

MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES

DEMAND NO. 65

Ministry of Non-Conventional Energy Sources

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

(In crores of Rupees)

Major Head	Budget 2004-2005			Revised 2004-2005			Budget 2005-2006			
	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	
Revenue	503.76	5.47	509.23	329.96	5.47	335.43	529.70	5.63	535.33	
Capital	96.04	...	96.04	70.04	...	70.04	70.05	...	70.05	
Total	599.80	5.47	605.27	400.00	5.47	405.47	599.75	5.63	605.38	
1. Secretariat-Economic Services	3451	6.91	5.47	12.38	6.91	5.47	12.38	8.25	5.63	13.88
Non-Conventional Energy Sources										
2. Solar Energy Programme	2810	97.76	...	97.76	72.30	...	72.30	89.25	...	89.25
	3601	0.03	...	0.03	...	...	0.03	...	...	0.03
	3602	1.42	...	1.42	1.41	...	1.41	1.42	...	1.42
	4810	0.04	...	0.04	0.04	...	0.04	0.05	...	0.05
	<i>Total</i>	<i>99.25</i>	...	<i>99.25</i>	<i>73.75</i>	...	<i>73.75</i>	<i>90.75</i>	...	<i>90.75</i>
3. Biogas Programme & NBB	2810	29.96	...	29.96	30.74	...	30.74	12.99	...	12.99
	3601	8.01	...	8.01	8.01	...	8.01	8.01	...	8.01
	<i>Total</i>	<i>37.97</i>	...	<i>37.97</i>	<i>38.75</i>	...	<i>38.75</i>	<i>21.00</i>	...	<i>21.00</i>
4. Wind Energy Programme	2810	22.35	...	22.35	16.00	...	16.00	18.00	...	18.00
5. Bio-mass Programme	2810	25.54	...	25.54	17.54	...	17.54	26.00	...	26.00
6. Integrated Rural Energy Programme	2501	1.60	...	1.60	1.00	...	1.00	...	...	...
	3601	6.39	...	6.39	11.40	...	11.40	...	...	...
	3602	1.00	...	1.00	0.10	...	0.10	...	...	...
	<i>Total</i>	<i>8.99</i>	...	<i>8.99</i>	<i>12.50</i>	...	<i>12.50</i>	...	...	...
7. Other Sources of Energy	2810	38.90	...	38.90	32.40	...	32.40	52.00	...	52.00
	3601	1.00	...	1.00	1.00	...	1.00	1.00	...	1.00
	3602	0.10	...	0.10	0.10	...	0.10	0.10	...	0.10
	<i>Total</i>	<i>40.00</i>	...	<i>40.00</i>	<i>33.50</i>	...	<i>33.50</i>	<i>53.10</i>	...	<i>53.10</i>
8. Improved Chulhas	2810	0.08	...	0.08	0.08	...	0.08	0.30	...	0.30
	3601	0.16	...	0.16	0.16	...	0.16	0.19	...	0.19
	3602	0.01	...	0.01	0.01	...	0.01	0.01	...	0.01
	<i>Total</i>	<i>0.25</i>	...	<i>0.25</i>	<i>0.25</i>	...	<i>0.25</i>	<i>0.50</i>	...	<i>0.50</i>
9. Energy from Urban and Agricultural Wastes	2810	14.40	...	14.40	9.40	...	9.40	14.50	...	14.50
10. Investment in Public Enterprises	4810	50.00	...	50.00	50.00	...	50.00	50.00	...	50.00
	6810	46.00	...	46.00	20.00	...	20.00	20.00	...	20.00
	<i>Total</i>	<i>96.00</i>	...	<i>96.00</i>	<i>70.00</i>	...	<i>70.00</i>	<i>70.00</i>	...	<i>70.00</i>
11. National Institute of Renewable Energy	2810	6.00	...	6.00	6.00	...	6.00	6.00	...	6.00
12. Other Items	2810	182.14	...	182.14	75.40	...	75.40	231.65	...	231.65
13. Lumpsum provision for N.E.Region & Sikkim	2552	60.00	...	60.00	40.00	...	40.00	60.00	...	60.00
Grand Total		599.80	5.47	605.27	400.00	5.47	405.47	599.75	5.63	605.38
B. Investment in Public enterprises	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	96.00	487.45	583.45	70.00	399.95	469.95	70.00	265.44	335.44
C. Plan Outlay*										
1. Non Conventional Sources of Energy	12810	538.40	487.45	1025.85	359.15	399.95	759.10	540.00	265.44	805.44
2. Special Programmes for Rural Development	12501	1.60	...	1.60	1.00	...	1.00	...	...	...
3. North Eastern Areas	22552	60.00	...	60.00	40.00	...	40.00	60.00	...	60.00
Total		600.00	487.45	1087.45	400.15	399.95	800.10	600.00	265.44	865.44
Demand No.101	12810	0.20	...	0.20	0.15	...	0.15	0.25	...	0.25

