

***Fighting Climate Change through Innovation
and
Entrepreneurship!***

A Caribbean Perspective



OUTLINE

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- Impact of Climate Change in the Caribbean
- CCIC Participating countries
- Focus Areas
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BACKGROUND

The Caribbean Climate Innovation Centre (CCIC) is an initiative funded by the World Bank/ *infoDev* in the Caribbean.

This is part of a larger World Bank/InfoDev's Initiative known as the Entrepreneurship Program for Innovation in the Caribbean (EPIC).

It is a five year US\$20M program funded partly by the Government of Canada to build an enabling ecosystem that foster high-growth and sustainable enterprises throughout the Caribbean.

EPIC has three (3) components (i) Climate Technology (ii) Mobile Technology and (iii) Gender Entrepreneurship.

Background (cont'd)

The activities of CCIC are being implemented in two (2) phases;

(1) Launch Phase – Building regional linkages across the Caribbean by identifying talent, facility providers and business support organizations in the Caribbean.

(2) Scale-Up Phase – Once regional linkages and initial programs have been launched, we will begin implementing and scaling up of core services and programs

The Impact of Climate Change in the Caribbean

The Caribbean shares disproportionate negative impact from changing climates contrasted with its small global greenhouse gas (GHG) footprint.

The regions Small Islands Developing States (SIDs) share a high degree of vulnerability to sea level rises, degradation to the natural ecosystems, extreme weather events such as strong hurricanes and devastating floods, rising temperatures resulting in increase severity of diseases etc. to crops are an issue.

The Impact of Climate Change in the Caribbean (cont'd).

Moreover the Caribbean is particularly susceptible given the reliance on expensive fossil fuel and other resources that contribute further to the region's environmental and economic difficulties.

A Tuft University study estimates that based on tourism losses and damage to infrastructure due to sea level rises (exclusive of Hurricane Damage) the Caribbean annual cost of inaction is likely to be US\$11 billion annually by 2025, or 5% of the region's 2004 GDP.

The Impact of Climate Change in the Caribbean (cont'd).

Key industries such as tourism, fishing, agriculture, energy and water supply will need to adopt new and innovative approaches and solutions to mitigate and adapt to climate change, ensure energy and resource security and contribute to the green growth and economic development of the region.

Innovations in climate and clean technology should be driven by local entrepreneurs, innovators and new ventures that transfer, develop and adopt locally-relevant solutions.

The Impact of Climate Change in the Caribbean (cont'd).

There are also many highly educated individuals throughout the region working in institutions that can be a ready resource to support an innovation ecosystem for climate and clean energy technologies.

The Caribbean next phase of growth is critically dependent upon its ability to develop, adapt, and adopt innovative climate related technologies and systems. Such locally-applicable solutions will enable the region to combat climate change and provide energy, resource and food security resulting in shared prosperity for the region.

The Impact of Climate Change in the Caribbean (cont'd).

In the long term (over 10 years), assuming continued financial support, it is projected that CCIC's supported ventures will generate close to 4000 cumulative jobs and mitigate 90,000 tons of CO₂e.

We like to see ourselves as “Thinking Globally while Acting Locally”.

PARTICIPATING COUNTRIES

The 14 CCIC participating countries include:

- | | |
|---------------------|--------------------------------|
| ● Antigua & Barbuda | ● Jamaica |
| ● Bahamas (The) | ● Montserrat |
| ● Barbados | ● St. Kitts & Nevis |
| ● Belize | ● St. Lucia |
| ● Dominica | ● St. Vincent & the Grenadines |
| ● Grenada | ● Suriname |
| ● Guyana | ● Trinidad & Tobago |



Bahamas

Cuba

Dominican Republic

Anguilla (GB)

St. Martin

Montserrat (GB)

Belize

Jamaica

Haiti

Puerto Rico (USA)

St. Kitts and Nevis

Antigua and Barbuda

Guadeloupe (FR)

Dominica

Martinique (FR)

Aruba

St. Vincent and the Grenadines

St. Lucia

Barbados

Trinidad & Tobago

Guyana

Suriname

French Guyana

OUR MANDATE

- We operate in the countries in red on the map shown on the previous slide,
- To empower participating countries to proactively and profitably adapt, develop and deploy climate technologies (clean technologies) and business models.
- To promote innovation and entrepreneurship among Small and Medium-Sized Enterprises (MSMEs).

