

## Sector Results Framework –Energy

Sector Outcome	Results Indicators	Indicator Type	Unit of Measure	Baseline	Targets/ Achievements						Lead Agency
						2009	2010	2011	2012	2013	
1 . Access to affordable and reliable electricity supplies for all <b>P1</b>	1 .Incentives in form of grants and concessionary financing introduced for power sector development, increased <b>P1S4</b>	Output	No. of incentive schemes	Power sector development loans by MoFT, FRESA loan scheme, Fuel subsidy	Target	Provide Grants for power system upgrade	Fuel subsidies	Draft Utilities development fund concept	Utilities development Fund established	Start disbursement of financing	MHE, MoFT, MoED
					Ach	- FRESA 1 loan, - 26 loans disbursed under revolving fund established at MoFT	- FRESA 1 loan - Electricity subsidies provided for household in need - Fuel subsidies given to utilities companies				
	2 .Private sector participation in developing and managing sustainable electricity supplies, increased facilitated <b>P1S2</b>	Outcome	Event	NA	Target	Handing over power systems developed by the Government to the six Utility Companies	- Initiate and facilitate private sector partnership with utility companies - Utility capacity development	Energy Sector Investment plan for PP prepared	Legislation for PP enacted, Implementation of energy sector investment plan	Private utilities operational, Implementation of energy sector investment plan	MHE, MoFT, MoED
					Ach	Six utility companies established	Target Achieved				
	3 . Islands with more Reliable and safe RE based electricity supplies increased. <b>P1S1</b>	Outcome	% of Renewable Energy Supply in total electricity supply	Existing RE pilot projects	Target	0.2%	0.2%~ 1%	2%	5%	10%	MHE, Utilities
					Ach	0.2%	To be assessed				

**Comment [D1]:** Consult with NSPA for statistical figures

2. Carbon neutrality achieved by 2020  P2	4. Electricity unit prices in islands at lowest cost possible  P1S4	Outcome.	Avg. Unit price for consumer	Existing tariff structure	Target	To establish Uniform regional tariff structure	Implementing tariff structure in the regions	- Maintaining avg. Unit price constant (Tariff+surcharge) - Possibilities for adopting Feed-in tariff explored - Implementing tariff structure in the regions	- Maintaining avg. Unit price constant (Tariff+surcharge) - Feed-in tariff policies Recommended Implementing tariff structure in the regions	Maintaining avg. Unit price constant (Tariff+surcharge) - Feed-in tariff policies & implementation guidelines implemented	MEA, NSPA, MoFT,
					Ach	Uniform regional tariff structure established	Implementation on going				
	5. Subscribers to RE-based electricity increased	Outcome	%	% with access to electricity	Target	1%	1%	2%	5%	10%	MHE, MoFT, Utilities
					Ach	0.2%	0.2%~ 1%	NA	NA	NA	
	1. Standards established for exhaust emissions, EE appliances, vehicles and vessels that use clean fuels  P2S3	Output	Event	Maldives Energy Authority regulation	Target			Establish exhaust emission standards for power plants, Establish EE appliance standards	Establish exhaust emission standard for vehicle/ vessels	Establish monitoring mechanisms	EPA, MEA
					Ach				NA	NA	
	2. Forecasts of energy usage by different sectors, GHG emissions and status of carbon neutrality developed  P2S1	Output	Event	Energy demand and supply study 2002, 2003, 2004, 2005	Target	Energy demand and supply for 2008/2009	Energy demand and supply for 2009	Energy demand and supply 2010, including sectoral studies	Energy demand and supply study 2011, modelling studies	Comprehensives Energy demand and supply study 2012	MHE, MEA
					Ach	Not achieved	Energy demand and supply study Completed for 2009, energy audit completed	Working on the energy demand and supply study for 2010			

Comment [D2]: Consult EPA with MEA

	3. Research and Development of Carbon Capture and Sequestration projects targeting reduction in GHG emission increased <b>P2S4</b>	Output	No. of Research and Development Projects	First National communication (2001)	Target	NA	NA	Follow the development of CCS technology, Data collection for second NC	Establish the potential of CCS in Maldives, Data collection for 2nd NC	Completion of 2nd NC	MHE
					Ach	NA	NA	NC Project Document preparation ongoing			
	4. Demand for diesel fuel decreased <b>P2S2</b>	Outcome	%	Existing RE pilot projects	Target	NA	NA	-3% from BAU	-7% from BAU	- 12% from BAU	Utilities, MHE
					Ach	NA	NA	NA	NA	NA	
2. Cost reduction through energy efficiency and energy conservation <b>P3</b>	1. Study compiled on all areas of improvements to achieve fuel conservation and efficiency in different modes of transportation <b>P3S4</b>	Output	Event	Sea transport network established ,	Target					Potential sustainable transport assessments	MoTC, MHE
					Ach						
	2. Incentive schemes developed for establishing charging centres to support increased use of electric vehicle and use of alternate cleaner fuels on existing vehicles <b>P3S5</b>	Output	Event		Target				Establishment of the scheme framework	Inauguration of first charging station	MoTC, MHE
					Ach						
	2. I <b>P3S3</b>	Impact	%	Energy demand and supply study 2009	Target		32%	33%	36%	40%	Utilities, MHE, MEA
					Ach	30.01%					
	3. Reduce expenditure on energy bill in comparison to GDP	Impact	% of GDP (red action over prev.	23 % of GDP	Target	8% reduction			2% reduction	3% reduction	MEA, MHE, Tourism. MoTC MoED
					Ach	8% reduction	3% increase				

