

The Global Sustainable Energy Islands Initiative (GSEII)

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Small Island Developing States (SIDS), the focus of many concerned climatologists around the globe, are rightfully receiving attention. Amid the resource wealth and sheer beauty of these islands, they are plagued by and dependent upon the actions of industrialized nations. With the issue of sea level rise coming out of obscurity and the accelerating pounding that storms are inflicting upon these nations' landscapes and infrastructures, it is no wonder that these nations are striving to provide exemplary methods by which greater contributors to the ubiquitous global warming dilemma may follow. Their intentions are not histrionic. Their plight is reality and, if ignored, could eventually lead to the literal submersion of a way of life.

In January of 2005 the Mauritius International Meeting on SIDS (BpoA+10) will begin, serving as a serious follow-up to the Global Conference on the Sustainable Development of Small Island Developing States that convened in Barbados in 1994 to address the problems mentioned above. Commensurately, states reached various conclusions on rational, substantive measures to

combat global warming while providing energy for their respective citizens. Sustainable Development Plans were the major result, and this vital conference will review the successes and plights connected with fulfilling these mandates. As such, the conference is slated to review the resolutions and actions proposed and agreed upon by those in at-



tendance in 1994 and to highlight the implementation of those projects. Under the mandates of the first conference, nations are expected to produce results at this conference, giving them opportunities to showcase their progress. Lastly, this conference should serve as a vibrant forum to pique interest and concern from other participants.

GSEII-UNIDO Side Event

The United Nations Industrial Development Organization (UNIDO) and GSEII are working together to help implement the sustainable energy plans of the islands states of St. Lucia, Grenada and Dominica. To highlight progress made to date, a side event entitled "Clean Energy Islands – SIDS as Examples of Sustainable Development," will be organized at the SIDS International Meeting in Mauritius in January 2005. The event will present a vision of the energy future for SIDS

based on existing practical examples of commitment and leadership. Additionally it will highlight the leadership taken by the SIDS on clean energy and encourage the rest of the world to follow their example. By highlighting success stories from the small island states, this event will seek to

build international public and private sector support for the SIDS' actions on renewable energy.

The event is intended to present an optimistic view of the future and emphasize that with political will, commitment and collective action, the SIDS and the international community can act effectively. A key objective of the event will be to invite additional donor commitments and support for the SIDS national sustainable energy plans.

*"UNIDO's vision is to improve the living conditions of people and promote global prosperity through offering tailor-made solutions for the sustainable industrial development of developing countries and countries with economies in transition."*

## Two Pacific Islands States Partner with GSEII

The Republic of the Marshall Islands, a nation of scattered reefs and atolls in the North Pacific, is under grave threat from climate change and an accompanying issue: sea level rise. With its highest point standing at a mere thirty feet, the Island's existence is in danger of submersion as industrialized countries continue to equivocate in their lackluster attempts to tackle global warming.

This group of islands sits at a favorable location for deriving its energy needs from the fierce tropical sun. Impressively, the government of the Marshall Islands has implemented extensive solar energy projects to electrify homes, workplaces and other facilities. These projects have assisted the Marshall Islands in becoming a formidable power in the effort to utilize small islands' abundant solar en-

ergy resources.

The Marshall Islands will be joining the GSEII, and presenting their plan at the GSEII side event in Mauritius.



Solar Panel, Marshall Islands

Fiji has made a commitment to trying to become 100% renewables based and the local utility is also supportive. The GSEII consortium will be working on a pre-feasibility study for a bio-diesel facility using coconuts as the feedstock, whereby Caterpillar is providing a 30 MW power plant and the Government of Fiji is to provide the fuel. This study would also look at related economic and productive applications associated with the plan.

## News from the Caribbean

**1 Grenada/Hurricane Ivan:** The Atlantic hurricane season has proved to be one of massive proportions- both in the astounding size and strength of Hurricanes Charley, Frances and Ivan and in the staggering level of destruction that they caused.

In particular, the nation of Grenada witnessed the depth of the economic abyss into which catastrophic hurricanes can throw them, as Hurricane Ivan thrashed the island on September 7 and 8 2004, killing twelve and destroying 90% of the nation's homes. A Category 4 storm packing a potent punch with winds of 140 mph, Ivan delivered serious setbacks to this tiny Caribbean nation vying for economic success.

