



R F D

(Results-Framework Document)
for

Department of Science & Technology
(2012-2013)

Section 1: Vision, Mission, Objectives and Functions

Vision

To maximise and mainstream the use of new and renewable energy sources in furtherance of the state's aim of energy security and energy independence, to shift from non-renewable and depleting sources of energy to renewable sources of energy and to harness the potential of Science and Technology as instrument of socio-economic change.

Mission

Develop, demonstrate and commercialize technologies for harnessing new and renewable energy sources. 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 Solar Energy in the total energy mix of the state to 3 per cent by 2022 and contribution of Renewable Energy in total electricity mix of the state to 5 per cent by 2013. Creating necessary infrastructure for advanced studies, research and application of science and technology in a substantial way.

Objectives

- 1 To promote development and deployment of grid-interactive and off-grid/ distributed renewable power generation projects for augmenting contribution of renewables in total electricity mix
- 2 To promote renewable energy initiatives for meeting energy/ lighting needs in remote areas
- 3 To promote renewable energy initiatives to supplement energy needs in rural/ urban areas
- 4 New initiatives and Management actions
- 5 Promoting awareness of science and transfer of new technologies to the society.
- 6 Development of manpower the help of talent promotion, entrepreneurship development and scholarship programmes.

Functions

- 1 Putting in place suitable policy and regulatory framework at State/District level 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.
- 4 Fostering national cooperation in new and renewable energy sector
- 5 Information, Publicity, Public Awareness creation in the Renewable Energy (RE) sector.

Section 1: Vision, Mission, Objectives and Functions

- 6 Undertaking resource assessment and potential estimation studies for all new and renewable sources of energy.
- 7 Organization of training programmes, seminars and workshops. Sponsoring of research projects. Technology Transfer. Scholarships to meritorious students etc.

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%
[1] To promote development and deployment of grid-interactive and off-grid/ distributed renewable power generation projects for augmenting contribution of renewables in total electricity mix	30.00	[1.1] Commissioning solar power plants off-grid JNNSM Mission of MNRE & BADP (2 MW)	[1.1.1] 2.5 MW	MW	12.00	2.5	2.25	2	1.75	1.50
			[1.1.2] Number of solar power plants	Number	12.00	200	180	160	140	120
		[1.2] Commissioning aero generators/ Wind + SPV hybrid systems	[1.2.1] 6 no. wind mast.	Number	3.00	6	5	5	4	4
		[1.3] To conduct sample survey of off grid system	[1.3.1] conducting sample surveys of off-grid systems by a third party.	Number	3.00	250	225	200	175	150
[2] To promote renewable energy initiatives for meeting energy/ lighting needs in remote areas	30.00	[2.1] Coverage of Remote Villages - No. of villages/hamlets provided with RE systems	[2.1.1] 350	Number	15.00	350	315	280	245	210
		[2.2] Decentralised SPV systems Solar Home Lantern/Solar Street Lighting	[2.2.1] 15150	Number	4.00	15150	13635	12120	10605	9090
		[2.3] Watermills	[2.3.1] 250	Number	4.00	250	225	200	175	150
			[2.3.2] Total capacity	KV	4.00	1250	1125	1000	875	750
		[2.4] Micro-hydel plants (below 2 MW)	[2.4.1] 26.5 MW capacity	MW	0.50	26.5	23.85	21.2	18.55	15.9
			[2.4.2] Number of plants	Number	0.50	20	18	16	14	12

