



Asia-Pacific Workshop on Value Creation 2023

The Value of Renewable Energy in Future Societies

September 25, 2023 | 1:00 — 5:00 pm

Japan-America Institute of Management Science, Honolulu

Objective

The symposium aims to focus on the significance of sustainable energy and its societal value. Given the negative impact of fossil fuel consumption, both in terms of global warming and environmental degradation, renewable energy assumes a pivotal role in shaping the landscape of future energy provisioning. This symposium strives to foster discussions about various dimensions of introducing Renewable Energy and to deeply comprehend its economic, environmental, and social value.

Goals

Knowledge Exchange: Facilitate the exchange of knowledge, insights, and best practices among experts, researchers, and industry leaders on the adoption and integration of renewable energy solutions.

Value Definition: Promote a deeper discussion among participants of the multifaceted value of renewable energy, including its environmental, economic, and social contributions.



Keynote Session 13:00 – 13:10	Opening Remarks by Hiroki Tsuruta
13:10 – 14:10	Keynote by Yoh Kawanami What is the "Value" of Renewable Energy in Hawaii?
14:10 – 14:20	Coffee Break
14:20 – 15:20	Keynote by Hisashi Tamaki Towards a Self-Sustainable Decentralized Energy System: Findings of a Prototype Study Based on DC Power Feeding and Utilization of Renew- able Energy
15:20 - 15:40	Coffee Break
Open Discussion Session	
15:40 – 15:55	Lightning Talk by Nori Tarui
15:55 – 16:10	Lightning Talk by Nobutada Fujii
16:10 - 16:50	Discussion
16:50 – 17:00	Closing Remarks by Kazuyuki Akino

Lightning Talk

A Case Study on Efficient and Equitable Clean Energy Transitions

Nori TARUI

Professor, Economics, University of Hawaiʻi at Manoa Co-Director, Renewable Energy and Island Sustainability Graduate Certificate Program, University of Hawaiʻi at Manoa

Given imported oil dependency and concerns about climate change, the State of Hawai'i adopted policy targets to achieve 100% renewable energy by 2045. How can the economic burden of such clean energy transitions be minimized? What are the impacts on low- and middle-income households under alternative scenarios? This talk draws on a few case studies to address these questions.

Nori Tarui is an environmental economist specializing in energy policy for decarbonization, its economic and distributional impacts, and strategies for climate change mitigation and adaptation by working with industry and government partners. He received the Outstanding Publications Award from the Society for Environmental Economics and Policy Studies in 2021. He has studied at Keio University (BA and MA Economics) and the University of Minnesota (PhD Agricultural and Applied Economics) and worked as an Earth Institute Fellow at Columbia University before moving to Honolulu.

Lightning Talk
Systems and Resilience



Nobutada FUJII

Professor, Information Infrastructure and Digital Transformation Initiatives Headquarter, Kobe University

Vice Chief, Value Design Group, V.School, Kobe University

In this presentation, resilience is defined as the ability to adapt to daily fluctuations while maintaining core functions amidst uncertainties. The presentation introduces environmental models and steady-state/non-steady-state models as system models of resilience, and highlights that the 'Research Group on Systems Resilience to Realize Both Maximum Efficiency and Operational Stability' by the Japan Iron and Steel Institute applies these models to maximize operational efficiency, minimize margins, and develop strategies for future operations.

Nobutada Fujii is a system engineer with expertise in various research areas. His primary focus includes Autonomous and Decentralized Manufacturing Systems, Agent-based Modeling and Simulation of Social Systems, Service Engineering, Smart Agriculture, and Urban Design. He earned his BA and MA in engineering from Kobe University, Japan, in 1996 and 1998, respectively. He received his PhD in engineering from the University of Tokyo, Japan, in 2004.