



Power Sector of the Maldives



MINISTRY OF CLIMATE CHANGE,
ENVIRONMENT AND ENERGY

GOVERNANCE AND OPERATION

GOVERNMENT

Ministry of Climate Change, Environment and Energy
Utility Regulatory Authority

UTILITIES



CONSUMERS



Overview

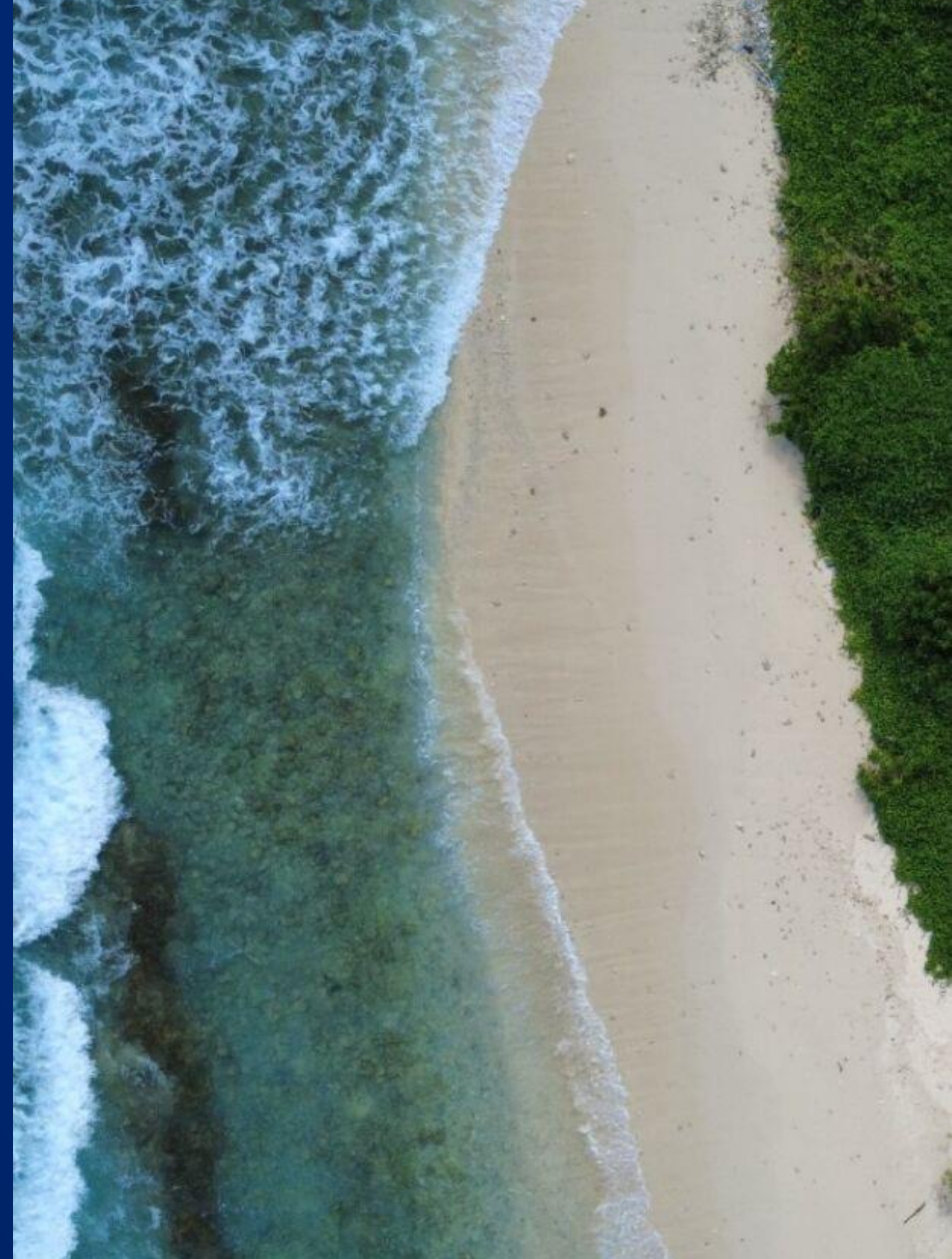
1192 Tropical Islands

175 Tourist Resorts / Marinas

- 1 island 1 resort concept
- Private and local grid – generation system

187 Inhabited Islands

- Scattered islands of varying size, population and power demand
- Unplanned power systems developed on ad-hoc basis
- Diesel generators systems – aged , varying sizes
- Distribution loss – aged grid, cable losses



