Reduce Dependency on Fossil Fuel, Increase Sustainability & Affordability in Maldives: Scaling Up Renewable Energy Share & Private Sector Investments

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Geography

- A chain of coral atolls
- 860 km long, 80 -120 km wide
- 1,192 small islands located in 26 geographical atolls
- over 80% of land area less than 1m above mean sea level
- 20 administrative atolls
- 187 inhabited islands
- 160 tourist resorts
- Island size: from 0.5 to 2 sq.km
- Total land area: less than 1%
- Small population: ~400,000
Energy Sector

Overview

Entirely dependent on imported fuel
Fuel import - 10% of GDP

TYPES of fuel imported

- Diesel: 81%
- Petrol: 12%
- Aviation: 4%
- LPG: 3%

Total Installed Capacity: 585.5 MW

Fuel imports by type (CIF)
2021 / Customs (MECCT)
164 Tourist Resorts
- One island one resort concept
  - Each Island have its own power generation & distribution systems

187 Inhabited islands
- Different land sizes, population – different power demands
- Power systems are developed on ad-hoc basis
- Diesel generators are of varying sizes & ages
- Power distribution cables are of varying sizes & ages resulting huge distribution loss.
Renewable energy growth

Total installed RE
53.5 MW

Cumulative annual RE growth

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Net-Zero target

Net-zero Emissions by 2030

- Solar PV & other RE sources
- Waste to energy
- Demand side energy efficiency
- Transportation
Successful projects
Ground Mounting & Rooftop PV

Completed projects
1.5 MWp
Successful projects

Rooftop PV

Completed projects

1.5 MWp
Successful projects

Completed projects

IPP model

Floating & Rooftop PV

Location: LUX resort - Maldives
Image source: www.sofarocean.com
Thank you