

No. 300/2/2020-Waste To Energy
Government of India
Ministry of New and Renewable Energy
(Biomass Division)

Atal Akshay Urja Bhawan,
Opposite CGO Complex
Lodhi Road, New Delhi-110 003
Date: 02-11-2022

To,

The Pay & Accounts Officer,
Ministry of New & Renewable Energy
New Delhi-110003

Subject: Administrative approval for implementation of Biomass Programme under the Umbrella scheme of National Bioenergy Programme for duration of FY 2021-22 to 2025-26 (Phase-I)- Reg.

Sir/Madam,

I am directed to convey the sanction of the President of India for the implementation of the National Bioenergy Programme for a period of 01.04.2021 to 31.03.2026 with the outlay of Rs.858 crore under Phase-I. The National Bioenergy Programme will comprise of the following sub-schemes:

- i) **Waste to Energy Programme** (*Programme on Energy from Urban, Industrial and Agricultural Wastes /Residues*)
- ii) **Biomass Programme** (*Scheme to Support Manufacturing of Briquettes & Pellets and Promotion of Biomass (non-bagasse) based cogeneration in Industries*)
- iii) **Biogas Programme**

2. Guidelines for the Biomass Programme are enclosed as **Appendix**.

3. The approved budget outlay of Rs.858 crore under Phase-I also includes the committed liabilities of the sanctions issued under the various sub-schemes of the National Bioenergy Programme up to 31st March 2021.

4. Budget outlay of sub-schemes of the National Bioenergy Programme is given as below:

Ajeem Kumar

Sub-schemes	Budget outlay of Phase-I (Rs in crore)
Waste to Energy Programme	600
Biomass Programme	158
Biogas Programme	100
	Rs. 858 crore

5. Bagasse based Biomass Cogeneration projects are not supported under the Biomass programme.

6. The balance committed liabilities under the National Bioenergy programme to be carried forward beyond 31.03.2026, should not exceed 50% of the total outlay of the National Bioenergy programme after excluding committed liabilities as on date of EFC (i.e. 27.06.2022).

7. In addition to regular applications for seeking CFA under the programme, following points are emphasized:

i. 'In-principle' approval for grant of Central Financial Assistance (CFA) to eligible Biomass (Non-Bagasse) Cogeneration project proposals, which were received up to 31.03.2021 (under the 'Scheme to support promotion of Biomass based cogeneration in Sugar mills and other Industries in the country' circulated vide letter dated 11th May, 2018 and corrigendum dated 4th Dec, 2018), but "In-Principle" approval could not be issued thereafter as the sub-schemes/programmes were continued only for clearing committed liabilities, may be considered under this administrative approval. Such 'In-principle' approvals and subsequent release of CFA shall be governed by the relevant scheme guidelines prevailing at the time of the receipt of the concerned proposals.

ii. (a) 'In-principle' approval for grant of CFA to eligible Biomass (Non-Bagasse) Cogeneration project proposals submitted to the Ministry after 31.03.2021 and till the issuance of new guidelines of Biomass programme shall also be considered under this administrative approval.

(b) Further, the applications of Biomass (Non-Bagasse) Cogeneration projects commissioned during this period (after 31.03.2021 and till the issuance of new guidelines of Biomass programme) may also be considered under this administrative approval for according 'In-principle' approval for CFA. Applications of such projects should be submitted within three months of date of notification of the guidelines.

8. The expenditure on Biomass Programme will be met from the budget provisions given under Bio-Power Head.

9. Indian Renewable Energy Development Agency Limited (IREDA) shall be the implementing agency for implementation of the Biomass programme.

Aneem Kumar

10. This issues in exercise of the powers conferred on this Ministry and with the concurrence of IFD Division vide their diary No. 196 dated 01.11.2022.