In addition to Grenada, other nations have been belted by high-powered hurricanes this year include Cuba, Jamaica, the United States and Haiti. Grenada has sought and received

international aid to rectify its current situation and the rebuilding process is well under way, as the international community has responded positively.

Eighty percent of the electric grid was damaged and it is expected to take months by the time the power is



restored to the Northern parts of the main island. GSEII is working with the Ministry of Agriculture, Energy & Works in Grenada to identify opportunities for renewable energy and energy efficiency measures during this period of reconstruction.

**2 St. Lucia/ Energy Week:** The Caribbean Island of St. Lucia observed Dec 6<sup>th</sup> – 10<sup>th</sup> as the Energy Awareness Week. This initiative was taken by the government of St Lucia as part of the effort to reduce their dependency on fossil fuels and to become one of the first nations to develop a comprehensive sustainable energy plan. Themed "A Vision for St Lucia's Energy Future", the event opened with a keynote address by the Minister for Physical Development, Environment & Housing, Honorable Ferguson John. In his speech, Mr. John reiterated the importance of hosting such events as a move aimed at working seriously towards securing the energy needs for the future.

The main event for the week, sponsored by the Climate Institute, was an energy exhibition, which opened with the formal launching of an energy efficient lighting project jointly undertaken by Climate Care of United Kingdom and

the Government of St. Lucia. A school project competition was also organized in order to encourage students to learn more about energy efficiency.

The event was also the venue for a seminar on national and regional energy initiatives. A panel discussion on renewable energy initiatives was aired on the National Television Network as part of the awareness and outreach efforts.

This week was an important step in St. Lucia's progress towards achieving an economy dependent on clean and green fuel alternatives. It has helped facilitate development of a solid energy policy for St. Lucia and has also been instrumental in projecting St. Lucia as a country with a bright future in the field of alternative fuel technologies.

**3** **Dominica/Geothermal:** A team of high level Geothermal Scientists and international experts in geothermal resource development will begin confirming the potential of the geothermal fields in Dominica. Led by the GSEII partner, Organization of American States (OAS) and with grant money from the Global Environment Facility (GEF), and in partnership with the United Nations Environment Programme (UNEP), the Eastern Caribbean Geothermal Development Project (Geo-Caraïbes) aims to create positive conditions for the commercial development of geothermal power generation in the Eastern Caribbean. In addition to the resource exploration, the project is assisting the governments of Saint Kitts & Nevis, Dominica and St. Lucia with the prepara-

tion of Geothermal Resource Development Laws, and will establish an estimated \$10 million regional Drilling Risk Fund that will provide commercial developers with low cost financing for the high risk exploratory drilling phase.

The Geo-Caraïbes Project seeks to overcome the barriers to the development of geothermal power in the Eastern Caribbean and seeks to catalyze the development of one or more geothermal power plants that might export electricity to several islands of the region, including Guadeloupe and/or Martinique.

Earlier in the year a host of conferences and expeditions took place, including the Project Launch Workshop held in Guadeloupe, a resource exploration mission to Nevis and a legal/policy mission to St. Lucia.

### *Update on Projects — St. Lucia, Grenada and Dominica*

GSEII partners with the additional support from UN Foundation/UNIDO are assisting the three participating Caribbean nations in their implementation of sustainable energy plans. GSEII works closely with the local utilities on most of its projects and also organizes training sessions on renewable energy technologies for utilities professionals on an annual basis in collaboration with the regional utilities associations. The projects that were selected for the 2004-07 phase are currently at various stages of implementation. The following table presents an update and status as of December 2004, and gives future implementation plans of these projects:

