



How SIDS generate financial resources for adaptation through the energy sector: SIDS DOCK case study

AMJAD ABDULLA
DIRECTOR GENERAL, CLIMATE CHANGE
GOVERNMENT OF MALDIVES
2ND FORUM OF THE STANDING COMMITTEE ON FINANCE
22 JUNE 2014, MONTEGO BAY, JAMAICA

SIDS DOCK

- ▶ SIDS DOCK serves as a “docking station” to increase SIDS access to international financing, technical expertise and technology, as well as a link to the multi-billion dollar European and US carbon markets
- ▶ Mission: To catalyze the transformation of the energy sector of SIDS to increase energy security, reduce greenhouse gas emissions (GHG), and **generate resources for investment in adaptation to climate change**

25%

*25 percent
(2005 baseline)
increase in
energy
efficiency*

50%

*50 percent of
electric power
from renewable
sources*

25%

*25 percent
decrease in
conventional
transportation
fuel use*

BY
2033

*SIDS DOCK
needs to
mobilize in
excess of USD
20 Billion*

Maldives: Climate Change, the single biggest threat to humanity.“

- ▶ About 1200 islands (189 inhabited and 105 active resorts)
- ▶ Population: 350,000
 - ▶ Greater Male Region (Capital Island): about 130,000
 - ▶ Outer Atolls : about 220,000
- ▶ Average elevation is 1.5 meters
- ▶ Economic Activity: Tourism and Fisheries
- ▶ GDP: US \$2.2 billion
- ▶ Heavily import dependent: over 90% of what is used is imported
- ▶ Extremely vulnerable to impacts of Climate Change
- ▶ Emission: 1300 - 1500 Gg of CO2 equivalent



Challenges to Adaptation

“The measure of intelligence is the ability to change.” — Albert Einstein

Life is neither static nor unchanging. With no individuality, there can be no change, no adaptation and, in an inherently changing world, any species unable to adapt is also doomed.” — Jean M. Auel

- ▶ Low lying small island
 - ▶ Increases the vulnerability to impacts of climate change
 - ▶ 1.5m average altitude
 - ▶ 80% lives 100m from shore (not by choice)
- ▶ Lack of economic strength
 - ▶ Adaptation requires high cost for small island geography
 - ▶ Maldives has a debt of 34.9% of GDP
- ▶ Lack of technical capacity
 - ▶ Not enough trained people available



Energy Sector

"We first make our habits, then our habits make us." — John Dryden

- ▶ Key service sector for all economic activities and services
- ▶ Almost exclusively dependent on fossil fuel (>99% as of 2012)
- ▶ Energy Use: 247,038 toe (as of 2012)
- ▶ Expenditure: **US \$476 million (as of 2012)**
- ▶ Energy use is distributed as below
 - ▶ Electricity generation and use : 40%
 - ▶ Transport : 54%
 - ▶ Other uses: 7%
- ▶ Growth rate: 7-10% annually
- ▶ Responsible for >90% of GHG emissions



Scaling up Renewable Energy Program (SREP)

- ▶ Grant of 30 million dollars from Climate Investment Funds initially
- ▶ Exclusively for renewable energy investments and readiness activities in electricity generation sector
- ▶ Split into 3 parts
 - ▶ ASPIRE: Accelerating Private Investments in Renewable Energy
 - ▶ POISED: Preparing Outer Islands for Sustainable Energy Development
 - ▶ TA: Technical Assistance
- ▶ **SIDS DOCK to contribute to enhance SREP investment plan**

Accelerating Private Investments in Renewable Energy (ASPIRE)

- ▶ Renewable Energy Investments under Feed in Tariff
- ▶ Investments include:
 - ▶ Solar PV investments in Greater Male Region
 - ▶ Solar and Wind investments in outer islands
 - ▶ Utilization of Waste to Energy where possible
 - ▶ Implementation support and institutional development
- ▶ Expected outcome:
 - ▶ **US\$ 92 million investments**
 - ▶ 20-25 MW RE installations



Preparing Outer Islands for Sustainable Energy Development (POISED)

- ▶ Prepping and demonstrating sustainable renewable energy systems in small outer islands
- ▶ Investments include
 - ▶ 100% RE in 10 small islands with storage (too small for commercial RE)
 - ▶ Power systems rehabilitation of all small islands (prepping to accept RE to existing grid)
 - ▶ Implementation and support
- ▶ Expected outcome:
 - ▶ **Over US\$ 100 million investments** (on RE , EE and other energy related infrastructure)
 - ▶ At least 2 MW RE installations



Technical Assistance

- ▶ Greater Male' Area Renewable Power System Integration
- ▶ Improved Access to quality data
- ▶ Creating enabling environment
- ▶ Human Capacity Building



Expected Achievements of SREP

- ▶ 27 MW of RE installation
- ▶ 551 tons/day of desalinated water produced
- ▶ 22 million liters of diesel reduced per year
- ▶ 65 Gg of CO₂ reduced per year
- ▶ US \$ 22 million per year on fuel import
- ▶ US \$ 10 million reduced on fuel subsidy
- ▶ Capacity built
- ▶ Establishment of Maldives Green Fund

Linkages: Adaptation and RE investments

- ▶ Increase energy security increase reliability of key community services
 - ▶ Energy services is key underlying factor in providing health services, water supply, communication etc
 - ▶ Indigenous production of energy reduces energy service black outs
- ▶ Reduced expenditure of fossil fuel import reduces economic vulnerability
 - ▶ Stronger the economy becomes, its easier and safer for private sector investments in various sectors like agriculture and fisheries
- ▶ Monetary savings could be used for Adaptation
 - ▶ The subsidy and other income through FIT can be used through Maldives Green Fund
 - ▶ Maldives Green Fund could provide much needed financial assistance to enhance adaptation activities in the country

Thank You!