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%
		[2.5] Distribution of Energy Saving Devices (CFL)	[2.5.1] 9000	Number	2.00	9000	8100	7200	6300	5400
[3] To promote renewable energy initiatives to supplement energy needs in rural/ urban areas	25.00	[3.1] Decentralised SPV systems SHLs	[3.1.1] 25000	Number	12.00	25000	22500	20000	17500	15000
		[3.2] Installation of Family type Biogas Plants [Mostly Family type plants of 2 cum. digester capacity.	[3.2.1] 206	Number	8.00	206	185	165	144	124
		[3.3] Installation of Solar Thermal systems in rural/urban households/buildings-total Collectors Area to be installed [Includes deployment in Industry also].	[3.3.1] 20000	Sq. Mtrs.	5.00	20000	18000	16000	14000	12000
[4] New initiatives and Management actions	9.00	[4.1] Deployment of solar cookers.	[4.1.1] 6000	Number	3.00	6000	5400	4800	4200	3600
		[4.2] Wind Monitoring Stations.	[4.2.1] 4	Number	2.00	4	4	3	3	2
		[4.3] Information and Public Awareness(I&PA)	[4.3.1] 30	Number	2.00	30	27	24	21	18
		[4.4] Management Action - Stakeholders consultations.	[4.4.1] 1	Number	2.00	1	1	1	1	1
* Efficient functioning of RFD system	6.00	Timely submission of Draft for Approval	On-time submission	Date	2.0	26/12/2012	27/12/2012	28/12/2012	29/12/2012	30/12/2012
		Implementation of Sevottam	Create a compliant system to implement, monitor and review	Date	2.0	24/03/2013	25/03/2013	26/12/2013	27/12/2013	28/03/2013

* 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	Very Good	Good	Fair	Poor
						100%	90%	80%	70%	60%
			Citizen's / Client's Charter							
			Create a Compliant system to redress and monitor public Grievances	Date	2.0	24/03/2013	25/03/2013	26/03/2013	27/03/2013	28/03/2013

* Mandatory Objective(s)

Section 3: Trend Values of the Success Indicators

Objective	Action	Success Indicator	Unit	Actual Value for FY 10/11	Actual Value for FY 11/12	Target Value for FY 12/13	Projected Value for FY 13/14	Projected Value for FY 14/15
[1] To promote development and deployment of grid-interactive and off-grid/ distributed renewable power generation projects for augmenting contribution of renewables in total electricity mix	[1.1] Commissioning solar power plants off-grid JNNSM Mission of MNRE & BADP (2 MW)	[1.1.1] 2.5 MW	MW	0.22	0.35	2.25	2.50	3.00
		[1.1.2] Number of solar power plants	Number	--	--	180	200	250
	[1.2] Commissioning aero generators/ Wind + SPV hybrid systems	[1.2.1] 6 no. wind mast.	Number	2	3	6	0	0
	[1.3] To conduct sample survey of off grid system	[1.3.1] conducting sample surveys of off-grid systems by a third party.	Number	--	--	225	250	300
[2] To promote renewable energy initiatives for meeting energy/ lighting needs in remote areas	[2.1] Coverage of Remote Villages - No. of villages/hamlets provided with RE systems	[2.1.1] 350	Number	95	175	315	150	150
	[2.2] Decentralised SPV systems Solar Home Lantern/Solar Street Lighting	[2.2.1] 15150	Number	4355	15150	13635	10000	10000
	[2.3] Watermills	[2.3.1] 250	Number	0	44	225	0	0
		[2.3.2] Total capacity	KV	0	230	1125	0	0
	[2.4] Micro-hydel plants (below 2 MW)	[2.4.1] 26.5 MW capacity	MW	0	0	26.5	35	40
		[2.4.2] Number of plants	Number	--	--	18	24	27

Section 3: Trend Values of the Success Indicators

Objective	Action	Success Indicator	Unit	Actual Value for FY 10/11	Actual Value for FY 11/12	Target Value for FY 12/13	Projected Value for FY 13/14	Projected Value for FY 14/15
	[2.5] Distribution of Energy Saving Devices (CFL)	[2.5.1] 9000	Number	5000	0	8100	15000	25000
[3] To promote renewable energy initiatives to supplement energy needs in rural/ urban areas	[3.1] Decentralised SPV systems SHLs	[3.1.1] 25000	Number	0	20000	22500	25000	25000
	[3.2] Installation of Family type Biogas Plants [Mostly Family type plants of 2 cum. digester capacity.	[3.2.1] 206	Number	30	500	185	200	200
	[3.3] Installation of Solar Thermal systems in rural/urban households/buildings-total Collectors Area to be installed [Includes deployment in Industry also].	[3.3.1] 20000	Sq. Mtrs.	1000	18160	18000	20000	20000
[4] New initiatives and Management actions	[4.1] Deployment of solar cookers.	[4.1.1] 6000	Number	0	5	5400	10000	10000
	[4.2] Wind Monitoring Stations.	[4.2.1] 4	Number	2	4	4	5	5
	[4.3] Information and Public Awareness(I&PA)	[4.3.1] 30	Number	6	30	27	30	30
	[4.4] Management Action - Stakeholders consultations.	[4.4.1] 1	Number	0	1	1	1	2

