

**F.No.10 /1/2013-U&I**  
**Government of India**  
**Ministry of New and Renewable Energy**  
**(U&I Group)**

Block No.14, CGO Complex,  
Lodi Road, New Delhi -110 003.  
Dated the 12<sup>th</sup> September, 2013

To,  
The Pay and Accounts Officer,  
Ministry of New and Renewable Energy,  
New Delhi.

**Subject: Programme on Energy from Urban, Industrial and Agricultural Wastes / Residues during 12<sup>th</sup> Plan period.**

Sir,

I am directed to convey the sanction of the Government of India for the implementation of the **Programme on Energy from Urban, Industrial and Agricultural Wastes / Residues** during 12<sup>th</sup> Plan period and with a total outlay of Rs.38.00 crore (Rupees Thirty eight crore only) for the year 2013-14. The details of the programme component, implementation methodology, financial assistance, release of funds and monitoring mechanism are given in the **Annexure - I**.

2. Each proposal will be examined and concurred by Integrated Finance Division of the Ministry, on case to case basis.

3. The expenditure on this scheme will be met from the budget provisions given below for the year 2013-14:

<u>Head of Account</u>	<u>Description</u>	<u>Allocated Amount</u>
'2810'	The Expenditure is debitable to Demand No.69, Ministry of New and Renewable Energy, Major Head '2810' New and Renewable Energy, 00-101 – Grid Interactive and Distributed Renewable Power	
	01 – Grid Interactive Renewable Power	
	03 – Bio Power .31GIA	Rs. 0.25 crore
	.33 Subsidy	Rs.24.00 crore
	02- Off Grid / Distributed and Decentralized Renewable Power	
	03 Bio Power .31 GIA	Rs. 0.70 crore
	.33 Subsidy	Rs. 13.00 crore
	.20 Other Administrative Expenses	Rs. 0.05 crore
	<b>Total</b>	<b>Rs. 38.00 crore</b>

4. This issues in exercise of the powers conferred on this Ministry and with the concurrence of IFD Division vide their diary No. IFD/1275/2013-14, dated 11.09.2013.

Yours faithfully,

**(B.R. Mishra)**  
**Scientist "E"**

Contd./....

**Copy to:**

- i) All Heads of State Nodal Departments / Agencies.
- ii) JS & FA, MNRE.
- iii) All Groups Heads.
- iv) PS to Minister (NRE).
- v) JS (Admn.)/ Dir.(P&C)/ Dy. Sec.(F)/COA./US(F).
- vi) PSO to Secretary, MNRE.
- vii) PAO/Cash Section, MNRE.
- viii) Director of Audit (C.W. & M), Special Cell, New Delhi.
- ix) Guard file.

**DETAILS OF PROGRAMME ON ENERGY FROM URBAN, INDUSTRIAL  
AND AGRICULTURAL WASTES/RESIDUES  
DURING 12<sup>TH</sup> PLAN PERIOD**

**1.0 Objective**

The main objectives of the Programme are as follows:

- To promote setting up of projects for recovery of energy from urban, industrial and agricultural wastes; and
- To create conducive conditions and environment, with fiscal and financial regime, to develop, demonstrate and disseminate utilization of wastes and residues for recovery of energy.

**2.0 Scope**

The scheme provides for Central Financial Assistance in the form of capital subsidy and Grants-in-Aid in respect of the following activities :

- i) Setting up of five pilot projects based on Municipal Solid Waste.
- ii) Biogas production from Industrial waste.
- iii) Power generation or production of bio-CNG from biogas produced from sewage and industrial wastes or from Urban and Agricultural wastes through biomethanation.
- iv) Power generation from solid industrial waste.
- v) Promotional activities .
- vi) R&D, Resources assessment, technology upgradation and performance evaluation, etc.
- vii) Installation of biomass co-generation projects (excluding bagasse co-generation) in industry for meeting the requirement of captive power and thermal energy with at least 50% of power for captive use, and an option for the surplus power to be exported to the grid.

