



Government of India

R F D

(Results-Framework Document)
for

Ministry of New and Renewable Energy
(2013-2014)

Section 1: Vision, Mission, Objectives and Functions

Vision

New and Renewable Energy to be a significant source in furtherance of the national aim of energy security and energy independence

Mission

Develop, demonstrate and commercialize technologies for harnessing new and renewable energy sources in close concert with corporate, scientific and technical institutions. Replace use of different fossil fuels wherever possible, and increase access to electricity/ lighting in remote and rural areas, through Renewable Energy Systems Increase the contribution of Renewable Energy in the total energy mix of the country to 6 per cent by 2022, with about 12 per cent contribution to total electricity mix by 2016-17.

Objectives

- 1 To promote deployment of grid-interactive renewable power generation projects to augment contribution of renewables in total electricity mix.
- 2 To promote renewable energy initiatives for meeting energy needs in rural areas
- 3 To promote renewable energy initiatives to supplement energy needs in urban areas
- 4 To promote renewable energy initiatives to supplement energy needs in industry and commercial establishments
- 5 To promote research, design and development activities at premier national institutions and industries on different aspects of new and renewable energy (NRE) technologies.
- 6 New initiatives and management actions
- 7 Development of resource base
- 8 Funding of Clean Energy projects
- 9 Monitoring Systems for installed projects

Functions

- 1 Putting in place suitable policy and regulatory framework at the national and State levels for growth of new and renewable energy sector.
- 2 Making available necessary fiscal and financial incentives to domestic industry, developers/ investors and users for development/ deployment of: -Grid interactive / Off-grid renewable power systems to supplement fossil fuels based electricity generation -Standalone RE systems/ devices and services to supplement energy needs of cooking, lighting & motive power in rural areas -RE systems and services for urban, industrial & commercial applications
- 3 Human Resource Development in the new and renewable energy sector.

Section 1: Vision, Mission, Objectives and Functions

- 4 Fostering international cooperation in new and renewable energy sector
- 5 Information, Publicity, Public Awareness creation in the Renewable Energy (RE) sector.
- 6 Supporting related Research & Development activities / projects taken up by institutions and industry.
- 7 Undertaking resource assessment and potential estimation studies for all new and renewable sources of energy.

Section 2:
Inter se Priorities among Key Objectives, Success indicators and Targets

Objective	Weight	Action	Success Indicator	Unit	Weight	Target / Criteria Value				
						Excellent 100%	Very Good 90%	Good 80%	Fair 70%	Poor 60%
[1] To promote deployment of grid-interactive renewable power generation projects to augment contribution of renewables in total electricity mix.	30.00	[1.1] Solar power plants commissioned (including JNNISM)	[1.1.1] Capacity addition in FY 2013-14	MW	4.00	1100	990	880	770	660
		[1.2] Projects sanctioned / auctioned under JNNISM	[1.2.1] Capacity to be sanctioned in FY 2013-14	MW	5.00	800	720	640	560	480
		[1.3] Projects commissioned under JNNISM	[1.3.1] Commission of projects in FY 2013-14	MW	5.00	400	360	320	280	240
		[1.4] Bio power (Biomass power and Cogeneration)	[1.4.1] Capacity addition in FY 2013-14	MW	5.00	400	360	320	280	240
		[1.5] Small Hydro Power (SHP)	[1.5.1] Commissioning of projects in FY 2013-14	MW	5.00	300	270	240	210	180
		[1.6] Wind power	[1.6.1] Capacity addition in FY 2013-14	MW	4.00	2500	2250	2100	2000	1900
		[1.7] Urban Waste to Energy	[1.7.1] Sanctioning/Commissioning of projects	MW	2.00	30	27	24	21	18
[2] To promote renewable energy initiatives for meeting energy needs in rural areas	21.00	[2.1] Installation of Family type Biogas Plants - No. of plants installed	[2.1.1] Allotment of targets and commissioning	No. in lakh	4.00	1.1	0.99	0.88	0.77	0.66
		[2.2] Installation of Biomass Gasifiers for Village energy supply	[2.2.1] coverage of villages	No. of villages	4.00	25	23	20	18	16
		[2.3] Decentralised SPV systems / Devices	[2.3.1] Distribution of systems	MW	4.00	40	36	32	28	24
		[2.4] Watermills	[2.4.1] Installation of watermills	Nos.	2.00	500	450	400	350	300

