Guidelines for implementation of

Biomass Programme

"Scheme to Support Promotion of Manufacturing of Briquettes & Pellets and Biomass (Non-Bagasse) Based Cogeneration in Industries in the Country"

for the period of FY 2021-22 to 2025-26



1. Introduction

1.1 Name of the Programme: "Scheme to Support Promotion of Manufacturing of Briquettes & Pellets and Biomass (Non-Bagasse) Based Cogeneration in Industries in the Country (Up to March 2026)". It may also be referred as "Biomass Programme".

1.2 Objective: The objective of the Biomass Programme is to support setting up of Biomass Briquette/Pellet manufacturing plants and to support Biomass (non-bagasse) based cogeneration projects in Industries in the country. The broader objectives of the scheme are to reduce stubble burning by utilizing surplus agricultural residue, to provide additional source of income to farmers through sale of surplus agro residue and to enable better environmental practices and reduce pollution.

1.3 Scope: The programme provides Central Financial Assistance (CFA to project developers and service charges to implementing agency and inspection agencies in respect of setting up of Briquette / Pellet manufacturing plants and Biomass (non- bagasse) cogeneration projects in industries.

2. Funding Pattern:

2.1 Standard CFA pattern: CFA available under the programme is as follows:

Sr No	Project Type	CFA
1	Briquette / Pellet Manufacturing plants	Rs. 9 Lakh per MTPH (metric ton/hour) manufacturing capacity (maximum CFA of Rs 45 Lakhs per plant)
2	Biomass (Non-bagasse) cogeneration projects	Rs. 40 Lakhs/MW (on Installed Capacity) (maximum CFA of Rs. 5 Crores per project)

2.2 Service charges to Implementing/ inspection agencies:

i) Implementing agency (IA) shall be provided a service charge @1% of total CFA for examining and processing the CFA applications received in BioURJA portal and forwarding suitable applications to Ministry. Indian Renewable Energy Development Agency Limited (IREDA) shall be the implementing agency. However the Ministry of New and Renewable Energy (MNRE) may change the IA by way of a suitable notification.

ii) Performance Inspection Agency shall be provided service charge of:

(a) Rs. 25,000 per metric ton per hour (maximum Rs. 1 Lakh per project) towards monitoring of implementation progress, performance inspection and verification of production record and post installation monitoring of Briquette/Pellet manufacturing plants, and

(b) Rs.1 Lakh/MW (Maximum Rs.5 Lakh per project) as incentive or service charge towards implementation progress, performance inspection and verification of generation record and post installation monitoring of Biomass (non-bagasse) cogeneration projects.

3. Terms & Conditions:

3.1 The programme shall provide CFA for projects utilizing biomass such as but not limited to:

i) Crop residues such as paddy straw, wheat straw, mustard stalks, cotton stalks etc.

ii) Wood produced through energy plantations such as prosopis juliflora etc.

iii) Weeds, palm leaves, coconut shells & husk etc.

iv) Wood waste produced in industrial operations such as saw dust, off cuts, bark etc.

v) Agro-based industrial residue such as rice husk, barley husk,etc.

vi) Forest residues such as pine needles, branches & stems of trees etc.

3.2 The proposals for setting up of Briquette / Pellet Manufacturing plants and Biomass (non-bagasse) cogeneration projects shall only be considered under this scheme. The bagasse based cogeneration projects shall not be eligible under this scheme.

3.3 Biomass (non-bagasse) cogeneration projects which intend to add capacity to the existing plants, shall also be considered for grant of CFA only for enhanced capacity attained by way of utilizing new plant and machinery.

3.4 Projects using municipal solid waste, black liquor, slop, press mud and other processed industrial waste shall not be considered under this scheme.

3.5 Companies registered under the Companies Act, Partnership Firms, Proprietorship Firms, Cooperatives, Public Sector Companies, Government owned Firms are eligible for financial support under the scheme.

