Regional Sustainable Energy Landscape: Key Trends

Caribbean Centre for Renewable Energy and Energy Efficiency
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What makes up the energy sector?

• In the Caribbean context:
  • Power Generation
  • Transportation
  • Industrial
  • Other

• The energy system is integrally connected with:
  • Other Infrastructure Systems
  • Critical Sectors
Where are we now?

- Energy consumption in the Caribbean is growing
- Dependent on imported fossil fuels for both electricity generation and transportation
- Total capacity: 6,526 MW (2018)
  Fossil-fuel based capacity: 82%
  Renewable energy capacity: 18%

*CARICOM Energy Report Card (CCREEE, 2018)*
What’s wrong with this path?

<table>
<thead>
<tr>
<th>Dependence on fossil fuels causes vulnerabilities rooted in:</th>
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<tr>
<td>Volatile oil prices</td>
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<tr>
<td>High costs</td>
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<tr>
<td>Limited climate resilience</td>
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<td>Carbon intensive development</td>
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<th>Deficiencies of our current energy infrastructure:</th>
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<td>Insufficient and aging infrastructure</td>
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<td>Low service quality</td>
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<td>Inefficiency</td>
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<td>Isolated grids</td>
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What is the solution?

• We need energy systems that promote:

  AFFORDABILITY  SUSTAINABILITY  SECURITY
What is the solution?

- The Caribbean region has an abundance of renewable energy resources
  - Hydropower
  - Wind
  - Solar
  - Geothermal
  - Ocean wave and tidal
- Energy efficiency has the potential to capture quick, low cost wins
Where do we need to be?

Installed renewable energy power capacity:
• 28% by 2022
• 47% by 2027

Reduction in energy intensity:
• 33% by 2027

Reduction in carbon dioxide emissions:
• 32% by 2022
• 46% by 2027

CSERMS Baseline Report and Assessment (CARICOM, 2015)
What progress has been made?

• In 2018 most member states had:
  • Finalized energy policies or action plans
  • Renewable energy targets
  • Sustainable transportation targets
  • Carbon dioxide emissions reduction targets
• Lack of energy efficiency targets
• Need to strengthen regulatory and legislative framework
• Insufficient monitoring and data collection

CARICOM Energy Report Card (CCREEE, 2018)
What progress has been made?

New Renewable Energy Installed 2014-2018

Total Renewable Energy Installed 2014-2018

SIDS Lighthouse Initiative (IRENA, 2019)
What is the way forward?

Accelerate Implementation
- Long-term strategic planning
- Regional synergy
- Cross sectoral efforts

Bridge Major Gaps
- Policy and regulation
- Technical expertise
- Contextual data and research

Sustainable Energy Financing
- Increase access to finance
- Project preparation support
Thank You!

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