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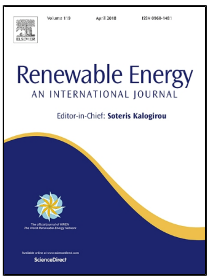

Feed-in Tariff vs Incentivized Self-Consumption: Options for Residential Solar PV Policy in Brunei Darussalam

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Feed-in Tariff vs Incentivized Self-Consumption: Options for Residential Solar PV Policy in Brunei Darussalam

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Abstract

The study assesses policy options for the proposed 5-year rooftop solar PV deployment program in Brunei Darussalam targeting around 1,000 households per year or installing a total of 50 MW_p [1] (5,000 x 10 kW_p) capacity in 5 years. At present, small scale solar PV systems are not competitive in the country and that the government needs to introduce a policy framework that incentivizes households to participate in the proposed deployment program. Feed-in tariff and self-consumption schemes (net metering and net billing) are the main policy frameworks adopted globally to promote deployment of residential solar PV systems and these could be designed to provide the same level of incentives to residential households given the same technical and financial requirements. For the implementation of the proposed 5-year deployment program, a feed-in tariff policy framework would require a much higher level of subsidy and would result in higher financial burden to consumers compared with net metering and net billing schemes. Electricity tariff reforms on the other hand could complement deployment policies by putting upward pressure on retail electricity prices making solar PV technologies more attractive and requiring less subsidies.

Keywords

Residential solar PV policy; feed-in tariff; self-consumption schemes; net metering; net billing

Highlights

- Small scale solar PV generation in Brunei Darussalam has not reached grid parity
- Feed-in tariff and incentivized self-consumption schemes to close the cost gap
- These schemes could be designed to provide the same level of incentives
- Feed-in tariff requires higher levels of subsidy than incentivized self-consumption
- Incentivized self-consumption schemes result in lower financial burden

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[1] W_p – watt peak; kW_p – kilowatt peak; MW_p – Megawatt peak