



State Electric Company Ltd (STELCO)
Republic of Maldives



Issues and Challenges of Power & Harmonization of Regulation and Policies

26 June 2014 (Thursday)

SAARC Workshop



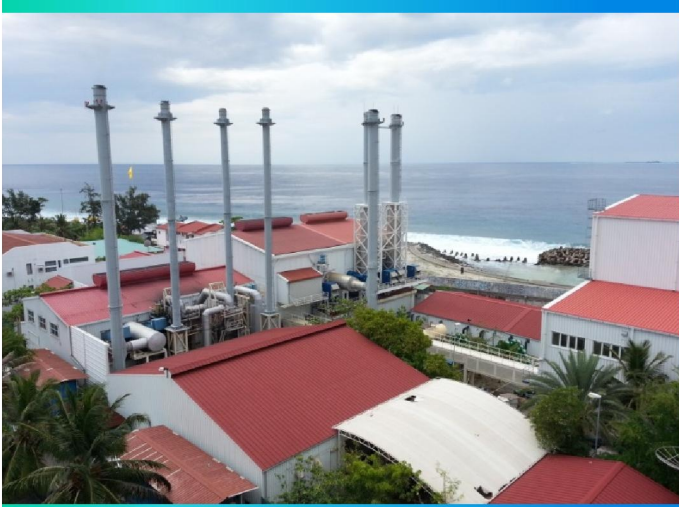
COUNTRY OVERVIEW



- 1192 Tropical Islands
- 194 Inhabited Islands
- 107 Tourist Resorts
- Population of 350,759
- Residents in Greater Male' Region
114,686
- Density in Capital 34%
- Land area: 300 km²
- 6-8% GDP growth annually
- Only 1-2 % of the country is land



POWER SECTOR HIGHLIGHTS



- **Energy Sector Regulated by Maldives Energy Authority (MEA)**
- **This sector entirely depend on imported fossil fuel**
- **Oil imports**