Section 2:
Inter se Priorities among Key Objectives, Success indicators and Targets

Objective	Weight	Action	Success Indicator	Unit	Weight	Target / Criteria Value				
						Excellent 100%	Very Good 90%	Good 80%	Fair 70%	Poor 60%
[3] To promote renewable energy initiatives to supplement energy needs in urban areas	4.00	[2.5] Micro hydel	[2.5.1] Sanctioning of projects	kW	1.00	2000	1800	1600	1400	1200
		[2.6] Aero generators	[2.6.1] Commissioning of system	kW	1.00	350	315	280	245	210
		[2.7] Wind + SPV hybrid systems (10kW)	[2.7.1] Starting of projects	No.	2.00	15	13	12	11	9
		[2.8] Capacity added through off grid wind / hybrid power micro hydel / bio power / SPV in rural areas	[2.8.1] Commissioned capacity	MW	1.00	35	31.50	28	24.50	21
		[2.9] Improved cookstoves	[2.9.1] Distribution of cookstoves	No.	1.00	50000	45000	40000	35000	30000
		[2.10] Solar cookers	[2.10.1] Numbers sold	No.	1.00	7000	6300	5600	4900	4200
		[3.1] Installation of Solar Thermal systems in urban households/ buildings -total Collectors Area installed	[3.1.1] collector area installed	Lakh square meter	3.00	4.50	4.05	3.60	3.15	2.70
		[3.2] SPV rooftop systems and smart grid	[3.2.1] capacity installed	MW	1.00	5	4.5	4.0	3.5	3
		[4.1] Industrial Waste-to energy	[4.1.1] capacity installed	MWeq	3.00	10	9	8	7	6
		[4.2] Rice husk based power generation in Rice Mills and other Industries	[4.2.1] projects installed	Nos	1.00	50	45	40	35	30
[4] To promote renewable energy initiatives to supplement energy needs in industry and commercial establishments	7.00	[4.3] Biomass based cogeneration in other industries excluding	[4.3.1] capacity added	MWeq	3.00	80	72	64	56	48

Section 2:
Inter se Priorities among Key Objectives, Success indicators and Targets

Objective	Weight	Action	Success Indicator	Unit	Weight	Target / Criteria Value				
						Excellent	Very Good	Good	Fair	Poor
						100%	90%	80%	70%	60%
[5] To promote research, design and development activities at premier national institutions and industries on different aspects of new and renewable energy (NRE) technologies.	11.00	Bagasse								
		[5.1] New R&D projects in : solar photovoltaic, solar thermal, Bio energy, New Technologies	[5.1.1] Number of projects sanctioned	No	4.00	15	13	12	10	9
		[5.2] Percentage of ongoing / new R&D projects meeting the pre agreed milestones	[5.2.1] projects meeting milestones	%	2.00	100	90	80	70	60
		[5.3] Number of new / ongoing collaborations with leading international institutions	[5.3.1] number of collaborations achieved	No.	1.00	2	2	1	1	1
		[5.4] Number of new / ongoing collaborations with private sector	[5.4.1] number of collaborations achieved	No.	1.00	4	3	2	1	1
		[5.5] Number of new technologies / products developed	[5.5.1] products developed	No.	1.00	4	3	2	1	1
[6] New initiatives and management actions	6.00	[5.6] 2 promising Research projects on which the Ministry is working (i) 1 MW solar thermal power projects at SEC (ii) 250 kW gasification based power generation (iii) New design of community cookstove	[5.6.1] completion of projects	No.	2.00	2	2	1	1	1
		[6.1] Number of SPV lighting systems financed by banks in rural areas	[6.1.1] systems financed	No. of system in lakh	3.00	1	0.9	0.8	0.7	0.6

Section 2: Inter se Priorities among Key Objectives, Success indicators and Targets