POWER SECTOR OVERVIEW

30 MW



Industrial

300 MW



Resorts

310 MW



Inhabited

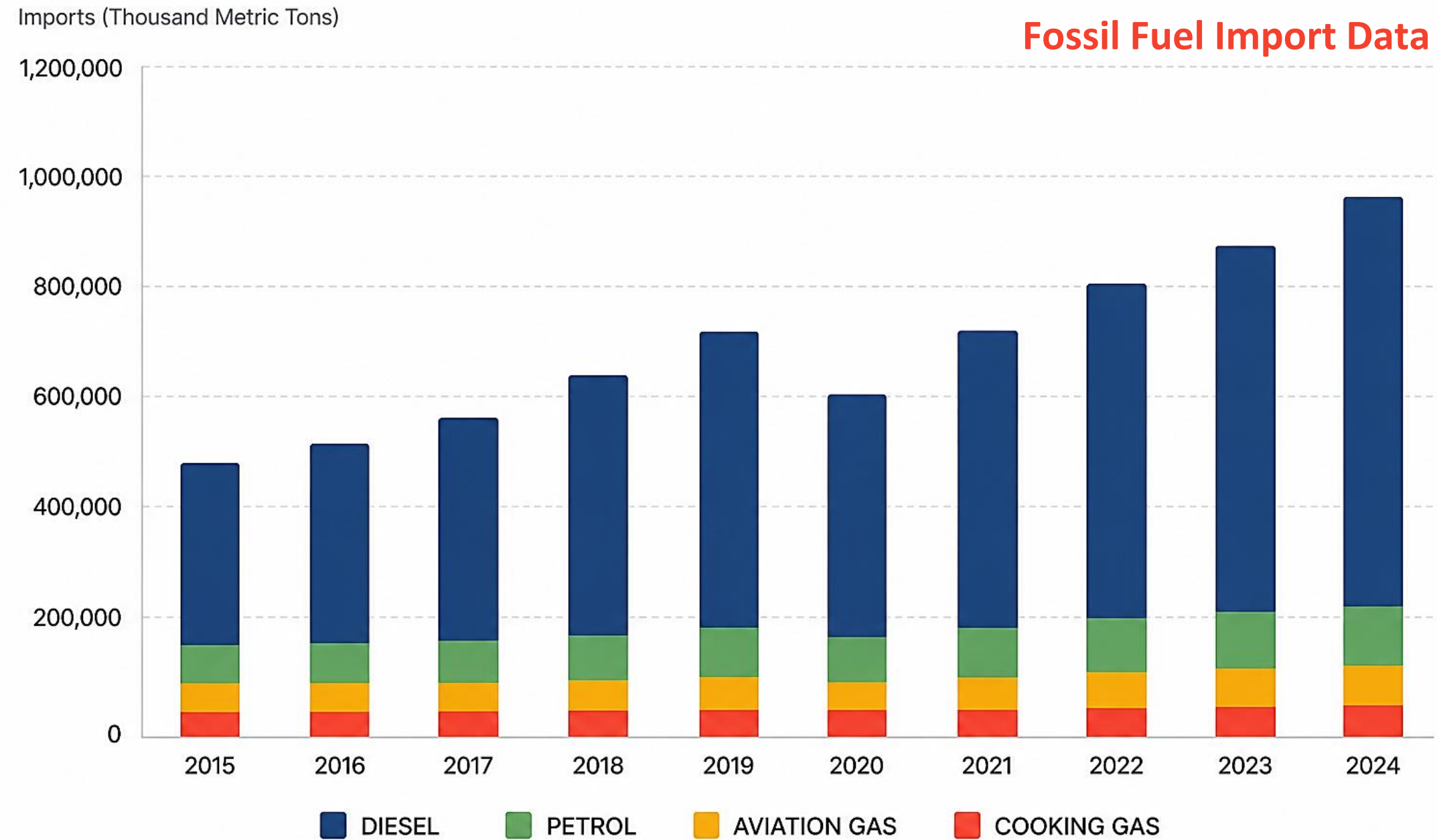
126 MW



Renewable

Total Installed Capacity : 766 MW

CURRENT STATUS



