

Ecuador

Lessons Learned Case Study



The Project

- San Cristóbal – Galápagos 2.4-MW wind power project, complemented by solar photovoltaic (PV) systems and training
- First large-scale wind project in the Galapagos
- Built on a UNESCO World Heritage site, complementing the United Nations Development Programme (UNDP) renewable energy program for the Galapagos Islands
- Supplies an average of 40% of the island's electricity needs

Public-Private Participants

Public Sector:

- The Ministry of Electricity and Renewable Energy of the Republic of Ecuador
- Elegalapagos EP, the government-owned electricity utility for the Galápagos islands

Private Sector:

- Eólica San Cristóbal S.A. – EOLICSA: the owner and operator of the San Cristóbal Wind Power Project
- The company is owned by the San Cristobal Wind Project Commercial Trust: American Electric Power (U.S. utility) and RWE (German utility) are the "Settlers" and Elegalapagos EP is the Adherent and the Beneficiary. AEP and RWE are members of the e8.

LESSONS LEARNED

Energy Policies

- Some policies on tariffs as subsidies for renewable energy, permitting and environmental issues had to be reviewed to facilitate project development.
- Public agencies were open to cooperate with private initiatives for the development of the project, particularly because of the importance of the Galápagos Islands as a World Nature Area.
- Rural Electrification Fund (FERUM Fund) rules were modified to permit financing of renewable energy projects.

Financing

- Funds from the e8 companies with complementary financial support from United Nations Foundation (UNF) were provided as grants.
- A commercial trust was structured to administer and manage the project funds. A private Ecuadorian financial agency was designated as the Trustee.
- The Ecuadoran government contributed with financial resources from the FERUM Fund.
- Ecuadoran law allowed the project to receive a percentage of income tax as voluntary donations from Ecuadoran taxpayers.
- Interests earned by funds were also a component of the financial structure.
- A small financial gap was filled with a short-term loan provided with UNF funds through UNDP.

- Project development and environmental studies were totally funded and led by charitable grant and technical expertise from e8 companies.
- A local public financial counterpart shall be provided to guarantee local involvement and support.

Replicability

- The Ecuadoran Government with UNDP support is replicating the project on nearby Baltra-Santa Cruz Island.

Long-term policy framework

- The success of the San Cristobal Project has encouraged the Ecuadorian Government to move rapidly in the direction of "zero fossil fuels" for the Galapagos by 2015.

Research and Development

- Some of the new projects could be implemented within a R&D framework such as flywheels, mini hydro pump storage, hybrid control systems and geothermal.
- Local private universities together with international and local NGOs could be interested in developing R&D programs in emerging clean technologies.

Conclusions

- Public-private partnership is the unique valid scheme for the development of energy programs in the Galapagos Islands.
- Because of islands' conditions and the government's limited resources, it is very hard (or impossible) to conduct a private participation on profitable basis; but, at least self-sustainability for operation and maintenance through adequate tariffs to users must be implemented.
- Public participation shall always be needed through a co-financing scheme, and by means of strong supports in all the development phases, like permitting, environmental assessments, importation procedures, taxes policies, tariffs regulations, etc.
- Key to the project's success was the cooperative work between developers with public agencies and the regulator.
- Strong involvement by the local project manager in all phases of the project contributed to success.

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