Objective	Weight	Action	Success Indicator	Unit	Weight	Target / Criteria Value				
						Excellent 100%	Very Good 90%	Good 80%	Fair 70%	Poor 60%
[6.2] Promoting concept of Green Campus/Neighbourhoods		[6.2.1] Preparation of DPRS	No. of cities	2.00		60	54	48	42	36
[6.3] Implementation of Ladakh plan - award of work for Small Hydro projects		[6.3.1] award of work for projects	No.	1.00		10	9	8	7	6
[7] Development of resource base	3.00	[7.1] Reassessment of wind potential	Masts	1.00		10	9	8	7	6
[7.2] Assessment of Solar potential		[7.2.1] setting up of stations	Monitoring stations	1.00		15	14	12	11	9
[7.3] Prepare a draft policy on Offshore wind power		[7.3.1] preparation of document	%	1.00		100	90	80	70	60
[8] Funding of Clean Energy projects	2.00	[8.1] Amount of clean energy projects posed to MoF	Rs.in crores	2.00		800	720	640	560	480
[9] Monitoring Systems for installed projects	1.00	[9.1] System for monitoring and evaluation of projects	%	0.50		10	9	8	7	6
[9.2] Revision of Schemes as per evaluation study		[9.2.1] schemes modified	no.	0.50		4	4	3	2	1
* Efficient Functioning of the RFD System	3.00	Timely submission of Draft RFD 2014-15 for Approval	Date	2.0		05/03/2014	06/03/2014	07/03/2014	08/03/2014	11/03/2014
* Transparency/Service delivery Ministry/Department	3.00	Timely submission of Results for 2012-13	Date	1.0		01/05/2013	02/05/2013	03/05/2013	06/05/2013	07/05/2013
* Mandatory Objective(s)	3.00	Independent Audit of implementation of Citizens'/Clients' Charter (CCC)	%	2.0		100	95	90	85	80

Section 2: Inter se Priorities among Key Objectives, Success indicators and Targets

Objective	Weight	Action	Success Indicator	Unit	Weight	Target / Criteria Value				
						Excellent	Very Good	Good	Fair	Poor
						100%	90%	80%	70%	60%
* Administrative Reforms	6.00	Independent Audit of implementation of Public Grievance Redressal System	% of implementation	%	1.0	100	95	90	85	80
		Implement mitigating strategies for reducing potential risk of corruption	% of implementation	%	1.0	100	95	90	85	80
		Implement ISO 9001 as per the approved action plan	% of implementation	%	2.0	100	95	90	85	80
		Implement Innovation Action Plan (IAP)	% of milestones achieved	%	2.0	100	95	90	85	80
* Improving Internal Efficiency/Responsiveness.	2.00	Identification of core and non-core activities of the Ministry/Department as per 2nd ARC recommendations	Timely submission	Date	1.0	27/01/2014	28/01/2014	29/01/2014	30/01/2014	31/01/2014
		Update departmental strategy to align with 12th Plan priorities	Timely updation of the strategy	Date	2.0	10/09/2013	17/09/2013	24/09/2013	01/10/2013	08/10/2013
* Ensuring compliance to the Financial Accountability Framework	1.00	Timely submission of ATNs on Audit paras of C&AG	Percentage of ATNs submitted within due date (4 months) from date of presentation of Report to Parliament by CAG .during the year.	%	0.25	100	90	80	70	60
		Timely submission of ATRs to the PAC Sectt. on PAC Reports.	Percentage of ATRs submitted within due date (6 months) from date of presentation of Report to Parliament by PAC .during the year.	%	0.25	100	90	80	70	60
		Early disposal of pending ATNs on Audit Paras of C&AG Reports presented to Parliament before 31.3.2012.	Percentage of outstanding ATNs disposed off during the year.	%	0.25	100	90	80	70	60
* Mandatory Objective(s)										

Section 2:
Inter se Priorities among Key Objectives, Success indicators and Targets

Objective	Weight	Action	Success Indicator	Unit	Weight	Target / Criteria Value				
						Excellent 100%	Very Good 90%	Good 80%	Fair 70%	Poor 60%
		Early disposal of pending ATRs on PAC Reports presented to Parliament before 31.3.2012	Percentage of outstanding ATRS disposed off during the year.	%	0.25	100	90	80	70	60

* Mandatory Objective(s)