Maldives relies heavily on oil for energy production

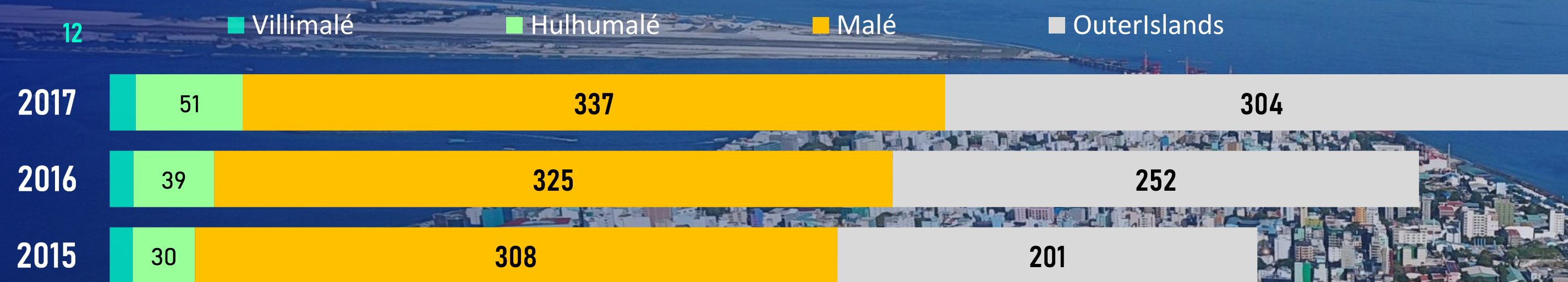
10% of GDP is spent on importing Fossil fuels.

The government spends approximately USD 194 million on subsidies.

