



energy *in* action

What is e7?

The e7 is a non-profit organization consisting of nine leading electric utility companies that spearheads projects and human capacity building activities in developing nations worldwide that exemplify e7's mission:

"To play an active role in global electricity issues and to promote sustainable development."

This diverse international group offers electricity sector expertise and practical competency in electricity generation, transmission and distribution. With field proven expertise in the planning, management, design, operation and maintenance of energy facilities, member companies together provide an all-encompassing scope of the global electricity industry to assist developing countries.

e7 members are:

American Electric Power (USA)
Electricité de France (France)
ENEL (Italy)
Hydro-Québec (Canada)
Kansai Electric Power Company (Japan)
Ontario Power Generation (Canada)
RWE (Germany)
ScottishPower (UK)
*Tokyo Electric Power Company (Japan).

*Observer status

Galapagos Islands: San Cristobal Island Wind Repowering Project

The e7 Fund, in partnership with the Ecuadorian authorities and the United Nations Development Programme (UNDP), and with support from the United Nations Foundation, is actively planning the installation of wind turbines on San Cristobal Island in the Galapagos Archipelago in order to replace a substantial portion of the electricity presently being produced by large diesel-powered generators. The project is part of UNDP's Renewable Energy Program for the four inhabited islands in the Archipelago.

The objectives of the project include:

- Reducing the risks of oil spills associated with transportation and delivery of fuel to San Cristobal;
- Reducing fossil-fuel emissions and greenhouse gases;
- Making San Cristobal less dependent on the supply of diesel fuel for the generation of electricity on the Island;
- Providing the local electric utility, Empresa Electrica Provincial Galapagos S.A, with the operational, technical, environmental and financial knowledge necessary to operate a fleet of wind turbines on a sustained basis;
- Providing valuable experience for the global promotion of small-scale power generation and distribution systems;

Continued on back



Giant tortoises of the Galapagos Islands

Continued from front

- Contributing to the protection of unique animals and plants;
- Increasing the access of the local population to renewable energy; and
- Developing public awareness of effective demand side management and energy conservation practices.

In a Memorandum of Understanding, the government of Ecuador has pledged to assist E7 with this project, which is on the country's National Priority List. As currently envisioned, this \$6 million project will involve construction of a wind park that will be able to generate approximately 1,800 kilowatts of electricity, displacing more than 50 percent of the electricity presently being produced by diesel-powered generators.

After careful environmental assessments made by E7 and the Galapagos National Park Service, the most appropriate area for the wind park was selected. Measurements of wind resources are underway in order to optimize design and financial feasibility factors for the project.

The next steps will involve defining the precise site for the wind turbines, within the pre-selected area, as well as the routing of the access road and transmission line from the mountain top in order to make sure E7 protectively integrates the project into its exceptional natural environment. In addition to the remaining environmental study requirements, the terms and conditions for a joint venture agreement with the local electric utility need to be completed before continuing with the engineering, procurement, construction and start-up process.

Once all the approvals are received, E7 estimates that the delivery of equipment to the Island would begin in 2004, and that the wind turbines would begin producing electricity in 2005.

The proposed joint venture agreement with the local electric utility will provide its personnel with the background, training and expertise necessary to operate and maintain the wind turbines in a sustainable manner for the long term.

Replacing diesel-generated electricity with wind-powered electricity on San Cristobal Island will reduce emissions of carbon dioxide. Any certified carbon credits resulting from such emission reductions will be shared equally by the Ecuadorian government and by E7.

Ultimately, E7 and its partners believe that the San Cristobal Island project will establish a model for replacing diesel-powered generators with renewable energy sources in the Galapagos and other islands around the world.

For more information, contact: Paul Loeffelman, American Electric Power. Phone: 614-716-1243. Fax: 614-716-1911. E-mail: phloeffelman@aep.com



Marine Iguana on San Cristobal Island

Partnerships can help bring energy to two billion people worldwide who are without electricity. Governments, financial institutions and other organizations can

work with electricity companies to make it happen. Put energy into action for sustainable development around the globe.

April 2003

For more information on E7, contact: Secretariat | E7 Network of Expertise for the Global Environment
Telephone: 514.392.8876 | Fax: 514.392.8900 | E-Mail: e7secretariat@hydro.qc.ca | www.e7.org