Section 3: Trend Values of the Success Indicators

Objective	Action	Success Indicator	Unit	Actual Value for FY 11/12	Actual Value for FY 12/13	Target Value for FY 13/14	Projected Value for FY 14/15	Projected Value for FY 15/16
[1] To promote deployment of grid-interactive renewable power generation projects to augment contribution of renewables in total electricity mix.	[1.1] Solar power plants commissioned (including JNNISM)	[1.1.1] Capacity addition in FY 2013-14	MW	905	295	1100	1600	2500
	[1.2] Projects sanctioned / auctioned under JNNISM	[1.2.1] Capacity to be sanctioned in FY 2013-14	MW	--	--	800	1000	1200
	[1.3] Projects commissioned under JNNISM	[1.3.1] Commission of projects in FY 2013-14	MW	--	--	400	600	800
	[1.4] Bio power (Biomass power and Cogeneration)	[1.4.1] Capacity addition in FY 2013-14	MW	488	400	400	525	550
	[1.5] Small Hydro Power (SHP)	[1.5.1] Commissioning of projects in FY 2013-14	MW	352	111	300	400	400
	[1.6] Wind power	[1.6.1] Capacity addition in FY 2013-14	MW	3196	1199	1500	3000	3000
	[1.7] Urban Waste to Energy	[1.7.1] Sanctioning/Commissioning of projects	MW	--	--	30	30	30
[2] To promote renewable energy initiatives for meeting energy needs in rural areas	[2.1] Installation of Family type Biogas Plants - No. of plants installed	[2.1.1] Allotment of targets and commissioning	No. in lakh	1.40	0.66	1.10	1.50	1.50
	[2.2] Installation of Biomass Gasifiers for Village energy supply	[2.2.1] coverage of villages	No. of villages	--	--	25	30	35
	[2.3] Decentralised SPV systems / Devices	[2.3.1] Distribution of systems	MW	16	17.59	40	40	40

Section 3: Trend Values of the Success Indicators

Objective	Action	Success Indicator	Unit	Actual Value for FY 11/12	Actual Value for FY 12/13	Target Value for FY 13/14	Projected Value for FY 14/15	Projected Value for FY 15/16
	[2.4] Watermills	[2.4.1] Installation of watermills	Nos.	440	270	500	550	600
	[2.5] Micro hydel	[2.5.1] Sanctioning of projects	kW	--	--	2000	2200	2500
	[2.6] Aero generators	[2.6.1] Commissioning of system	kW	--	--	350	400	450
	[2.7] Wind + SPV hybrid systems (10kW)	[2.7.1] Starting of projects	No.	--	--	15	20	25
	[2.8] Capacity added through off grid wind / hybrid power micro hydel / bio power / SPV in rural areas	[2.8.1] Commissioned capacity	MW	--	--	35	35	40
	[2.9] Improved cookstoves	[2.9.1] Distribution of cookstoves	No.	--	--	50000	75000	100000
	[2.10] Solar cookers	[2.10.1] Numbers sold	No.	--	--	7000	8000	10000
	[3.1] Installation of Solar Thermal systems in urban households/buildings -total Collectors Area installed	[3.1.1] collector area installed	Lakh square meter	11	1.41	4.5	6.50	6.50
[3] To promote renewable energy initiatives to supplement energy needs in urban areas	[3.2] SPV rooftop systems and smart grid	[3.2.1] capacity installed	MW	--	--	5	7	10
[4] To promote renewable energy initiatives to supplement energy needs in industry and commercial establishments	[4.1] Industrial Waste-to energy	[4.1.1] capacity installed	MW _{eq}	--	12.76	10	15	20

Section 3: Trend Values of the Success Indicators

Objective	Action	Success Indicator	Unit	Actual Value for FY 11/12	Actual Value for FY 12/13	Target Value for FY 13/14	Projected Value for FY 14/15	Projected Value for FY 15/16
[5] To promote research, design and development activities at premier national institutions and industries on different aspects of new and renewable energy (NRE) technologies.	[4.2] Rice husk based power generation in Rice Mills and other Industries	[4.2.1] projects installed	Nos	--	42	50	55	55
	[4.3] Biomass based cogeneration in other industries excluding Bagasse	[4.3.1] capacity added	MWeq	--	55.53	80	80	80
	[5.1] New R&D projects in : solar photovoltaic, solar thermal, Bio energy, New Technologies	[5.1.1] Number of projects sanctioned	No	--	4	15	20	20
	[5.2] Percentage of ongoing / new R&D projects meeting the pre agreed milestones	[5.2.1] projects meeting milestones	%	--	--	100	--	--
	[5.3] Number of new / ongoing collaborations with leading international institutions	[5.3.1] number of collaborations achieved	No.	--	--	2	2	2
	[5.4] Number of new / ongoing collaborations with private sector	[5.4.1] number of collaborations achieved	No.	--	--	3	3	3
	[5.5] Number of new technologies / products developed	[5.5.1] products developed	No.	--	--	3	3	3