80% of the imported petroleum products is Diesel

60% off the imported diesel is used to produce electricity

Annual Electricity Consumption in Inhabited Islands



Source : Island Electricity Data book 2018

Total consumption
751 GWh

Male' region
440 GWh

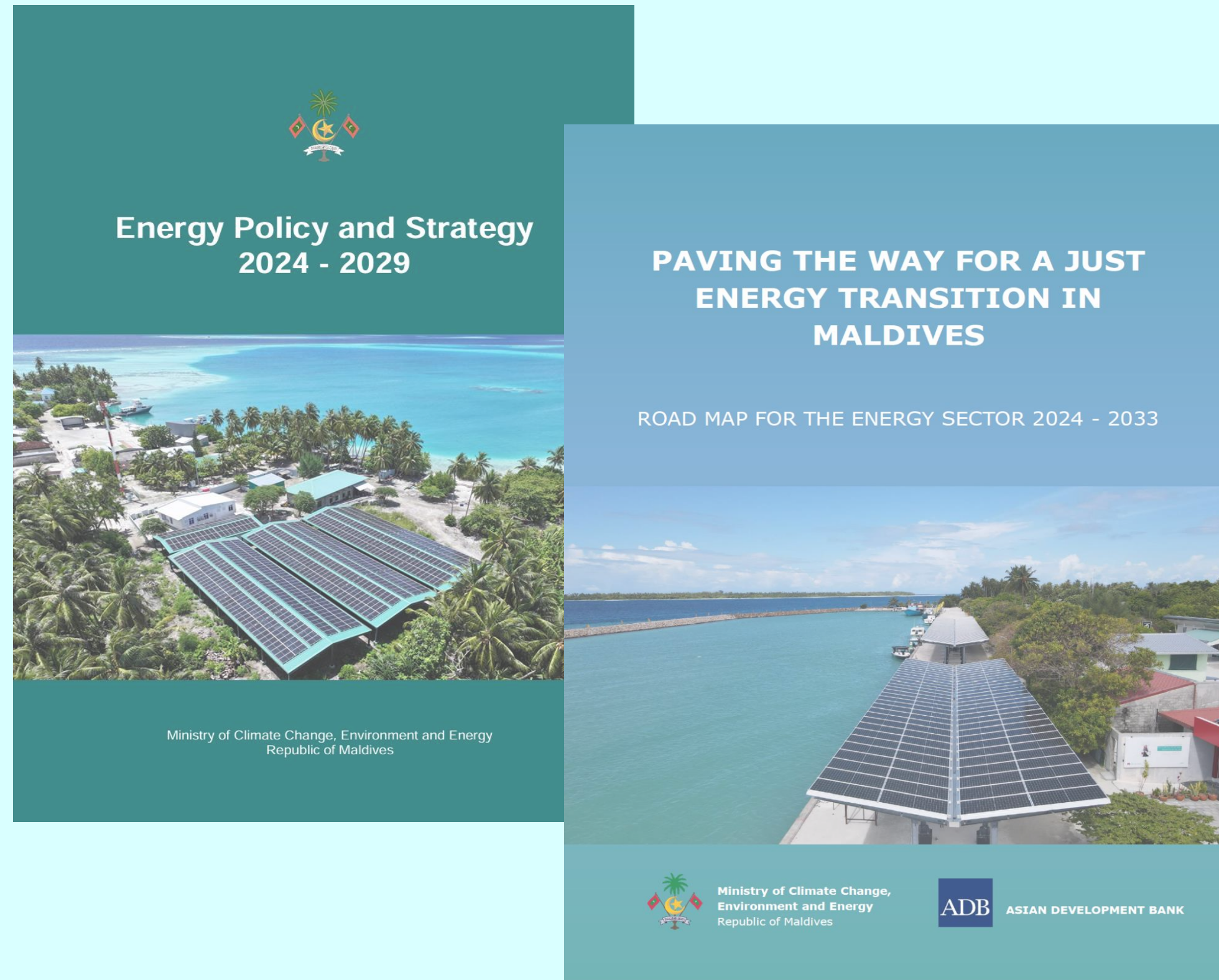
Source : Island Electricity Data book 2019

GOVERNMENT'S COMMITMENT



**Developing
renewable
energy systems
capable of
providing 33%
of the nation's
electrical needs**

MINISTRY OF CLIMATE CHANGE, ENVIRONMENT AND ENERGY



In order to achieve this commitment, the government published

- The Energy policy strategy (2024-2029)
- Roadmap for the energy sector (2024 – 2033)

ENERGY POLICY



Energy Policy and Strategy 2024 - 2029



Ministry of Climate Change, Environment and Energy
Republic of Maldives

- **Increase renewable energy**
Target 33% renewable electricity by 2028
 - **Improve energy efficiency**
Reduce energy waste and promote efficient buildings, appliances and power systems.
 - **Ensure affordable & reliable energy**
Review electricity tariffs, improve subsidies and strengthen fuel security.
 - **Reduce fossil-fuel dependence**
Diversify the energy mix and increase the use of locally available renewable resources.
- Strengthen energy governance**
Improve regulations, data collection, institutions and technical capacity.
- **Promote innovation & R&D**
Support research, new technologies and private-sector investment in clean energy.

