

## Moving Beyond REFTA: *The PEI Success Story*

### Location

Philippines

### Problem

Major market and institutional obstacles in financing of renewable energy (RE).

### People

Rural Filipino/a beneficiaries, private sector RE companies, Government of the Philippines RE programs

### Solution

Implementation of Renewable Energy Financing and Technical Assistance Project, to support private sector and government RE efforts.

### Timeframe

1994-1997, with benefits continuing to present

### Results

Implementation of mini-hydro, micro-hydro and solar lighting projects; leveraging of \$10 billion of investment funds; development of two renewable energy development companies; establishment of local RE development NGO; continued administration of Capital Investing Fund revolving fund for RE investment.

In September 1994, with USAID support, Winrock International initiated the Renewable Energy Financing and Technical Assistance (REFTA) Project, to help the private sector and the Government of the Philippines (GOP) establish and sustain commercial renewable energy (RE) investments in the country.

While the project had three components, including technical assistance to the GOP and private sector, feasibility cost-share funding, and the Capital Investment Fund, REFTA's success came primarily from private investments, and innovative ways of structuring and financing projects.

With investments of only \$702,130, REFTA was able to leverage funds and catalyze the implementation of 3 projects: Bubunawan 7-MW mini-hydro project; Villa Escudero 98-kW micro-hydro project; and Solar Electric Company PV Dissemination project. These projects

are now operational and contributing to the country's climate change initiatives. Total investments in these projects amount to over \$10.7 billion, 15 times REFTA's own investment. The 7-MW Bubunawan mini-hydro project received a GEF grant from the IFC, and will soon (early 2004) be joined by 1-MW of on-grid solar capacity. The Solar Electric Company has also expanded operations to include pico- and micro-hydro and wind.

Using cost-share pre-investment funds of \$180,000, two renewable energy development companies (DEVCOs) were established under REFTA and a pipeline of community-based micro-hydro projects were initiated. These DEVCOs, namely Mindanao Hydropower Corporation (MINDEVCO) and Philippine BioSciences Development Company, Inc (PHILBIO) are now pursuing minihydro and waste-to-energy projects. PHILBIO's successful 60-kW waste-to-energy project in Rocky Farms, Piliia Rizal has been replicated at 6 pig farms, with 6 more interested in

applying similar technology. PHILBIO is also expanding to industrial and municipal waste systems, currently implementing 2 pilot projects, and has completed a feasibility study for a third. MINDEVCO has several projects (totaling ~35 MW) under development, for which pre-feasibility studies have been performed and necessary development permits obtained. All eight community-based projects in eight communities are operational, supplying energy services to about 1,000 households

Winrock established the Capital Investment Fund (for limited loans and equity) with USAID support as a successor organization to continue the work

of the REFTA beyond its project life. It was designed to catalyze private sector investments, and led to the establishment of what is now *Preferred Energy, Inc. (PEI)*, a Filipino NGO with a mission to promote and develop RE and energy efficiency.

Two years into the implementation of REFTA,

PEI was registered with Philippines Securities and Exchange Commission as a Philippine NGO. Nine years later, PEI continues to receive USAID support and has leveraged funding from local and international donor communities. PEI administers the REFTA Capital Investment Fund as a revolving fund for renewable energy development and has used lessons learned from the 8 community-based pre-investment REFTA projects (all still operating successfully) to design PEI's Village Power Fund, currently being pilot-tested with WB-ESMAP support.

PEI has been awarded contracts from international organizations including The World Bank, the United Nations Development Programme, and the British Department of Trade and Industry as well as local and international private RE development companies.

PEI has a solid reputation in the field of renewable and rural energy and is well positioned to continue the goal of REFTA, playing a significant role in RE promotion and development efforts in the Philippines.



*Bubunawan 7-MW mini-hydro project powers Cagayan de Oro City & vicinities in Mindanao*