Section 3: Trend Values of the Success Indicators

Objective	Action	Success Indicator	Unit	Actual Value for FY 11/12	Actual Value for FY 12/13	Target Value for FY 13/14	Projected Value for FY 14/15	Projected Value for FY 15/16
[6] New initiatives and management actions	[5.6] 2 promising Research projects on which the Ministry is working (i) 1 MW solar thermal power projects at SEC (ii) 250 kW gasification based power generation (iii) New design of community cookstove	[5.6.1] completion of projects	No.	--	--	2	2	2
	[6.1] Number of SPV lighting systems financed by banks in rural areas	[6.1.1] systems financed	No. of system in lakh	--	--	1	1.25	1.50
	[6.2] Promoting concept of Green Campus/Neighbourhoods	[6.2.1] Preparation of DPRS	No. of cities	--	--	60	40	30
	[6.3] Implementation of Ladakh plan - award of work for Small Hydro projects	[6.3.1] award of work for projects	No.	--	--	10	5	--
[7] Development of resource base	[7.1] Reassessment of wind potential	[7.1.1] installation of Masts	Masts	--	--	10	20	25
	[7.2] Assessment of Solar potential	[7.2.1] setting up of stations	Monitoring stations	--	--	15	20	20
	[7.3] Prepare a draft policy on Offshore wind power	[7.3.1] preparation of document	%	--	--	100	--	--
[8] Funding of Clean Energy projects	[8.1] Amount of clean energy projects posed to MoF	[8.1.1] proposals prepared	Rs.in crores	--	--	800	1000	1200

Section 3: Trend Values of the Success Indicators

Objective	Action	Success Indicator	Unit	Actual Value for FY 11/12	Actual Value for FY 12/13	Target Value for FY 13/14	Projected Value for FY 14/15	Projected Value for FY 15/16
[9] Monitoring Systems for installed projects	[9.1] System for monitoring and evaluation of projects	[9.1.1] development of system	%	--	--	50	50	--
	[9.2] Revision of Schemes as per evaluation study	[9.2.1] schemes modified	no.	--	--	4	--	--
* Efficient Functioning of the RFD System	Timely submission of Draft RFD 2014-15 for Approval	On-time submission	Date	--	--	06/03/2014	--	--
	Timely submission of Results for 2012-13	On-time submission	Date	--	--	02/05/2013	--	--
	Independent Audit of implementation of Citizens'/Clients' Charter	% of implementation	%	--	--	95	--	--
* Transparency/Service delivery Ministry/Department	Independent Audit of implementation of Public Grievance Redressal System	% of implementation	%	--	--	95	--	--
	Implement mitigating strategies for reducing potential risk of corruption	% of implementation	%	--	--	95	--	--
	Implement ISO 9001 as per the approved action plan	% of implementation	%	--	--	95	--	--
* Administrative Reforms	Implement Innovation Action Plan (IAP)	% of milestones achieved	%	--	--	95	--	--
	Identification of core and non-core activities of the	Timely submission	Date	--	--	15/10/2013	--	--

* Mandatory Objective(s)

