

Reflections from Samoa: "Renewable energy for economic development in the Caribbean"

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There are three drivers for scaling up renewable energy in the Caribbean islands: energy security to reduce dependence on expensive imported fossil fuels; fossil fuel costs and price volatility and the knock-on effect on competitiveness of goods and services; and environmental concerns around the contribution of fossil fuels to climate change. For the Caribbean, the first two economic arguments are driving the growing interest in wind, geothermal and solar energy as the top options.

The Third International Conference on Small Island Development States (SIDS) in Samoa featured renewable energy as one of the key themes in the plenary presentations by Caribbean countries and during side event discussions.

Dr. Didacus Jules, Director General of the Organisation of Eastern Caribbean States ([OECS](#)), gave an excellent summary assessment of the drivers for change and the renewable energy initiatives and issues. Dr. Jules outlined the three drivers for scaling up renewable energy in the Caribbean islands as: energy security to reduce dependence on expensive imported fossil fuels; fossil fuel costs and price volatility and the knock-on effect on competitiveness of goods and services; and environmental concerns given the contribution of fossil fuels to climate change. With electricity access almost 100% across Caribbean countries (except for Haiti and Guyana), and low carbon emissions per capita (with the embarrassing exception of Trinidad and Tobago, which has one of the highest in the world but seems to be unconcerned about it), the real energy issue is around security and cost.

Some Caribbean countries have pursued [PetroCaribe](#) agreements, where Venezuela offers very concessionary rates under a debt swap arrangement. This has received mixed reviews internationally resulting in increasing debt of Caribbean countries to Venezuela. In fact, Dr. Jules reported that debt is now approaching US\$5 billion for borrowing countries. However, without this option, Dr. Jules feels that the OECS countries would have been in terminal economic crisis. With the death of President Chavez and uncertainty about the future of these arrangements, the OECS now wants to manage the relationship more strategically, for example via exploring sinking funds and trade arrangements.

As petroleum imports continue to dramatically increase across the OECS, vital foreign exchange is being spent that needs to go towards paying off the incredible debt burdens. In his plenary statement, Dr. Kenneth Darroux, Dominica's Minister for Environment, Natural Resources, Physical Planning and Fisheries, lamented that "once we stop sending so much of our precious foreign exchange out of our countries we can stop the bleeding."

The cost of electricity in the OECS is among the highest in the Caribbean and this is having serious knock-on impacts on the costs of goods and services, adding to other challenges that reduce competitiveness of Caribbean products in regional and international markets. With limited export opportunities, Caribbean countries cannot earn the foreign exchange required for energy purchases, far less for debt servicing.

International non-profit organisation, the [Carbon War Room](#), noted that less than 5% of the energy in the Caribbean is renewable, and highlighted key barriers as:

- the monopoly by public or private utilities on generation, distribution and transmission;
- lack of investor confidence because of high risks and a weak policy environment;

- scepticism of private sector involvement in controlling energy;
- weak capacity of governments to evaluate the overload of proposals they receive on different technology options; and
- worry about grid stability as intermittent renewables are introduced.

A recent [study](#) by the Caribbean Natural Resources Institute ([CANARI](#)) conducted for the Caribbean Development Bank ([CDB](#)) explored the economic impacts of a few ongoing renewable energy initiatives in the Caribbean. The study outlined a series of recommendations on the importance of: creating an appropriate policy and institutional environment; the critical combination of government policy, private sector innovation, markets, and international and domestic finance; a consolidated approach and international finance to overcome risk-related market failures; scaling up best practices nationally and regionally; government role in oversight, regulation and enabling; government ownership to yield policy co-benefits; structured processes of learning from experience; data, information and benchmarks to measure progress; and putting renewable initiatives in the broader sustainable development context.

Dominica is one of the countries exploring the potential for renewable energy in a big way. It already boasts that up to 70% of its electricity is from hydropower. For several years Dominica has also been exploring the potential of geothermal energy using some of its own funds (for example, investing the equivalent of 10% of the last annual budget) and working in partnership with [SIDS-DOCK](#) and the [Clinton Climate Initiative](#).

They are also hoping to attract private investors to support their ambition to export energy to neighbouring Guadeloupe and Martinique via undersea cables. Minister Darroux boasted that Dominica is a vanguard of the transition to sustainable energy and can be a model for the world. Certainly a regional approach is needed as Dominica and many other countries explore how they can generate renewable energy to service local needs but also, importantly, to export to neighbouring islands.



Warmmae Letang ("rowing lake" in Creole) in the mountains of Dominica generates hydropower and also supports community ecotourism activities.

Increasing the share of renewable energy is an absolute necessity for Caribbean countries as they struggle with alarming debt to Gross Domestic Product (GDP) ratios (an International Monetary Fund [report](#) estimated overall public sector debt in the Caribbean was about 79 percent of regional GDP in 2012). The 2014 CDB study notes that "financing poses the biggest challenge as governments do not have the fiscal space to take on the high initial capital costs of renewable energy. Money now available from Multilateral Environmental Agreements and through the International Swaps and Derivatives Association is too little and too disparate. A pooled financing mechanism is desperately needed, along

the lines of the SIDS-DOCK support programme for SIDS, but specifically for the Caribbean. CDB can potentially provide such a mechanism."

Caribbean governments need a coordinated approach, supported by their international development partners, to create this mechanism which is vital for sustainable development in Caribbean SIDS. Opening of the treaty supporting the SIDS-DOCK programme at the Samoa conference is an important step forward and hopefully Caribbean governments will sign on. Negotiations at the Samoa conference need to lead to concrete benefits to Caribbean sustainable development so that we can feel that the huge carbon footprints of these international conferences are worth it.

About CANARI

The Caribbean Natural Resources Institute is a regional technical non-profit organisation which has been working in the islands of the Caribbean for more than 20 years. Our mission is to promote equitable participation and effective collaboration in managing natural resources critical to development. Our programmes focus on research, sharing and dissemination of lessons learned, capacity building and fostering regional partnerships.

Connect with us:



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