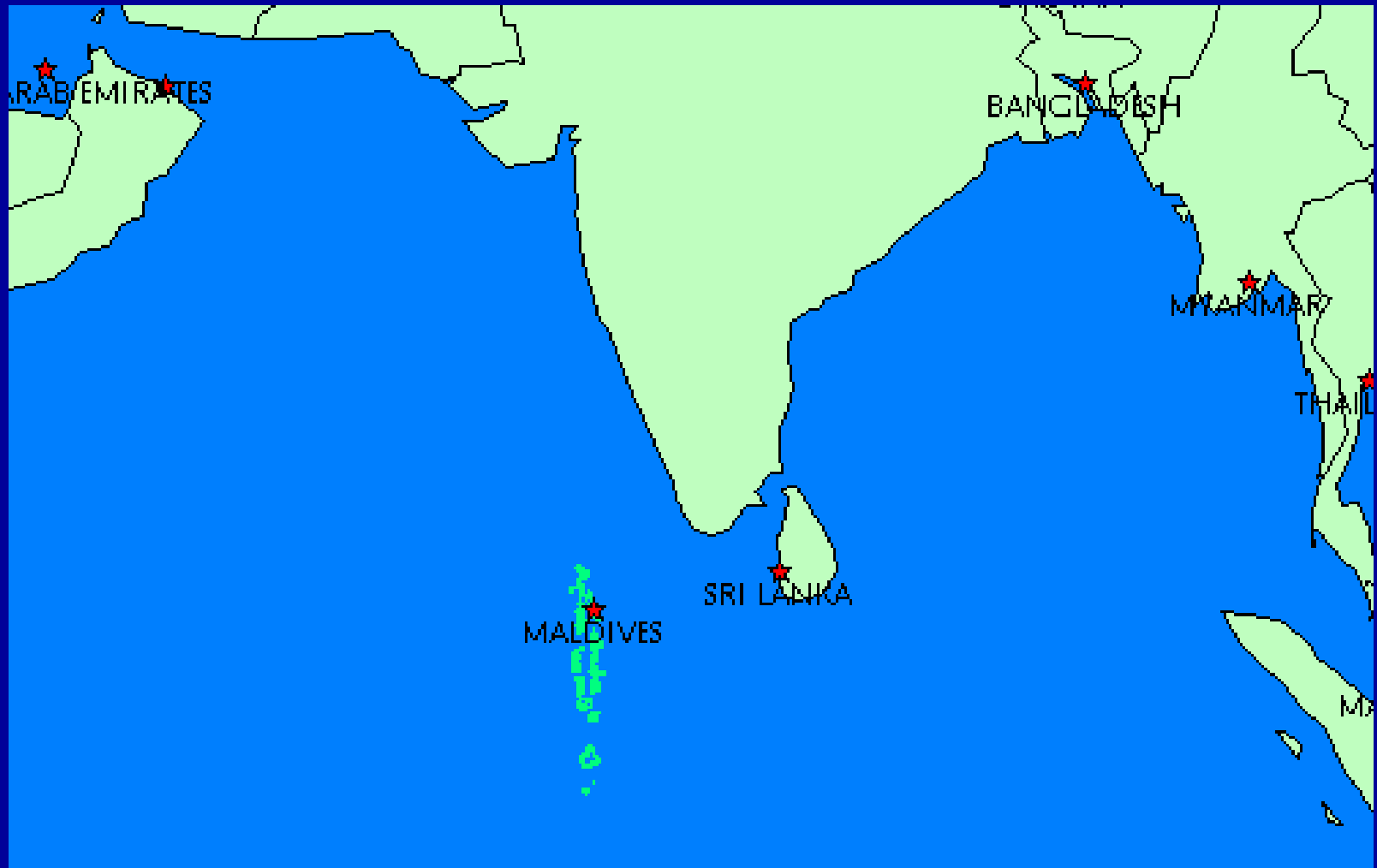


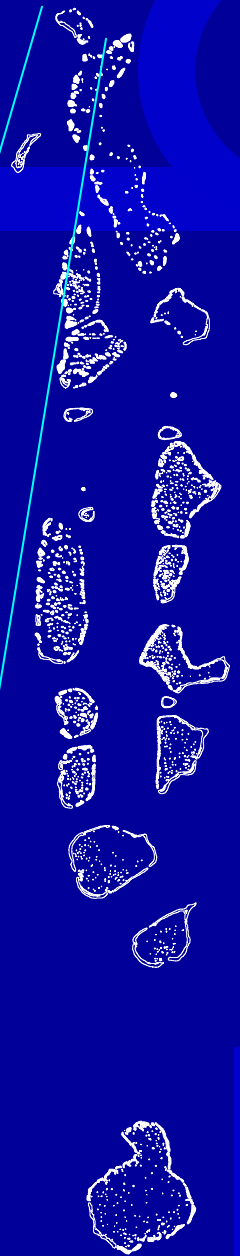
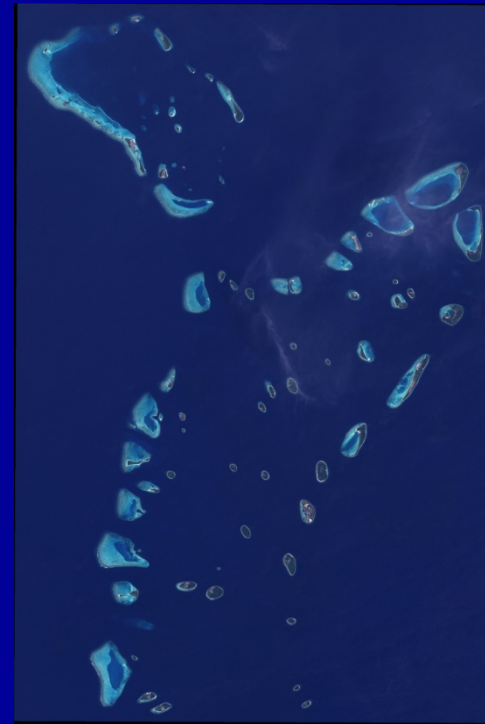
***Our Future:
Environmentally Sustainable
Transport
MALDIVES***

1. Introduction



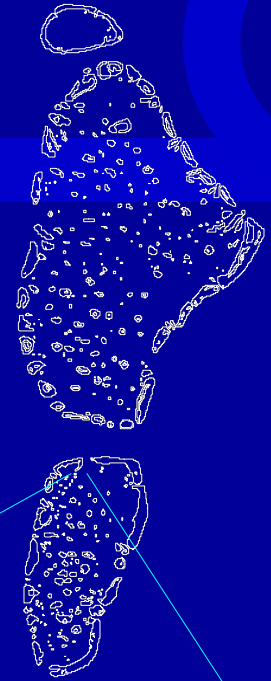
Geography

- A chain of coral atolls 860 km long, 80 -120 km wide
- 26 geographical atolls
- 1,192 islands
- 199 inhabited islands, 91 resorts, 5 airports



Geography - islands

- average height above mean sea level is 1.5 m
- over 80% of land area less than 1m above mean sea level
- size: from 0.5 to 2 sq.km
- 3 islands greater than 3 sq.km
- total land area: approximately 300 sq.km (less than 1% of the EEZ)



Our Transport System

Sea Transport

- Common mode of transport
- Consists of
 - Fishing Dhonies
 - Speed boats



Air Transport

- A fleet of wheeled and float planes (sea planes) offer passenger and limited cargo services
 - Wheeled planes
 - 5 domestic airports
 - 10 domestic airports (under construction by private sector)
 - All islands are accessible from an airport on a Dhoni within 2 hours
 - Float planes (sea planes)
 - Two operators operating to over 50 destinations in 100 km radius from Male' International Airport
 - Exclusive to tourism sector
- International air passenger and cargo services are offered through the International airport at
 - Hulhule Island in North Male' Atoll.
 - Gan Island in Addu Atoll



Land Transport

- Road passenger and cargo services are concentrated in Male'
- Male' has a paved road network with a length of 59.5 km and varying widths.
- A limited vehicle fleet operates on a number of other islands.
- High density of vehicles only on few islands
- Most popular vehicles
 - Motorcycles
 - Cars
 - Others



Institutional Framework

- Ministry of Transport and Communication is mandated to regulate the transport sector
 - Maritime Transport Department
 - regulates the deep sea and interisland transport modes
 - The Coast Guard assists the Maritime Department in the enforcement of regulations
 - The Land Transport Department
 - regulates land transport throughout the country
 - Maldives Port Authority (MPA)
 - manages the Port of Male'
 - passenger services
 - Maldives Airport Company Limited
 - Administer the International airports at Male' and Gan
- The Civil Aviation Department under the Ministry of Tourism and Civil Aviation
 - responsible for the regulation of the international and domestic air

