## **Tokyo Energy Transition Forum & The 5th ISETS Energy Transition Forum**

Tokai University (Faculty of Policy Science and Economics; School of Global Studies; TOKAI Research Institute for Environment and Sustainability (TRIES)); The University of Kitakyushu; The International Society for Energy Transition Studies (ISETS) Oct 14, 2022

The forum started with the welcoming remarks of **Prof. Naoto Yoshikawa**, Vice Chancellor for Global Initiatives, Tokai University, Japan Professor, School of Global Studies. And **Prof. Xunpeng (Roc) Shi**, Professor, University of Technology Sydney; Australia; President of The International Society for Energy Transition Studies (ISETS).

The forum had two keynote speeches and seven presentations, and discussions.

In the first keynote speech, **Prof. Kazuo Matsushita** highlighted that the climate crisis is a human rights crisis, especially the "crisis of children's rights. For Decarbonization" and fossil-free societies, specific climate change countermeasures are required which are not only beneficial for the environment but also for energy security.

In the second keynote speech, **Prof. Naoyuki Yoshino** highlighted the role of fiscal policy and optimal portfolio allocation for achieving carbon neutrality. He stressed the importance of developing a global green credit rating system and global carbon taxation system to avoid distortion of investments in sustainability projects.

## Session 1, had three presentations.

In the first presentation, **Prof. Youngho Chang**'s presented the opportunities and challenges of transition to net zero in developing Asia. He proposed that It is necessary to develop new business modes to accommodate new consumers' behavior in delivering zero carbon assets in homes and businesses.

In the 2<sup>nd</sup> presentation, **Prof. Jinjun Xue** presented on the Russia-Ukraine war, the energy crisis, and political and geographical reconstruction. He mentioned that the war is changing the geopolitics of energy and raised concerns on (1) environmental pollution, (2) carbon emissions, (3) timetable and pathway of carbon neutrality, and (4) international cooperation on energy and climate.

In the  $3^{rd}$  presentation, **Dr. Yuki Kudoh** presented the role of novel technologies in achieving carbon neutrality. Both the significant reduction of CO<sub>2</sub> and the introduction of negative emission technologies are indispensable. According to his presentation, Further innovations are required to achieve carbon neutrality with economic feasibility, and discussions are needed on ensuring the competitiveness of industries and necessary costs.

## The 2<sup>nd</sup> session, had four presentations.

In the 1<sup>st</sup> presentation, **Prof. Masashi Yamamoto** presented on the role of waste-to-energy in achieving carbon neutrality. Waste-to-energy plants burn municipal solid waste to produce steam in a boiler that is used to generate electricity. He mentioned that waste-to-energy remains to be an important tool to minimize social costs (CO2 emissions + material recovery).

The 2<sup>nd</sup> presentation was by **Prof. Gazi Salah Uddin** on the impact of the clean energy transition on growth, environment, and welfare in Bangladesh. His empirical study showed that solar energy helped rural males engage in non-farm activities such as trading businesses and females in poultry farming. These income-generating activities create opportunities for more expenses in food and non-food expenditure and asset formation.

In the 3<sup>rd</sup> presentation, **Dr. Daniel del Barrio Alvarez** assessed the role of power connectivity in the energy transition and sustainability. Power connectivity can bring energy security, economies of scale, and political cooperation. He added that power connectivity could increase the resilience of national electricity systems. However, the underlying rationale for the success (or not) of power connectivity initiatives is not simple, as it involves various disciplines and requires more research.

In the final presentation, **Dr. Gagan Deep Sharma**, underlines the impact of energy poverty on social change and well-being. Energy poverty impacts the citizens' quality of life, work ethic, and personal life. It can impede society's growth, and policymakers need to pay special attention to it.

The forum was co-hosted by **Prof. Satoshi Honma** (Tokai University, Japan), **Dr. Farhad Taghizadeh-Hesary** (Tokai University, Japan) and **Prof. Yoshiaki Ushifusa** (The University of Kitakyushu, Japan) and was sponsored by KAKENHI (Grant-in-Aid for Scientific Research (B) No. 22H03816.