3.6 Minimum project/ plant size requirement for grant of CFA under this scheme (a) For Briquette/ Pellet Manufacturing Plant: 1 MTPH (metric tons per hour), (b) For Biomass (non- bagasse) Cogeneration Power Plant: - 0.5 MW.

3.7 Proposals for availing CFA should be submitted so as to reach the Implementing Agency before the commissioning of the projects except for the projects mentioned in clause 4.1 (ii) and clause 4.2 (iv).

3.8 The CFA shall be released after successful commissioning and performance inspection of the plant as specified under Clause 4.

3.9 Central financial assistance from any other Ministry or department of the Central Govt. should not be claimed for proposed plant for which application has been submitted to this Ministry.

3.10 Only those projects, including capacity enhancement projects, which install new machinery e.g. Briquette/Pellet making machinery, boiler, turbine, are eligible under the scheme for grant of CFA.

4. Procedure for availing Central Financial Assistance (CFA)

4.1 Submission of proposal:

i) The proposal for availing CFA should be submitted through BioURJA Portal (www.biourja.mnre.gov.in) before commissioning of the plant [except the projects mentioned in clause 4.1(ii)and clause 4.1 (iii)]. The applications are invited from the date of

notification of the guidelines. The last date for submitting the applications under these guidelines shall be 31.12.2025. List of documents to be submitted is placed at **Annexure-I (Part-A).**

ii) Biomass (non-bagasse) cogeneration projects which have been commissioned on or after 1.4.2021 till the date of notification of these guidelines, shall also be considered as eligible for grant of CFA under this the Biomass Programme. The application for such project should be submitted in the BioURJA portal within three months of date of notification of these guidelines.

iii) Proposals for CFA to Biomass (non-bagasse) cogeneration projects, received by the Ministry on or before 31.3.2021 (under the 'Scheme to support promotion of Biomass based cogeneration in Sugar mills and other Industries in the country' circulated vide letter dated 11 May 2018 and corrigendum dated 04 Dec 2018) and wherein *"In-Principle" Approval could not be issued*: Such proposals shall be processed as per guidelines prevailing at the time of submission of the proposal in the Ministry.

iv) Incomplete proposals in any form and without requisite approvals/documents shall not be considered for grant of CFA. The rejection of such proposals shall be intimated to the project developers preferably within 60 days of submission of the proposal in the BioUrja Portal. However, fresh proposals doing away with all shortcomings may be resubmitted before commissioning of the plant or 31.12.2025 whichever is earlier.

4.2 "IN-PRINCIPLE" Approval of proposal:

i) For projects with debt/loans from FIs/Banks: In case loan drawn by the developer for the project is equal or more than from eligible CFA, the Implementation Agency shall receive the applications through BioURJA portal, examine the applications and shall forward the consolidated proposal to Ministry on bimonthly basis. The Ministry shall issue an "In-Principle" approval with the concurrence of IFD and approval of Secretary, MNRE. For projects with loan, Ministry/ implementing agency shall go by the appraisal of the project by the lending bank/FI.

ii) For projects without debt/loan or projects wherein loan drawn by the developer for the project is less than the eligible CFA, the Implementation Agency shall receive the applications through BioURJA portal, examine the applications and thereafter the applications will be put up to Project Appraisal Committee (PAC). Only PAC recommended applications will be forwarded to Ministry in a consolidated manner on bimonthly basis. The Ministry shall issue an "In-Principle" approval with the concurrence of IFD and approval of Secretary, MNRE.

iii) The Ministry shall issue an "In-Principle" approval to the proposals forwarded by implementing agency with the concurrence of IFD and approval of Secretary, MNRE. The in-principle approval shall be accorded by MNRE preferably within 40 days of receipt of the consolidated proposal from IREDA.