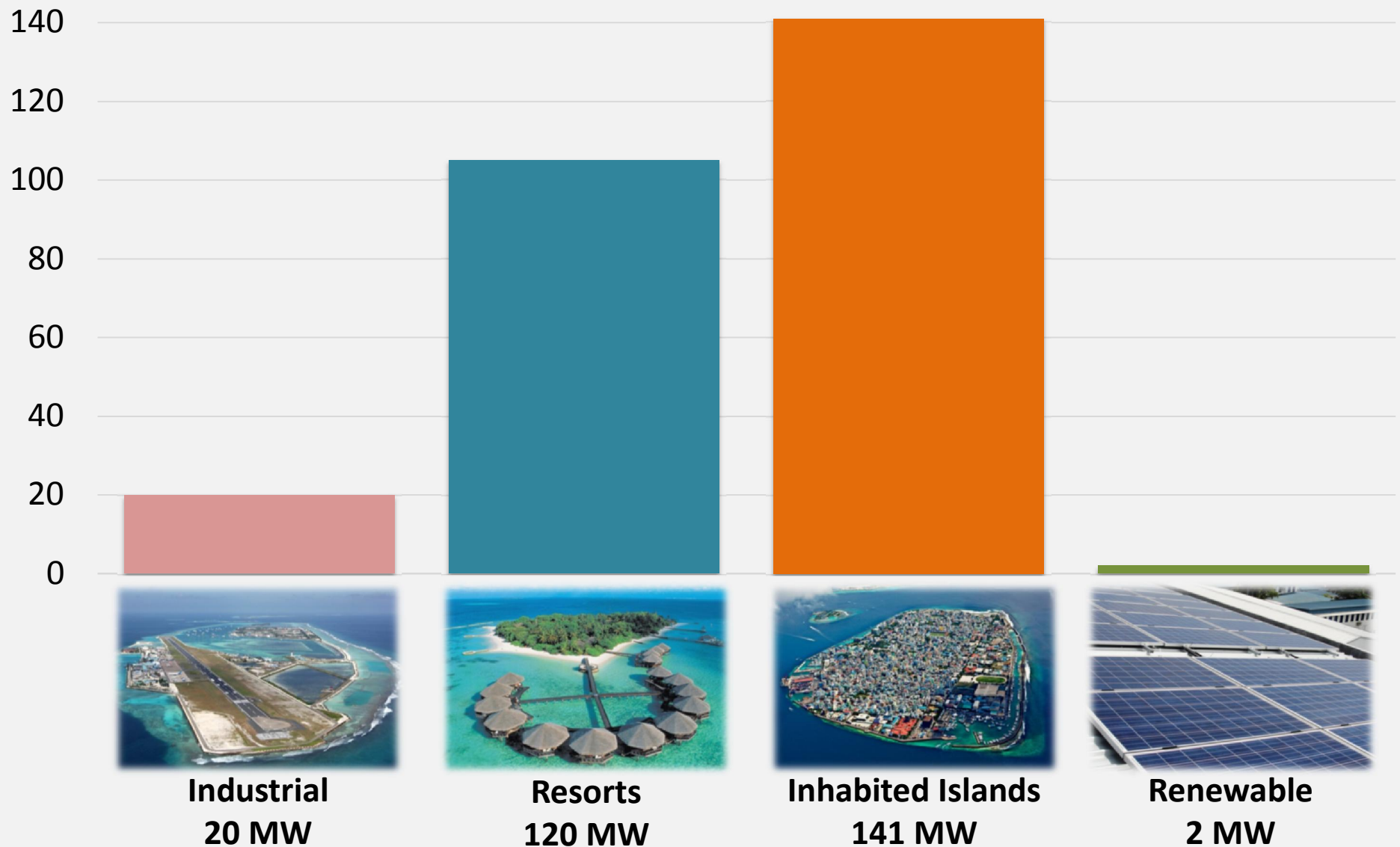
USD 470M in 2012 and USD 487M in 2013

- **Inhabited Islands Consumes 428 GWh/year**





INSTALLED CAPACITY OF DIFFERENT SECTORS



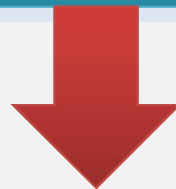
Total Installed Capacity : 268 MW



GOVERNANCE AND OPERATION

Ministry of Environment and Energy

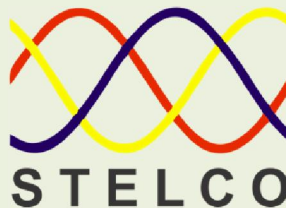
Maldives Energy Authority (MEA)



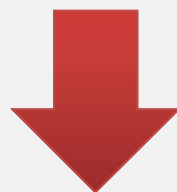
MWSC



STELCO



FENAKA



Consumers



GOVERNMENT UTILITIES

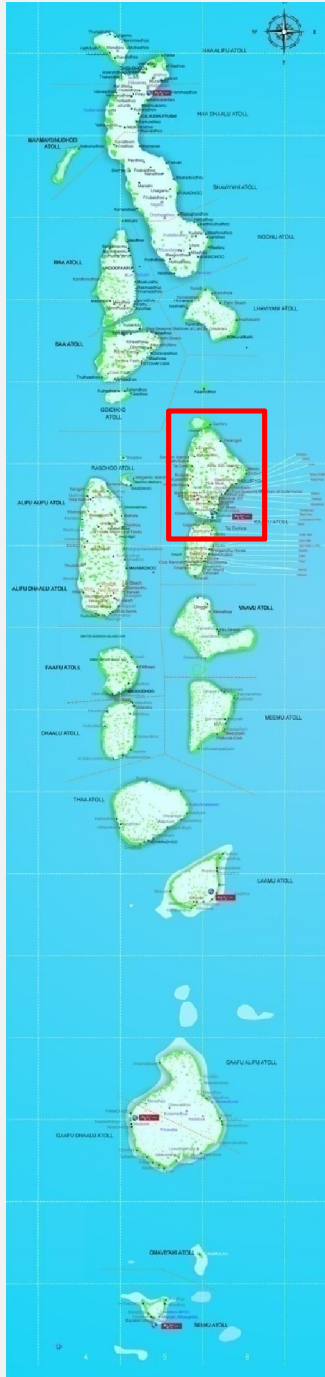


- **STELCO & FENAKA are entirely State owned organizations responsible for Generation and Distribution and Sale of Electricity to Consumers**
- **MWSC is 80% State owned and 20% Hitachi Company responsible to supply Electricity and Fresh Water to consumers**
- **Current Peak Demand in Capital Male' is 47 MW and Total Installed Capacity is 65 MW**