11. This has approval of Hon'ble Minister for New and Renewable Energy.

Yours faithfully,

Aseem Kumar

(Aseem Kumar)

Director

Copy for information and necessary action to:

- 1) All Central Government Ministries and Departments.
- 2) NITI Aayog, Sansad Marg Area, New Delhi.
- 3) Renewable Energy/Power/Energy Departments of all States & UTs.
- 4) Principal Director of Audit, Scientific Audit-II, DGACR Building, I.P. Estate, Delhi-110002
- 5) Indian Renewable Energy Development Agency Limited (IREDA), 3rd Floor, August Kranti Bhawan, Bhikaji Cama Place, New Delhi-110066
- 6) State Nodal Agencies for Renewable Energy (SNAs) of all States/UTs.
- 7) Sardar Swaran Singh National Institute of Renewable Energy (SSS-NIBE), Kapurthala, Punjab.
- 8) Heads of Banks/Financial Institutions.

Internal Distribution:

- a. PS to Hon'ble Minister of Power and New and Renewable Energy
- b. PS to Hon'ble Minister of State for New and Renewable Energy and Chemicals & Fertilizers
- c. PSO to Secretary, MNRE
- d. All Group Heads and Advisors/JS (DDJ)/JS(LB)/JS&FA/Eco. Advisor, MNRE
- e. CCA, MNRE/Cash Section, MNRE
- f. Director (NIC) to upload the Guidelines on Ministry's Website.
- g. Sanction folder

Aseem Kumar

(Aseem Kumar)

Director

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



**Government of India
Ministry of New and Renewable Energy
New Delhi - 110003**

November - 2022

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 & 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 average 16 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 fulfil 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 fulfil 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.

Part A: List of documents required for in-principle approval of proposals

i. For Briquette/Pellet Manufacturing Plants:

- a. Forwarding letter from developer in case of self-financed projects (i.e. projects without debt financing/loans) (As governed by clause 4.6(i)) **or** Lead FI/Bank (As governed by clause 4.6(ii)) in case of projects availing debt financing/loans (format at Annexure-II)
- b. Copy of DPR /Feasibility Report/ Project Report (As per Annexure-III).
- c. Copy of loan sanction letter (in case of project financed by FI(s)/bank(s))
- d. Techno-economic Feasibility Report (for projects based on debt/loan as governed by clause 4.6(ii))
- e. Latest high resolution photographs of site (with time stamp)
- f. Duly notarized undertaking in original (on a non-judicial stamp paper of Rs. 500) in the format mentioned at Annexure-V. #

ii. For Biomass (Non-Bagasse)Cogeneration Projects:-

- a. Forwarding letter from developer in case of self-financed projects (i.e. projects without debt financing/loans) (As governed by clause 4.6(i)) **or** Lead FI/Bank (As governed by clause 4.6(ii)) in case of projects availing debt financing/loans (format at Annexure-II)
- b. Copy of DPR (As per Annexure-III)
- c. Copy of loan sanction letter (in case of project is financed by FI(s)/bank(s))
- d. Techno-economic Feasibility Report (for projects based on debt/loan as governed by clause 4.6(ii))
- e. Latest high resolution photographs of site (with time stamp)
- f. Duly notarized Undertaking in original (on a non-judicial stamp paper of Rs. 500) in the format mentioned at Annexure-V.#

Part B: List of documents required for release of CFA

i. For Briquette/Pellet Manufacturing Plants:

- a. Performance Inspection report (Annexure-VI) (refer clause 4.4 (iii) and clause 4.4 (v) of scheme guideline),
- b. Loan disbursement certificate (in case of project is financed by FI/bank),

- c. CA certificate detailing the total cost incurred on the project as per invoices and the source of funds,
- d. Consent to operate from concerned State Pollution Control Board (wherever applicable),
- e. EIA clearance (wherever applicable)
- f. Copy of contract agreement for sale of briquettes / pellets for a minimum period of two years,
- g. Set of high resolution photographs of the plant (time stamp),
- h. Details of SCADA/remote monitoring system installed by Plant
- i. A certificate from Lead FI/Bank that the project is not an NPA (in case of project financed from Bank/FI#
- j. Mandate form for payment transfer duly certified by FI for loan account. #

ii. **For Biomass (Non-Bagasse) Based Cogeneration Projects:-**

- a. Performance Inspection Report (Annexure-VI) (refer clause 4.4 (iv) and clause 4.4 (vi) of scheme guideline),
- b. Loan disbursement certificates (in case of project is financed by FI/bank)
- c. CA certificate detailing the total cost incurred on the project as per invoices and the source of funds,
- d. Consent to operate from concerned State Pollution Control Board,
- e. EIA clearance (wherever applicable),
- f. Set of high resolution photographs of the plant (time stamp),
- g. A certificate from Lead FI/Bank that the project is not an NPA (in case of project financed from Bank/FI#
- h. Details of SCADA/remote monitoring system installed by Plant
- i. Mandate form for payment transfer duly certified by FI for loan account. #

#Documents (marked with #) are required to be submitted in original to Implementing Agency (IA). However, developers are required to produce original of other documents as and when required by IA.