4.3 Commissioning of the plant:

i) The time period for commissioning shall be 12 months for Briquette / Pellet Manufacturing plants and 24 months for Biomass (non-bagasse) cogeneration plants from the date of "In-Principle" approval.

ii) After submission of application in the BioURJA portal, if a developer intends to commission the plant before in-principle approval to the proposal is accorded by MNRE, a prior intimation of commissioning of the project to the Implementing Agency is mandatory. However, in-principle approval of the project shall be subject to fulfilment of the eligibility conditions mentioned in this scheme guideline.

iii) In case of delay in commissioning for reasons not attributable to the developer, an extension of period upto one year over the original period of completion may

be granted by Secretary, MNRE provided an application is made by the developer, with supporting documents, atleast 30 days before the original date of completion. If no such application is received by MNRE/Implementing Agency and commissioning does not happen within the stipulated period (including the extended period), the in-principle approval shall be treated as cancelled and no CFA shall be released.

4.4 Performance Inspection:

i) On successful commissioning of the project, inspection team is required to visit the plant for performance inspection. The performance inspection of the plant shall have to be carried out within 18 months from the date of commissioning, beyond which the "In-Principle" approval shall be cancelled except in those cases where reason(s) of delay in inspection is (are) beyond the control of developer. For such cases, an extension of suitable period over the original performance inspection period can be granted by Secretary, MNRE provided an application is made by the developer, with supporting documents, before the completion of original inspection period of 18 months as given above.

ii) Inspection agency for performance inspection:

(a) For Briquette/Pellet Manufacturing Plants: -The developer may choose any one of the following agencies:

- Concerned State Nodal Agency (SNA), or
- Sardar Swaran Singh National Institute of Bio-Energy (SSS-NIBE).

(b) For Biomass (non-bagasse) cogeneration projects: - Concerned State Nodal Agency (SNA) and Sardar Swaran Singh National Institute of Bio-Energy (SSS-NIBE). The service charges towards inspection shall be shared equally between SNA & SSS-NIBE.

iii) The Performance testing of Briquette/Pellet Manufacturing Plants would inter-alia imply the following:-

(a) Operation of the plant at an average of 80% of rated capacity measured over a period of three consecutive days (taking average16 Hrs per day as standard operating hours), **and**

(b) Operation of the plant at an average of 70% of rated capacity measured over a period of three consecutive months (taking average 16 Hrs per day as standard operating hours).

Illustration 1:

Assuming Capacity of Briquette/Pellet Manufacturing plant = 3 metric tons per hour & Hours of operation per day= 16 Hrs

(Sample calculation for three days' operation)

Days	Hours of operation	Daily Production of Briquettes/ Pellets at rated capacity (in metric tons)	Total Production of Briquettes/Pellets over three days at rated capacity (in metric tons)	Minimum required Production of Briquettes/Pellets over three days to fulfil the clause 4.2(iii)(a) (in metric tons)
Day 1	16	48	144	115.2
Day 2	16	48		
Day 3	16	48		

(Sample calculation for three months' operation)

Months	Hours of operation	Monthly Production of Briquettes/ Pellets at rated capacity (in metric tons)	Total Production of Briquettes/ Pellets over three months at rated capacity (in metric tons)	Minimum required Production of Briquettes/Pellets over three months to fulfil the clause 4.2(iii)(b) (in metric tons)
Month 1 (say July)	31*16=496	3*496=1488	4416	3091.2
Month 2 (Say August)	31*16=496	3*496=1488		
Month 3 (Say September)	30*16=480	3*480=1440		

Actual no. of days in a month should be taken into consideration for purpose of calculation.

(iv) The Performance testing of Biomass (non-bagasse) based Cogeneration Projects would inter-alia imply the following:

(a) Continuous operation of the power plant for 72 hours at an average of 80% of rated capacity, **and**

(b) Operation of the power plant at an average 80% of rated capacity measured over a period of three consecutive months.