**3.0 Eligibility of projects for Central Financial Assistance**

**Criteria based on type of wastes**

**3.1** The eligibility criteria for type of waste are as follows:

- i) Projects based on any bio-waste from urban, agricultural, industrial/agro – industrial sector (excluding bagasse).
- ii) Projects for co-generation /power generation and production of bio-CNG from biogas.
- iii) Mixing of other wastes of renewable nature, including rice husk, bagasse, sewage, cow-dung, other biomass and industrial effluents (excluding distillery effluents) will be permissible.
- iv) Biogas generation projects based on distillery effluents and projects based on wastes from fossil fuels and waste heat (flue gases) shall not be supported.
- v) Municipal Solid Waste based projects selected through transparent competitive procedure would only be eligible for central financial assistance.
- vi) In MSW to Power projects, any waste of renewable nature or biomass can be mixed to the extent of 25 % based on gross Calorific Value. Use of a maximum of 25 % conventional fuels would be allowed in Biomass Co-generation (Non-Bagasse) projects based on agricultural wastes and residues other than bagasse.

### Criteria based on technologies

**3.2** The eligibility criteria for technologies will be:

- i) Projects based on waste-to-energy conversion technologies, namely, biomethanation, combustion, gasification, pyrolysis or a combination thereof.
- ii) Projects for generation of power from biogas will be based either on 100% biogas engines or steam turbines with a minimum steam pressure of 42 bar.
- iii) MSW based projects need to be developed in accordance with the decision of Hon'ble Supreme Court given during the hearing on May 15, 2007 and the recommendations of the Expert Committee referred therein.
- iv) The projects based on biomethanation of MSW should be taken up only on segregated/uniform Waste unless it is demonstrated that in Indian conditions, the waste segregation plant/process can separate waste suitable for Biomethanation.
- v) Bio-CNG to be produced will have to meet the BIS specifications as per IS 16087 : 2013.

### Criteria based on capacity

**3.3** There will be no minimum / maximum limit on capacity of projects supported under this programme, however, cattle dung based power generation projects of up to 250 kW capacity will not be considered under this programme.

### 4.0 Central Financial Assistance

Central Financial Assistance (CFA) for projects of different categories would be given in the form of capital subsidy to the promoters and in the form of Grants-in-Aid for other activities, as given below:

#### 4.1 Capital subsidy to the promoters

Wastes/Processes/Technologies	Capital Subsidy
1. Power generation from Municipal Solid Waste	Rs. 2.00 crore/MW (Max. Rs.10crore/project)
2. Power generation from biogas at Sewage Treatment Plant or through biomethanation of Urban and Agricultural Waste/residues including cattle dung or production of bio-CNG.	Rs. 2.00 crore/MW or bio-CNG from 12000 m <sup>3</sup> biogas/day (Max. Rs. 5 crore/project)
3. Biogas generation from Urban, Industrial and Agricultural Wastes/residues	Rs. 0.50 crore /MWeq. (12000 m <sup>3</sup> biogas /day with maximum of Rs. 5 cr./ project)
4. Power Generation from Biogas (engine / gas turbine route) and production of bio-CNG for filling into gas cylinders	Rs. 1.00 crore/MW Or bio-CNG from 12000 m <sup>3</sup> biogas (Max. Rs.5 crore/project)
5. Power Generation from Biogas, Solid Industrial, Agricultural Waste/residues excluding bagasse through Boiler + Steam Turbine Configuration	Rs. 0.20 crore/MW (Max. Rs. 1 crore/project)

#### **4.2** The capital subsidy will be considered subject to the following:

- i) The amount of capital subsidy would be calculated on the basis of installed capacity.
- ii) Total capital subsidy would be limited to Rs. 5.00 crore per project for Industrial Waste, however, it will be limited to Rs. 1.00 crore per project in case of projects for power generation through boiler turbine configuration in stand alone mode or through co-generation.
- iii) Subsidy amount will be restricted to 20% of the project cost in Urban, Agricultural Waste/residues and Industrial Waste while financial assistance will be limited to 40 % for STP.
- iv) In case of Special Category States (NE Region, Sikkim, J&K, Himachal Pradesh and Uttarakhand), the capital subsidy would be 20% higher than that for other States. This provision will also be applicable two items (ii & iii) above.
- v) CFA to Biomass co-generation projects would be limited to a maximum of Rs. 1.0 crore/project , irrespective of the installed capacity of the project.

#### **4.3 Incentives to State Nodal Agencies**

State Nodal Agencies would be provided an incentive / service charge @ Rs.1% of the subsidy restricted to Rs.5.00 lakh per project, in order to facilitate development of projects and their monitoring during implementation / post commissioning. Service charges for Biomass co-generation (Non-bagasse) projects would be @ Rs.1 lakh/MW restricted to Rs. 5 lakh/project.