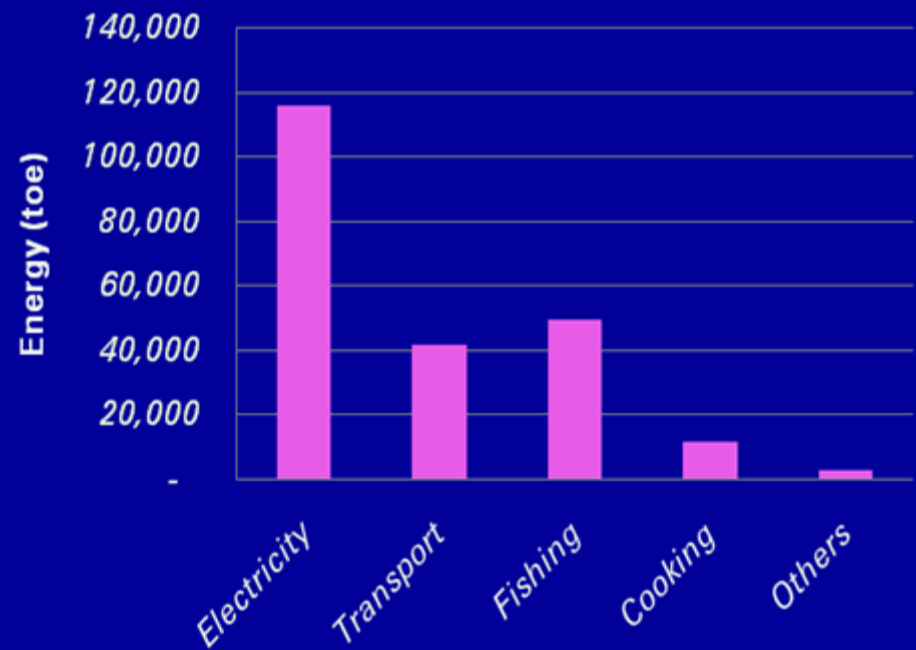
Legal Framework

- Law on Land Vehicles. The 2nd amendment
- Law for Pedestrians
- Law of Maritime Vessels
- Collection of fees from Maritime Vessels. The 8th amendment
- Licensing of Ship Stations
- Law for Wrecked and/or Sunken Vessels
- 43 percent is used for Transport and Fishing
- Law for Light Indicators at the Vessels within the Harbor
- Harbor Fee Collection Law
- Change of Ownership of Registered Vehicles.
- Presidential decree for the Maldives Airports Company Limited

Energy and Transport Sector

- Nearly 50 percent of the country's primary energy is used for electricity generation
- 43 percent is used for Transport and Fishing

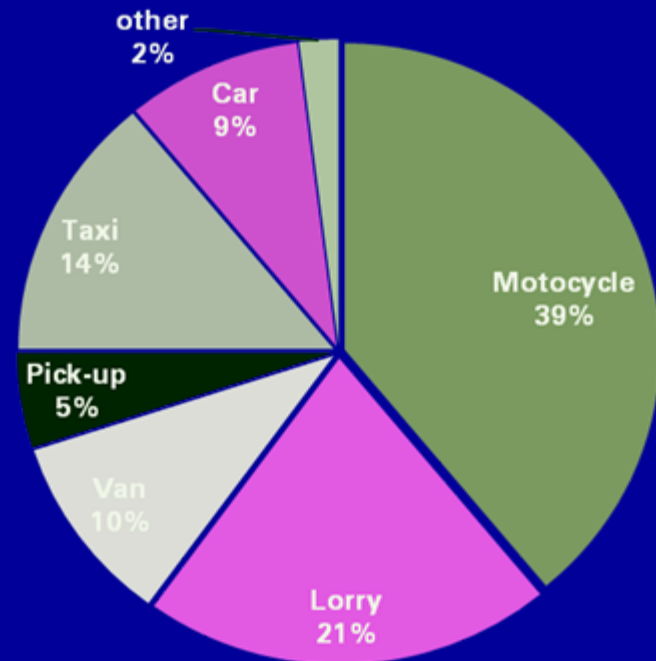
Primary energy usage for different sectors in the Maldives (2002)



Energy and Transport Sector

- Total energy consumption for road transport was estimated to be 8,826 toe
- The share of petrol is 89%
- Taxis represents 3% of vehicles but accounts 14% of the road transport energy consumption

Energy Consumption for Road Vehicles



Renewable Energy

1. Renewable energy technologies has been introduced to the Maldives
 - Navigational lights
 - Solar water heaters
 - PV for backup power by a telecommunication operator
2. Electric Vehicles has been recently introduced
 1. Motorcycles
 2. Golf carts to some resorts

Maldives contribution to global GHG emissions

- Maldives contributes 0.0012% to global greenhouse gas emissions
- Per capita emission was 0.54 t which is comparable to other small islands (1994)

Challengers facing the transport sector

- Sparsely populated small islands
- Hundreds of islands spread across a vast ocean
- Transport sector completely developed over fossil fuel as the energy source
- Lack of an appropriate public transport system
- High oil prices is heavily impacting on the country's fragile economy

Opportunities and way forward

- Renewable source of energy is becoming a favorable source of energy for the transport sector
- Well established tourism and fisheries sector
- An facilitative environment for the application of research and development technologies for land and sea transport

Thank you