

**F.No.20 /222/2016-17-WTE**  
**Government of India**  
**Ministry of New and Renewable Energy**  
**(Waste to Energy Division)**

**Block No.14, CGO Complex,**  
**Lodi Road, New Delhi-110 003**

**Date: 28-02-2020**

To,

- 1) Chief Secretaries of State Governments
- 2) Secretaries of concerned State Government Departments (Power/Energy/Non-Conventional Energy/Additional Sources of Energy/S&T etc.)
- 3) Heads of State Nodal Departments/Agencies
- 4) Chairman of State Electricity Boards/Transco/Gencos etc.
- 5) Head of Urban Local Bodies
- 6) Head of Banks/Financial Institutions

**Subject: Programme on Energy from Urban, Industrial, Agricultural Wastes/ Residues and Municipal Solid Waste (2019-20) – Revised Guidelines of Waste to Energy Programme – Reg.**

Sir,

I am directed to refer this Ministry's O.M. of even number dated 30<sup>th</sup> July, 2018 of above mentioned scheme and to convey the sanction of the President of India for the implementation of the **Programme on Energy from Urban, Industrial, Agricultural Wastes/ Residues and Municipal Solid Waste** with revised terms and conditions for 2019-20. The details of the Programme guidelines are given in the **Appendix**.

2. Based on clarification from Department of Expenditure, scheme has been further revised to include Municipal Solid Waste based (MSW) based projects in the programme guidelines.
3. Approval is accorded for grant of Central Financial Assistance(CFA) of Rs.478.00 Crores and a physical target of 257 MWeq for the remaining period of 2019-20 for the Programme on Energy from Urban, Industrial, Agricultural Wastes/Residues and Municipal Solid Waste which includes a Central Financial Assistance (CFA) of Rs.400.0 crore with physical target of 200.0 MW for the Municipal Solid Waste (MSW) based Waste-to-Energy plants
4. This Guideline will supersede existing guidelines of Waste to Energy Programme dated 30<sup>th</sup> July, 2018. However, the proposals already received in the Ministry before the date of notification of this guideline will be governed by Waste to Energy Scheme's O.M. No. 20 /222/2016-17-WTE dated 30<sup>th</sup> July, 2018 and 14/47/2017-WTE dated 18<sup>th</sup> May, 2017 as applicable.
5. The expenditure on this scheme will be met from the budget provisions given under Bio-Power Head.



6. This issues in exercise of the powers conferred on this Ministry and with the concurrence of IFD Division vide their diary NO. 422 dated 09/12/2019.
7. This has approval of Hon'ble Minister for New and Renewable Energy and Power.

Yours faithfully,



(K. Salil Kumar)

Deputy Secretary

Copy to:

- a. PS to Hon'ble Minister (NRE).
- b. Sr.PPS to Secretary, MNRE.
- c. PPS to AS & FA, MNRE.
- d. Sr.PPS to JS (Bioenergy Group).
- e. Advisers/Directors, MNRE.
- f. Pay & Accounts Officer, MNRE.
- g. NIC- to upload the Guidelines on Ministry's Website.



(K. Salil Kumar)

Deputy Secretary

## APPENDIX



### REVISED GUIDELINES OF WASTE-TO-ENERGY PROGRAMME

Programme on Energy from Urban,  
Industrial, Agricultural Wastes/ Residues  
and Municipal Solid Waste

GOVERNMENT OF INDIA

MINISTRY OF NEW AND RENEWABLE ENERGY

Block 14, CGO Complex, New Delhi -110003

# REVISED GUIDELINES OF WASTE-TO-ENERGY PROGRAMME

## Programme on Energy from Urban, Industrial, Agricultural Wastes/Residues and Municipal Solid Waste

### 1. OBJECTIVE

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The main objectives of the Programme are as follows:

- a. To promote setting up of projects for recovery of energy in the form of Biogas / BioCNG / Power from Urban, Industrial and Agricultural Waste and Captive Power and Thermal use through Gasification in Industries.
- b. To promote setting up of projects for recovery of energy from Municipal Solid Waste (MSW) for feeding power into the grid and for meeting captive power, thermal and vehicular fuel requirements.
- c. To promote Biomass Gasifier for feeding power into the grid or meeting captive power and thermal needs of rice mills/other industries and villages.
- d. 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. SCOPE

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

- a. Installation of plants of Biogas production from Industrial Waste, Sewage Treatment Plants, Urban & Agricultural Waste/ Residue through Biomethanation.
- b. Installation of plants of Power generation or production of BioCNG/enriched Biogas from Biogas produced from Industrial Waste, Sewage Treatment Plants, Urban & Agricultural Waste/ Residue.
- e. Installation of Biomass Gasifier for feeding power into the grid or meeting captive power and thermal needs of rice mills/other industries and villages.
- c. Installation of Plants of recovery of energy/power from Municipal Solid Waste.

