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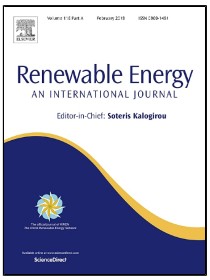

Solar home systems in ho chi minh city: a promising technology whose time has not yet come

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SOLAR HOME SYSTEMS IN HO CHI MINH CITY:

A promising technology whose time has not yet come

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Abstract

This study examines the constraints to the uptake of Solar Home Systems (SHS) in Ho Chi Minh City (HCMC), Vietnam. SHS are photovoltaic systems which generate electricity for residential properties. The limited numbers of SHS installed in HCMC are mostly on-grid systems with backup batteries to supply electricity to residential properties during evenings and/or power cuts. Semi-structured interviews with SHS installers, manufacturers and users, plus government agencies and technical experts identify pricing, regulatory issues and the cost of systems as major constraints. Cost-benefit analysis is then used to estimate the financial rates of return and payback periods for three representative SHS. Introducing net metering with a price equal to the proposed tariff of VND 3,250/kWh would generate financial rates of return of over 7.5% and shorten the payback periods for the two larger systems from more than 30 years to 12 or 13 years. Smaller off-grid kits are already competitive with small, stand-alone diesel or gasoline generators. In the next five years, reforms to Vietnam's electricity market can be expected to green the energy mix and make SHS more finally attractive. SHS therefore represent a promising technology for HCMC in the future.