* Inclusive of works outlay provided in the Demands of Ministry of Urban Development and Poverty Alleviation.

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 deployment of solar lantern and for community purposes only SPV pumping systems in electrified or to be electrified villages.

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), inter-alia, 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 subcommittee takes a view on the scheme.

4. **Wind Energy Programme** : This includes strengthening of wind database, research, development and demonstration including Centre for wind energy Technology (C-WET).

5. **Bio-mass/Bio-Energy Programme** : Provision for this programme relates to R&D on biomass development and development utilizing various technologies. Biomass Based Co-generation Programme has been taken up for generation of power in sugar Industry. Programme on Biomass Gasification and Biomass Combustion based power has been further strengthened. Under this Programme financial incentives viz capital subsidy are being provided for installation of these projects.

6. **Integrated Rural Energy Programme (IREP)**: The Programme aims at providing energy needs for cooking, lighting and motive power through non-electrical renewable means (exception: SPV lanterns and SPV pumping systems for community purposes).

7. **(i) Other Sources of Energy** : Includes provision for research and development and demonstration projects and activities for promoting the use of environmentally clean new energy technologies such as fuel cell technology, hydrogen energy, bio-fuels for surface transport, non-polluting fuels and vehicles for surface transportation, geothermal energy for power generation and direct heat 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: Small Hydro Project (SHP)

programme is aimed at utilisation of the run of rivers and natural falls for decentralised power generation through such systems either being connected to grid or directly supplied to the local household. Financial support is also being provided for feasibility studies and towards capital subsidy for installation of these projects.

8. **National Programme on Improved Chulhas** : The programme is proposed to be transferred to State sector during Tenth Plan and will be continued till the NDC sub-committee takes a final view in the matter.

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" has been launched. The scheme provides capital subsidy for waste to energy projects.

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

11. **National Institute of Renewable Energy (NIRE)** : The need for a National Level institute was felt for conducting state-of-the-art research and development activities in biofuels, synthetic fuels and bioenergy and related activities leading to commercialization of the same. With this in view, 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, various preparatory activities and constitutions of the buildings and campus of the Institute, on Jalandhar Kapurthala road in Punjab, have been taken up.

12. **Other Items**: (i) Includes provision for Information & Publicity, International Cooperation, Regional Offices, Technology information Forecasting Assessment and Databank (TIFAD), Human Resource Development & Training, R&D on renewable energy and for energy Parks.

(ii) Remote Village Electrification: The Ministry has undertaken the task of electrifying all un-electrified remote villages and hamlets where the extension of grid is not either cost-effective or feasible, through renewable sources mainly biomass, small hydro, solar, etc. The Ministry aims to electrify 5000 remote census villages during the 10th Plan period.

13. **Lumpsum provision for NE Regions & Sikkim**: Includes provision of Central financial assistance for setting up of State Nodal Agencies in the North East States including Sikkim for planning implementing and monitoring the Non-Conventional Energy Programmes in these states.