### 3. ELIGIBILITY CRITERIA

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#### 3.1 Type of waste

The eligibility criteria for type of waste are as follows:

##### **Urban, Industrial and Agricultural Wastes/Residues**

- i). The Projects based on Biomethanation of any Biodegradable Waste like Urban waste (Vegetable & fruit market/kitchen, Slaughter house, Sewage including livestock wastes like cattle dung, Poultry waste etc.), Agricultural Waste (paddy straw, agro processing industries residues/ effluents, green grass etc.), Industrial Waste/Effluents (Agro processing industry, Paper & Pulp Industry, Milk processing, Sugar Industry etc. shall be eligible for Central Financial Assistance (CFA).
- ii). Biogas Generation projects based on distillery effluents and projects based on wastes from fossil fuels and waste heat (flue gases) shall not be eligible for CFA.
- iii). For Biomethanation based projects, mixing of other anaerobic digestion compatible organic wastes (excluding distillery effluents) of renewable nature shall be permissible.
- iv). BioCNG(*enriched Biogas/Compressed Biogas/Biomethane*) generation projects from Biogas for captive use /pipeline /bottling/as vehicle fuel shall be eligible for CFA.
- v). Projects based on combustion of Waste of Renewable Nature shall be eligible for CFA. For combustion-based projects, mixing of other waste of renewable nature may be permitted. Mixing of fossil fuels shall not be allowed in any case.

##### **Municipal Solid Waste (MSW)**

- vi). Power generation Projects based on Incineration/Gasification/Pyrolysis or a combination thereof or any new technology as approved by MNRE shall be eligible for CFA.
- vii). The projects based on Biomethanation of MSW may be taken up only on segregated/uniform Biodegradable Waste.
- viii). In MSW to Power projects, mixing of any waste of renewable nature or biomass may be mixed to the extent of 25% of the total waste used or as per SERC/CERC regulations.
- ix). The Solid Waste Management Rules, 2016 published under the Gazette on 8th April, 2016 should be applicable for MSW based projects. Terms such as "Bio-methanation", "Biodegradable Wastes" "RDF" etc. would have the same meaning as defined in the "Solid Waste Management Rules 2016".
- x). Recovery of energy from Municipal Solid Waste is subject matter of Ministry of New & Renewable Energy (MNRE) and Ministry of Housing and Urban Affairs would not provide any assistance for setting up of Waste to Energy plants.
- xi). **Biomass Gasifier** projects using *Biomass/Agro-residues* for feeding power into the grid or meeting captive power and thermal needs of rice mills/other industries and villages shall be eligible for CFA.

### 3.2 Technologies

The eligibility criteria for technologies will be:

- a. Projects based on Waste-to-Energy conversion technologies namely, Biomethanation, Combustion, Gasification, Pyrolysis or a combination thereof or any new technology as approved by MNRE shall be eligible for CFA.
- b. Projects for generation of Power from Biogas shall be based either on 100% Biogas engines/gas turbines or steam turbines with a minimum steam pressure of 42bar.
- c. BioCNG/Enriched Biogas to be produced shall meet the specifications of BIS IS 16087: 2016 or any other further revisions in the said specifications.

### 3.3 Capacity

There will be no maximum limit on capacity of Waste to Energy projects supported under this Programme. Whereas Biogas plants based on Agro-based Industrial Residues of upto 250 kW capacity for power generation and upto 2500 m3 capacity shall not be eligible under this Programme. Biomass Gasifier projects of any capacity shall be eligible for CFA under this Programme.

**3.4** Projects installed with New Plant/Machinery only shall be eligible for installation under this Programme.

### 3.5 Loan

#### a. Waste to Energy (WTE) projects

- i). To avail financial support, the applicant must have availed term loan from any Bank/financial institution. One time back ended Central financial assistance for Waste to Energy projects through banks/FIs will be provided for offsetting loan amount. Loan may be taken from any Indian Bank (commercial and co-operatives)/Financial Institution or International Bank/Financial Institution.
- ii). **Minimum amount of loan-** Loan amount should be equal or greater than eligible central financial assistance available under this Guideline.
- iii). In case of local body, PSU or Government, Semi-Government organization/agency with or without Joint Venture with national/international organization is setting up waste to energy plant from its own resources, loan will not be mandatory.