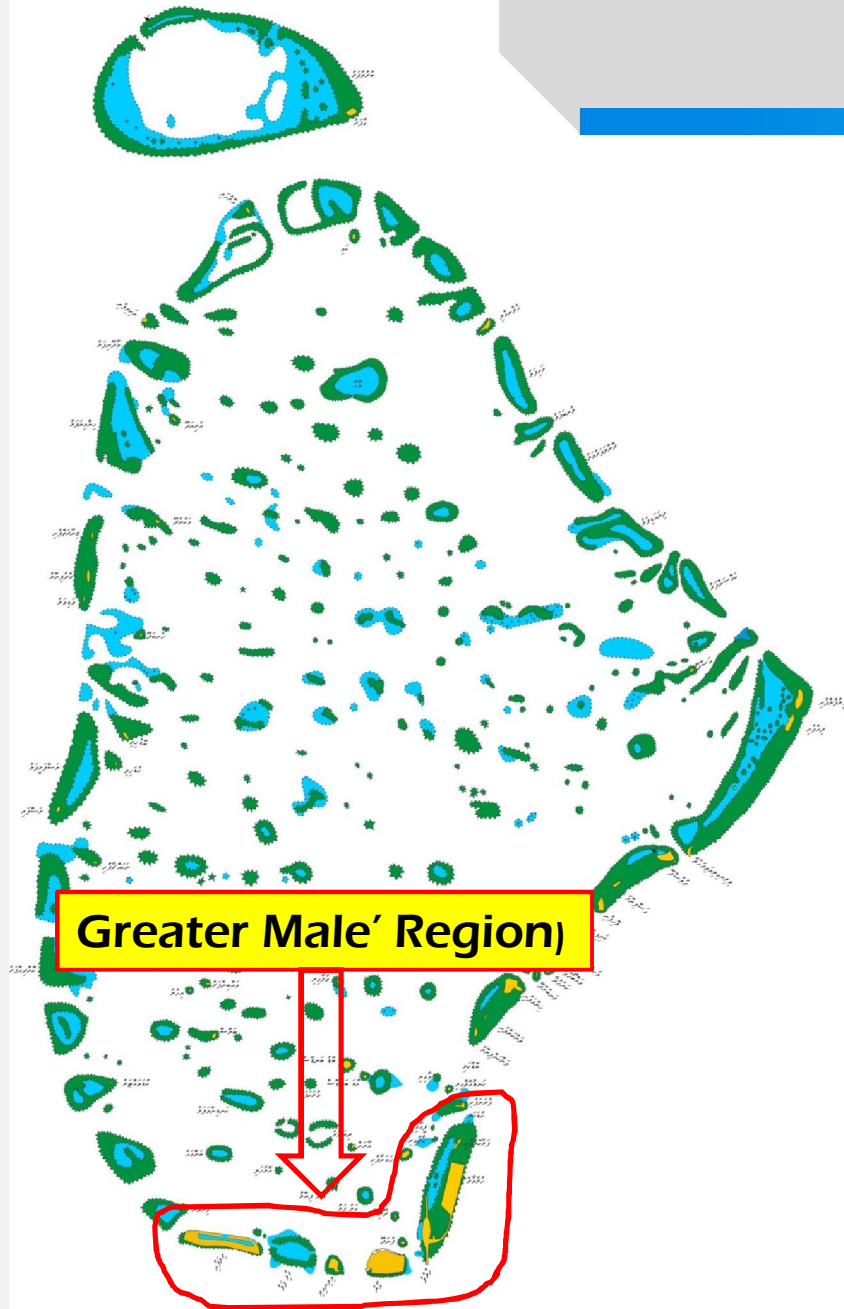
CHALLENGES



Challenges

- Capital City is Congested, in need of Grid Connection to mitigate land unavailability, Network Overloading and Exhaust Emission Limitations
- Due to dispersed in geographical nature it's difficult to share a common grid throughout Maldives but certain regional zones can be interconnected
- Forced to operate and maintain individual power house and distribution network in each inhabited island where the population is less than 1000 on average