Format for forwarding letter by Lead FI/Bank

F.No. <letter no.>

Date <date>

To,

Director,
< Biomass> Division
Ministry of New and Renewable Energy
Block-14,CGO Complex,
Lodhi Road, New Delhi-11003

Subject: Application of M/s <developer name> for availing Central Financial Assistance (CFA) for setting up of < project details> at <location> under <Programme name>-reg

We are forwarding herewith the application and proposal of M/s <developer name> for Central Financial Assistance (CFA) for setting up of <project details> at <location> under <Programme name>. The project is financed by us.

2. We endorse and authenticate the financial parameters incorporated in the proposal and consider the project to be **technically feasible and economically viable**(Techno-economic feasibility report is attached herewith). We also confirm that the aforementioned project is under-installation as on date and has not been commissioned yet. We do hereby recommend this project for in principle sanction and subsequent release of eligible CFA as per Programme guidelines.

3. In view of the request by the applicant, please find enclosed the following documents for consideration of their application for availing CFA:

<List of Documents submitted wrt Programme guidelines>

Thanking you.

<Name>
<Sign and stamp>

CC:

1. <developer name>
2. <State Nodal Agency>--for information

Indicative Format for DPR

S.No.	Description
(A) TECHNICAL & COMMERCIAL	
1.	Introduction
2.	Project at a Glance and Executive Summary
3.	Justification of the project capacity (Analyse potential and characteristics of various suitable feedstock)
4.	Availability of Feed Materials, its types & procurement procedure
5.	Technology description- Description of main Plant Equipment, Auxiliary Equipment and systems with technical specifications Description of Plant Electrical System Plant Instrumentation and Control system
6.	Schematics and Drawings
7.	Project implementation – Execution and management plan Engineering Procurement and Construction plan
8.	Plant layout, land area requirement & existing infrastructure facilities
9.	Operation & Maintenance set up
10.	Manpower requirement
11.	Environment impact/protection management (Government regulation and clearance required), if applicable
12.	Socio-economic impact in the region due to project implementation
13.	Project cost estimate (site development, civil works, plant machinery, roads & building, water supply & public health, electrical works, fire protection system, office equipment, furniture & automation etc.)
14.	Cost of generation, financial analysis and Techno economic feasibility
15.	Risk and sensitivity analysis

Commissioning Certificate

MNRE in-principle approval no. and date:	
Project name:	
Details of project commissioned:	
Project commissioned by :	
Commissioning Date:	
Commissioning witnessed by: (Attach Photographs of the plant's commissioning)	

This is to certify that the commissioning of the project with installed capacity of <installed capacity & output> has been successfully carried out on <Date> by <Developer's Name> under supervision of <Commissioning Authority> as per specification, drawings with acceptable quality, process and MNRE's "in-principle" approval/scheme guideline.

Developer's Name: Company name: contact name: title: contact information: Signature & Stamp: Date:	Commissioning Authority: Agency name: contact name: title: contact information: Signature & Stamp: Date:
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UNDERTAKING

We M/s <developer> do hereby solemnly declare and affirm as under:

