

The Recent Two Critical Developments: Approval of Kashiwazaki-Kariwa Nuclear Plant Restart and Outcomes of COP30

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

Over the past week, two events have emerged that could significantly shape the future trajectory of both domestic and international energy landscapes. Although entirely independent of one another, their implications and potential impact are commonly profound. The first concerns Governor Hanazumi of Niigata Prefecture formally declaring his intention to approve the restart of the Tokyo Electric Power Company (TEPCO) Kashiwazaki-Kariwa Nuclear Power Plant. The second pertains to the conclusion of the 30th Conference of the Parties (COP30) to the United Nations Framework Convention on Climate Change, held in Brazil, where negotiations culminated in the adoption of an agreement document. In what follows, I will offer my reflections on the significance of these developments and the challenges that lie ahead.

On November 21, Governor Hanazumi convened an extraordinary press conference to announce his official stance in favor of restarting the Kashiwazaki-Kariwa Nuclear Power Plant. He indicated that this decision would be subject to a confidence vote in the regular prefectural assembly session scheduled for February next year; if endorsed, he would convey the “local consent” policy to the national government. The immediate focus will be on Unit 6 of the Kashiwazaki-Kariwa plant. Should local consent be secured and the restart proceed, this would mark TEPCO’s first reactor restart since the Fukushima Daiichi nuclear accident.

Since the 2011 accident, Japan has implemented stringent new safety regulations, and reactors that have cleared these standards and obtained local consent have gradually resumed operations—14 units to date, primarily in Kyushu and Kansai areas. Nevertheless, more than 20 reactors remain offline. TEPCO, as the operator responsible for the Fukushima Daiichi nuclear power plants, which caused the serious disaster, has faced intense public scrutiny and deep-seated distrust among local communities, rendering the Kashiwazaki-Kariwa restart particularly challenging. However, following the plant’s successful completion of national safety reviews and exhaustive deliberations by Niigata Prefecture and other host municipalities, expectations surrounding nuclear power’s role in ensuring stable electricity supply, reducing CO₂ emissions, and supporting local economies have grown. Against this backdrop—and contingent upon enhanced safety measures, improved evacuation routes, and strengthened oversight of TEPCO—the decision to approve the restart has now been reached.

The Seventh Strategic Energy Plan, endorsed by Cabinet decision in February 2025, signaled a major policy shift: moving from the previous stance of “reducing nuclear dependence as much as possible” to “maximizing the use of nuclear power” alongside renewables. To realize this objective, the foremost priority is to advance the restart of existing reactors and ensure their safe, stable operation. Of course, maximizing nuclear utilization will also require extending the operational life of existing reactors, pursuing new construction and replacement projects, and introducing advanced technologies. Yet, in the immediate term, the safe and publicly accepted restart of existing units remains paramount.

If the restart of Kashiwazaki-Kariwa Unit 6 serves as a catalyst for subsequent restarts of other idle reactors, the benefits for Japan's energy security and decarbonization efforts will be substantial. At a time when electricity demand is projected to surge—driven by the proliferation of artificial intelligence and the rapid expansion of data centers—the question of how to supply zero-emission electricity reliably and at competitive cost has become a critical national challenge. In this context, expectations for nuclear power's contribution are considerable. Building on the recent approval decision, it is hoped that the restart and sustained safe operation of Kashiwazaki-Kariwa Unit 6 will help restore local trust while reinforcing Japan's overall energy security.

Moreover, reports have surfaced this week suggesting that Governor Suzuki of Hokkaido may signal his intention to approve the restart of Tomari Nuclear Power Plant Unit 3 during the prefectural assembly session on November 28. Developments surrounding Japan's nuclear power sector warrant close attention in the coming months.

The second major development concerns the outcome of COP30 and the global discourse on strengthening climate change mitigation efforts. Convened in Belém, Brazil, COP30 opened on November 11 and, following a one-day extension, concluded on November 22 with the adoption of an agreement document. However, the conference unfolded against a backdrop of mounting challenges: the absence of U.S. government participation under the Trump administration, widening gaps between aspirational climate goals and harsh realities, and growing difficulties faced by many nations in reconciling these tensions. As a result, negotiations were fraught, and consensus-building proved exceedingly difficult.

Climate change has become one of the world's most pressing concerns, and momentum toward decarbonization and carbon neutrality has intensified in recent years. Since the late 2010s, COP meetings and their outcomes have consistently commanded global attention. A notable example was COP26 in the United Kingdom in 2021, which culminated in the adoption of the “Glasgow Climate Pact”—an ambitious framework aimed at achieving the 1.5°C target. At that time, the global tide toward decarbonization appeared to be accelerating, and COP agreements were widely regarded as key drivers of international action.

Yet, the geopolitical and economic landscape has shifted markedly since then. The 2022 Ukraine crisis destabilized global energy markets, prompting a renewed emphasis on energy security; soaring energy prices inflicted severe political, social, and economic repercussions; and deepening global fragmentation elevated concerns over economic security. While the fundamental importance of climate action remains unchanged, the international context surrounding COP negotiations has evolved dramatically. Above all, the widening gap between climate ambitions and real-world constraints has become a stark and pressing issue. Global greenhouse gas emissions continue to rise, and the divergence from pathways consistent with the 1.5°C goal has reached alarming proportions. Analyses based on the remaining carbon budget suggest that achieving net-zero emissions worldwide by 2032 would be necessary to meet the 1.5°C target—a scenario that appears increasingly implausible.

Against this backdrop, it was perhaps inevitable that COP30 deliberations would be heavily influenced by prevailing realities. Among the principal outcomes incorporated into the agreement document was a commitment to triple adaptation finance for developing countries by 2035. Beyond this, however, the conference yielded few breakthroughs that could be heralded as transformative. As widely reported, the initial draft text included language on “transitioning away from fossil fuels,” but sharp divisions emerged between European nations advocating for a concrete roadmap and oil-producing and emerging economies opposing restrictions on fossil fuel use. Ultimately, the final

agreement omitted any reference to this issue altogether. These unresolved tensions will likely persist, continuing to fuel contentious debates in future COP meetings and other international forums.

Energy is an indispensable resource underpinning the livelihoods and economies of all nations. Consequently, the “realities” surrounding energy exert a powerful influence on the formulation and implementation of energy policies worldwide. Given that climate action directly affects patterns of energy use, it is inevitable that such considerations will shape COP negotiations as well. Amid profound uncertainty and opacity in global energy dynamics, the international discourse on climate change—epitomized by COP—appears to stand at a critical crossroads.

Contact: report@tky.iecej.or.jp

The back issues are available at the following URL.

http://eneken.iecej.or.jp/en/special_bulletin.html