

# Energy Development in Island Nations

Partnering to Increase Island Energy Security Around the World

The international partnership for Energy Development in Island Nations (EDIN) aims to help island nations and territories increase their energy security by adopting energy efficiency measures and deploying renewable energy technologies.

The EDIN partnership was formed by Iceland, New Zealand, and the United States in 2008, and a steering committee comprising representatives of the three countries holds bimonthly teleconferences and meets annually to set priorities, review progress, and plan future activities. EDIN takes a comprehensive approach, bringing together policy, technical, and financial experts to guide clean energy development and deployment in specific regions and island communities. Based on experience gained through direct project experience,



*Projects undertaken by EDIN will assist islands in developing clean energy policies, financing, and technologies suited to their unique energy and infrastructure needs to help reduce their dependence on imported fossil fuels.*

EDIN will work to develop a holistic model to address critical energy use and infrastructure issues that can be replicated by island nations with developed energy infrastructure.

## Conducting Pilot Projects to Test Methodologies and Establish Models

EDIN participants are currently engaging in pilot projects to test approaches and methodologies with the aim of establishing replicable models.



## The United States: Working to Reduce the U.S. Virgin Islands' Dependence on Fossil Fuels

Building upon the experience the United States has gained through its participation in the Hawai'i Clean Energy Initiative (HCEI), the U.S. Virgin Islands (USVI) pilot project will focus on achieving specific and measurable clean energy targets by developing indigenous renewable energy resources and improving energy efficiency. The USVI aims to stabilize energy costs, protect the environment, and create green jobs while achieving a 60% reduction in fossil fuel-based energy consumption by 2025 through renewable energy generation and energy efficiency. This project will comprehensively address technology, policy, and financing to support the territory's commitment to fundamentally changing the way it uses energy.



### **Iceland: Helping Dominica Develop Its Renewable Resources**

Applying Iceland's proven model of transition from a fossil fuel-dependent economy to a clean energy economy, the Iceland and Dominica Collaboration pilot will support the capacity-building efforts of the Commonwealth of Dominica. Dominica has significant geothermal resources and hydropower potential, and Iceland will lend its longstanding technical and legal expertise in developing this sustainable energy source to help Dominica address the economic, social, and environmental crises it faces.



### **New Zealand: Assessing Geothermal Potential in the Pacific**

The New Zealand pilot project has assessed the potential for geothermal electricity generation in a number of Pacific island nations, including U.S. territories, as an alternative to high-cost diesel electricity generation. The project report, released in June 2009, was based on an initial screening of 20 Pacific island nations and a subsequent, more detailed review of the five with the highest geothermal energy potential. The report provides valuable information for evaluating the suitability of geothermal energy as part of the islands' energy mix. The full report is available at [www.edinenergy.org/pilot\\_projects.html](http://www.edinenergy.org/pilot_projects.html).

## **Collaborating to Advance Common Clean Energy Goals**

EDIN works to advance common goals in clean energy deployment through cooperative activities among the partner countries that include fostering research, demonstration, and deployment projects; arranging short-term visits and exchanges of expertise, trade missions, and site visits; organizing conferences, symposia, and workshops; training technical experts; and developing clean energy curricula for schools, universities, and trade institutions.

Although not a funding organization, the EDIN partnership is focused on providing technical assistance to islands with developed energy generation and distribution systems to help increase the penetration of clean energy technologies and policies. Over the next several years, EDIN aims to make a practical contribution to reduced fossil fuel consumption, increased use of renewable energy, development of replicable working models and educational resources, and documented results on several additional projects.

While EDIN is still in the early stages of development, the partnership may engage in additional projects and is open to the possibility of adding new participants that are similarly committed to deploying renewable energy and energy efficiency technologies, as well as implementing policies that advance the goals of EDIN.

Island nations and countries interested in more information about EDIN activities and opportunities should visit the EDIN Web site at [www.edinenergy.org](http://www.edinenergy.org) and/or contact the EDIN Secretariat at [edinenergy@nrel.gov](mailto:edinenergy@nrel.gov).



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### **National Renewable Energy Laboratory**

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