



U.S. Chamber of Commerce  
International Affairs

U.S.-Japan  
Business Council

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Business Council

# Energy and Infrastructure



Every country sees a growing need to increase energy security in today's uncertain geopolitical environment due to recent events such as the Russian invasion of Ukraine. Furthermore, climate change represents one of the greatest challenges facing the world and requires urgent and sustained action toward carbon neutrality.

The U.S.-Japan Business Council and the Japan-U.S. Business Council (hereafter "the Councils") believe that the U.S. and Japan must be key players in navigating the world to a well-balanced future - decarbonizing the power sector and ensuring secure and stable energy supply.

To achieve carbon neutrality by 2050 and enhance energy security, international collaboration and public support from developed economies to growing economies such as legislation, regulatory reform, and incentives are essential. The world also needs to take various energy transition routes, including circular economy approaches to support decarbonization, factoring just transition considerations so that it leaves none behind as there is no one-size-fits-all approach to the energy transition.

In addition, the Councils remain committed to U.S.-Japan cooperation to realize a Free and Open Indo-Pacific (FOIP) for the prosperity and security of the region. The Councils also see Southeast Asian countries as important stakeholders to achieve FOIP.

## Improving Systems Toward Upgrading Energy Security

The Councils welcome many of the energy and climate provisions of the Inflation Reduction Act (IRA) such as hydrogen and carbon capture, which supports the U.S. in achieving a carbon neutral society by 2050. We recognize that the Act needs further actions to make sure its incentives can be maximized as quickly as possible to benefit society: providing clear regulation, streamlining a cumbersome permitting system, and investing in enabling infrastructure.

The Councils also welcome the launch of the Japan-United States Energy Security Dialogue which strengthens the two countries' bilateral partnership on energy security. Recent geopolitical events and skyrocketing energy prices have reminded us that securing a stable energy supply is essential as well as pursuing decarbonization to protect daily life.

We further acknowledge the role liquefied natural gas (LNG) can play to alleviate global energy supply constraints and hence promote exports of U.S. LNG to take this role. As the Japanese government and International Energy Agency Secretariat's recently released LNG Strategy for the World report warns, "If investment into natural gas/LNG is insufficient, a supply tightness could occur before a demand decline, putting global energy security at risk...Therefore, it is important to recognize that the world may risk facing prolonged periods of supply shortages if actual demand turns out to be higher than forecasts or expectations."

Meanwhile, the lack of consistency and transparency in measurement and reporting of methane emissions creates challenges for the LNG market. We support the U.S. Department of Energy's development of the global framework for differentiated natural gas to verify emissions throughout a global supply chain. The Councils recommend the two governments to consider the following measures for the U.S. and Japan to lead efforts to enhance energy security and resilience for a stable worldwide energy supply:

- Support the development and deployment of infrastructure 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;
- Boost activities on the Coalition for LNG Emission Abatement toward Net-zero (“CLEAN”) for the initiative taken by its buyers, together with its producers, to reduce methane emissions in the value chain.
- Increase energy supply through governmental frameworks among like-minded countries and support investments in energy infrastructure to diversify supply chains and sources of energy, instead of depending on a single source;
- Utilize nuclear power and promote the new generation of safer reactors which can contribute to the enhancement of energy security as one of the important sources of safe, resilient, and green baseload power supply;
- Develop clear regulations and guidelines based on the IRA, such as domestic sourcing requirements, carbon intensity and key definitions to implement the law; and,
- Expand the IRA philosophy which includes incentives to reduce carbon emissions to other countries such as Japan to boost decarbonizing projects globally.

### Securing A Realistic Transition That Works for All

The Councils are aware that the energy transition is far more complicated than simply turning off fossil fuels and switching on renewables. It requires a balancing act between decarbonizing our society and ensuring secure and stable energy supplies for each country. Every country has a different resource situation and requires a phased approach toward carbon neutrality.

There is no one-size-fits-all approach to achieving the energy transition with stable energy supply, but we have various solutions such as low carbon fuels such as e-methane/e-natural gas, carbon capture systems, nuclear power, and hydrogen in addition to employing natural energy resources such as solar, wind, geothermal, pumped storage hydropower, and batteries where possible.

The U.S. and Japan continue efforts to achieve a carbon neutral world with the “Japan-U.S. Energy Security Dialogue” as the center of U.S.-Japan cooperation in this area. The Councils urge the two governments to support the following for the U.S. and Japan to overcome the energy trilemma: ensuring energy security, providing energy equity – international access to affordable, clean energy - and achieving environmental sustainability:

