



**FENAKA**  
CORPORATION LIMITED

**RENEWABLE ENERGY  
PERSPECTIVE**

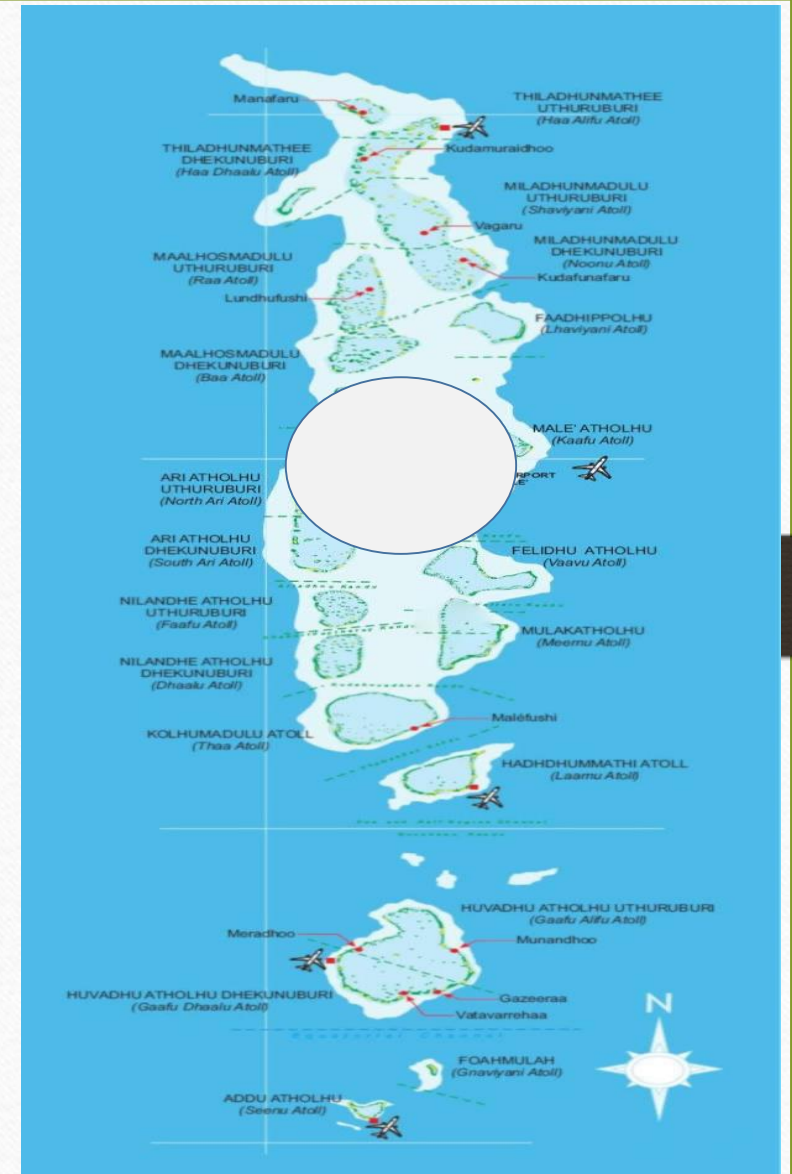
**BY**

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**FENAKA CORPORATION  
LIMITED**

## A Brief Background

- Fenaka Corporation Limited is a Company solely owned by Government, established in year 2012 with the mandate to provide Electricity, Sewerage and clean water to outer islands of Maldives.
- As such, FENAKA has presence and its operations in almost all Islands apart from Greater Male' area, Kaafu Atoll, Alif Alif Atoll, Alif Dhaal Atoll and Vaavu Atoll.
- We, Fenaka Corporation, has **151 Powerhouse** in operation **in 151 islands** of Maldives.
- All these powerhouses are powered by Diesel-Engined Generator sets.



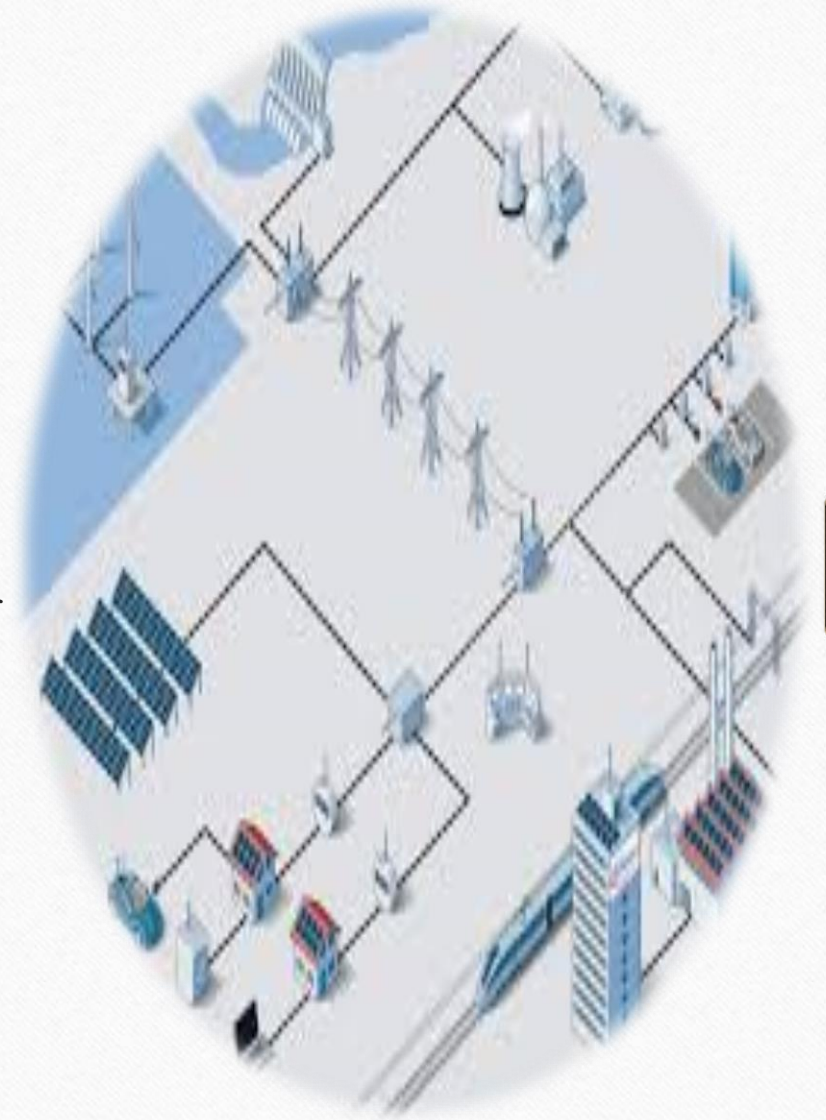
## The Situation then....