OUR MANDATE (cont'd)

We target small and medium enterprises -SME's. This is not by chance as it is well known that the largest percentage of employment/job creation globally is generated by small businesses.

In Indonesia, for example, it is believed that SME's account for 90% of the total workforce and employs especially women and youth.

FOCUS AREAS

To identify market needs, opportunities and challenges, infoDev conducted a detailed analysis and an extensive in-country, multi-stakeholder engagement process, where stakeholders from the region were convened for a series of workshops, focus groups, surveys and interviews.

The general idea was to explore the barriers to climate technology innovations and entrepreneurship in the Caribbean and the design of appropriate solutions to these barriers in the form of CCIC programs, services and support.

FOCUS AREAS (Cont'd)

The CCIC focuses on five (5) thematic areas:

Resource Use Efficiency: Waste-to-energy, materials recovery, reuse and recycling.

Water Management: Potable water, rainwater harvesting, efficient irrigation, wastewater treatment and recycling, water use efficiency, desalination.

Sustainable Agribusiness: Water/energy efficient irrigation systems; waste management; high-value agribusiness; sustainable land use practices; waste-to-energy; and wind and solar energy for farms.

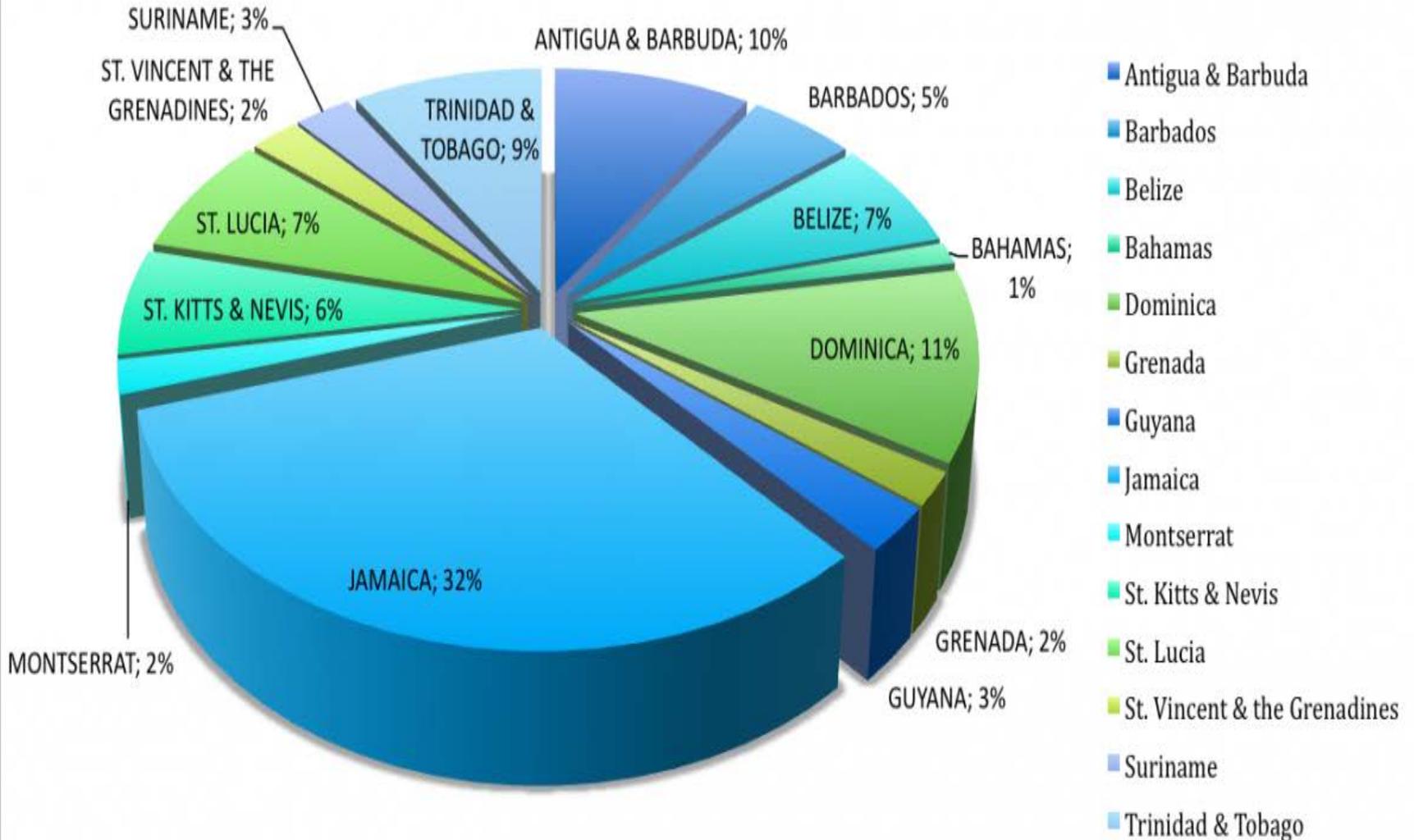
Solar Energy: Residential and commercial self-generation, residential and **commercial water heating, solar-powered air-conditioning.**

