



Republic of the Philippines  
DEPARTMENT OF ENERGY

Project Management Office  
PHILIPPINES RURAL POWER PROJECT

## SSMP2:

### Accelerating Community Electricity Services using Solar (Project ACCESS) using the Sustainable Solar Market Package Concept

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#### Background

The Government of the Philippines through its Department of Energy (DOE) has embarked on a number of comprehensive and innovative measures towards achieving the goal of 100% village (barangay) electrification by 2009 and 90% household electrification by 2017. These measures include new approaches to implementation of electrification projects to enhance sustainability and greater private sector participation and investments.

#### SSMP Project Features

The DOE is implementing the World Bank and Global Environment Facility (GEF)-supported Rural Power Project (RPP) of which Project ACCESS is one component.

The SSMP approach recognizes that to provide solar photovoltaic (PV) electricity services to remote rural communities in a commercially viable way, the scale of the business operation must be sufficiently large to overcome the transaction costs of doing business in distant areas, and risks must be manageable. This is achieved by combining installations for public facilities (that are competitively bid out) with the marketing of solar home systems and lanterns for households.

The SSMP approach utilizes a combination of innovative instruments to achieve the targets:

- *Clustering of villages into commercially viable packages that are bid out on a competitive basis in respect of community facilities;*
- *Each SSMP package or lot comprises a base load from community facilities (e.g., village halls, health facilities, schools, public/street lights);*
- *An obligation to market a minimum number of household systems with strong focus on after-sales service and micro financing; and*
- *Performance-based subsidies and financial incentives to improve affordability;*
- *Technical assistance to assist firms to address market barriers.*

A successful SSMP contractor will have an obligation to install the PV systems for community facilities within a defined timetable and warrant their operation for a period of five years. The contractor is also obligated to market and sell on a

commercial basis, solar PV systems to benefit a defined and agreed upon number of households within a defined period in each of the clustered villages.

In early 2007, the SSMP approach was implemented for the electrification of 76 villages intended for the electrification of about 3,700 households and other private establishments, about 170 community facilities, including village halls, health centres and schools, and more than 200 public streetlights.

The DOE is now putting together the follow-on SSMP2 Project using the same methodologies for the electrification of about 500 villages in the country that remain un-energized. In preparation, a Rapid Rural Appraisal is being carried out to determine the target villages including their economic and livelihood profile and to identify the number and type of community facilities to be provided. Immediately thereafter, these villages will be clustered to form an SSMP lot. An SSMP lot may have varying number of contiguous villages depending on the size, location and the overall profile.

### Funding

Public sector, private entities, and donor resources will fund PV systems for community facilities, and GEF funds available with DOE will support household sales to remove market barriers. The SSMP contractor shall receive payments for the installation of communal facilities based on achievement of specified triggers defined in the contract.

### Household Marketing and Sales

Each household in a village is a potential customer for the SSMP contractor. The communal facility implementation also serves as demonstration of what a solar PV system can provide. The sizes of solar home systems to be sold and installed may typically be in the 20Wp to 50Wp range, and based on need and income level. Solar lanterns may also be considered for households.

As many of these rural households may not be in a position to pay in cash, the SSMP contractor is expected to develop the household sales business in partnership with microfinance institutions (MFIs). The DOE has developed programs including sourcing of funds, risk mitigation through the Loan Guarantee Fund (LGF) to support and encourage MFIs to participate in providing credit financing to households.

### Subsidies and Financial Incentives for Household Sales

Output based subsidies and financial incentives are available to both the household and the SSMP contractor. Households are eligible to receive a government subsidy of P4,000 or P8,000 (about \$80 or \$160) per system, while the SSMP contractor receives GEF financial incentives of \$1.50-2.50/Wp per system. These incentives are based on the size of the PV system.

### Other Support Facilities

The Rural Power Project also provides cost-shared grants through the Market Development Support Facility (MDSF) to support specific capacity building activities

such as training, business planning, technical assistance and market development to a participating PV company (such as the SSMP contractor, MFI, etc.).

Moreover, an Incubator Project which is a special feature of the MDSF provides for the rapid development of the business relationship between a participating PV company and a MFI. The financial support is intended to help the two entities penetrate an identified area by focusing on the co-developed business plan leading to actual PV sales, financing and installations.