**b. Biomass Gasifier-** Requirement of Loan is not mandatory for Biomass Gasifier projects.

**3.6 Expansion of Projects:** Projects which intend to add capacity to the existing plants (*Waste to Energy or Biomass Gasifier*) shall also be considered for grant of CFA. CFA for such projects will be considered only for the enhanced capacity. Applications received for expansionary projects will be cleared as per guidelines existing at the time of submission of applications.

**3.7** The scheme is open for Urban Local Bodies / Municipal Corporations, registered private or public sector enterprises or organizations, as well as Energy Service Companies (ESCOs).



## 4. CENTRAL FINANCIAL ASSISTANCE

**4.1** Central Financial Assistance (CFA) for different categories of **Waste to Energy & Biomass Gasifier projects** is given below:

	Output	CFA	Description
1	<b>Biogas</b>	<b>Rs. 1.0 crore</b> <i>per 12000m<sup>3</sup> Biogas /day.</i> (Maximum CFA- Rs.10 crore/project)	Generation of Biogas from biomethanation of Urban waste including segregated MSW/ Agricultural Waste/ Industrial wastes/ Effluents or mix of these wastes. (Distillery effluent is excluded)
2	<b>BioCNG / Enriched Biogas/ Compressed Bio Gas</b>	<b>Rs 4.0 crore.</b> <i>Per 4800 kgs of BioCNG/day generated from 12000m<sup>3</sup> Biogas /day (MWeq).</i>  (Maximum CFA- Rs.10 crore/project)	It will have two components- i). Generation of Biogas from Biomethanation of Urban waste including segregated MSW / Agricultural Waste/ Industrial wastes/Effluents or mix of these wastes; and ii). BioCNG/Enriched Biogas production from Biogas generated. ➤ In case developer wants to set up BioCNG/ Enriched Biogas generating unit at already existing Biogas plant or at distillery effluent based Biogas plant, applicable CFA will be <b>Rs 3.0 crore/MWeq.</b>
3	<b>Power</b> <i>(based on Biogas)</i>	<b>a) <u>Gas engine/turbine route:</u></b>  <b>Rs 3.0 crore / MW.</b> (Maximum CFA- Rs.10 crore/project)	It will have two components- i). Generation of Biogas from Biomethanation of Urban waste including segregated MSW / Agricultural Waste/ Industrial wastes/Effluents or mix of these wastes; and ii). Power generation (through engine/ turbine route) from Biogas generated. ➤ In case, developer wants to set up power generating unit at already existing Biogas plant or at distillery effluent based Biogas plant, the applicable CFA will be only <b>Rs 2.0 crore per MW.</b>
		<b>b) <u>Boiler+Steam turbine route:</u></b>  <b>Rs 1.5 crore / MW.</b> (Maximum CFA- Rs.10 crore/project)	It will have two components- i). Generation of Biogas from Biomethanation of Urban waste including segregated MSW / Agricultural Waste/ Industrial wastes/Effluents or mix of these wastes; and ii). Power generation (through Boiler+Steam turbine route) from Biogas generated. ➤ In case, developer wants to set up power generating unit at already existing Biogas plant or at distillery effluent based Biogas plant, the applicable CFA will be only <b>Rs 0.50 Crore/MW.</b>

<b>4</b>	<b>Power</b> (based on MSW/ RDF)	<b>Rs 5.0 crore / MW</b>  (Maximum CFA- Rs.50 crore/project)	Power generation from Municipal Solid Waste/Refused derived fuel through Incineration or other approved thermal technologies. Minimum size of the plant of <b>5 MW</b> of installed capacity shall be supported.
<b>5</b>	<b>Power</b> (Based on BTG route)	<b>Rs. 0.50 crore / MW</b>  <b>(Maximum CFA- Rs.10 Crore/Project)</b>	Power generation (through boiler & steam turbine route) from the wastes/residues of renewable nature other than MSW.
<b>6</b>	<b>Biomass Gasifier</b>	i). <u>Electrical</u> <b>Rs.2,500 per KW<sub>e</sub></b> with dual fuel engines	Biomass Gasifier for captive power applications in industries & other institutions
		ii). <u>Electrical</u> <b>Rs. 15,000 per kW<sub>e</sub></b> with 100% gas engines	Distributed / off-grid power for villages and upto 2MW Grid connected power projects using Biomass Gasifier systems with 100% producer gas engines
		iii). <u>Thermal</u> <b>Rs.2.0 lakh / 300 KW<sub>th</sub></b> for thermal applications.	Biomass Gasifier for captive thermal applications in industries & other institutions
		iv). <u>Electrical</u> <b>Rs.10,000 per kW<sub>e</sub></b> for 100% producer gas engines with Gasifier system.	Biomass Gasifier with 100% producer gas engines for captive power applications in industries & other institutions
		v). <u>Electrical</u> Rs. 8000 per kW <sub>e</sub> <b>for 100% producer gas engine alone</b>	Installation of 100% producer gas engine only at already existing Gasifier for captive power applications in industries & other institutions

