Energy Development in Island Nations (EDIN) - Purpose







Why Islands?

- Islands are often <u>highly dependent on fossil fuels</u> for electricity <u>and</u> transportation and often have <u>very high retail electricity rates</u>
 - Hawaii pays 3 times the national average for electricity; CNMI \$0.40/kWh; Cayman Islands \$0.70/kWh (U.S. average in 2008 is \$0.10/kWh)
 - Electricity should be affordable in the 21st century
- Islands often have <u>abundant renewable resources</u> and small populations, so are ideal places to showcase the potential of renewable energy penetration
 - Through the Hawaii Clean Energy Initiative (HCEI), DOE is working in Hawaii to supply 70% of primary energy from renewable energy by 2030 EDIN builds on this initiative
- Islands are <u>vulnerable to the impacts of climate change</u>, such as sea level rise and greater severity and frequency of hurricanes

EDIN will facilitate the scaling of renewable energy and energy efficiency technologies in island nations and territories

Energy Development in Island Nations (EDIN) - Participants



- Partnership began officially in August 2008, with Iceland, New Zealand and U.S. (DOE/EERE) as founding members
- EDIN will build upon the HCEI model of transforming an island with existing electrical infrastructure to a clean energy economy through technical, financial and policy assistance.
- April 2009 EDIN announced three pilots projects
 - The U.S. (DOE and DOI) is working with U.S. Virgin Islands towards clean energy goals
 - Iceland will assist Dominica with harnessing its geothermal resources
 - New Zealand conducted a survey of geothermal potential in numerous Pacific islands, working with select islands to gauge potential of utilizing these resources
- EDIN partners are exploring possibilities for regional workshops to aid in transferring lessons learned from projects



EDIN Activities – General



Ongoing general activities of EDIN:

- Create knowledge modules for replicable model for islands to transform to clean energy economy – e.g., model templates of EE/RE policies and contracts – that can be accessed via EDIN website
- Visits and exchanges of experts to island sites/conferences in the policy, finance, and technology areas
- Organization of conferences, symposia, and workshops
- Establishment of a network of project developers and financiers
- Write-up detailed case studies of island EE/RE projects on website
- Organize collaboration with other agencies; multi-lateral institutions; regional bodies (CARICOM; Pacific Islands Forum)
- Develop content on website to aid in transferring knowledge and lessons learned (currently developing a "toolkit")
- Ultimately become a clearinghouse of island EE/RE energyrelated information



