

Overview on SAARC Energy Connectivity and Corporation in the SAARC Region

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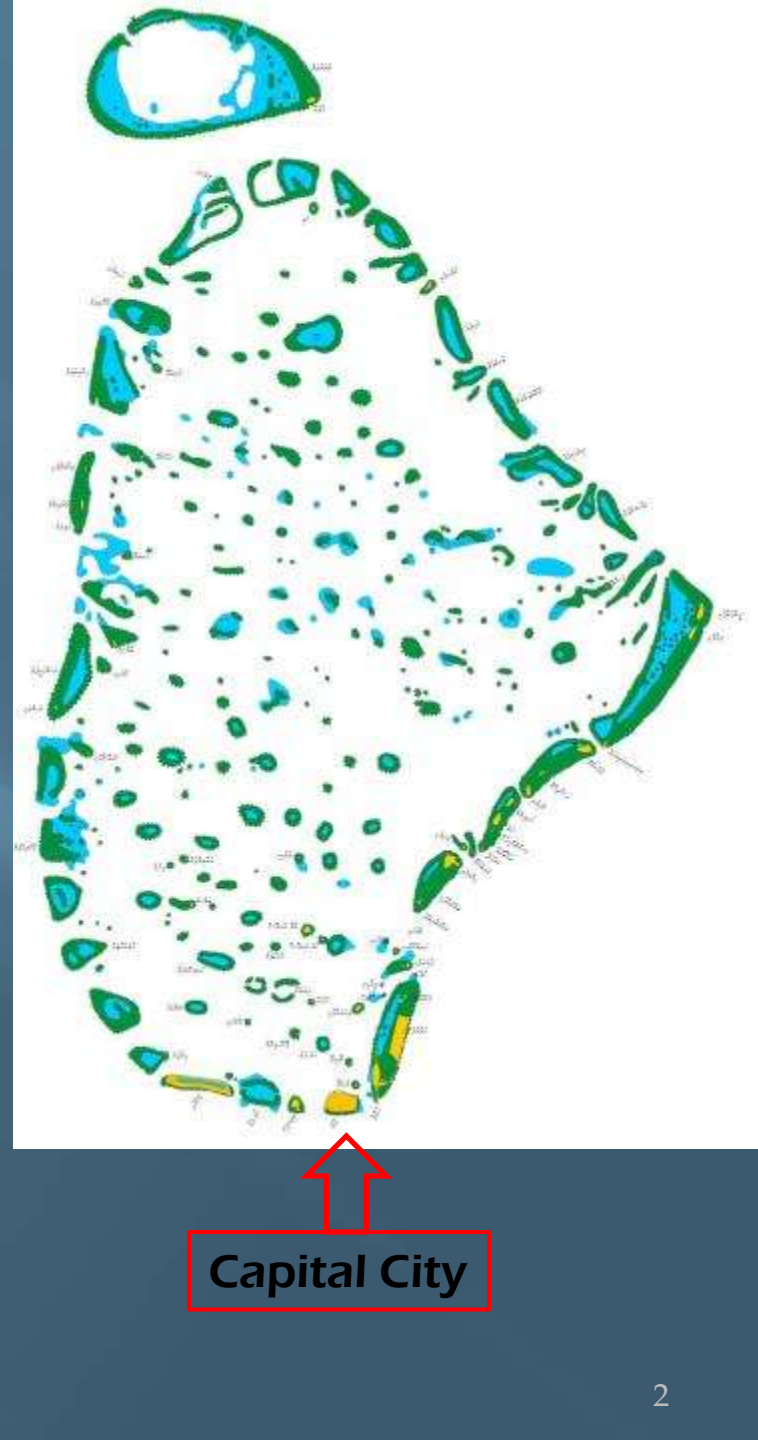
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Male'

Maldives



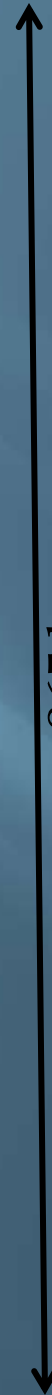
Maldives

Capital City

Interconnection between neighboring countries to Maldives



**196 Inhabited islands scattered
over a 865 km from North to South**



865 km



564 km

728 km

Statistics

Total Population	345,000 (2013)
Population in the Capital	102,380
Percentage In the Capital	30%
Number of Islands	1190
Inhabited Islands	196
Number of Atolls	20
Administrative Provinces	7



Cross-Border Energy Trade

- ▣ SAARC countries share a land border (or a maritime border) with at least one other SAARC country. The potential for direct energy trade between these countries is immense.
- ▣ Countries that share a land border are currently trading in electricity as well as energy sources.
- ▣ Potential for trade is enormous, ranging from electricity to fossil fuels and technology.
- ▣ In case of Maldives, technologies transfer is more applicable

Maldives Energy Trade

- ▣ Maldives is unique, with no land border and no viable opportunities for direct trade in electricity within the Region.
- ▣ Potential trade is in fossil fuels and technologies including Renewable Energy
- ▣ Individual islands make it very difficult to have a high penetration of renewable energy. Potential for small, independent renewable energy systems is high.
- ▣ No installed energy storage systems. Potential for such systems to deal with the peak demand – especially in the capital city Male’
- ▣ Technologies transfer, and energy investments are the way forward.

STELCO Today

- ▣ State Electric Company Limited (STELCO) is a 100% state owned company.
- ▣ At present STELCO provides electricity to over half of the population of the country with a total installed capacity of over 90 MWs.
- ▣ STELCO has its largest operation in Male' City, the capital of Maldives, with an installed capacity of over 62 MW, to provide electricity to over 35,000 customers.
- ▣ 1 MW of Solar PV installed in Male' and few other islands under various projects.
- ▣ The company, although catering to about 50% of the population, provides 70% of the electricity generated in the islands (excluding resorts) due to the high energy consumption of the capital zone.

GREATER MALE' CENTRAL POWER STATION AND TRANSMISSION GRID

WITH DEMAND FORECAST FOR 2035



STELCO and Renewable Energy

- ▣ In order to decrease the dependency on fossil fuel and benefit the environment, STELCO has successfully implemented renewable energy projects. Being a tropical country with plenty of sunshine, the best fit renewable energy technology has been solar photovoltaic.
- ▣ STELCO was the first company to introduce solar photovoltaic to the Maldives on a commercial scale.
- ▣ In 2012 a 740kWp of solar photovoltaic was installed on six islands under a power purchasing agreement with a local company.
- ▣ In addition 600kWp of solar photovoltaic was installed in the capital Male' under Japanese grant aid. STELCO was the implementation partner of this project and also operates and maintains these systems.

Maldives-Japan Cooperation

- ▣ Japan has been one of the biggest partners in the development of the Maldives. Japanese aid has been crucial in the infrastructure of the country as well as education system.
- ▣ Male' island city has approximately 600kWp solar panels installed by a grant of Japanese Government.
- ▣ Energy output of these is approximately 60,000 kWh per month.
- ▣ Individual islands make it very difficult to have a high penetration of renewable energy. Studies are being done with Japanese companies to increase the renewable energy grid penetration. Government has plans to make 30% of day peak of every inhabited island from renewable energy by the end of 2018.
- ▣ Maldives government has been working very closely with Japanese government to decrease Maldives dependency on fossil fuel.
- ▣ The Project for Clean Energy Promotion in Male' is a good example of Japanese assistance in promoting renewable energy in the Maldives.



100kWp

100kWp

130kWp



Thank You