- The power generation and distribution systems Fenaka inherited are mostly rundown and built in a very ad hoc manner.
- The electricity demands of consumers are being barely met and machines are running continuously without rest and proper maintenance because there is no backup or alternative to give power if that machine is switched off.
- Power cuts are imminent and frequent.
- However, the demand growth on average in each island is between 10-15% per annum. The consumer needs continuous power for their life works



## The Initiatives....

- As a Utility service provider, our utmost priority is to provide a reliable and sustainable supply which caters the growing demand of the consumers.
- Therefore, to meet the immediate demands and to upgrade our power generation, Fenaka Corporation has invested heavily in increasing the Generation Capacity by purchase of Diesel Generator sets.
- By this, we have successfully delivered the government's pledge of ensuring Electricity for 24hours in all islands.
- Our present focus is on strengthening this reliability by investing in islands' grid rehabilitation, distribution networks and establishing state of the art control and synchronizing panels for generator sets.



## Renewable Energy Initiatives....

- Simultaneously, while developing infrastructures for reliable power systems, Fenaka is actively involved in implementation of Renewable Energy systems.
- Fenaka has fully collaborated with Ministry of Environment and Energy, by providing all necessary data, help and utilizing of staffs in the installation of
  - 550kWp Solar Generation Rooftop System in GDh. Thinadhoo
  - 208kWp of Solar Generation Rooftop system in Dh. Kudahuvadhoo.
- Currently, our management and staffs are engaged in the Preparing Outer Islands for Sustainable Energy Development (POISED) Project.
- Also, We are in final stages in negotiation for installation of a 100kWp floating solar system in B. Dharavandhoo.
- At this stage, Fenaka is formulating our own renewable energy projects to implement in next year.



## Figures and R.E Savings

- From analysis of past year data, with a monthly generation of 12.4 Million kWh of Electricity a roughly estimated 170,000 Tonnes of CO<sub>2</sub> is emitted to atmosphere.
- An estimated 70 Million Litres of Diesels are burnt per year in Fenaka Powerhouses
- GDh. Thinadhoo 550kWp Solar PV System Savings
  - Savings on Diesel : 800Litres / Day
    - ie. Savings in MVR =  $800 \times 30 \times 16 = \text{MVR } 384,000/-$  per Month
- Dh. Kudahuvadhoo Savings
  - Savings on Diesel : 200Litres / Day
    - ie. Savings in MVR =  $200 \times 30 \times 12 = \text{MVR } 72,000/-$  per Month



# Renewable Energy Potential and Challenges

- From the various studies conducted, Solar Photovoltaic systems are the renewable energy form which can be affordably and reliably implemented in Maldives. However, wind energy maybe utilized in certain islands for power generation.
- Main obstacles in implementing such Renewable Energy Systems
  - Initial Costs
  - Space Restrictions – utilize numerous roof tops ( for Solar PV)
  - Limited technical expertise
  - Logistic difficulties

## Fenaka's Commitment

- In line with government policies to decrease the dependency of diesel and lower the environmental impacts due to pollutants, Fenaka is fully committed and focused in installing renewable energy systems.
- We, Fenaka pursue a diversified portfolio to meet the demand by :
  - Lesser Dependence on Diesel : with the implementation of Diesel-Solar Hybrid Systems
  - Building our own renewable energy systems : We are formulating solar PV projects to our islands
  - Purchase of Renewable Energy ( from IPP through PPAs) : Feed-in Tariff needs to be revised with a formula which is fair for the IPP as well as utility in a market where diesel prices are volatile and subject to fluctuation.
  - Provide green energy option to consumers : Through the net-metering regulations of MEA



As a final note, once again I would like to emphasize, Fenaka Corporation fully supports the renewable energy programs and policies of this government and Fenaka is fully committed in making the dreams a reality.

Our thanks to all Government authorities, particularly, Ministry of Environment and Energy, Maldives Energy Authority, Environment Protection Agency, Ministry of Finance and also to IRENA and foreign agencies who support us in this cause.

**THANK YOU**