



REGIONAL CONFERENCE INCLUSIVE ENERGY TRANSITION IN SOUTH ASIA AND BEYOND

7–9 MAY 2024 • Galle, Sri Lanka

Community Energy Resilience Decentralized Systems in the Maldives

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A Resilience Assessment Framework



- The framework^(*) identifies 4 dimensions of resilience.
- For each dimension, the framework recognizes key capabilities to be considered while assessing the resilience and inclusiveness of a City or community
- Assessing the maturity level of each capabilities for a city will identify the key strengths or areas of improvement to attain an adequate state of resilience and inclusiveness.

Five maturity levels & criteria identified to characterize a city's resilience

For example, assessing the "D -DRR/DRM Planning" capability :



Aims

- Meeting a minimum of 70% of the daytime peak load demand in more than 160 outer islands.
- To reach 30 MWp of solar photovoltaic, 12.5 megawatt-hours (MWh) of energy storage, and modern energy management systems.
- Additional financing for solar PV-based icemaking factories for fisheries, and RE-based passenger ferries for marine transport.
- These systems to be managed by the Women Development Councils.

Achievements

- The project has installed 24.5 MWp of solar PV, 8 MWh of battery energy storage systems (BESS), 27 MW of energyefficient diesel generators, and renewable energy-ready grids in 70 inhabited islands across eight atolls. (As of June 2023.)
 - The project has achieved fuel savings of 25% per hybrid system.





- Beneficiaries: Communities disadvantaged due to remote locations
- Career guidance for students: on renewable energy studies in schools conducted for grades 8–12 on all 160 islands.
- Women in technical jobs. Fenaka and STELCO trained and hired 1368 women utility officers to manage the systems.
- **MSME**: 49 training and information sessions conducted on reducing tariffs, to off-peak or shoulder rates, for micro and small enterprises led by women.
- **RE and Energy Efficiency awareness**: Workshops conducted with Women Development Councils, NGOs, and female government officials.
 - A total of 113 community outreach programs have been implemented with more than 50% women's participation
- Community development opportunities enhanced
- Inform the Maldives Energy Road Map





* Economic benefits * Improvement in services
*Health and Wellbeing * Decentralised Governance *
Inclusion and Empowerment

 The project potentially contributes to building the resilience of the island communities and the opportunities to reduce the vulnerabilities identified are well within the scope of the project.





Thank You!!!







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