



## ENERGY AND INFRASTRUCTURE

The U.S.-Japan Business Council and the Japan-U.S. Business Council (hereafter “the Councils”) recognize that the ambitious target of achieving carbon neutrality by 2050, as pledged by the United States and Japanese governments respectively, has accelerated the momentum for decarbonization. The Councils further welcome the joint statements, “Japan-U.S. Climate Partnership on Ambition, Decarbonization, and Clean Energy,” and “U.S.-Japan Competitiveness and Resilience (CoRe) Partnership” issued by President Biden and former Prime Minister Suga, which will facilitate more concrete cooperation between the United States and Japan toward this shared goal. The Councils hereby affirm their intent to contribute towards achieving carbon neutrality in the United States, Japan, and third countries through this cooperation. The Councils also note that disruptive innovation coupled with orderly transition will be necessary to achieve carbon neutrality, and that natural disasters, geopolitical risks and economic security need to be taken into account to enhance the resilience of the supply chain in a post-COVID-19 society.

### **Towards an Ambitious Carbon Neutral Target**

The Councils recognize that the ambitious carbon neutral by 2050 target pledged by the United States and Japanese governments has accelerated the momentum for decarbonization, and the Councils agree to work to help realize this target. No single technology can achieve this ambitious target, and an “all-of-the-above” approach needs to be taken to maximize efficiency and carbon reduction of both energy production and consumption. The Councils urge the two governments to consider the following measures to promote all clean energy technologies:

- Lead international rulemaking to achieve this ambitious carbon neutrality target through a pragmatic and technology-neutral approach;
- Continue efforts to deploy renewable energy such as on/offshore wind power generation and solar power generation to improve the technology and efficiency of such renewable energy sources, and to enhance the related supply chains in the United States and Japan; strengthen the power adjustment capability including power grid to accommodate growing renewable energy generation; and ensure sufficient power capacity and fair access;
- Promote the switch to natural gas in the energy transition from other power generation methods with higher emissions, and deploy natural gas-based power such as highly efficient gas turbine combined-cycle power as a stable cleaner baseload power supply to help achieve emission reduction targets;
- Discuss issues related to the utilization of nuclear power, another important source of low-carbon baseload power supply, and continue R&D into innovative advanced nuclear technology including passive safety features, small modular reactors and cooperation for decommissioning;

- Take steps to realize the enormous potential of a future hydrogen society, which can contribute to the decarbonization not only of the energy and infrastructure sectors, but also of a wide range of other sectors such as the industrial and transportation sectors; and engage in cross-sectoral cooperation to develop production technologies for all types of hydrogen and ammonia and to establish the supply chain and storage/transportation infrastructure; and,
- Provide economic incentives to promote low carbon solutions such as the deployment of carbon capture and storage, both for new and existing energy infrastructure and industry sector.

### **Third Country Cooperation for Realization of a Free and Open Indo-Pacific**

The Councils believe deepening the cooperation of the United States and Japan with third countries in the Indo-Pacific region is vital to realizing a Free and Open Indo-Pacific (FOIP) for the prosperity and security of this region. The energy and infrastructure sector is one of the key pillars for this cooperation, and while we endorse the importance of further efforts to achieve carbon neutrality worldwide, we also recognize the importance of natural gas as a realistic transitional energy source for the region. The Councils urge the two governments to support the following:

- Continue U.S.-Japan cooperation on liquefied natural gas (LNG) issues in the region including the establishment of a transparent LNG market, including for U.S. LNG exports, the deployment of LNG-based energy infrastructure, the establishment of the LNG distribution network within the region, the assurance of freedom of navigation, and raising international awareness of the role natural gas can play in promoting lower carbon energy in the region;
- Expand U.S.-Japan cooperation to other forms of clean energy cooperation in the region such as promoting emissions reduction at existing coal power plants, as well as converting coal power plants to LNG-based infrastructure and to hydrogen-based infrastructure including ammonia in the long-run;
- Finalize the pragmatic and practical certification criteria for the Blue Dot Network (BDN) which is a tool to accelerate the FOIP strategy, and fully develop the newly established Japan-U.S. Clean Energy Partnership (JUCEP) together with policies of the new United States Administration, including on the role of natural gas in regional decarbonization efforts, for promotion of quality infrastructure; and,
- Provide business matching opportunities for private companies from the United States and Japan to mobilize private capital, promote public-private partnerships, and reduce barriers to execute energy and infrastructure projects in third countries to assist with their energy transition and decarbonization goals and to materialize government-led programs and initiatives further.

### **Promoting Innovation and Responding to Digitalization**

The Councils agree that disruptive innovation, coupled with orderly transition, is necessary to achieve the ambitious carbon neutral target by 2050. Simultaneously, a response to risks in the energy and infrastructure sector of the ever-expanding digitalization is essential. The Councils urge the two governments to promote the following:

- Improve the efficiency and product life of energy storage technology, and reduce the use of, and build recycling ecosystems for, critical minerals to keep up with clean energy-related demand;
- Develop more cost-effective and efficient CO<sub>2</sub> capture technologies such as carbon capture and storage and direct air capture, and support the development of business models utilizing captured CO<sub>2</sub>, such as CO<sub>2</sub>-EOR (Enhanced Oil Recovery) and methanation, to establish a CO<sub>2</sub> value chain;
- Develop innovative technologies for production, transportation and storage technologies for hydrogen, ammonia and synthetic fuel, for their application in not only the energy and infrastructure sector, but also across a wide range of sectors;
- Utilize digital technologies to enable the energy and infrastructure sector to increase efficiency and stability including demand-response and grid digitalization; and,
- Enhance cyber security readiness and resilience against cyber attacks on critical infrastructure as an essential response to expanding digitalization.

### **Resiliency Required for a Post-COVID-19 Society**

COVID-19 exposed the vulnerability of supply chains which pursued economic efficiency while disregarding risks such as dependence on a single country. In a post-COVID-19 society, natural disasters, geopolitical risks and economic security need to be fully taken into consideration to ensure the resilience of the supply chain, and promote smart, modern, resilient infrastructure.

The Councils recommend the following to the two governments for a post-COVID-19 society:

- Promote policies for energy-related sectors that support economic security by balancing economic efficiency and legitimate national security concerns, and cooperate to establish U.S.-Japan alignment on such policies;
- Strengthen public and private dialogues to diversify supply chains in the energy and infrastructure sector, such as energy sources, energy infrastructure equipment and critical minerals, to enhance resilience, and provide further economic incentives for diversifying supply chains from U.S. and Japanese government financial institutions;
- Expand cooperation between the United States and Japan, as well as other like-minded countries, to build resilient supply chains in the energy and infrastructure sector, accelerate the adoption of pre-disaster mitigation, and define the United States and Japan as respective “trusted partners” and avoid potential barriers that could hinder this cooperation; and,
- Develop alternative options for products for which the diversification of supply chain is difficult.