

**MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES**

## DEMAND NO. 64

**Ministry of Non-Conventional Energy Sources**

A. The Budget allocations, net of recoveries, are given below:

		<i>(In crores of Rupees)</i>								
Major Head	Budget 2005-2006			Revised 2005-2006			Budget 2006-2007			
	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	
Revenue	529.70	5.63	535.33	273.65	6.43	280.08	531.75	6.64	538.39	
Capital	70.05	...	70.05	76.35	...	76.35	65.25	...	65.25	
<b>Total</b>	<b>599.75</b>	<b>5.63</b>	<b>605.38</b>	<b>350.00</b>	<b>6.43</b>	<b>356.43</b>	<b>597.00</b>	<b>6.64</b>	<b>603.64</b>	
1. Secretariat-Economic Services	3451	8.25	5.63	13.88	8.25	6.43	14.68	10.50	6.64	17.14
<b>Non-Conventional Energy Sources</b>										
2. Solar Energy Programme	2810	89.25	...	89.25	54.05	...	54.05	89.88	...	89.88
	3601	0.03	...	0.03	0.01	...	0.01	0.04	...	0.04
	3602	1.42	...	1.42	0.11	...	0.11	0.08	...	0.08
	4810	0.05	...	0.05	6.35	...	6.35	0.25	...	0.25
	<i>Total</i>	<i>90.75</i>	<i>...</i>	<i>90.75</i>	<i>60.52</i>	<i>...</i>	<i>60.52</i>	<i>90.25</i>	<i>...</i>	<i>90.25</i>
3. Biogas Programme & NBB	2810	12.99	...	12.99	24.40	...	24.40	36.60	...	36.60
	3601	8.01	...	8.01	4.00	...	4.00	6.00	...	6.00
	<i>Total</i>	<i>21.00</i>	<i>...</i>	<i>21.00</i>	<i>28.40</i>	<i>...</i>	<i>28.40</i>	<i>42.60</i>	<i>...</i>	<i>42.60</i>
4. Wind Energy Programme	2810	18.00	...	18.00	8.01	...	8.01	15.00	...	15.00
5. Bio-mass Programme	2810	26.00	...	26.00	10.25	...	10.25	50.00	...	50.00
6. Integrated Rural Energy Programme	2501	...	...	...	0.50	...	0.50	1.50	...	1.50
	3601	...	...	...	3.30	...	3.30	16.00	...	16.00
	3602	...	...	...	0.20	...	0.20	0.50	...	0.50
	<i>Total</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>4.00</i>	<i>...</i>	<i>4.00</i>	<i>18.00</i>	<i>...</i>	<i>18.00</i>
7. Other Sources of Energy	2810	52.00	...	52.00	28.95	...	28.95	54.90	...	54.90
	3601	1.00	...	1.00	1.00	...	1.00	1.00	...	1.00
	3602	0.10	...	0.10	0.05	...	0.05	0.10	...	0.10
	<i>Total</i>	<i>53.10</i>	<i>...</i>	<i>53.10</i>	<i>30.00</i>	<i>...</i>	<i>30.00</i>	<i>56.00</i>	<i>...</i>	<i>56.00</i>
8. Improved Chulhas	2810	0.30	...	0.30	0.00	...	0.00	0.02	...	0.02
	3601	0.19	...	0.19	0.01	...	0.01	0.02	...	0.02
	3602	0.01	...	0.01	...	...	...	0.01	...	0.01
	<i>Total</i>	<i>0.50</i>	<i>...</i>	<i>0.50</i>	<i>0.01</i>	<i>...</i>	<i>0.01</i>	<i>0.05</i>	<i>...</i>	<i>0.05</i>
9. Energy from Urban and Agricultural Wastes	2810	14.50	...	14.50	5.00	...	5.00	23.50	...	23.50
10. Investment in Public Enterprises	4810	50.00	...	50.00	50.00	...	50.00	50.00	...	50.00
	6810	20.00	...	20.00	20.00	...	20.00	15.00	...	15.00
	<i>Total</i>	<i>70.00</i>	<i>...</i>	<i>70.00</i>	<i>70.00</i>	<i>...</i>	<i>70.00</i>	<i>65.00</i>	<i>...</i>	<i>65.00</i>
11. National Institute of Renewable Energy	2810	6.00	...	6.00	1.00	...	1.00	6.00	...	6.00
12. Other Items	2810	231.65	...	231.65	89.56	...	89.56	160.10	...	160.10
13. Lumpsum provision for N.E.Region & Sikkim	2552	60.00	...	60.00	35.00	...	35.00	60.00	...	60.00
<b>Grand Total</b>		<b>599.75</b>	<b>5.63</b>	<b>605.38</b>	<b>350.00</b>	<b>6.43</b>	<b>356.43</b>	<b>597.00</b>	<b>6.64</b>	<b>603.64</b>
<b>B. Investment in Public enterprises</b>	Head of Dev	Budget Support	I.E.B.R	Total	Budget Support	I.E.B.R	Total	Budget Support	I.E.B.R	Total
10.01 Indian Renewable Energy Development Agency	12810	70.00	265.44	335.44	70.00	224.78	294.78	65.00	370.02	435.02
<b>C. Plan Outlay*</b>										
1. Non Conventional Sources of Energy	12810	540.00	265.44	805.44	314.75	224.78	539.53	538.50	370.02	908.52
2. Special Programmes for Rural Development	12501	...	...	...	0.50	...	0.50	1.50	...	1.50
3. North Eastern Areas	22552	60.00	...	60.00	35.00	...	35.00	60.00	...	60.00
<b>Total</b>		<b>600.00</b>	<b>265.44</b>	<b>865.44</b>	<b>350.25</b>	<b>224.78</b>	<b>575.03</b>	<b>600.00</b>	<b>370.02</b>	<b>970.02</b>

\* Inclusive of works outlay provided in the Demands of Ministry of Urban Development.

