

Increased Use of Renewable Resources Program for Central America

Location: Guatemala, El Salvador, Honduras, Nicaragua, and Panama

Type: New power generation using renewable energy sources

Size: 1,200 photovoltaic (PV) home systems in use; 5 MW of biomass potential power; 2 MW of hydropower

Funding: Total: US\$4,295,000

Private: US\$625,000

Public: US\$3,670,000

Objective: To develop renewable energy enterprises and projects.

Duration: 2000–2003

Scale: Urban and rural

- Institution building and access to justice and enforcement of laws

A key principle that helped attract private-sector financing was allowing energy facilities to operate under standard commercial practices. In El Salvador and Honduras, activities that helped accomplish this included forming a management team independent of the government and hiring and developing staff with appropriate skills matched to the job. Corporate restructuring of energy enterprises to support commercial operations was also important. Other principles that helped attract private-sector support included broad stakeholder participation in decision making and effective coordination among sectors, between public and private sectors, and across multiple geographic and institutional scales.

Summary

Under the Financiamiento de Empresas de Energia en Centroamerica (FENERCA) Program, five Latin American countries have integrated environmental and economic sustainability into their energy agendas. Numerous rural communities without access to conventional power grids and urban communities with unreliable power systems now have access to clean, renewable, and reliable electricity through the establishment of PV home systems and power generating facilities using hydro and biomass fuel. Entrepreneurs structured and, in some instances, initiated operations to produce clean energy for the region.

In-Country Principles That Attracted Nondonor Financing

- Capacity building and informed decision making
- Public participation in, and support of, sustainable development



Financing

Total project investment was US\$4,295,000. E+Co contributed US\$625,000 in catalytic seed capital. Public funding sources included the United States Agency for International Development (USAID) (US\$2,850,000), United Nations Foundation/United Nations Environment Program (UNF/UNEP) (US\$70,000), and United Nations Development Program/Global Environment Facility (UNDP/GEF) (US\$750,000).

Local Central American financial institutions are considering investing US\$2,000,000 in renewable energy projects and initiatives.

The Project

FENERCA, a USAID initiative, seeks to promote the development of renewable energy enterprises and projects, while increasing the capacity of financial institutions and non-governmental organizations (NGOs) in the region. The program provides enterprise development services, assists in securing financing, and provides regulatory and policy alternatives to local governments.

The project has enabled entrepreneurs to structure and, in some cases, initiate clean-energy-producing projects. As a result, several rural communities have gained access to clean energy services. In addition, urban areas have benefited from increased grid capacity.

Residential, industrial, and commercial sectors are benefiting through improved health, education, lighting, refrigeration, drinking water, cooking, and recreation.

Technical Data

Technologies include biomass (sugar cane bagasse) for increased grid capacity, geothermal, hydro (turbines), solar PV (home energy systems), and wind. To date, 1,200 solar home systems have been installed, providing 375 kWh/d. Five megawatts of biomass power potential have been developed, and approximately 2 MW of electricity will be generated through three hydro projects under construction.

Performance Data

Of the approximately 120 proposals identified under the FENERCA program, 24 received enterprise development services and 15 have business plans under review. Two enterprises are delivering new clean energy, and three are under construction.

In Honduras, 18 proposals for renewable energy projects have been approved by the electric utility, and a local Honduran financial institution has provided a loan of US\$550,000 to finance the construction of a hydroplant.

Several direct and indirect jobs have been created, road conditions that facilitate commuting between regions have improved, indoor use of kerosene has been displaced, and access to clean energy in rural communities has been provided.

Greenhouse gas emissions have been reduced by the displacement of fossil fuels used to generate electricity.

Comprehensive training sessions on business plan development and renewable energy finance were held to strengthen the capacity building of entrepreneurs, NGOs, and financial institutions. As a result, local financial institutions are considering US\$2,000,000 in active investments, and funds totaling US\$525,000 have been committed and/or invested by E+Co in three specific project proposals.

Participants and Roles

FENERCA is an initiative of the USAID being implemented by E+Co, in close partnership with BUN-CA (Biomass Users Network-Central America).



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