CHALLENGES



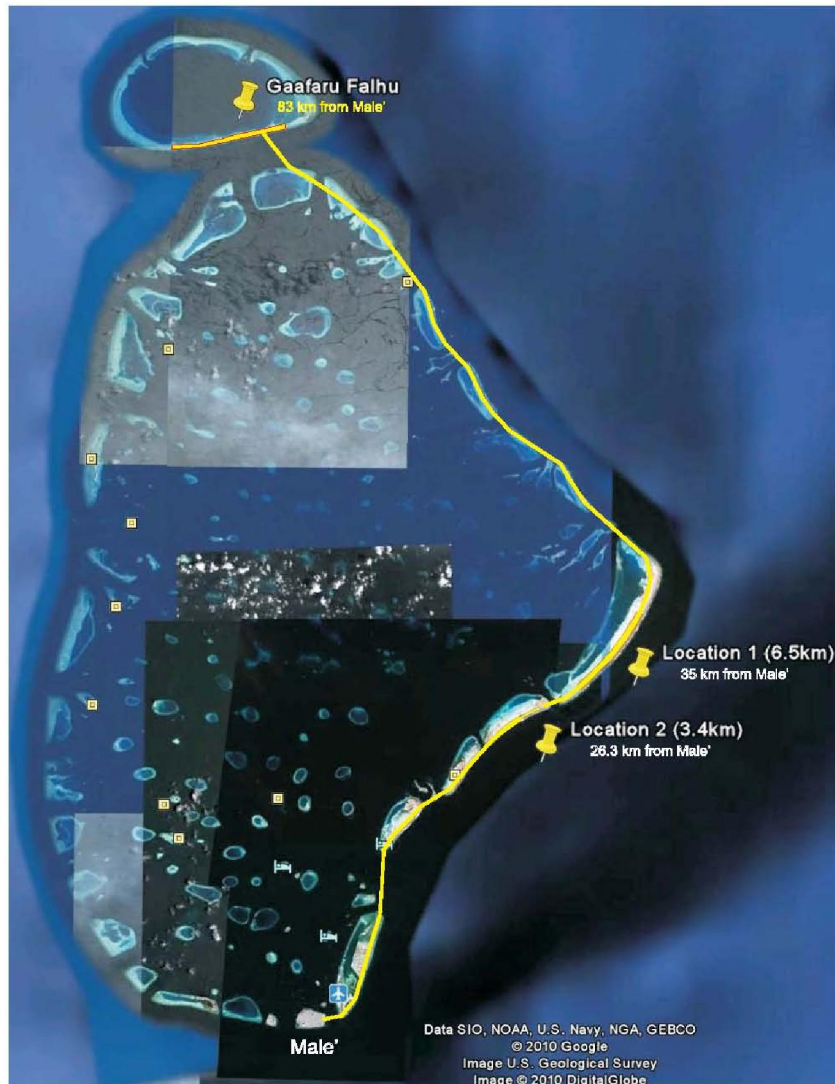
- Due to dispersed in geographical nature it's difficult to share common grid through out Maldives
- Forced to operate and maintain individual power house and distribution network in each inhabited island
- Currently each island is an isolated power grid with limitations
- Maldives can benefit from a common energy grid which will tremendously reduce the cost
- Common grid will increase stability & reliability
- Land issue will be mitigated

CHALLENGES



SUMMARY

Distance From Male' to Location 1, 2 and Gaafaru



- Male' City demand continues rising at an average rate of 5~8% per annum
- Power expansion not possible without a common grid
- Financial constraints on initiating a common grid
- For a Power Security and System reliability interconnection of isolated powerhouses are an utmost importance

