

**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 19<sup>th</sup> April, 2011.

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

**Subject: Programme on “Biomass Co-generation (non-bagasse) in Industry” for implementation during the year 2011 – 12- Sanction regarding.**

Sir,

I am directed to convey the sanction of the Government of India for implementation of the **Programme on “Biomass Co-generation (non-bagasse) in Industry”** during the year 2011-12 at a total outlay of Rs.12.00 crore (Rupees Twelve crore only). The details of the programme component, implementation methodology, financial assistance, release of funds and monitoring mechanism are given in the **Appendix**.

2. The objective of the Programme is to encourage the deployment of biomass co-generation systems in industry for meeting their captive thermal and electrical energy requirements with supply of surplus power to the grid, to conserve the use of fossil fuels for captive requirements in industry, to bring about reduction in greenhouse gas emissions in industry and to create awareness about the potential and benefits of alternative modes of energy generation in industry. Under the programme, financial assistance/support would be provided in respect of the following activities:

- i) Biomass Co-generation (non-bagasse) projects for meeting captive heat and power requirements of industry.
- ii) Awareness creation activities such as organization of business meets, seminars, workshops, orientation and training programmes, publication of newsletters, etc.
- iii) Promotional activities such as potential / resource assessment, technology validation, strategic studies, industry-wise / sectoral studies and performance monitoring and evaluation etc.

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

Contd./....

4. Physical target for the year 2011-12 80 MW
5. The expenditure on the 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, 101 – Grid Interactive and Distributed Renewable Power 02 – Off Grid / Distributed & Decentralized Renewable Power 03- Bio Power – Biomass Co-generation (non-bagasse) in Industry	
	.31 Grants in Aid	Rs. 00.50 crore
	.33 Subsidy	Rs. 11.50 crore
	<b>Total</b>	<b>Rs.12.00 crore</b>

6. This issues in exercise of the powers conferred on this Ministry and with the concurrence of IFD Division vide their diary No. IFD/23/11-12, dated 05.04.2011.

Yours faithfully,

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

**Copy to:**

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

**Programme on “Biomass Co-generation (non-bagasse) in Industry” for implementation during the financial year 2011-12.**

**1.0 Objectives**

The main objectives of the programme on Biomass Co-generation (non-bagasse) in Industry are given below:

- i) To encourage the deployment of biomass co-generation (non-bagasse) systems in industry for meeting thermal and electrical energy requirements.
- ii) To promote decentralized / distributed power generation through supply of surplus power to the grid.
- iii) To conserve the use of fossil fuels for captive requirements in industry.
- iv) To bring about reduction in greenhouse gas emissions in industry.
- v) To create awareness about the potential and benefits of alternative modes of energy generation in industry.

**2.0 Scope**

The Programme will cover the following:

**i) Biomass Co-generation (non-bagasse) Projects in Industries for Captive Use**

To meet the requirement of captive power and thermal energy, the installation of biomass co-generation projects (excluding bagasse co-generation) is to be promoted in industry, with at least 50% of power for captive use, and a provision for the surplus power to be exported to the grid. This will increase the use of non-conventional energy sources and conserve the use of fossil fuels such as coal, oil and natural gas. Use of maximum of 25% conventional fuels would be allowed in such projects.

**ii) Other Promotional Activities**

Other promotional activities would cover potential / resource assessment, preparation of DPRs, organization of seminars / workshops / conferences, interactive / business meets, awareness creation activities, and other professional technical services.

**3.0 Central Financial Assistance (CFA)**

Central Financial Assistance in the form of capital subsidy would be provided for biomass co-generation (non-bagasse) projects in industries for their captive use.

**4.0 Programme provisions**

The details of Central Financial Assistance and other provisions are given below:

**4.1 Capital subsidy for Biomass Co-generation (non-bagasse) projects**

Capital subsidy @ Rs.20.00 lakhs/MWe would be provided to promoters for installation of Biomass Co-generation (non-bagasse) projects based on direct combustion.

#### **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) CFA would be limited to a maximum capacity of 5 MW, irrespective of the installed capacity of the project.
- iii) In case of Special Category States (NE Region, Sikkim, J&K, Himachal Pradesh and Uttaranchal), 20% higher capital subsidy than that for General Category States would be provided.

