

Press release

GJETC presents key scenarios for climate neutrality in Germany and Japan

Berlin/Tokyo, November 25, 2021. Full decarbonization for the highly industrialized countries of Germany and Japan was discussed today during an outreach event hosted by the German Japanese Energy Transition Council (GJETC). The meeting focused on the technical, economic, and social feasibility of full decarbonization strategies for Germany and Japan. On this topic, scientists from both countries presented country specific, representative scenarios on how climate neutrality could be achieved, in Germany by 2045 and in Japan by 2050. The GJETC, which consists of renowned scientists, is committed to science-based cooperation on issues of global warming and energy transition.

Based on various models and strategies, the scenario comparison for Germany revealed a general feasibility to achieve carbon neutrality by 2045 and to phase out nuclear energy by 2022 at reasonable societal costs. As instruments for a successful transition, the scientists identified above all the efficient use of energy and materials, the establishment of circulation strategies, for example through systematic recycling, a strategy of forced green electrification and the stepwise increased use of hydrogen in society. In addition, a change to more sustainable lifestyles is also unavoidable to guarantee prosperity and freedom for future generations.

"The shift to low-risk energy systems and the implementation of a just socio-ecological transformation towards climate neutrality is a huge undertaking for society. The outcome of the UN Climate Change Conference in Glasgow has now given a new momentum to this ambition. As GJETC, we support this objective with scientific studies, outreach events with stakeholders and recommendations to policy makers of Germany and Japan", says Prof. Dr. Peter Hennicke, German co-chair of the GJETC.

Achieving climate neutrality in Japan by 2050, as the Japanese government is aiming for, will require a higher priority for renewables and energy efficiency, the use of innovative methods in thermal power generation, such as the use of hydrogen, ammonia, and further development of carbon storage, according to the scenario comparison. In addition, the building and transport sector would need to be electrified through decarbonized electricity sources. In processes where electrification is not possible, decarbonization would need to be promoted using hydrogen, synthetic methane, and other synthetic fuels.

Prof. Tatsuya Terazawa, the Japanese co-chair of the GJETC, emphasizes: "Limiting global warming to 1.5 degrees is an ambitious goal, while COP26 has once again shared the awareness of urgency and importance of achieving this goal. As GJETC, we are addressing the challenges in providing scientific support for the goals and implementation of climate change policy."



About GJETC

The German-Japanese Energy Transition Cooperation Council is an international model project to strengthen knowledge exchange on technologies, policies and the impacts of the energy transition. In its form, continuity and size, the GJETC is the first German-Japanese cooperation project on the energy transition of its kind. Founded in spring 2016, the Council conducts an extensive study program on core topics of the energy transition, holds stakeholder dialogues with industry and civil society, and has already published six studies, a series of strategic input papers, and two reports with key recommendations for a successful energy transition in March 2018 and June 2020.

The project, jointly launched by the Wuppertal Institute, ECOS, hennicke.consult and the Institute of Energy Economics Japan (IEEJ/Tokyo) in spring 2016, was funded by the German Federal Environmental Foundation (DBU), the Mercator Foundation and the Japanese Ministry of Economy, Trade and Industry (METI) in working phase 1 and 2.The Federal Ministry for Economic Affairs and Energy (BMWi), and the Japanese-German Center Berlin (JDZB) also support the project. On the German side, the Wuppertal Institute is coordinating the Council's work as secretariat together with ECOS; on the Japanese side, the Institute of Energy Economics Japan (IEEJ) is assuming this task.

Press contact Germany: Kevin Hohmann Medienbüro am Reichstag GmbH Reinhardtstrasse 55 10117 Berlin

Phone: +49 30 2061 4130 50 E-Mail: <u>kevin.hohmann@mar-berlin.de</u>

Press contact Japan:

General Planning Group The Institute of Energy Economics, Japan Inui Bldg.Kachidoki 10th Floor, 13-1, Kachidoki 1chome, Chuo-ku, Tokyo 104-0054

Phone: +81-3-5547-0211 Fax: +81-3-5547-0223 E-Mail: <u>contact-ieej@tky.ieej.or.jp</u>