1. That proposed project for generation of <details> using <biomass> is situated at <address>. The proposed plant shall have configuration of all required standard equipment and components as per Programme guidelines.
2. The equipment e.g. Briquette/Pellet making machinery, boiler, turbine (as applicable) for which CFA is being applied are new. CFA for the new equipment/machinery/plant under reference has not been taken earlier from any programme/scheme of the Government of India nor shall it be taken from any programme or scheme of any other Ministry/Department of Government of India in future. In case of violation of this clause the Ministry of New and Renewable Energy (MNRE) shall be entitled to recover the CFA released by MNRE with interest from us.
3. We shall not dislocate/dismantle the project without prior information to the Ministry.
4. We shall share generation data with MNRE or any other designated agency through installation of SCADA System/remote monitoring system.
5. Biomass (non-bagasse) cogeneration plant shall not be utilizing any fossil fuel (for Biomass (non-bagasse) cogeneration power plants).
6. We will take all necessary statutory clearances for the proposed plant from appropriate Central Govt./State Govt/Statutory bodies/institutions/agencies authorized to grant such clearances before establishing or commissioning of the plant as applicable for the particular stage of the project.
7. The Ministry shall have the right to get all the project related data to publish success stories/case studies/technical papers and for third party inspection and evaluation on the operation and performance aspects of the plants.
8. Above content of this affidavit are true and correct to the best of my knowledge and acceptable to the undersigned.

Authorized Signatory (Sign & stamp)

Name: _____

Designation: _____

Date: < _____ >

Place: < _____ >

Inspection Report by Inspection Agency

A. For Briquette/pellet manufacturing plants

“In-Principle” approval No.

“In-Principle” approved Capacity of the Project:

Installed capacity of the Project:

Name of the Inspection Agency:

2. General Details:

Sl. No	Particulars	Details
1	Name of the Plant & its complete address	
2	Name of the Promoter, his Email Id & Phone Number	
3	Name of the Promoter's company & its registered address	
4	Installed Capacity of the Plant in TPH (metric tons per hour)	
5	Date of start of project	
6	Date of completion	
7	Date of start of production / start of operation	
8	Actual Project Cost (in Rs. Lacs)	
9	Land Area of the project (m2)	
10	Total No. of Employees with breakup (Skilled, unskilled, engineers etc.)	
11	Capacity for storage of raw biomass (MT)	
12	Measures taken to ensure safety of stored biomass	
13	Sanctioned electrical load (kW)	
14	Date of visit by inspection agencies	
15	Name and Designation of the visiting officers	

B. Product related parameters

Sl. No	Technical Data	Unit	Value
1.	Base Material	n. a.	
2.	Dimension/Diameter	mm	
3.	Bulk Density	Kg/m ³	
4.	Fines % (Length<3mm)	Wt %	
5.	Moisture	Wt %	
6.	Gross Calorific Value	Kcal/Kg	

3. Process Description:

(Brief description of the process followed for manufacturing of pellets; including process flowchart, manufacturing technology used and type of products produced)

4. Fuel Availability and Analysis

Biomass Used (% of each type, if more than one type is being used):

Biomass Collection Mechanism

Biomass Sourcing Areas (Names of Tehsil or Villages):.....

5. Plant performance related parameters:

Sl. No	Particulars	Details
1.	Make of key machines (Primary sizing, drying, fine sizing, pelletizing etc.) and their date of installation	
2.	Energy required to produce 1 ton of pellets (kWh)	
3.	Percentage Yield (Quantity of pellets produced per ton of raw material)	

The plant was commissioned on The plant has operated for months since commissioning. The operation of the plant for the three months is summarized as under (taking 16 Hrs per day as standard operating hours):

S. No.	Month	Hours of Operation	Actual monthly Production of Briquettes/Pellets (in metric tons)	Total actual production of Briquettes/Pellets over three months (in metric tons)	Capacity Utilisation Factor* (%)
1.					
2.					
3.					

(Monthly report sheet on daily basis is at Annex – I)

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

6. Three consecutive days Performance Testing Results

The observations/ readings taken for three consecutive days (average 16 hours per day) for are summarized as under:

S. No.	Day/Date	Hours of Operation	Actual daily Production of Briquettes/Pellets (in metric tons)	Total actual production of Briquettes/Pellets over three days (in metric tons)	Capacity Utilisation Factor** (%)
1.					
2.					
3.					

(Daily report sheet at hourly basis is placed at Annex – II)

***Capacity Utilisation Factor over three days= Total Briquette/pellet generation in three months (in metric tons)/[Capacity of plant (in TPH)*16 Hrs per day* 3 days]*

7. Photos Taken at Site:

8. Recommendation:

(Signature and Stamp)

(Representatives from SSS NIBE/SNA)

B. For Biomass (non-bagasse) cogeneration projects

“In-Principle” approval No.