- Maintain implementation of the U.S. Department of Energy and Japan’s Ministry of Economy, Trade and Industry Memorandum of Cooperation in the field of carbon capture, utilization and storage, conversion and recycling, and carbon dioxide removal. Continue commitment on switching to natural gas including LNG, a stable cleaner baseload power supply, and methanol from other fuels with higher emissions; and deploying cutting edge technologies such as dual-fuel gas turbines capable of combusting both natural gas and hydrogen, and eventually just hydrogen;
- Ensure a clear and sustainable rules-based approach so that each country has predictable policies toward reducing emissions or introducing a price for carbon, and develop mechanisms for emissions trading and environmental value trading, so-called Corresponding Adjustment, across countries;
- Activate incentives for carbon capture, utilization, and storage (CCUS) and other decarbonization pathways for cleaner utilization of existing infrastructure, decarbonization of hard-to-abate sectors such as the industrial and transportation sectors and production of cleaner fuels including blue hydrogen/ammonia, e-fuel, and sustainable aviation fuel;
- Coordinate on development of key regulatory and standards processes to encourage investments in decarbonization and build demand for lower-carbon products and manufacturing inputs;
- Promote cross-sectoral cooperation, such as the recent consortium announcement between U.S. and Japanese companies, to develop an entire hydrogen value chain from production to transportation, storage and utilization, and mobilization of all technologies related to hydrogen, ammonia, and e-methane/e-natural gas to quickly realize a hydrogen society.

## Expanding Development and Deployment of Innovative Technologies

The Councils emphasize that disruptive innovation which supports an orderly energy transition is necessary to achieve the carbon neutrality targets set for 2050 by both the U.S. and Japanese governments. Also, no single technology can achieve this target, and an “all-of-the-above” approach is required. The Councils recommend the two governments to promote the following policies to accelerate development and utilization of innovative technologies:

- Support continued implementation of the Memorandum of Cooperation between the Ministry of Economy, Trade and Industry of Japan and the U.S. Department of Energy concerning collaboration in the field of carbon capture, utilization and storage / conversion and recycling, and carbon dioxide removal.
- Implement digital technologies in the energy and infrastructure sector, including power grids, for improvement of efficiency, utilization of limited resource, and promotion of smart, modern, and resilient infrastructure;
- Develop risk-based standards incorporating private sector consultation to enhance cyber security resilience and readiness against cyber-attacks on critical infrastructure;
- Utilize AI and IoT technologies to decarbonize value chains such as hydrogen and CO2 and optimize an energy management by power grids;
- Support private sector efforts to develop new technologies such as more efficient energy storage and carbon capture (direct air capture) technologies, innovative advanced nuclear technology, and new types of clean fuels to prepare as many technology options for the energy transition as possible and to drive cost reduction for affordability;
- Establish a CO2 value chain, which is one of the key pillars toward carbon neutrality and decarbonizing hard-to-abate sectors, by promoting development of business models utilizing captured CO2 and creating a circular economy for CO2 which has e-methane/e-natural gas as a solution;
- Set rules for CO2 accounting to facilitate the import and export of products made of captured CO2; and,
- Coordinate harmonization of standards for cross border CO2 shipping.

## Cooperating With Southeast Asian Countries in Order to Achieve a Free and Open Indo-Pacific

The Councils believe the cooperation of the U.S., Japan, and Southeast Asian countries in the Indo-Pacific region is essential to realizing a Free and Open Indo-Pacific (FOIP) that brings prosperity and security to the region. Through enhancing the Japan-U.S. Clean Energy Partnership (JUCEP), the U.S. and Japan can support like-minded countries in the region to promote high quality infrastructure for energy transition and energy security with consideration of the different circumstances of each country. The Councils urge the two governments to support the following recommendations:

- Expand U.S.-Japan cooperation with Southeast Asian countries to sustainably switch coal power plants to LNG, use renewable natural gas with CCUS systems, and then convert such infrastructure to hydrogen/ammonia infrastructure with minimum modification for further emissions reduction in the long run;
- Mobilize financing to accelerate the development of low-carbon and clean energy technologies via the “Clean Energy, Decarbonization, and Infrastructure” pillar of the Indo-Pacific Economic Framework (IPEF) in the region. Simultaneously, utilize the “Supply Chain” pillar to secure the supply chain of energy infrastructure equipment and critical minerals, and freedom of navigation;
- Continue to actively engage in global development efforts including the Mineral Security Partnership that includes government partners from 12 countries including Japan and the United States to stabilize mineral supply chains;
- Utilize all existing frameworks for public-private dialogue established by the U.S. and Japanese governments to support private energy and infrastructure business projects in the region. This could take multiple forms, including by providing business matching opportunities for private companies, encouraging mobilization of private capital and reducing regulatory barriers in Southeast Asian countries;

- Encourage circular economy approaches to promote innovative sustainable business models in which products are crafted and consumed in a way that maximizes their value throughout their entire life cycle, and reduces their impact on natural resources, waste generation, and carbon emissions;
- Develop common principles and life cycle assessment (LCA) tools to evaluate circularity and environmental impact of the different alternatives, and additionally support the waste hierarchy by rethinking traditional, linear “take-make-dispose’ way of doing business to adopt new ways of working that maximize the value and use of our resources;
- Pilot increased investment in waste management through available channels such as U.S. and Japanese development funding, and others as a means to create economic value for waste plastic (as feedstock) in the developing economies in Indo Pacific region; along with new job creation – while also establishing environmental solutions;
- Encourage greater investment in recycling technology, including the deployment of advanced recycling which is a more suitable technology to address the complexity in developing economies in the region; and,
- Promote greater public awareness on new low carbon alternatives increasing public acceptance on the role of CCS, hydrogen and low emissions fuel as part of the “all-of-the above” solution to achieve a carbon neutral society by 2050.