Accepted Manuscript

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

Bob Baulch, Do Thuy Duong, Thai-Ha Le

PII: S0960-1481(17)31076-5

DOI: 10.1016/j.renene.2017.10.106

Reference: RENE 9394

To appear in: Renewable Energy

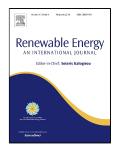
Received Date: 13 July 2016

Revised Date: 15 October 2017

Accepted Date: 29 October 2017

Please cite this article as: Bob Baulch, Do Thuy Duong, Thai-Ha Le, Solar home systems in ho chi minh city: a promising technology whose time has not yet come, *Renewable Energy* (2017), doi: 10.1016/j.renene.2017.10.106

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



SOLAR HOME SYSTEMS IN HO CHI MINH CITY:

A promising technology whose time has not yet come

Bob Baulch^a, Do Thuy Duong^b and Thai-Ha Le^b

 International Food Policy Research Institute, 1201 Eye Street NW, Washington, DC20005-3915, USA

^b RMIT University Vietnam, 702 Nguyen Van Linh, District 7, Ho Chi Minh City, Vietnam Corresponding Author: Dr Bob Baulch, b.baulch@cgiar.org

<u>Abstract</u>

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.

دريافت فورى 🛶 متن كامل مقاله

- امکان دانلود نسخه تمام متن مقالات انگلیسی
 امکان دانلود نسخه ترجمه شده مقالات
 پذیرش سفارش ترجمه تخصصی
 امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
 امکان دانلود رایگان ۲ صفحه اول هر مقاله
 امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
 دانلود فوری مقاله پس از پرداخت آنلاین
 پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات
- ISIArticles مرجع مقالات تخصصی ایران