Section 3: Trend Values of the Success Indicators

Objective	Action	Success Indicator	Unit	Actual Value for FY 11/12	Actual Value for FY 12/13	Target Value for FY 13/14	Projected Value for FY 14/15	Projected Value for FY 15/16
* Ensuring compliance to the Financial Accountability Framework	Ministry/Department as per 2nd ARC recommendations							
	Timely submission of ATNs on Audit paras of C&AG	Percentage of ATNs submitted within due date (4 months) from date of presentation of Report to Parliament by CAG .during the year.	%	--	--	90	--	--
	Timely submission of ATRs to the PAC Sectt. on PAC Reports.	Percentage of ATRS submitted within due date (6 months) from date of presentation of Report to Parliament by PAC .during the year.	%	--	--	90	--	--
	Early disposal of pending ATNs on Audit Paras of C&AG Reports presented to Parliament before 31.3.2012.	Percentage of outstanding ATNs disposed off during the year.	%	--	--	90	--	--
	Early disposal of pending ATRs on PAC Reports presented to Parliament before 31.3.2012	Percentage of outstanding ATRS disposed off during the year.	%	--	--	90	--	--

* Mandatory Objective(s)

Section 4:
Acronym

Sl.No	Acronym	Description
1	HRD	Human Resources Development
2	IEPR	Integrated Energy Policy Report
3	RE	Renewable Energy
4	SPV	Solar Photovoltaic

Section 4: Description and Definition of Success Indicators and Proposed Measurement Methodology

Sl.No	Success indicator	Description	Definition	Measurement	General Comments
1	[1.1.1] Capacity addition in FY 2013-14	Total installed capacity of Grid connected Renewable Power projects in Megawatt	Grid Interactive Renewable Power	Reports of State utilities/Central Electricity Authority / NTPC Vidyut Vyapar Nigam Limited / Indian Renewable Energy Development Agency	
2	[2.1.1] Allotment of targets and commissioning	Number of Bio gas plants installed - Mostly Family type Biogas plants of 2-5 cum. capacity (digester size)	Installation of Biogas plants	Reports of State Implementing Agencies	
3	[2.3.1] Distribution of systems	Total installed capacity of non-grid connected Renewable power projects - generating electrical and/or thermal energy	Off-Grid Renewable power	Reports of State Implementing Agencies/Banks/NABARD/IREDA	
4	[3.1.1] collector area installed	Total Area of Solar Thermal collectors installed under various types of solar thermal such as solar water heaters and solar cookers	Installation of Solar Thermal Systems	Reports of State Implementing Agencies, IREDA	
5	[5.1.1] Number of projects sanctioned	Total number of new R&D project proposals approved for Central Financial Support	Support new R&D Projects	Own records of the Ministry	

Section 5 :
Specific Performance Requirements from other Departments

Location Type	State	Organisation Type	Organisation Name	Relevant Success Indicator	What is your requirement from this organisation	Justification for this requirement	Please quantify your requirement from this Organisation	What happens if your requirement is not met.
Central Government		Public Sector units (PSUs)	Power Grid Corporation of India	[1.1.1] Capacity addition in FY 2013-14	Proposals to set up RE projects	Use of renewable energy in their organisation	Detailed Project proposals	Promotion of Renewable Energy restricted
				[1.5.1] Commissioning of projects in FY 2013-14				
				[1.6.1] Capacity addition in FY 2013-14				
				[2.3.1] Distribution of systems				
			Oil and Natural Gas Corporation	[1.1.1] Capacity addition in FY 2013-14				
				[1.5.1] Commissioning of projects in FY 2013-14				
				[1.6.1] Capacity addition in FY 2013-14				
				[2.3.1] Distribution of systems				
			Bharat Heavy Electricals Ltd.	[1.1.1] Capacity addition in FY 2013-14				
				[1.5.1] Commissioning of projects in FY 2013-				

Section 5 :
Specific Performance Requirements from other Departments

Location Type	State	Organisation Type	Organisation Name	Relevant Success Indicator	What is your requirement from this organisation	Justification for this requirement	Please quantify your requirement from this Organisation	What happens if your requirement is not met.
				14 [1.6.1] Capacity addition in FY 2013-14 [2.3.1] Distribution of systems				
			NTPC	[1.1.1] Capacity addition in FY 2013-14 [1.5.1] Commissioning of projects in FY 2013-14 [1.6.1] Capacity addition in FY 2013-14 [2.3.1] Distribution of systems				
		Ministry	Ministry of Power	[2.3.1] Distribution of systems [2.7.1] Starting of projects [3.1.1] collector area installed	Mainstream renewable power and include in transmission plans	Increasing RE capacity requires transmission network		Restricted use of Renewable Energy
			Ministry of Panchayati Raj	[2.3.1] Distribution of systems	Concept Note for use of Renewable Energy	To understand possibilities of promoting Renewable Energy	Increase use of RE by them	

