

Energy and Infrastructure



The need to enhance energy security and resilience has been called for in the wake of events such as the COVID-19 pandemic and the recent tightening of natural gas demand and supply. But the U.S.-Japan Business Council and the Japan-U.S. Business Council (hereafter “the Councils”) recognize that Russia’s aggression against Ukraine requires a more immediate and fundamental global response. While the Councils welcome various efforts to ensure a stable supply of energy taken by the United States and Japanese governments and the international community, the United States and Japan need to lead further efforts. The Councils also emphasize that efforts to achieve carbon neutrality cannot be slowed down, and careful navigation of the balance between energy security and resilience, and energy transition is required in response to increasing extreme weather events. As such, the Councils welcome specific nuclear and gas energy activities that are recognized as environmentally sustainable economic activities by the so-called EU Taxonomy. To achieve the carbon neutral target by 2050 set by both governments, continuous development of innovative technologies and deployment of clean energy infrastructure, building on the utilization of existing baseload power supply, including highly efficient thermal and nuclear power, is necessary. In addition, the Councils continue to be committed to cooperation in the Indo-Pacific region to realize a Free and Open Indo-Pacific (FOIP).

Enhancement of Energy Security and Resilience

The Councils welcome the “Joint Statement Between the Ministry of Economy, Trade, and Industry of Japan and the United States Department of Energy on Cooperation toward Energy Security and Clean Energy Transition” dated May 4th, 2022, which aims to promote the assurance of global energy security. We further acknowledge the role liquefied natural gas (LNG) can play to alleviate global energy supply constraints and to serve as a reliable alternative to higher-emitting energy sources, and shall promote exports of U.S. LNG to take this role. The Councils recommend the two governments to consider the following measures for the United States and Japan to lead efforts to enhance energy security and resilience for stable energy supply of the world:

- Establish a multilateral task force to diversify the energy supply, which can also ensure the security and affordability of LNG supplies in the Indo-Pacific amid the rapid expansion of LNG shipments from the United States to European markets in response to Russia’s aggression against Ukraine;
- Support the development and investment in infrastructure, including gas pipelines, LNG facilities such as on the Pacific coast of Mexico and Floating Storage and Regasification Unit

- wherever deployable, to increase the capacity and efficiency of exporting U.S. LNG to the Indo-Pacific while accelerating the deployment of clean energy technologies in the region;
- Increase energy supplies through governmental frameworks among like-minded countries and bolster investments in infrastructure which can be supported by some of the permitting reforms that will provide certainty for long-term investments to diversify supply chains and energy sources; and,
 - Establish a clear pathway to expand safe utilization of nuclear power, and invest in developing the skilled workforce required to do so, to enhance energy security and serve as an important source of low-carbon baseload power supply.

Constant Efforts to Achieve Carbon Neutrality

The Councils are aware that enhancement of energy security and resilience cannot slow efforts to achieve carbon neutrality. Careful navigation of the balance between energy security and resilience, and energy transition is required. The United States and Japan continue efforts to achieve carbon neutrality under the “Japan-U.S. Climate Partnership on Ambition, Decarbonization, and Clean Energy” as the center of the U.S.-Japan cooperation. The Councils urge the two governments to support the following for the United States and Japan to demonstrate pragmatic and orderly energy transition:

- Continue commitments to deploy renewable energy including on/offshore wind, hydro, geothermal, and solar power generation, and increase capacity and modernize power grids to accommodate and efficiently utilize such power;
- Switch to natural gas, a stable cleaner baseload power supply, from other fuels with higher emissions, and deploy high-efficiency natural gas-based infrastructure such as gas turbine combined-cycle power, for orderly energy transitions with pathways such as the future conversion to hydrogen;
- Incentivize deployment of carbon capture, utilization and storage (CCUS) for cleaner utilization of existing infrastructure, decarbonization of hard-to-abate sectors such as the industrial and transportation sectors, production of cleaner fuels including blue hydrogen/ammonia, sustainable aviation fuel and synthetic methane from methanation and reduction of other greenhouse gases such as methane and fluorinated gases; and,
- Promote cross-sectoral cooperation to develop the entire hydrogen value chain from production to transportation, storage and usage, and mobilization of all technologies related to hydrogen/ammonia to quickly realize a hydrogen society.

Development and Utilization of Innovative Technologies

The Councils emphasize that disruptive innovation which supports orderly energy transition is necessary to achieve the carbon neutral target by 2050, set by both the United States and Japanese governments. Also, no single technology can achieve this target, and an “all-of-the-above” approach can mobilize all available technologies is required. The Councils urge the two

governments to promote the following to accelerate development and utilization of innovative technologies:

- Implement digital technologies in the energy and infrastructure sector including power grid and demand-response for improvement of efficiency and energy-saving on the consumer side, utilization of limited resources, and promotion of smart, modern and resilient infrastructure;
- Develop standards to enhance cyber security resilience and readiness against cyber-attacks on critical infrastructure;
- Incentivize development of new technologies such as more efficient energy storage and CO2 capture (direct air capture) technologies, innovative advanced nuclear technology including small modular reactors, accident-tolerant nuclear fuels, disruptive nuclear materials that can improve the safety and economics of current and advanced nuclear reactors and fusion energy technologies, and new types and advanced production methods of clean fuels including different colors of hydrogen and innovative methanation in order to ensure a diversity of energy transition technology options and to drive cost reduction for affordability; and,
- Establish a value chain of CO2 to achieve carbon neutrality, by promoting development of business model utilizing captured CO2.

Advancing a Free and Open Indo-Pacific

The Councils believe the cooperation of two countries in the Indo-Pacific region and realizing a FOIP are critical for the prosperity and security of this region. Through the Japan-U.S. Clean Energy Partnership (JUCEP) – the core framework of the cooperation in the region for the energy and infrastructure sector – the United States and Japan can support like-minded countries in the region to promote quality infrastructure for energy transition with consideration of different circumstances in each country. The Councils urge the two governments to support the following:

- Expand long-term U.S.-Japan cooperation in third countries where step-by-step transition is required. This includes utilizing coal power plants in cleaner ways such as ammonia co-firing and CCUS – supported by the knowledge and experience of Japan with recognition of their importance from an energy security standpoint – to switch to LNG where feasible, and then to allow such LNG infrastructure to convert with minimum modifications or to shift fuels, to accommodate synthetic methane and hydrogen/ammonia for further emissions reductions;
- Materialize the “Clean Energy, Decarbonization, and Infrastructure” pillar of the Indo-Pacific Economic Framework (IPEF) to mobilize finance that will accelerate the development and deployment of low-carbon and clean energy technologies in the region and the pillar of “Supply Chains” to secure the supply chain of energy infrastructure equipment and critical minerals, and freedom of navigation; and,
- Realize private business projects related to the energy and infrastructure sectors in the region by utilizing multiple frameworks established by the United States and Japanese governments through public-private dialogue, providing business matching opportunities for private companies, encouraging mobilization of private capital and simplifying various procedures and reducing regulatory barriers in third countries.