

F.No.10/1/2011-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 19th July, 2012.

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

Subject: Programme on Energy Recovery from Municipal Solid Waste for the year 2012-13 - Sanction regarding.

Sir,

I am directed to convey the sanction of the Government of India for the implementation of the **Programme on Energy Recovery from Municipal Solid Waste** during the year 2012-13. The scheme provides financial assistance for setting up of five Pilot projects for power generation from MSW to be undertaken in accordance with the decision of Hon'ble Supreme Court given during a hearing held on May 15, 2007, and recommendations of the Expert Committee; administrative charges to State Nodal Agencies and Grants-in-aid for Research, Development and Demonstration, organizing seminars, workshops, training courses, etc. on the subject of energy from MSW. The details of the programme component, implementation methodology, financial assistance, release of funds and monitoring mechanism are given in the **Appendix**.

2. The main objectives of the proposed Programme on Energy Recovery from MSW are as follows:

- To set up five Pilot projects for recovery of energy from MSW; and
- To create conducive conditions and environment, with fiscal and financial regime, to develop, demonstrate and disseminate utilization of MSW for recovery of energy;

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

Contd./...

4. The expenditure on this scheme will be met from the budget provisions given below:

<u>Head of Account</u>	<u>Description</u>	<u>Allocated Amount</u>
'2810'	The Expenditure is debitable to Demand No.68, 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 .31 Grants in Aid .33 Subsidy	Rs. 0.05 crore Rs. 15.00 crore
	Total	Rs. 15.05 crore

5. This issues with the approval of competent authority and concurrence of IFD vide their diary No. IFD/513/2012-13, dated 02.07.2012.

Yours faithfully,

(B.R. Mishra)
Scientist "E"

Copy to:

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

PROGRAMME ON ENERGY RECOVERY FROM MUNICIPAL SOLID WASTE

1. Implementation Arrangements

The scheme is to be implemented by involving the State Nodal Agencies, Urban Local Bodies / Municipal Corporations. The Technical Institutions namely IISc, IITs, CLRI, etc. and the organisations 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 will be provided for projects selected through a transparent competitive procedure.

2. Guidelines for Development of Projects

The 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. Key recommendations of the Expert Committee in regard to development of MSW based waste-to-energy projects are given below:

- The issues such as Project Development including characterization of wastes, sizing of projects, technology selection and project design, management model and operational issues including close co-ordination between Municipal Corporation and the Promoters, financial appraisal and approval of project should be adequately addressed.
- In view of the problems of treatment and disposal of municipal wastes (solid and liquid) in our cities and towns, which are only likely to increase with the growth of population and urbanization, an integrated approach to waste processing and treatment will be necessary, as brought out in the MSW Rules, 2000. Therefore, instead of focusing on individual technologies, it would be desirable to take an integrated approach to the management and treatment of MSW, which would necessitate deployment of more than one technology in tandem.
- The selection of technology for the solid waste management depends upon the quality of waste to be treated and the local conditions. Therefore, for the segregated waste, which is dedicated in nature, the selection of technology is relatively easier and its performance and success is beyond doubt. Therefore, it is desirable to have solid waste segregated at source, which is also required as per the MSW Rules, 2000.
- The Committee has also recommended that 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.

The projects need to be developed for specific cities. It is expected that State Nodal Agencies, HUDCO, IREDA, IL&FS, TCOs, etc, will develop the projects with the help of consultants, as may be necessary, for the Municipal Corporations / Urban Local Bodies. The Project documentation involves the following:

- Analysis of MSW and assessment of quantity;
- Identification of project site;
- Preparation of MSW collection and transportation plan
- Finalization of tie-up with the ULBs for land lease and supply of waste;
- Finalization of power purchase agreement;
- Development of a bankable project with Feasibility Report and the DPR;
- Firming up of means of project finance;
- Assistance in entire process of bidding;
- Obtaining all statutory clearances for the projects; and
- Providing assistance and supervision during execution and commissioning.

3. Details of Financial Assistance

3.1 Financial support to be provided under this Programme for setting up five Pilot Projects on Energy Recovery from Municipal Solid Wastes is as follows:

- i Financial assistance at a flat rate of Rs. 2.00 crore per MW, subject to ceiling of 20% of project cost and Rs. 10.00 crore per project, whichever is less.
- ii Financial Assistance to be provided for projects selected through a transparent competitive procedure.
- iii Financial assistance of 20% higher than those specified for different categories of projects will be provided for projects in North Eastern Region and Special Category States, namely, Himachal Pradesh, J&K, Sikkim and Uttarakhand.

Project Development Assistance

3.2 Financial assistance of 50% of the cost of preparation of Detailed Project Reports subject to a maximum of Rs 10.00 lakh per project will be provided.

Administrative Charges to State Nodal Agencies

3.3 Administrative charge of 1% of the MNRE's financial assistance with an upper limit of Rs 5.00 lakh per project, shall be payable to the State Nodal Agencies (SNA) to facilitate the development and implementation of the projects and monitoring for a period of one year after commissioning.

Financial Assistance for Training and Awareness Creation

3.4 Financial assistance may be provided upto a maximum of Rs 3.00 lakh per event for organization of training courses, business meets, seminars, workshops and awareness raising activities on case-to-case basis.

Financial Assistance for Resource Assessment / Performance Evaluation Studies

3.5 Financial assistance may be provided upto a maximum of Rs 3.00 lakh per studies on resource assessment and performance evaluation of the plants.

Research & Development:

3.6 Financial support will be provided for R&D projects in accordance with the R&D Policy of the MNRE. Financial support may also be provided for projects involving Applied R&D and technology up-gradation. This will also be governed by the procedures/ guidelines being issued by the R&D Division of MNRE separately.

4. MIXING OF OTHER WASTE / SUPPORT FUEL

Any waste of renewable nature or biomass can be mixed to the extent of 25% based on Gross Calorific Value.

5. RELEASE OF FINANCIAL ASSISTANCE

The financial assistance will be released by the Ministry in two installments as follows :

- i. **First** installment of 50 percent of subsidy may be released against Bank Guarantee from Nationalized Bank for the same amount to the FI/bank lending for the project upon release of 50% of sanctioned loan amount. This may be treated as interest free loan until the release of second installment of subsidy. In the event of the second installment not getting released within a period of one year due to non-completion of project as per the terms and conditions of the sanction, this amount may be refunded by the Bank/FI with interest and paid to MNRE by revoking the Bank Guarantee. A proper agreement will be entered into with the Bank/FI concerned for recovery of released amount of subsidy in the event of second installment not getting released.
- ii. **Second** installment of 50% of subsidy may be released in three months after commissioning of the project, and achievement of an average Plant Load Factor (PLF) of 60% during the third month of operation. The quantum of second installment may be reduced by 5% per month in the event of delay in achieving the average monthly PLF of 60%.

In case of the projects set up by the developers through their own resources, financial assistance would be released directly to the developers after successful commissioning of the projects.

6. MONITORING MECHANISM

The concerned State Nodal Agencies will closely monitor the execution of the projects and provide guidance for their timely completion and submit monthly progress reports to MNRE. MNRE may also monitor the progress of implementation of projects as well as their performance through a Monitoring Committee consisting of representatives from the Technical Institutions namely IISc, IITs, CLRI, etc., and organisations such as IL&FS, TCOs, FIs, IREDA, etc. besides officials from MNRE and State Nodal Agencies. As regards the monitoring of performance of projects, including the limit of utilization of other wastes of renewable nature and biomass, MNRE may also engage the services of independent third party entities.

7. In case of any ambiguity in interpretation of provisions of this scheme, the decision of the MNRE shall be final.