**Section 5 :
Specific Performance Requirements from other Departments**

Location Type	State	Organisation Type	Organisation Name	Relevant Success Indicator	What is your requirement from this organisation	Justification for this requirement	Please quantify your requirement from this Organisation	What happens if your requirement is not met.
			Ministry of Panchayati Raj	[2.3.1] Distribution of systems [2.7.1] Starting of projects [3.1.1] collector area installed	Concept Note for use of Renewable Energy	To understand possibilities of promoting Renewable Energy	Increase use of RE by them	
			Ministry of Communication and Information	[2.3.1] Distribution of systems [2.7.1] Starting of projects [3.1.1] collector area installed				
			Ministry of Defence	[2.3.1] Distribution of systems [2.7.1] Starting of projects [3.1.1] collector area installed				
			Ministry of Home Affairs	[2.3.1] Distribution of systems [2.7.1] Starting of projects [3.1.1] collector area installed				
			Ministry of Railways	[2.3.1] Distribution of systems				

Section 5 :
Specific Performance Requirements from other Departments

Location Type	State	Organisation Type	Organisation Name	Relevant Success Indicator	What is your requirement from this organisation	Justification for this requirement	Please quantify your requirement from this Organisation	What happens if your requirement is not met.
				[2.7.1] Starting of projects [3.1.1] collector area installed				
			Ministry of Rural Development	[2.3.1] Distribution of systems [2.7.1] Starting of projects [3.1.1] collector area installed				
			Ministry of Petroleum and Natural Gas	[2.3.1] Distribution of systems [2.7.1] Starting of projects [3.1.1] collector area installed				
State Government	Assam	Departments	State Departments	[1.5.1] Commissioning of projects in FY 2013-14 [2.1.1] Allotment of targets and commissioning [2.3.1] Distribution of systems	Submit project proposals	To consider release of subsidy	Detailed project Report/proposals	Subsidy not sanctioned

**Section 6:
Outcome/Impact of Department/Ministry**

Outcome/Impact of Department/Ministry	Jointly responsible for influencing this outcome / impact with the following department (s) / ministry(ies)	Success Indicator	Unit	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16
1 Creating Additional Generation Capacity (RE initiative) to supplement the conventional Energy initiatives of the country	CERC/SERC/Ministry of Power/Ministry of Environment and Forests/State Governments and Implementing Agencies	Capacity installed during the year (MW)	MW	3385	3163	3330	4000	5000
2 Meeting Energy needs of Rural areas under Remote Village Electrification /Energy Access programme	Ministry of Power (responsible for identification of remote villages not likely to receive grid connectivity under RGGVY)	Percentage of RE w.r.t total power installed in the country	%	17.83	15.33	18	19	20
3 Meeting Energy needs in urban/industrial/rural sectors under other off-grid programmes	Ministry of Power/Ministry of Rural Development	No. of remote villages/hamlets covered	No.	905	975			
		Biomass Gasifier for village energy supply	No	50	25	35	50	50
		Family Type Biogas Plants	No. in lakhs	1.50	1.25	1.10	1.25	1.25
4 Percentage of Energy produced in the Electricity Mix	Ministry of Power/Central Electricity Authority	Solar Photovoltaic lighting systems financed by rural Banks	No	100000	125000	150000	175000	190000
		Installation of Solar Thermal systems in Urban areas and industry	in lakh sq.meter	11	1.41	4.5	6.5	6.75
		Renewable Energy produced in the Electricity Mix	million units	51.22	54	57	60	62.5

Section 6:
Outcome/Impact of Department/Ministry

Outcome/Impact of Department/Ministry	Jointly responsible for influencing this outcome / impact with the following department (s) / ministry(ies)	Success Indicator	Unit	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16
5 Power Generation from Renewable Energy	Ministry of Power/CEA	Percentage of Renewable Energy used in the Energy Mix	MW	5.8	6.5			
		Actual power Generation per MW of Total Installed capacity	million units/MW	1.8	1.9	2		
		Unit cost of power produced from various sources	cost/unit		5.5	5.40		
		Generation from various Renewable Energy projects based on data collected through CEA	MW					