Energy Efficiency: Lighting, household appliances, air-conditioning, commercial cooling and ventilation systems, consumer behaviour, building energy management systems, building design and materials.

ACCOMPLISHMENTS

- ✓ Launch of the CCIC in January 2014
- ✓ Proof of Concept competition yielded approximately 300 application from across the region.
- ✓ Selected 11 Winners with total grant funding of US\$427,000
- ✓ Nine Country Hubs so far has been established
- ✓ In the process of establishing Partnership Network
- ✓ Did Regional Market Survey.

PERCENTAGE OF APPLICATIONS BY COUNTRY



SOME OF OUR WINNING IDEAS

- ❖ Organic Soil Conditioner & Fuel Briquettes from Castor Oil Waste.
- ❖ Creating Home Grown Organic Bio-Fertilisers.
 - ❖ Fiber-Optic Solar Indoor Lighting (FOSIL).
- ❖ The Pedro Banks Renewable Energy Project.
 - ❖ H2-Flex Hydrogen Hybrid Project.
 - ❖ Biofuels from microalgae cultivation.

SERVICES

Our Motto is “ Fighting Climate Change through Entrepreneurship

We provide grant funding of up to US\$50,000 for Proof of Concept Innovations.

The overall idea is to help these entrepreneurs to scale up some of these innovation

The CCIC is setting up 14 hubs to be located in each of the countries where the CCIC is active and provide its services.

To date we have signed Agreements with 9 Hubs and another 5 hubs are expected to come on stream soon.

SERVICES

Some of our Hubs are;

1. National Development Foundation of Dominica.
2. Dynamic Youth Trust of Grenada
- 3. Antigua and Barbuda Investment Authority**
- 4. Montserrat Development Corporation**
- 5. Jamaica Business Development Corporation**
- 6. St. Lucia Coalition of Services Inc.**
- 7. Business Builders Global of the Bahamas.**

SERVICES

The commercialization of climate technologies locally ensures solution are design for the environments in which they operate.

Capacity will be built locally for maintenance and servicing, local contents build domestic supply chains and economic value is captured locally through the creation of jobs and an enhanced entrepreneurial ecosystem.

SERVICES

- ✓ Proof of Concept Grants
- ✓ Mentoring and Business Training
- ✓ Business Incubation
- ✓ Access to Finance
- ✓ Technology Commercialization
- ✓ Market Development
- ✓ Networking and Partnership
- ✓ CAD Lab Services
- ✓ Social Media Training

THE WAY FORWARD

CCIC will continue to:

Build a pipeline of high-impact new ventures through the provision of Proof of Concept funding.

Support the testing and prototyping through access to facilities and information.

Accelerate access to early growth-stage capital through the provision of pre-investment advisory services and investment facilitation and syndication.

Support entrepreneurial capacity through technology-enabled business development services, networking, mentoring and training.

Identify and develop local, regional and international markets.
Influencing and advocating for policy coordination.

THE WAY FORWARD

Assist in filling the gaps that remain in the capacity for local innovation to excel in the Caribbean region.

Help entrepreneurs who are faced with multiple small individual and fragmented markets that increase the transaction costs of doing business.

Build the support system and associated institutions for innovation in the region that is limited.

Provide Access to Finance, market awareness, technical capacity and supportive Government policies that are barriers to climate innovations in the region.

THE WAY FORWARD

Opportunities exist however for the region to be proactive in its green growth objectives and build an entrepreneurial class that contributes to the emergence of new domestic climate and clean energy industries.

The Caribbean benefits from proximity to the large markets of North, Central and South America.

In addition, there is a vibrant culture and significant diaspora community, an asset for potential investments, mentoring and partnership networks.

The region has some of the highest electricity prices in the world which provides significant opportunities for cost-competitive renewable energy and energy efficiency technologies, particularly significant for the large tourism market

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Thank You