Regional Forum on Building a Caribbean Pathway for Disaster Resilience in the CDEMA Participating States – Safeguarding Infrastructure

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Our Borrowing Member Countries face a significant decision-making challenge

1
Vulnerability of Caribbean region to climate change

2
Substantial level of investment in infrastructure required

3
Inadequate strategic planning and programming

4
Outdated, unresponsive policies and enabling environment

5
Poor project preparation and design

Vulnerability of Caribbean region to climate change

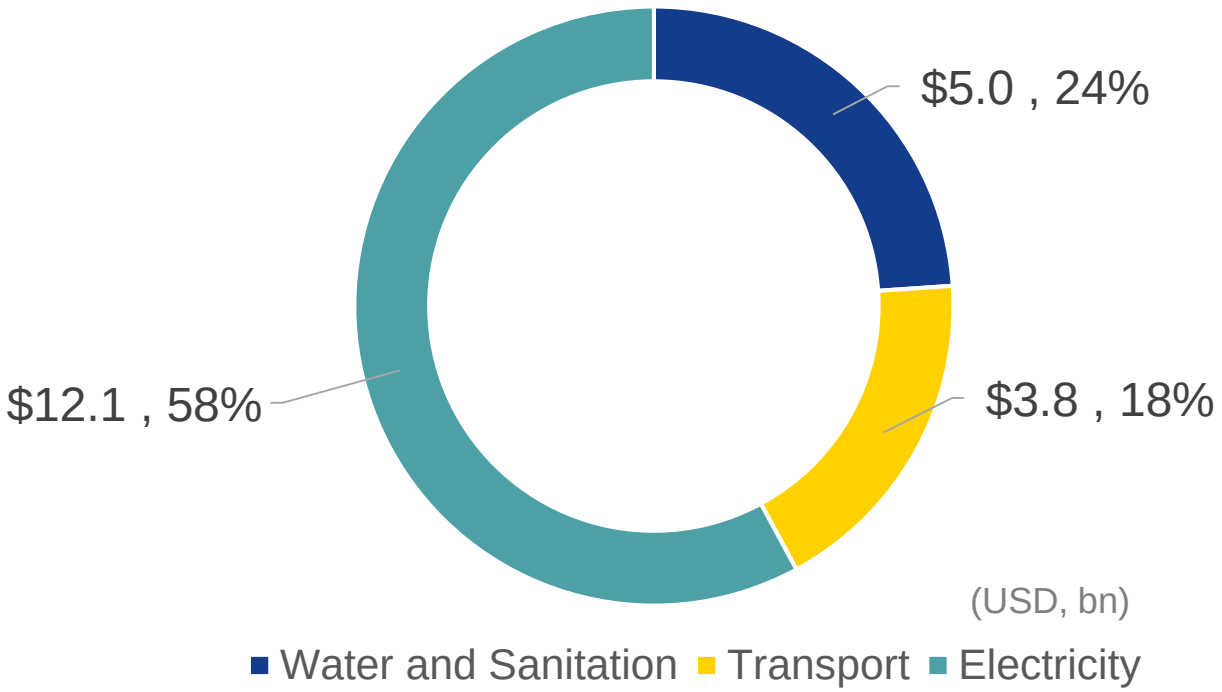
- Adverse impact on output and productivity
- Reduced revenue flows from impacted sectors, additional costs of alternative ways of maintaining supply and transmission of energy, and consequences for productive and social sectors
- Impact on poverty: Impact on employment, informal livelihoods, and delivery of essential services
- Macroeconomic impact: consequences for sector GDP, exports, imports, inflation, etc.

Vulnerability of Caribbean region to climate change

Financing efforts to examine more closely the climate science findings for the Region through the UWI Mona Climate Studies Group

Helping decision-makers integrate climate and disaster risk considerations in economic planning and sector level planning and investment programming

USD21 billion in infrastructure investments needed over the next 10 years



Source: PPPs in the Caribbean: Building on early lessons (2014, CDB)

Substantial level of investment in infrastructure required

- Improving access to new climate finance streams and optimising climate finance
- Providing access to vertical funds such as Green Climate Fund (grant and concessional resources)
- CDB's accreditation to GCF and Adaptation Fund
- Strengthening partnerships for concessional and innovative financing
- Providing interest rate subsidy for climate action through the EIB Climate Action Line of Credit (EUR120 mn)
- De-risking infrastructure and energy investments
- Support for risk transfer mechanisms such as CCRIF SPC
- Incorporating climate risk into CDB's credit risk management