#### **4.3 Incentives / Service charges to SNAs.**

Incentives / service charges @ Rs.1.00 lakh / MWe (or equivalent) would be provided to SNAs on pro-rata basis, subject to a ceiling of Rs.5.00 lakh / project, including for Industrial Co-generation projects, for their active involvement in promoting Biomass Power / Co-generation projects.

#### **4.4 CFA for organizing business meets, seminars, workshops, orientation and training programmes, etc.**

CFA upto Rs.3.00 lakh / event would be considered for organization of business meets, seminars, workshops, orientation programmes and training programmes, etc.

#### **4.5 CFA for technology validation, strategic studies, industry-wise sectoral studies and performance monitoring & evaluation etc.**

CFA upto Rs. 5.00 lakhs, on case by-case basis would be considered for technology validation, strategic studies, industry-wise sectoral studies and performance monitoring & evaluation etc. to institutions /industries. This will be governed by the procedures/guidelines being issued by the R&D Division of MNRE separately.

### **5.0 Implementation Arrangements**

- 5.1 The projects will be implemented by private and public sector industry, including through Energy Service Companies (ESCOs), in which case the ESCO would be eligible for the CFA.
- 5.2 IREDA, other financial institutions or commercial banks shall forward the Detailed Project Reports received from the promoters / ESCOs to the Ministry along with their Appraisal Note indicating the techno-economic viability of the projects, taking into account the eligible capital subsidy. The promoters would be required to also submit an advance copy of their proposal to the Ministry directly. The prescribed format for submission of the proposal is given in the Annexure.
- 5.3 For projects to be implemented by the promoter without debt financing / loans from domestic FIs / banks, the proposals should be directly submitted to the Ministry for financial support.
- 5.4 After receipt of DPR from promoters, Appraisal Note and copy of loan sanction order from IREDA / lead bank / FI, and other requisite information / documents from the promoters, the proposal will be examined in the Ministry and sanction will be issued for providing capital subsidy in accordance with the provisions of scheme.

## **6.0 Release of Central Financial Assistance (CFA)**

- 6.1 The entire capital subsidy amount would be released to the beneficiary's loan account in the lending financial institutions/banks for the purpose of offsetting the loan amount after successful commissioning of project as per DPR norms and receipt of copies of statutory clearances and requisite project relating information / documents. The conditions of successful commissioning of the project would inter-alia imply operation of the project for three months, including at least 72 hours continuous operation at minimum 80% of rated capacity.
- 6.2 In case the project is set up by the promoters through their own resources, the CFA would be released directly to promoters 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 Mechanisms**

- 7.1 The concerned State Nodal Agencies will closely monitor the execution of the projects and ensure their timely completion. They would be required to submit periodic progress reports to MNRE.
- 7.2 MNRE will 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 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 dispute on interpretation of any provision under the scheme, the decision of the Ministry shall be final and binding.

**APPLICATION FORMAT FOR CAPITAL SUBSIDY  
(BIOMASS POWER/CO-GENERATION (NON-BAGASSE) PROJECTS IN INDUSTRY)**

**PART-A**

**[TO BE FILLED IN BY PROMOTER & FORWARDED THROUGH LEAD FI]**

**1. GENERAL**

- (i) Name, Address, Phone, Fax & Email of the Promoter :
- (ii) Name and designation of authorized signatory :
- (iii) Constitution (whether Co-operative/ Private Sector/ Public Ltd/ joint sector/Public Sector Company etc.) :
- (iv) Location of the Project :

**2. PROJECT DETAILS**

- (i) Installed capacity (MW) :
  - (a) Thermal (MW)
  - (b) Power (MW)
- (ii) Capital requirement (MW) :
- (iii) Surplus Exportable (MW) :

**3. TECHNOLOGY USED**

(Please specify whether combustion, Gasification, Co-generation etc.) :

**4. BIOMASS**

- (i) Biomass proposed :
- (ii) Quantity required per day :

**5. SUPPORT FUEL**

Type of other fuels, if proposed to be used as Support/ supplementary fuel :

**6. AVERAGE COST OF GENERATION (Rs./Kwh):**

**7. FINANCING**

- Total cost of project as approved by FIs :
- Means of financing
  - (i) Debt Equity Ratio :
  - (ii) Promoter's contribution (Equity) :
  - (iii) Term loans with rate of Interest (FI wise):
  - (iv) Any other source :
- Loan repayment period (FI Wise) :