* Mandatory Objective(s)

Section 3: Trend Values of the Success Indicators

Objective	Action	Success Indicator	Unit	Actual Value for FY 10/11	Actual Value for FY 11/12	Target Value for FY 12/13	Projected Value for FY 13/14	Projected Value for FY 14/15
* Efficient functioning of RFD system	Timely submission of Draft for Approval	On-time submission	Date	--	--	27/12/2012	--	--
	Implementation of Sevottam	Create a compliant system to implement, monitor and review Citizen's / Client's Charter	Date	--	--	25/03/2013	--	--
		Create a Compliant system to redress and monitor public Grievances	Date	--	--	25/03/2013	--	--

* Mandatory Objective(s)

Section 4: Acronym

Sl.No	Acronym	Description
1	BADP	Border Area Development Programme
2	JaKEDA	Jammu and Kashmir Energy Development Agency
3	JNNSM	Jawaharlal Nehru National Solar Mission
4	MNRE	Ministry of New and Renewable Energy
5	NVVN	NTPC Vidyut Vyapar Nigam Ltd.
6	RVE	Remote Village Electrification Programme

Section 4: Acronym

Sl.No	Acronym	Description
7	SHLs	Solar Home Lighting Systems
8	SSLs	Solar Street Lighting Systems

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

SI.No	Success indicator	Description	Definition	Measurement	General Comments
1	[3.3.1] 20000	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	Area covered	
2	[2.1.1] 350	No of villages/hamlets provided with RE systems	coverage of remote villages	Number	null
3	[1.2.1] 2.5 MW	About 200 no. off-grid power plants to be installed	Solar Power Plants off grid.	Total capacity of the equipment installed.	
4	[2.4.1] 26.5 MW capacity	About 16 micro-hydel plants to be installed	Micro Hydel plants	total capacity of power generated	

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.
State Government	J & K	Departments	Department of Power Dev.	[1.2.1] 2.5 MW [2.4.1] 26.5 MW capacity	Evacuation of power and entering into firm PPAs with developers of Solar/Hydro/Wind power projects	powers are vested with the department.	100%	Delay in projects
			Department of Revenue & Relief	[1.2.1] 2.5 MW [2.4.1] 26.5 MW capacity	Giving clearance for land transfer for grid power projects	powers are vested with the department		delay in the projects

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 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15
1 Creating additional generation capacity (RE initiative) to supplement the conventional energy initiatives of the state	CERC/SERC/Ministry of Power/Ministry of Environment and Forests/State Government and Implementing agencies	solar power plants off grid	MW	0.22	0.35	2.25	2.50	3.00
		Aero generators/Wind + SPV hybrid systems	Number	2	3	6	0	0
		Micro Hydel Plants (below 2 MW) - 26.5 MW capacity	MW	0	0	26.5	35	40
2 To conduct a sample survey for off-grid system (on utilisation of off grid system)	JaKEDA, S&T department, Implementing agencies	Number of Surveys	Number	22	37	200	200	300
3 Likely annual savings of conventional fuel/electricity through renewable energy requirement.	JaKEDA, PDD, PDC, JKSERC	Electrical units saved	Billion Units	0	0	1.2	1.5	1.5
		Installation of family type biogas plants	Number	30	500	185	200	200
		Deployment of solar cookers	Number	0	5	5400	10000	10000