Inadequate strategic planning and programming

ENERGY SECTOR

- No early warning system to detect high sediment transport or floods that could potentially damage turbines, power plant structures or T&D lines
- Lack of hazard resilient technical design standards for energy infrastructure
- Inadequate maintenance of transmission and distribution lines
- Slow post-disaster recovery capacity, taking months for full restoration of electricity supply

Inadequate strategic planning and programming

ROAD TRANSPORT, WATER AND OTHER URBAN INFRASTRUCTURE AND SERVICES

- At-risk key urban infrastructure and services such as, main roads, urban water supply, treatment plants, pumping stations, distribution systems, sewerage facilities, flood protection, and housing, underestimated earthquake risk
- Urban infrastructure mostly old with poor maintenance regimes, limited redundancies
- Lack of hazard resilient technical design standards for infrastructure
- BMCs have significant settlements on steep slopes, river or drainage embankments

Inadequate strategic planning and programming (response)

- Climate sector assessments in water and transportation sectors for four countries
- Designing and implementing work programmes through a climate lens
- Capacity building, development of tools and resources
- Mainstreaming climate considerations in planning and decision-making frameworks
- Providing technical support for sector decision-making related to climate impacts
- Supporting the establishment of transparent, accountable policy and legislative frameworks that are responsive to new finance streams
- Assisting with policy coordination across sectors

Outdated, unresponsive policies and enabling environment

POLICY AND INVESTMENT COHERENCE

- Asset management
- Infrastructure investment action plans with credible budgets
- Tax breaks, grants, or subsidized loans for Infrastructure investments
- Private sector participation – PPP potential
- Hazard and climate risk screening mechanisms for project investments

MONITORING AND ENFORCEMENT

- Allocation of clear responsibility for monitoring and compliance enforcement
- Legal and regulatory framework, including safety standards, building codes, guidelines, risk-sensitive land use planning and relevant technical codes

Outdated, unresponsive policies and enabling environment

Providing technical assistance to improve delivery of mandates of regional technical agencies

Support for Caribbean Institute for Meteorology and Hydrology, Caribbean Disaster Emergency Management Agency, Caribbean Community Climate Change Centre

Providing technical assistance for strengthening national legislative and planning frameworks; land-use policies; legislative changes

Poor project preparation and design

- Strengthen sector-specific monitoring and early warning mechanisms
- Apply risk-sensitive design, construction, operation, and maintenance standards
- Create redundancies in energy generation, transmission, and distribution systems
- Retrofit and upgrade critical power installations and assets(e.g. elevate critical power installations)
- Create hazard-specific design standards (e.g. ring distribution systems instead of radial ones)
- Develop and/or update urban or sector master plans to address disaster risk

Poor project preparation and design

Identification of climate mitigation and/or adaptation co-benefits in all investment operations—large and small.

Providing climate mitigation financing for sustainable energy – both renewable energy and energy efficiency.

Sustainable Energy for the Eastern Caribbean grant financing being utilised in the six independent OECS member countries for energy audits to prepare energy efficiency investment projects.

Canadian Support to the Energy Sector Fund being used by CDB to build capacity and for pre-feasibility studies.

Strengthening project preparation and technical design to include climate considerations

Resilient infrastructure management framework

- Sectoral development plans identify key risks & specific risk reduction measures
- Effective mechanisms in place to screen investment schemes and programmes against risks
- Sector development projects address resilience of vulnerable communities in high-risk locations
- Allocation of adequate budgets for integrating risk reduction measures into sector investments
- Adequate investment in stand-alone resilience measures (e.g. flood control, seismic retrofitting)

Resilient infrastructure management framework

- Indicators established for measuring the effectiveness of risk reduction measures in national and sector development plans and programs
- Legal and regulatory framework, including safety standards, building codes, guidelines, risk-sensitive land use planning and relevant technical codes
- Multi-sector coordinating mechanisms
- Accountability mechanisms for the enforcement of standards and codes (and avoidable losses resulting from their violation)

The “why” of our work

Thank you