

Participating in the Roundtable "IRA and GX Strategy: U.S.-Japan Partnership for a Net-Zero World"

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On March 15, the U.S. Embassy in Tokyo, the U.S.-Japan Council (USJC), and the Institute of Energy Economics, Japan (IEEJ) co-organized the roundtable "IRA and GX Strategy: U.S.-Japan Partnership for a Net-Zero World." I would like to report on some of my impression from the discussion.

The U.S. Embassy in Tokyo and USJC have a cooperative relationship and held a roundtable on methane emission reduction in March of 2023 with IEEJ officials.

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Like last year, this year's roundtable was held as part of USJC's Climate & Sustainability Initiative, which is supported by the Initiative's Founding Strategic Partner, Amazon.

[Climate & Sustainability Initiative - U.S.-Japan Council \(usjapan.org\)](https://www.usjapan.org)

This roundtable was held on the occasion of a visit to Japan by John Podesta, Senior Advisor to the U.S. President for International Climate Policy, in order to broaden the understanding of Japanese stakeholders regarding the U.S. Inflation Reduction Act (IRA) and to strengthen the U.S.-Japan partnership in coordination with the Japan's GX strategy. The discussion was also expected to serve as preparation for the Japan-U.S. summit meeting scheduled for Prime Minister Kishida's visit to the United States in April.

I was involved in planning this roundtable and served as the moderator for the day.

In addition to Mr. Podesta, other participants in the discussion included Mr. Tatsuya Terazawa, Chairman & CEO, IEEJ; Mr. Shinichi Kihara, Director General for Energy and Environment Policy, METI; Mr. Fatih Birol, Executive Director, IEA (via video); Ms. Toshiko Chiba, Director, Climate Change Response, Tokyo Metropolitan Government; Mr. Ken Koyama, Senior Managing Director,

IEEJ; Mr. Ken Haig, Head, Energy and Environment Policy, Amazon Web Services; Ms. Megumu Tsuda, General Manager, Sustainability Promotion Division, Hitachi, Ltd; Mr. Kaoru Miyake, Co-Chair, Japan Climate Leaders Partnership (JCLP); Mr. Keiji Kaita, President, Carbon Neutral Engineering Development Center, Toyota Motor Corporation; Mr. Hiroyuki Tezuka, Senior Specialist, JFE Steel Corporation; Ms. Miki Yamanaka, Manager, CSR & Global Environment Center, Daikin Industries; Mr. Saburo Takeuchi, General Manager, Policy Research and External Relations, Next Generation Energy Division, Mitsubishi Corporation; Ms. Kathy Matsui, General Partner, MPower; and Mr. Tamotsu Saito, Chairman, NEDO.

The following is a summary of **Mr. Podesta's** keynote presentation and handouts.

The Inflation Reduction Act (IRA) is a government-enabled, private sector-led approach to promote clean energy investment in the power, industrial, transportation, building, and agricultural sectors through \$369 billion in tax credits, loans, and grants. Most of these credits will last for 10 years. Since President Biden took office, \$676 billion in clean energy investments have been announced in the United States and 270,000 jobs have been created in the sector since the IRA took effect. (According to the handout, a total of \$224 billion in clean energy investments have been announced since the IRA was enacted, including over \$84 billion for batteries, over \$17 billion for EVs, and over \$13 billion for solar energy.) A Boston Consulting Group analysis shows that the IRA can reduce the cost of clean energy technology by up to 25% and accelerate their adoption worldwide. A Rhodium Group modeling analysis shows that for every ton of CO₂ saved in the United States, up to 2.9 tons of CO₂ can be saved outside the United States through IRA.

The **U.S. IRA and Japan Green Transformation (GX)** will cooperate in the following ways: 1) to deepen open dialogue between the U.S. and Japanese public and private sectors on incentives for the private sector; 2) to promote innovation in the clean energy sector; and 3) to address economic security risks by building supply chains that are not dependent on China (the U.S.-Japan Critical Minerals Agreement is an example of this). Japan is the most important ally country in the global clean energy transition. The United States and Japan will establish a permanent ministerial-level dialogue. The United States and Japan should work more ambitiously toward the 1.5°C target.

The following are the main points that impressed me in the presentations and discussions by the participants that followed.

First, **the Japanese side emphasized the importance of various pathways in pursuit of the clean**

energy transition, depending on the circumstances of each country and industry. This point was emphasized by Mr. Kihara of METI, who served as a docent at the G7 Energy, Environment, and Climate Ministerial Meeting last year. Other participants pointed out the need for a realistic and gradual shift during the transition period, especially in hard-to-abate sectors such as the transportation (automobile) sector and industries such as iron and steel. The importance of the various pathways has been emphasized by Japan in international discussions and seems to be well understood in Europe and the United States, but it was meaningful to take this opportunity to further promote understanding on the part of the United States.