			yr.)								
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P4	4. National energy security increased via diversified energy sources	1. Indigenously available renewable sources of energy developed for use, increased P4S1	Output	No.	Existing RE Pilot projects	Target			700kWp solar PV.	SREP targets	SREP targets	MHE, utilities, Min of Tourism
						Ach						
		2. Study conducted on energy demand and supply at regional/ provincial levels P4S2	Output	Event	Energy demand and supply study 2002,2003, 2004, 2005, 2009	Target		Local Energy demand and supply studies	Local Energy demand and supply studies	Local Energy demand and supply studies	Local Energy demand and supply studies	MEA, MHE,
						Ach	Local Energy demand and supply studies 2009					
		3. Renewable Energy Centre established and courses on renewable energy introduced in school and national college curriculum P3S10	Output	Event	RE information kiosk	Target	<a href="#">Establish RE Kiosk, Sign with an agreement with MITE to conduct RE courses.</a>	<a href="#">Introduce RE courses at MITE.</a>	RE course at FET/ schools	RE course at FET/school ; students graduating	RE course at FET/schools ; students graduating	Maldives National University , MHE
						Ach	RE information kiosk	RE course at FET				
		4. Suppliers mandated to participate as strategic partners in ensuring timely, quality and quantity availability of required petroleum products at selected supply centers, increased P4S5	Impact	No.		Target				<a href="#">Increase the number of suppliers</a>	<a href="#">Increase no of suppliers</a>	MoED
						Ach						
		5. Feasible regions opened for fuel market for investors, increased	Output	No.		Target				Fuel storage facilities at 7 <sup>0</sup> & 0 <sup>0</sup>	Fuel storage facilities at 7 <sup>0</sup> & 0 <sup>0</sup>	MoED
						Ach		Proposal to develop Fuel				

Comment [C3]: Can a value be given?

	P4S3						storage				
	6. Communities generating their own Power supplies from household waste and bio fuel, increased P5S7	Output	No.	SMILES pilot project	Target				Community based demonstration project	Community based demonstration project	Utilities
					Ach						
	7. Non Conventional renewable Energy (bio gas) installed capacity, increased	Output	No.	SMILES pilot project	Target				Community based demonstration project	Community based demonstration project	Utilities,
					Ach	2009					
	8. Electricity provisions to households through conventional/ non conventional renewable energy supplies	Outcome	Ratio	Pilot RE projects	Target			Install 700kW Solar PV; RE project at Thinadhoo	SREP	SREP	Utilities
					Ach		Contract signed, funds approved				
5. Institutional and Legal framework of the energy sector, strengthened P6	1. Frameworks to regulate and monitor energy usage focused on protecting the environment and human health established P6S1	Output	Event		Target			Identification of parameters and variables to analyze energy-envt.- human health linkages	Develop frameworks	Establish regulations	MEA, EPA, Min of Health
					Ach						
	2. Regulations developed for facilitating market driven tariffs, competition, encouraging formation of JV, energy production from renewable sources and for establishing regional and	Output	Event	Energy policy, MEA regulation	Target			Energy bill, PPA, feed-in tariff, RE equipment standards; Conduct feasibility studies to install submarine cable	Implementation of energy bill; Install submarine cable	Monitoring in place; Increased installation of submarine cable	MEA, Utilities, MHE
					Ach						

**Comment [C4]:** As the Unit of Measure is ratio can a% be given for the targeted household coverage by RE and Non RE sources?

	interconnected submarine grids										
	P6S5, P6S4										

	3. Guidelines and design requirements for ensuring energy efficiency in building developed	Output	Event	Building code	Target			Energy policy developed	Develop standards & implementation guidelines	Monitoring mechanism in place	MHE, MEA
					Ach			Energy audits for buildings			
	4. Buildings qualified for certification as energy efficient, increased	Outcome	No.	Building code	Target			Potential energy conservation estimated	% of existing building adopting conservation	% of new construction is EEBS	MHE, MEA
					Ach						
	P6S9										
	P6S9										

Comment [C6]: Can a value be given for the %

Comment [C5]: Can a value be given for the %