تَرْفُورِ سَوَدَّ سَرِّی وَ مَحْضُو

تقریریں: 50 صفحہ: 272 تقریریں: 5 صفحہ: 1443 - 11 تقریریں: 2021

تاریخ: 18/2021

میرزا محمد رفیع و میرزا محمد رفیع و میرزا محمد رفیع

Maldives Energy Act

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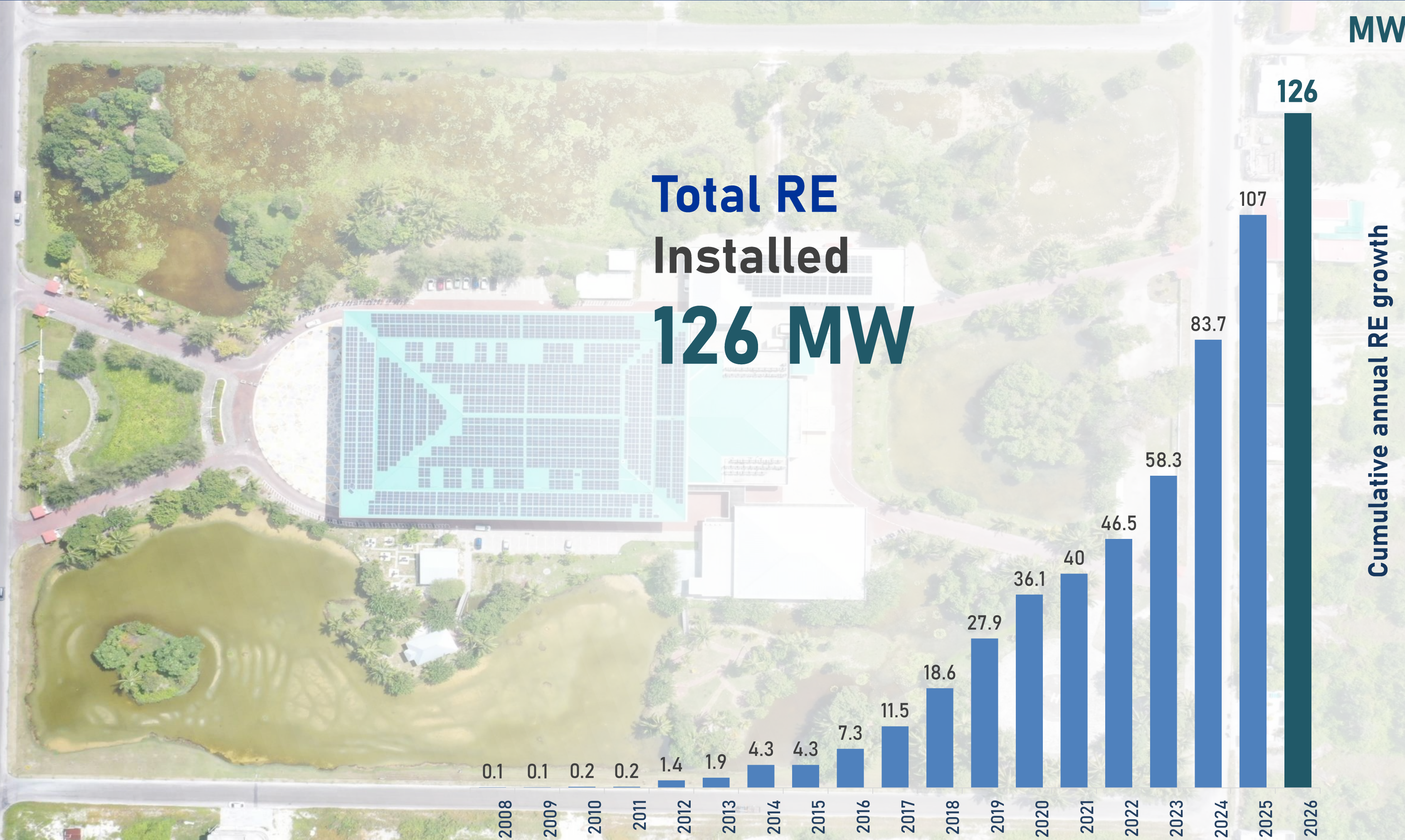
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- **Energy Act 18/2021**
Main legal framework for the energy sector.
- **URA Act 26/2020** – Establishes the regulator responsible for electricity and other utility services.
- **Energy Maximum Rate Regulation**
Regulates energy-service rates.
- **Energy Service Operating License Regulation**
Licensing requirements for energy-service providers.
- **General Regulation for Energy Services**
General requirements for energy-service provision.
- **Net Metering Regulation 2020/R-46**
Framework for renewable-energy net metering

RENEWABLE ENERGY GROWTH



Projects and Studies

ADB Projects

POISED

Preparing Outer
Islands For
Sustainable Energy
Development

ASSURE

Accelerating
Sustainable System
Development Using
Renewable Energy

Installed: 19.7 MW
Ongoing: 5.8 MW
Planned: 14.4 MW

Projects and Studies

World Bank Projects

ASPIRE

Accelerating
Sustainable Private
Investment in
Renewable Energy

ARISE

Accelerating Renewable
Energy Integration and
Sustainable Energy

Installed: 17.2 MW

Ongoing: 1 MW

Planned: 15.6 MW

Investment Mechanisms

Competitive Tendering

- Government invites local and international investors to compete for specific energy projects.
- Typically awarded based on technical and financial proposals.
- Power Purchase Agreements (PPAs) to provide long-term revenue certainty.