“In-Principle” approved capacity of the Project:

Installed capacity of the Project:

Name of the Inspection Agency:

1. General Details:

S. No.	Particulars	Details
1.	Name of the project	
2.	Address of the project	
3.	Name of the developer/promoter	
4.	Email Id	
5.	Mobile No.	
6.	Installed Capacity of the project in MW	
7.	Date of start of Project	
8.	Date of completion	
9.	Date of commissioning	
13.	Project Cost (Actual)	
14.	Total No. of Employees	
15.	Indirect Employment Generation	
16.	Date of visit by inspection agencies	
17.	Name and Designation of the visiting officers	

2. Project Key Parameters

S. No.	Particulars	Details
1.	Biomass requirement at design capacity of boiler (TPH)	
2.	Biomass requirement per year in MT	
3.	Water consumption per day	
4.	Land Area	
5.	Boiler (Make)	
	a. Type	
	b. MCR	
	c. Pressure	
	d. Temperature	
6.	Steam Turbine (Make)	
	a. Type	
	b. Capacity	

3. Process Description:

4. Fuel Availability and Analysis

Biomass Used (% of each type, if more than one type is being used):

.....

Biomass Collection Mechanism:.....

Particulars	Unit	Quantity
Days of Operation	Days	
Biomass Generation per month (If generated in-house)	MT	
Biomass Imported per month	MT	
Biomass Required per day (if operated at rated capacity)	MT	
Biomass Required per Year (if operated at rated capacity)	MT	
Boiler Capacity	TPH	
Steam Generation per month	MT	
Actual Biomass Consumption in Boiler per month	MT	
Biomass Saved	MT	
Average Steam/Fuel Ratio for boiler	Kgs/kgb	
Total units of electricity generated per month	kWh	
Biomass required to generate 1 unit of electricity	Kg	

5. Photos Taken at Site:

6. Last 3 Months Performance of the power plant:

The power plant was commissioned onThe plant has operated for months since commissioning. The operation of the plant for three months is summarized as under: -

Month	Hours of operation	Actual monthly generation of electricity (in kWh)	Total actual generation of electricity over three months (in kWh)	Plant Load Factor ## (%)

(Monthly report sheet on daily basis is at Annex – III)

##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]

7. Performance Testing Results for continuous 72 hours operation:

Observations/ readings taken for continuous operation for three consecutive days and performance of the plant during this is summarized as under:

Day/ Date	Hours of operation	Actual daily generation of electricity (in kWh)	Total actual generation of electricity over three days (in kWh)	Plant Load Factor ## (%)

(Daily report sheet at hourly basis is placed at Annex – IV)

##Plant Load Factor over 3 consecutive days= Total electricity generation in three days (in kWh)/[Capacity of plant (in kW)*24 Hrs per day* 3 days]

8. Recommendation:

(Signature and Stamp)
(Project Developer)

(Signature and Stamp)

(Signature and Stamp)

(Representative from SSS NIBE)

(Representative from State Nodal Agency)

MONTHLY REPORT SHEET
(Each for three months)

Day/date	Operating Hours	Down Time	Rated Capacity	Actual Production of Briquettes/Pellets (in metric tons)

(Signature and Stamp)
(Project Developer)

(Signature and Stamp)
(Representatives from SSS NIBE/SNA)

DAILY REPORT SHEET
(on hourly basis)
(each for three days)

Time (hourly basis)	Down Time	Rated Capacity	<i>Actual Production of Briquettes/Pellets (in metric tons)</i>

(Signature and Stamp)
(Project Developer)

(Signature and
Stamp)
(Representatives from SSS NIBE/SNA)

MONTHLY REPORT SHEET
(Each for three months)

Day	Operating Hours	Down Time	Rated Capacity	Units of electricity generated (in kWh)

(Signature and Stamp)
(Project Developer)

(Signature and Stamp)
(Representative from SSS NIBE)

(Signature and Stamp)
(Representative from State Nodal Agency)

DAILY REPORT SHEET
 (on hourly basis)
 (each for three days)

Time (on hourly basis)	Down Time	Rated Capacity	Units of electricity generated (in kWh)

(Signature and Stamp)
 (Project Developer)

(Signature and Stamp)
 (Representative from SSS NIBE)

(Signature and Stamp)
 (Representative from State Nodal Agency)