<b>St. Lucia</b>	LUCELEC Point de Caille 4.25 MW Wind Farm St. Lucia Solar Hot Water Heating Financing Program St. Lucia Ciceron Landfill Gas to Energy Project Poultry Litter to Energy Project Sulphur Springs Geothermal Project Energy Efficient Lighting Project Energy Audits & Training Project for Hotel Industry Energy Efficiency and Renewables Awareness Campaign	Wind analysis ongoing by LUCELEC To be launched in Spring 2005 Pre-feasibility completed Pre-feasibility completed Part of Geo-Caraïbes (OAS) Complete - 6000 bulbs installed Complete – Fall 2004 Energy week held – Dec 2004
<b>Dominica</b>	Geothermal Project Pre-feasibility Development Efficiency improvements in DOMLEC Distribution System Dominica Solar Hot Water Heating Financing Program Pilot Phase for a potential 4MW Wind Farm DOMLEC Micro Hydro Project Energy Efficiency Lighting Project	Part of Geo-Caraïbes Project (OAS) Study in progress by UNIDO Planned for late 2005 or 2006 Initial stages of discussion Pre-feasibility stage Planned for Fall of 2005 or 2006
<b>Grenada</b>	225 kW Wind Turbine on Carriacou island Grenada Nutmeg Shell to Energy Project Grenada Solar Hot Water Heating Financing Program Energy Efficient Lighting Project PV system for Grenada Chocolate Company	Discussion renewed with utility Postponed indefinitely (hurricane) Expected launch in Spring 2006 10,000 bulbs to be installed in 2005 Found not economically viable

## Endangered Islands Campaign

Although island nations are actively promoting clean energy and international awareness on climate change, international commitment and cooperation, particularly among industrialized countries, are paramount in order to mitigate and adapt to the exacerbating impacts of climate change. Without quantifiable international efforts, island nations stand the risk of eventually being submerged.

Working with groups skilled in climate adaptation and its GSEII partners such as the International Hurricane Research Center, Island Resources Foundation, James Lee Witt Associates and the International Codes Council, the Climate Institute is developing an Endangered Islands Campaign, to be launched at



the January 10-14, 2005 SIDS conference in Mauritius.

This nascent effort will enhance the capacity of island nations to respond to climate change by transforming current pollution-laden energy sources into renewable and indigenous ones and developing anticipatory coastal and emergency preparedness measures to lessen human, environmental and structural damage. Furthermore, it will elevate building code standards and land use planning to ensure resiliency from natural disasters and utilize natural resources such as passive solar. The World Bank is now managing \$2 million of Global Environment Facility Funds to implement specific climate adaptation measures in three Caribbean nations- St. Lucia, Domin-

ica, and St. Vincent and the Grenadines. The Climate Institute is partnering this effort and is seeking to attract other institutions to help these nations develop an anticipatory strategy.

Once the Endangered Islands Campaign has been fully solidified the Climate Institute will seek to build partnerships between Caribbean island nations and US and Canadian coastal cities such as Miami, New Orleans, Charleston, Boston and Halifax to work on common vulnerabilities, improved building design and implement clean, sustainable energy infrastructure. Ultimately similar links may be forged among US cities such as Honolulu and San Francisco. Moreover, the cities of Sydney, Melbourne and Cairns, Australia and Wellington and Auckland, New Zealand may partner with numerous small-island nations in the Pacific.



We want to highlight the support and commitment of our donors including: Rockefeller Brothers Fund, United Nations Foundation, Renewable Energy & Energy Efficiency Partnership, United States Agency for International Development and the Government of Italy.

### Donors

The GSEII donors have been instrumental in enabling the Consortium to work in the small island nations - areas most susceptible to climate change impacts but often overlooked by the multilateral financial community.

*The Global Sustainable Energy Islands Initiative (GSEII), a consortium of international NGOs and multi-lateral institutions, has been organized to support the interest of all small island states and potential donors by bringing renewable energy and energy efficiency projects, models, and concepts together in a sustainable plan for small island nations. The GSEII seeks to showcase national efforts to significantly reduce greenhouse gas emissions.*

#### THE GSEII CONSORTIUM

##### Members include:

- **Climate Institute**  
[www.climate.org](http://www.climate.org)
- **Counterpart International**  
[www.counterpart.org](http://www.counterpart.org)
- **Energy and Security Group**  
[www.energyandsecurity.com](http://www.energyandsecurity.com)
- **International Network for Sustainable Energy**  
[www.inforse.org](http://www.inforse.org)
- **Organization of American States**  
[www.oas.org/usde](http://www.oas.org/usde)
- **Winrock International**  
[www.winrock.org](http://www.winrock.org)

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