Demand No.100	12810	0.25	...	0.25	0.25	...	0.25	3.00	...	3.00
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1. **Secretariat** : Provides for secretarial expenditure of the Ministry of Non-Conventional Energy Sources.

2. **Solar Energy Programme**: Includes provision for Solar Thermal Energy Programme and Solar Photovoltaic Energy Programme including research and development, demonstration and extension of solar thermal energy technologies. It inter-alia envisages support in the form of soft loans for Solar Thermal Systems and promotional measures for Solar Cookers.

3. **Biogas Programme** : Biogas programme aims at providing clean gas for cooking, lighting and electricity generation and enriched manure from cattle dung and night soil. The Programme includes popularisation of family type plants and also research and development on Biogas Development (NPBD), provides subsidy to farmers for setting up biogas plants and fees for turnkey job worker and Rural Energy Technicians for quality construction and repair and maintenance service for Biogas Plants for a period of first three years. The programme on community institution and Night soil Biogas Plants is proposed to be transferred to State sector during tenth Plan and will continue till the NDC sub-committee takes a view on the scheme.

4. **Wind Energy Programme** : This includes wind power generation, strengthening of wind data base, research and development and provision for the Centre for Wind Energy Technology (C-WET).

5. **Bio-mass/Bio-Energy Programme** : Provision for this programme relates mainly to R&D and promotion of various biomass conversion and utilization technologies/ projects on biomass based co-generation of power in sugar industry and on biomass gasification and combustion based power. Financial incentives viz capital and interest subsidy are being provided for installation of such projects.

6. **Integrated Rural Energy Programme(IREP)**: This Programme aims to provide for household energy needs through an optimal fuel-mix comprising both renewable and conventional forms of energy.

7. (i) **Other Sources of Energy** : Includes provision for research and development and demonstration projects and activities for promoting the use of new energy technologies such as fuel cell technology, hydrogen energy, bio-fuels for surface transport, battery powered electric vehicles, geothermal energy for power generation and direct thermal applications and ocean energy for power generation. Projects are taken up at several research, scientific, academic institutions, national laboratories, universities, industry, etc. in the country. The widespread use of these innovative and advanced technologies can play an important role in providing energy needs in the foreseeable future.

(ii) **Small Hydro Programme**: This programme is aimed at the utilization of the hydropower potential at run-of-river and natural falls, either through grid-connected power projects or through decentralized power generation projects in remote and hilly areas.

Financial support is being provided for feasibility studies, preparation of detailed project reports and towards interest subsidy for installation of such projects. A project with partial assistance for GEF/UNDP on "Optimizing Development of Small Hydel Resources in the Himalayan and Sub-Himalayan Regions" is also under implementation.

8. **National Programme on Improved Chulhas** : This programme stands transferred to States. The provision which has been kept is mainly for meeting past liabilities.

9. **Energy from Urban and Agricultural Wastes** : With a view to recover energy in the forms of fuel and power from urban and Industrial Wastes a "National Programme on Energy Recovery from Urban, Municipal and Industrial Wastes" is being implemented. The scheme provides fiscal and financial incentives for waste to energy projects. Besides, a UNDP/GEF assisted project on "Development of High-rate Bio-Methanation Processes as Means of Reducing Green House Gases Emission" is under implementation.

10. **Investment in Public Enterprises** : The Indian Renewable Energy Development Agency (IREDA) has been set up to lend support for various new and renewable sources of energy projects and schemes. The agency is responsible for financing such projects through internal resources, equity and mobilization of funds from external agencies.

11. **National Institute of Renewable Energy (NIRE)** : The Sardar Swarn Singh National Institute of Renewable Energy has been established as a registered society under the Society's Registration Act XXI of 1860. During the current year, work on the construction of the campus of the Institute on Jalandhar-Kapurthala road in Punjab, was taken up. NIRE will focus on synthetic fuels and bio-energy including biofuels.

12. **Other Items**: (i) Includes provision for Information & Publicity, International Cooperation, Technology Information Forecasting Assessment and Databank (TIFAD), Human Resource Development & Training, R&D projects and for Special Area, Demonstration Project.

(ii) Remote Village Electrification (RVE): Villages not being provided grid connectivity under Rajiv Gandhi Gramin Vidyutikaran Yojana (RGGVY) are provided with electricity/lighting through renewable energy devices and systems, wherever feasible and cost effective under the RVE programme of Ministry. 10,000 remote census villages are expected to be covered under the programme apart from remote hamlets of electrified villages, whose numbers have not yet been finalized by Rural Electrification Corporation.

13. **Lumpsum provision for NE Regions & Sikkim**: Includes provision of Central Financial Assistance for implementation of projects under different programmes of the Ministry.