Second, **the importance of building a supply chain to promote the introduction of clean hydrogen and ammonia** was pointed out. The potential for the supply of clean hydrogen and ammonia in the United States is attracting attention, and many of the participants pointed out the usefulness of building a supply chain between the U.S. side and the Japanese side, which requires it on the demand side. In relation to this point, there was a discussion on how the IRA should be enforced. The Japanese side pointed out that it is important to establish a supply chain for hydrogen and ammonia as soon as possible, and that the U.S. Treasury Department's interpretive guidance on the conditions for clean hydrogen to be incentivized by the IRA should be more relaxedly applied. Mr. Podesta commented on the importance of striking the right balance between the need to expand hydrogen supply and the need for net emission reductions to be made when renewable electricity is used for clean hydrogen production (additionality of renewable energy). The U.S. Treasury Department's interpretive guidance is scheduled to be finalized this summer based on public comments on the draft, and its development will be closely watched.

Third, **the importance of green demand** was discussed. It was pointed out that in the hard-to-abate sectors, the supply side is ready to increase the availability of decarbonized products, but that a large initial investment is required and, in order to recover the investment, incentives are needed to ensure that the environmental value of green products is properly evaluated on the demand side. Mr. Podesta commented that the IRA has introduced a tax credit system for consumers when purchasing EVs, with regard to green demand, but that it is a challenging issue in corporate sectors such as steel. As for the demand side, it was pointed out that although there are many companies in Japan that are committed to net-zero emissions and there are signals of demand for renewable energy, the expansion of renewable energy supply is not progressing much. As a specific measure to hinder the introduction of renewable energy, the FIT surcharge is imposed on corporate PPA transactions in Japan, and negative pricing is not allowed (in Japan, the lower limit price is set at 0.01 yen/kWh, whereas in Europe and the United States negative

pricing is allowed for wholesale electricity, resulting in avoiding curtailment and the introduction of batteries on the demand side).

Fourth, **the importance of technology** was discussed, including various examples. METI and NEDO presented examples of technology development and demonstration through Japan's Green Innovation Fund and Green Transition Bonds (industry (steel, chemicals, pulp and paper, cement), transportation (EV, battery, aircraft, SAF, ship), consumer (housing, resource recycling, semiconductor), energy (hydrogen, next-generation renewable energy, nuclear power, CCS), etc.). From the corporate side, examples of Japan-U.S. collaborative projects in ammonia, e-natural gas, SAF/Biofuels, DAC, etc., utilizing IRA and GX were presented. Other examples of Japan-specific technologies such as high-efficiency inverter air conditioners and heat pumps with high energy efficiency were also presented. In light of the role of start-ups in clean energy technology, a recommendation was made for easier access for start-ups to government programs such as the IRA and GX. Since the U.S. IRA is oriented toward promoting the introduction of existing technology rather than technology development, and Japan's GX strategy is more technology development oriented, the complementary relationship and synergy between the United States and Japan is considered effective. In addition, while innovation by start-up companies is more active in the United States, it is becoming more active in Japan as well, and therefore Japan-U.S. cooperation to expand this ecosystem may also be effective.

Fifth, **the importance of sub-national players** was confirmed. The Tokyo Metropolitan Government is aiming for a carbon half target in 2030 through green building programs, PV installation mandates, cap-and-trade programs, and other measures, and is also aiming for net-zero emissions in 2050 through the introduction of green hydrogen and other measures. In the process of formulating and implementing these policies, they are exchanging information with the states of New York, California, and other states with which they have exchanges. The U.S. and Japanese governments are also attempting to accelerate urban climate action on a global scale through the Global Subnational Zero Carbon Promotion Initiative, which shares advanced examples from cities in Japan and abroad.

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Such subnational-level collaboration is particularly useful in the United States, given that the main actors in decarbonization policy and implementation are at the state and city level rather than the federal government. It is recalled that in the past, when President Trump declared his withdrawal from the Paris Agreement early in his presidency in 2017, many U.S. state governors and mayors voiced that “We are still in”.