#### **4.4 Financial Assistance for promotional activities**

Financial assistance would be provided for organizing training courses, business meets, seminars/ workshops and publicity /awareness on case-to- case basis, subject to a maximum of Rs. 3.0 lakhs per event/ activity.

#### **4.5 Financial support for R&D projects**

Financial support would be provided for R&D projects, including studies on resources assessment, technology upgradation, performance evaluation etc. to institutions/ industries. This will be governed by the procedures /guidelines issued by MNRE.

#### **5.0 Implementation Arrangements**

The scheme will be implemented by State Nodal Agencies, Urban Local Bodies / Municipal Corporations, private and public sector enterprises and organizations, as well as NGOs including through Energy Service Companies (ESCOs). The prescribed format for submission of the proposals is given in the Annexure-II. For projects to be implemented without debt financing/loans, the proposals will be directly submitted to the Ministry for financial support. In cases where debt financing / loans from domestic FIs / Banks is involved, the proposals for financial support will be submitted by the promoters to the Ministry through Banks/FI along with all the statutory clearances. The Technical Institutions namely IISc, IITs, CLRI, etc. and the organizations such as IL&FS, TCOs, FIs, IREDA, etc. will also be involved in development of projects and preparation of Detailed Project Reports (DPR). The projects will be taken up by Urban Local Bodies and other Government organizations in Public Private Partnership mode. Financial Assistance for MSW based projects will be provided for projects selected through a transparent competitive procedure.

## **6.0 Release of Central Financial Assistance**

**6.1** The entire capital subsidy amount would be released to the beneficiary's loan account in the lending financial institution/banks for the purpose of offsetting the loan amount only after successful commissioning of project as per DPR norms and receipt of copies of statutory clearances and requisite project related information / documents. The condition of successful commissioning of the project would, *inter-alia*, imply operation of the project for three months, including continuous operation for at least 72 hours at minimum of 80% of rated capacity, for MSW based projects, this would be 60% of rated capacity.

**6.2** In case the project is set up by the developers through their own resources, the CFA would be released directly to the developer after successful commissioning of the project as per item 6.1 above

**6.3** The incentives to State Nodal Agencies would be released after successful commissioning of the project.

## **7.0 Monitoring Mechanism :**

**7.1** The State Nodal Agencies concerned will closely monitor the execution of the projects and provide guidance for their timely completion. They would also submit periodic progress reports to MNRE.

**7.2** MNRE may also monitor the progress of implementation of the projects as well as their performance through a Monitoring Committee consisting of representatives from MNRE, financial institution (s) / banks, Technical Institutions and State Nodal Agencies.

**8.0** The aforesaid programme is subject to change (s) and modification (s) as may be decided by the MNRE, Govt. of India from time to time, and subject to availability of funds. The Ministry shall in no way be liable for expenditure incurred by promoters for pre-project preparation or other activities, merely on the basis of this circular and / or related announcements by the Ministry. In case of any ambiguity on interpretation of any provisions of the scheme, the decision of the Ministry shall be final and binding.

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**APPLICATION FORM FOR GRANT OF SUBSIDY  
Under the Programme on Energy from Urban, Industrial and  
Agricultural Wastes / Residues**

1. Name of Promoter/ Investor
  
2. Regd. Office address  
Tel. No./ Fax No.
  
3. Postal Address  
Tel. No./Fax No./E-Mail
  
4. Name of Project
  
5. Nature of the project along with capacity
  
6. Type of Waste & Quantity required per day
  
7. Supplementary fuel if any
  
8. Location- (city/district/state)
  
9. Name of Financial Institutions(s) with which financial tie-ups have been made
  
10. Total cost of project
  - a) Pre-project costs
  - b) Capital cost
  - c) Other costs
  - d) Total
  
11. Means of Financing
  - a) Promoter's direct equity
  - b) Loans (with details) from FIs
  - c) From other sources

12. Whether grid-connected or captive
13. Project period (in months)
14. Status of Project
  
15. Enclosures
  - a) Two copies of DPR, including bar charts for schedule of activities for the project
  - b) Proof of possession of site
  - c) Details of statutory clearances obtained, (if any)
  - d) Copy of the MoU executed with FI/Bank
  - e) Copy of the MoU executed with SEB / other State Agency

**Note** Certified that the above information given by me on behalf of my firm/ company is correct in all respects and no factual information has been suppressed.

**(Signature of the Applicant)**