



Hawai'i Natural Energy Institute Research Highlights

International Support

USAID Sustainable Energy for Indonesia's Advancing Resilience Program

OBJECTIVE AND SIGNIFICANCE: In September 2021, HNEI GridSTART was contracted by Tetra Tech ES to provide technical support for USAID's Sustainable Energy for Indonesia's Advancing Resilience (SINAR) program. The SINAR program aims to advance Indonesia's development goals in expanding reliable and equitable energy services necessary for sustainable development and inclusive economic growth. SINAR program objectives include: 1) accelerating deployment of advanced energy; 2) improving performance of energy utilities; 3) adopting transparent and best value procurement; and 4) strengthening the institutional framework and capacity of the energy sector.

BACKGROUND: Although Indonesia has abundant renewable energy (RE) resources, they are not being utilized to their full potential. One of the obstacles to accelerating the adoption of RE resources is the limited experience of key energy stakeholders on proper and prudent RE planning for energy transition in accordance with local conditions and current energy policies. In an effort to help the Government of Indonesia increase the use of RE, in line with its National Energy Policy and Nationally Determined Contributions (NDC) under the Paris Agreement, USAID SINAR identified a need for Indonesia's Ministry of Energy and Mineral Resources (MEMR) and PT Perusahaan Listrik Negara (PLN or 'State Electricity Company') to have a clear strategy, standard framework, and program roadmap for the successful energy transition toward net zero emissions.

PROJECT STATUS/RESULTS: HNEI GridSTART is supporting the USAID SINAR program by providing capacity building on: 1) advanced energy systems finance and development, 2) utility cost recovery and modernization, 3) competitive procurement and domestic resource utilization, and 4) stakeholder coordination and policy improvement.

In February 2022, HNEI GridSTART presented a three-day webinar to Indonesia's Directorate General of Electricity (DGE) and MEMR on Hawai'i's renewable energy transformation, lessons learned from incorporating increasing levels of RE, and technical issues posed by high renewable penetrations in modern power systems. HNEI's deep knowledge and understanding of Hawai'i's successful energy

transformation and lessons learned garner great interest and attention not only from Indonesia but also from numerous countries in the Asia-Pacific region, due to their similar geographical and climatic characteristics.

Following the webinar, in May 2023, HNEI GridSTART was invited and traveled to Indonesia to conduct a three-day workshop on small island grid planning for PLN in Bali and a one-day webinar for the Setjen DEN (the National Energy Council of Indonesia) in Jakarta. Discussions with Indonesian stakeholders during that trip have led to ongoing scoping discussions for additional capacity building located in Hawai'i, which is planned for 2024.



Figure 1. HNEI GridSTART participants in a focus group discussion in Indonesia in May 2023.

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