**AUTHORIZED SIGNATORY**

**PART-B**  
**[TO BE FILLED BY LEAD FINANCIAL INSTITUTION]**

i) Name of the Lead FI (and other FIs, Lending to the Project) complete address, telephone number, fax number, e-mail etc., and name & designation of the contact person.	
ii) Whether any application made/ proposed to be made for any other financial assistance/grant/ loan for the project from any organization in India or abroad. If yes, please give the source details. iii) As, appraised by FI(s)	
<ul style="list-style-type: none"> <li>• Cost of the project approved by FIs) <ol style="list-style-type: none"> <li>1. Civil Works</li> <li>2. Plant &amp; Machinery</li> <li>3. Misc. Equipment</li> <li>4. Pre-operative expenses</li> <li>5. Others</li> </ol> </li> </ul>	
<ul style="list-style-type: none"> <li>• Means of financing (As appraised by FIs) <ol style="list-style-type: none"> <li>1. Promoters/ industry Contribution (equity)</li> <li>2. Term loan (FI wise)</li> <li>3. Any other sources <ul style="list-style-type: none"> <li>• Appraised installed Capacity (MW)</li> <li>• Appraised captive requirement (MW)</li> <li>• Appraised Net/Exportable Power (MW)</li> <li>• Appraised total Term Loan approved (FI wise indicating variable or fixed interest rate)</li> <li>• Techno-economic Viability of Project</li> </ul> </li> </ol> </li> </ul>	
iv) Physical Status of the Project	
v) Anticipated commissioning schedule	
vi) a) Whether power purchase agreement with SEB has been made? b) Status of Statutory Clearances	
vii) Amount of estimated Capital Subsidy eligibility as per GOI sanction order	Rs.

(viii) Enclosure check list/ Whether enclosed (Please tick)

- |    |  |     |
|----|--|-----|
| 1. | One copy of DPR as accepted by FIs                       | ( ) |
| 2. | Copy of PPA/ No objection certificate under section 44   | ( ) |
| 3. | Copy of Statutory clearances /State Government approvals | ( ) |
| 4. | Authorised /attested copies of Loan Agreement(s)         | ( ) |
| 5. | Sanction Order of FI(s)                                  | ( ) |
| 6. | Appraisal Note of FI(s)                                  | ( ) |
| 7. | Eligibility check list                                   | ( ) |
| 8. | Disbursement Schedule (FI-wise)                          | ( ) |
| 9. | Any other (please specify)                               | ( ) |

**AUTHORIZED SIGNATORY**

**PART-C**

**ELIGIBILITY CHECK LIST  
(BIOMASS POWER/CO-GENERATION (NON-BAGASSE) PROJECTS IN INDUSTRY)**

**(To be filled in by Promoter & countersigned by the Lead FI)**

Please Tick ( ) only one, against each, as applicable.

<b>SL. No.</b>	<b>PARTICULARS</b>	<b>ITEMS</b>	<b>TICK MARK (only one box)</b>
1.	Biomass resources used	a) Forestry based and Agro based industrial residues b) Energy Plantations; Forestry & Agro Residues c) Any other	( ) ( ) ( )
2.	Mix of fuel	If used whether <25% (please specify type of fuel and quantity)	( )
3.	Configuration / boiler pressure	100 bar & above 80 bar 60 bar 40 bar	( ) ( ) ( ) ( )
4.	Debt / equity ratio	4:1 3:1 3:2 2:1	( ) ( ) ( ) ( )
5.	Technology Route Used	a) Steam Turbine b) Gas/Steam Turbine c) Gas Turbine Engine d) Dual Fuel Engine e) Any other (please specify)	( ) ( ) ( ) ( ) ( )

6.	Details of loans	a) Date of sanction of loan by FI (FI wise) b) Whether Loan Agreement(s) signed c) Whether any disbursement of Term Loan made (if yes, date and amount disbursed)	
7.	Power Purchase Agreement/ Wheeling Agreement	a) Whether Signed b) Yet to be Signed c) Not Required	( ) ( ) ( )
8.	Whether applied for any other assistance/grant from any Organization/State Government including International Agency (please specify name & quantity of assistance expected/available)	a) Yes b) No	( ) ( )

**AUTHORIZED SIGNATORY**