



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION





# Elevator Pitch High-level Luncheon Event "Mission Transforming Island Lives! The Network of Regional Sustainable Energy Centres for Small Island Developing States"



Organization: The Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE) was established as a CARICOM specialized agency with an official mandate to promote renewable energy and energy efficiency investments, markets and industries in the Caribbean.

The CCREEE's vision is "Transforming the energy landscape into a climate resilient, sustainable and affordable sector; focused on improving the lives of our people".

# Description of the Transformative Program: Energy Modelling and Renewable Energy Integration Virtual Laboratory (EMREV)

## Challenges to be addressed

- The regional energy transformation and frequent socio-economic set-backs due to natural disasters require proper planning for:
  - Resource mobilization in renewable energy and energy efficient systems and infrastructure;
  - increasing levels of flexibility in our systems and approaches, and resilience of our people;
- Limited availability of data, technical capabilities and knowledge in the energy and related critical sectors (water, health, safety, security)
- Lack of a comprehensive regional platform to assess the technical, financial and operational risks of integrating emerging technologies towards integrated resource and resilience planning
- Short-term technical assistance and cooperation seldom allow for the capacity development of our people

Project Objectives, outcomes/outputs, budget and key partners









#### **Project Objectives:**

- Optimise investment profile of RE and EE projects in the CARICOM region
- Create integral knowledge to improve the operation and management (O&M) of the energy systems of the region, with a special focus on SIDS systems and their peculiarities
- Provide accurate information to inform policies and decision-makers through the CARICOM Energy Knowledge Hub
- Support Caribbean governments and regulators in negotiating license agreements with utilities and in setting optimal tariff rates through tariff reviews
- Bolster ability of Caribbean utilities to operate resilient grids in light of increased frequency and intensity of adverse weather events
- Build capacities of regional stakeholders
- Innovate, develop and deploy new solutions for SIDS towards climate change adaptation and resilience
- Create an enabling environment for the introduction of the right technologies and subsequent integration into the CARICOM energy mix
- Contribute to gender mainstreaming into the energy sector, and empower the youth and vulnerable groups
- Improve energy access and adapt to climate change
- Improve systems design, ensuring good quality and cost-effectiveness

#### Project Outcomes:

The establishment of a cost-effective and sustainable regional vehicle for modeling energy systems and informing the integration of renewable energy, which serves the Caribbean nations and is supported by member states. The regional approach ensures cost-effectiveness, allows for better replication and scaling of successful approaches, and facilitates research.

### **Project Budget**

The proposed budget for the EMREV is USD 3.5 million, which will cover the capital costs of USD 1.5 million, as well as operational costs of USD 2 million for five (5) years. The long-term business model for sustainability will be largely based on fees-for-service.





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#### **Project Partners**

Key partners will include CARICOM regional organisations, interested development partners, NREL, other regional centres within the GN-SEC, Thematic Hubs, National Focal Institutions and the Regional Universities Network.

### Expected transformative impact

- A Caribbean population that is less vulnerable to the effects of climate change, diseconomies of scale and market disadvantages related to SIDS.
- There is a de-risking component to the EMREV: with the right information, better decisions can be made. It is therefore more cost effective to have this information to support better decision-making.
- Socio-economic value added to the region through support to private sector developers across critical sectors (energy, food, water, health, security and safety) to yield meaningful job creation and attraction of effective investment.
- Environmental and socio-economic benefits achieved in terms of climate change mitigation and adaptation.
- A higher level of gender equality achieved
- Vulnerable groups and youth supported
- Regional knowledge and capacity enhanced, which will support the development of national and regional energy policies and strategies and contribute to improve sustainable energy market services.
- Contribution to SDGs 4, 7, 9, 13, 17