Private Sector Initiated Proposals (PSIPs)

- Investors can propose their own projects to the Government rather than waiting for a government-issued tender.
- Proposals are assessed for compliance and alignment with national priorities.
- If approved, the project can proceed through a government agreement.

Special Economic Zones (SEZs)

- A framework under the SEZ Act 24/2014 designed to attract large-scale strategic investment through special incentives.
- Renewable energy is specifically identified as a strategic investment area.
- Current threshold: minimum USD 100 million for strategic investments.
- SEZs can provide incentives such as tax/customs concessions, facilitated approvals and repatriation of capital and profits.

Magey Solar

Magey Solar is a Government initiative that promotes the installation of rooftop solar PV systems for households

Aim to reduce electricity costs, increasing the use of renewable energy, and reducing dependence on fossil fuels.

The programme is implemented by the Ministry in partnership with Utility Company (Fenaka Corporation Ltd.)

Installed in 250 household

Additional 298 households are currently underway



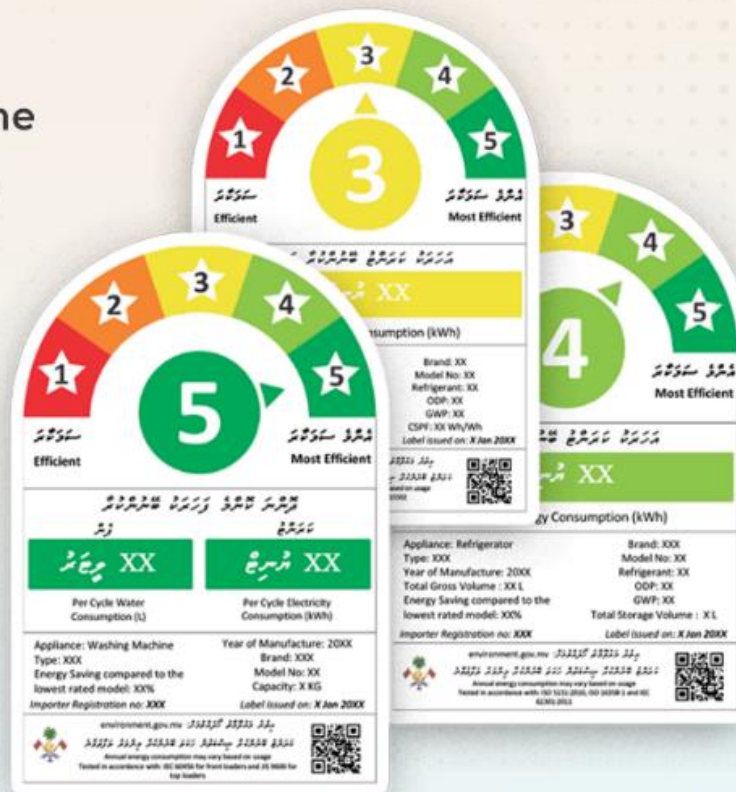
HAKATHARI PROGRAM

Maldives energy efficiency standard and labeling program

WHAT IS THE HAKATHARI LABEL?

It is a label which **indicates** the **energy efficiency level** of an appliance.

The label is based on international standards.



HOW DOES IT HELP?

-  Helps to compare different appliances.
-  Check the energy efficiency levels.
-  Find out how much energy is used annually.



THE FIRST HAKATHARI APPLICATION INTRODUCED



Refrigerator



Air Conditioner



Washing Machine



33



104



20

Seven businesses and 12 brands have registered for the program.



RANFAUN
Elevate your lifestyle

ASTERS

Redwave

Ref Cool

HOPE BROTHERS PRIVATE LIMITED

CHALLENGES

Lack of land space

- 115,300 km² land space

Many remote grids

- Islands are highly dispersed

Lack of economies of scale

- High electricity production cost in remote islands

Financial Barrier

- Unavailability of low cost financing
- High initial investment cost

Lack of human resources

- Small population
- Capacity development required





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Thank you