Illustration 2:

Assuming Capacity of Biomass (non-bagasse) based Cogeneration Plant= 3 MW & Hours of operation per day= 24 Hrs

(Sample calculation for three days' operation)

Days	Hours of operation	Daily Electricity Generation at rated capacity (in kWh)	Total generation over three days at rated capacity (in kWh)	Minimum required generation over three days to fulfil the clause 4.2(iv)(a) (in kWh)
Day 1	24	3000*24=72000	2,16,000	1,72,800
Day 2	24	3000*24=72000		
Day 3	24	3000*24=72000		

(Sample calculation for three months' operation)

Months	Hours of operation	Monthly electricity generation (in kWh)	Total electricity generation over three months (in kWh)	Minimum required electricity generation over three months to fulfil the clause 4.2(iv) (b) (in kWh)
Month 1 (Say July)	31*24=744	3000*744= 22,32,000	66,24,000	52,99,200
Month 2 (Say August)	31*24=744	3000*744= 22,32,000		
Month 3 (Say September)	30*24=720	3000*720= 21,60,000		

Actual no. of days in a month should be taken into consideration for purpose of calculation.

(v) The Briquette/pellet manufacturing plant should fufil the conditions mentioned in clause 4.4 (iii) (a)and clause 4.4 (iii)(b) above to become eligible for full release of CFA. In case of any variation in fulfilment of the conditions of clause 4.4 (iii) (b), following graded structure based on average capacity utilisation factor over a period of three months shall be used, for release of CFA: -

Average Capacity Utilization Factor (CUF)* over three months	% of eligible CFA
CUF ≥70%	100%
60% ≤ CUF< 70%	80%
50% ≤ CUF < 60%	60%
CUF<50%	0%

**Capacity Utilization Factor over three months= Total Briquette/pellet generation in three months (in metric tons)/[Capacity of plant (in metric tons per hour)*16 Hrs per day* total no. of days in three months]*

(vi) Biomass (non-bagasse) cogeneration projects should fufil the conditions mentioned in clause 4.4 (iv) (a)and 4.4 (iv)(b) to become eligible for full release of CFA. In case of any variation in fulfilment of the conditions of clause 4.4 (iv) (b), following graded structure based on average capacity utilisation factor over a period of three months shall be used, for release of CFA

Average Plant Load Factor (PLF)**over three months	% of eligible CFA
PLF≥80%	100%
60% ≤ PLF<80%	80%
50% ≤ PLF<60%	60%
PLF<50%	0%

***Plant Load Factor over 3 months= Total electricity generation in three months (in kWh)/[Capacity of plant (in kW)*24 Hrs per day* total no. of days in three months]*

4.5 Submission of documents for release of CFA:

(i) Claim for release of CFA by developer should be made in the BioURJA portal within 3 months of the inspection of the plant by inspection team. List of documents to be submitted is placed at **Annexure-I (Part-B).**

(ii) The implementing agency shall examine the release request and shall forward the consolidated demand, in respect of all project eligible for release of CFA as per scheme guidelines, to MNRE on monthly basis.

4.6 Disbursement of CFA

(i) For Self-financed projects or projects wherein loan drawn by the developer for the project is less than the eligible CFA, the CFA shall be released to developer's account.

(ii) For FI/Bank financed projects**:** In case loan drawn by the developer is equal to or more than from eligible CFA**,** CFA shall be released to the developer's term loan account maintained in the lending FIs/banks to off-set/reduce the loan by an equivalent amount. In case of complete repayment of loan by the developer before release of CFA, the CFA may be released to developer's account, which may be other than the term loan account, on recommendation from FI/Bank.

(iii) The service charge to inspection agencies and implementing agency shall be released in the bank account of the agency.

(iv) The above disbursements of CFA to eligible projects shall be done by MNRE/ Implementing Agency in accordance with procedure specified for release of funds by Ministry of Finance.

5. Project Monitoring Mechanism

Developers shall share plant generation data to MNRE or any other designated agency, through installation of SCADA System/remote monitoring system.

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/developers for pre-project preparation or other activities, merely on the basis of this circular and / or related announcement by the Ministry. In case of any ambiguity on interpretation of any provisions of the programme, the decision of the Ministry shall be final and binding.

It is clarified that mere submission of the proposal should not be construed as sanction / approval of the project for grant of CFA.

For Annexures mentioned in this booklet, please refer detailed Programme guidelines uploaded at MNRE website (https://mnre.gov.in)