Managing Director
The Institute of Energy Economics, Japan

As 2025 draws to a close with only six days remaining, it is evident that the global and domestic energy landscape has continued to experience significant turbulence. Beginning with the profound impact of the COVID-19 pandemic on energy markets in early 2020, the decade of the 2020s has been marked by increasingly dramatic fluctuations. Inheriting this trajectory, 2025 witnessed numerous developments and challenges that deeply shook energy dynamics worldwide. This paper reviews the major events of 2025 and organizes those with particularly significant implications.

The foremost event that must be highlighted is the inauguration of “Trump 2.0,” which profoundly influenced the overall international landscape in 2025. On January 20, Donald J. Trump assumed office as the 47th President of the United States, marking the commencement of “Trump 2.0.” This administration championed the slogans “Make America Great Again (MAGA)” and “America First,” identifying the pursuit of “Energy Dominance” as one of its core strategic pillars. Immediately following his inauguration, President Trump issued a series of executive orders, including a second withdrawal from the Paris Agreement, the declaration of a national energy emergency, and measures aimed at unlocking America’s vast energy supply potential. These actions signaled a decisive shift toward implementing energy policies and strategies designed to maximize U.S. national interests.

In April, President Trump announced the introduction of substantial reciprocal tariffs, citing the objectives of reducing the United States’ significant trade deficit and rectifying unfair trade practices. This move sparked widespread speculation that the United States—long regarded as a champion of free trade—had fundamentally altered its trade policy, sending shockwaves through the global economy. The announcement of reciprocal tariffs immediately heightened uncertainty in world markets, accelerating the decline in crude oil prices. Concerns over a global economic slowdown, driven by the impact of the so-called “Trump Tariffs,” were compounded by increased production from “non-OPEC Plus” countries, particularly in the Americas. Simultaneously, contrary to expectations of intensified output cuts to support prices, “OPEC Plus” adopted a policy of production increases, effectively reversing prior reductions. These factors exerted persistent downward pressure on crude oil prices throughout 2025. By the latter part of the year, WTI crude prices had consistently fallen below \$60 per barrel. Moreover, this trend was not confined to crude oil alone. Prices for natural gas, LNG, and coal traded on international markets also exhibited a declining trend, reflecting abundant global supply conditions throughout the year.

Although 2025 was characterized by a general trend of declining energy prices, this trajectory was repeatedly disrupted by rising geopolitical risks. In connection with “Trump 2.0,” negotiations surrounding a ceasefire and potential peace settlement in the Russia–Ukraine conflict drew significant attention from energy markets. The United States and European nations signaled intentions to intensify pressure on Russia through strengthened energy sanctions. Market participants increasingly recognized that, should these enhanced sanctions materialize and prove effective, the resulting reduction in Russian energy supplies to international markets would exert upward pressure on prices.

Conversely, any progress toward a ceasefire or peace agreement was expected to facilitate the reintegration of Russian energy into global markets, potentially softening prices. Consequently, the evolution of the Russia–Ukraine situation became a focal point for market observers during the latter half of the year. In the Middle East, June witnessed an unprecedented development: military strikes respectively by Israel and the United States on Iranian nuclear facilities, sharply escalating regional tensions. Fortunately, further deterioration was avoided, and energy flows from the region remained largely unaffected. Nevertheless, subsequent incidents—such as Israel’s September attack on Hamas forces within Qatar—rekindled concerns regarding the stability of Middle Eastern geopolitics. These events collectively underscored the fragility of regional security and heightened perceptions of uncertainty regarding future developments. Such geopolitical risks, carrying the potential to destabilize international energy markets, reaffirmed the critical importance of energy security in 2025—a priority that the global community was compelled to revisit with renewed seriousness.

Another critical issue reinforcing the importance of energy security was the challenge of ensuring a stable electricity supply amid surging demand driven by the new information revolution. The rapid proliferation of generative AI and the associated expansion of data centers have significantly increased global electricity consumption. Ensuring a reliable, affordable, and preferably decarbonized power supply has emerged as a pressing energy security concern. The phrase “AI and Energy” became one of the most widely discussed keywords in energy discourse during 2025.

Driven by heightened geopolitical risks and growing concerns over stable electricity supply, the world in 2025 confronted energy security with unprecedented seriousness. However, a broader interpretation of energy security also emerged as a critical topic during the year. Against the backdrop of deepening global fragmentation—exemplified by the intensification of U.S.–China rivalry—dependence on specific countries within global supply chains for clean energy technologies has come to be recognized as a major strategic vulnerability. China occupies an overwhelmingly dominant position in global market share across key sectors such as renewable energy, battery storage, and electric vehicles. As the global transition toward these technologies accelerates, dependency on China inevitably deepens. This issue was further underscored by China’s near-monopoly in the supply of critical minerals—particularly in refining and processing stages—and by the actual imposition of export restrictions on rare earth elements to the United States. These developments have elevated supply chain security/resilience to the forefront of discussions on energy, economic, and national security, marking one of the defining characteristics of 2025.

Amid growing recognition of the need for affordable and secure energy, 2025 also exposed the widening gap between decarbonization aspirations and practical realities. At COP30 in November, the Secretariat projected that global GHG emissions would decline by only 12% from 2019 levels by 2035 based on submitted NDCs—far short of the 60% reduction for 2035 required to achieve net-zero emissions by 2050. Current emissions continue to rise, and some estimates suggest that the remaining carbon budget compatible with the 1.5°C target equals merely four years of present emissions.

Confronted with the widening gap between decarbonization ideals and practical realities, nations have increasingly sought pragmatic policy approaches tailored to their respective circumstances and conditions, with a strong emphasis on safeguarding economic stability, industrial competitiveness, and employment. A notable example of this trend occurred in December, when the European Commission announced its decision to revise and postpone the previously established ban on the sale of new internal combustion engine vehicles scheduled for 2035. This policy adjustment reflects a broader global shift toward more realistic and flexible strategies, underscoring the growing recognition that practical implementation must take precedence over aspirational targets.

Japan also experienced notable developments. In February, the Cabinet approved the Seventh Strategic Energy Plan, reaffirming the pursuit of “S+3E” (Safety, Energy Security, Economic Efficiency, and Environment) under evolving global conditions. This plan reflects heightened emphasis on energy security and introduces significant changes, including a pivot toward “maximum utilization of nuclear power” and incorporation of a “strategic Plan B” should ideal targets prove unattainable. Implementation of the Strategic Energy Plan will proceed under the Takaichi administration inaugurated in October.

While renewable energy remains central to Japan’s future energy mix, 2025 revealed challenges such as rising costs for offshore wind projects and growing friction with local communities over large-scale solar installations. Conversely, nuclear power saw progress: local consent was finally secured for the restart of the Kashiwazaki-Kariwa and Tomari nuclear plants, marking a significant step toward realizing the policy of “maximizing nuclear utilization” indicated in the Strategic Energy Plan.

Contact: report@tky.iej.or.jp

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