Sixth, **the importance and effectiveness of the US-Japan partnership** was emphasized throughout the discussion. Mr. Podesta, Mr. Kihara, and Mr. Birol of the IEA unanimously emphasized the importance of the US-Japan partnership, especially for the clean energy transition not only for the United States and Japan, but also for the rest of the world, including Asia. Mr. Podesta commented that he chose Japan as his first overseas destination after assuming the post of Senior Advisor to the U.S. President for International Climate Policy because Japan is the United States' most important ally. As a concrete initiative for the Japan-U.S. partnership, the importance of establishing domestic and international supply chains, including between Japan and the United States, using the IRA and GX was emphasized. There were real project examples of clean hydrogen, ammonia, e-methane, and e-fuel in terms of supply by the United States and demand by Japan. NEDO concluded an MOU with ARPA-E of the U.S. Department of Energy in October 2023 and, as part of the MOU, the development of biodegradable microplastics derived from marine resources, LCA of rock weathering as CCS, and other examples were introduced. NEDO also introduced the Pacific Hydrogen Alliance of three regions, Namie Town, Fukushima Prefecture, Lancaster City, California, and Hawaii County, Hawaii, in which NEDO is involved.

Seventh, in response to my question, **Mr. Podesta made a positive comment on the durability of the IRA.** Although the outcome of the U.S. presidential election in November this year is difficult to predict at this point, Republican candidate Mr. Trump has said that the IRA will be scrapped if he is elected as President, and many companies that are implementing or considering investment plans based on the IRA have concerns. Podesta laughingly said that this is the 20th time he has been asked that question during his visit to Japan, and that he is confident in the durability of the IRA because many clean energy investments have already been realized and jobs have already been created across the United States, including in conservative states, and this is based on companies' confidence in the 10-year validity period of the IRA, which is very important. He commented that it is very difficult to overturn this 10-year IRA validity. Although this comment reflects the view of the current administration, it is true that the IRA is a law passed by a majority of the ruling and opposition parties in the U.S. Congress and, given the fact that many Republican states enjoy the benefits of the law, the total abolition of the IRA may be difficult to envision. However, as Mr. Podesta acknowledges, international measures (e.g., the Paris Agreement) and environmental regulations (e.g., EPA-related) may be affected by a change of administration. Japanese private-sector companies will need to continue to carefully monitor developments in the United States in the future.

Finally, I would like to share my impressions based on the overall discussion.

First, the roundtable was a **meaningful dialogue that advanced mutual understanding between Japan and the United States**. Such frank dialogue itself is an important pillar of the U.S.-Japan partnership, and it is hoped that such a dialogue will stimulate and promote the U.S.-Japan partnership in terms of policy and private sector business activities. Mr. Podesta sufficiently emphasized the high policy effectiveness of the IRA, which was well understood by the Japanese side. Conversely, Mr. Podesta seemed to well understand the content and philosophy of the Japanese side's GX strategy. The Japanese side emphasized the importance of various pathways, which is also believed to have increased the understanding of the US side. In terms of how to utilize the IRA to establish a hydrogen supply chain, which was the subject of some discussion, the Japanese viewpoint that the supply increase should be hastened to establish an early supply chain seems to have been inputted into the US side.

Second, **although there are some problematic aspects of the IRA from the perspective of free trade principles, such as the preferential treatment of only U.S. made products, the effect of inducing investment in clean energy is very large**. The basic direction of the U.S. policy should be taken positively in the face of the global competition to expand investment in decarbonization, an objective that is undeniable. As Mr. Podesta pointed out, even if there is a change of administration in the United States, the fundamentals of the IRA are expected to persist. However, as the EPA recently lowered the 2032 EV share target to 35-56% from 67% in the draft proposal, there is always the possibility of modification or change in environmental and energy policies due to political considerations. Mr. Podesta also indicated that there could be changes regarding international commitments (e.g. the Paris Agreement) and EPA-related regulations in the event of a change of administration. Therefore, Japanese private-sector companies should pay close attention to political risks, including regime change, and keep a watchful eye on the political situation in the United States when developing investment strategies that take advantage of U.S. policies and regulations.

Third, **Japan's GX strategy is expected to be a better policy with ongoing detailed policy design, as it has advantages as a follower, such as being able to refer to the preceding U.S. IRA**. In particular, as pointed out by Mr. Kihara, Japan's policy has Japanese characteristics, such as a combination of carrots (subsidies) and sticks (ETS, levies), and an emphasis on technological development, and its effectiveness is expected to be demonstrated globally. In addition, we should take seriously the fact that Mr. Podesta pointed out that there may be systemic issues in Japan that prevent supply from increasing much despite growing large demand for renewable energy in Japan, and we should strictly avoid the Japan passing phenomenon, in which investment in/to Japan is avoided because of the lack of renewable energy supply.

The U.S. and Japanese governments have reaffirmed their commitment to the U.S.-Japan Climate Partnership, and the private sector recognizes the complementarities and synergies between the United States and Japan in terms of real markets, supply chain construction, technology development, etc. It is expected that a globally meaningful U.S.-Japan partnership will continue to grow at both the public and private levels.

Note: The opinions expressed in this report are the personal views of the author, and the statements made by the roundtable participants are based on the author's understanding.

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