**4.2** The amount of CFA would be calculated on the basis of installed capacity as proposed in the DPR or actual installed capacity whichever is lower and shall vary with size of the plant. In case of expansion proposals, the CFA would be calculated only for the enhanced capacity.

### **4.3 Incentive to State Nodal Agencies (SNA)**

State Nodal Agencies would be provided an incentive / service charge @ **Rs.1%** of the eligible CFA (minimum of Rs.10000/- and maximum of Rs 5.0 Lakh per project) in order to facilitate development of projects and their monitoring during implementation / post Commercial Operation Date (COD).



## 5. SUBMISSION OF PROPOSAL FOR “IN-PRINCIPLE” APPROVAL

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### 5.1 Waste to Energy proposals

#### Procedure for submission of proposal

- i) The developers of new/expansion WTE Projects including projects based on MSW intending to avail financial support are required to submit the request of application form(*Annexure-II*) along with enclosures as given at *Annexure-I* after getting all statutory clearances to this Ministry through Financial Institutions/Banks before COD of the plant for “in-Principle” approval of CFA.
- ii) Incomplete proposals in any form and without requisite documents will not be entertained in the Ministry and such incomplete proposals shall be returned in original.
- iii) A copy of the proposal should also be submitted to the concerned State Nodal Agency for information.
- iv) Projects which have commenced commercial operation before date of notification of this Guideline shall not be eligible for CFA under this Guideline.

#### “In-Principle” approval

- v) A Project Advisory Committee (PAC) for Waste to Energy projects constituted with the approval of Secretary, MNRE under the Chairmanship of Joint Secretary (In-charge), MNRE will evaluate and recommend the project proposals for financial support. The Ministry would issue “In-Principle” approval with the concurrence of IFD and approval of Secretary, MNRE subject to fulfilling of all eligibility conditions for grant of financial support within 45 days from the date of PAC.

#### Time duration for implementation

- vi) Based on the “In-Principle” approval the developers shall complete their projects as per guidelines of the Scheme. The time period for commencement of COD shall be 24 months for WTE projects (excluding MSW to Power) and 36 months for MSW to Power projects from the date of “In-Principle” approval of the project.
- vii) The extension in the time period for commencement of COD for reasons beyond the control of Developer may be considered provided an application is made by the developer, with supporting documents, within 30 days of occurrence of such reasons. If no such application is received by MNRE and COD does not happen within the stipulated period, the sanction will be treated as cancelled and no CFA shall be released.

### 5.2 Biomass Gasifier Proposals:

#### Procedure for submission of proposal

- i) The developers intending to avail financial support are required to submit the request on application form (*Annexure-VI/VII/VIII/IX as applicable*) along with enclosures as given at *Annexure-IV (Table A)* to Ministry directly or through SNA before installation of Biomass Gasifier for “In-Principle” approval of CFA. No Detailed Project Report is required for Gasifier for captive power / thermal application having project size **≤500kW**. Only brief proposal of the project required as per pro-forma given at

- ii) Incomplete proposals in any form and without requisite documents shall not be entertained in the Ministry and such incomplete proposals shall be returned in original.

**“In-Principle” approval**

- iii) A PAC constituted with the approval of Secretary, MNRE under the Chairmanship of Joint Secretary (In-charge), MNRE will evaluate and recommend the project proposals for financial support. The Ministry would issue “In-Principle” approval with the concurrence of IFD and approval of Secretary, MNRE subject to fulfilling of all eligibility conditions for grant of financial support within 45 days from the date of PAC.

**Time duration for implementation**

- iv) The timeline for COD of Biomass Gasifier projects shall be 12 months from the date of “In-Principle” approval of project without any extension and extension for whatsoever reasons shall not be granted.

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

## **6. RELEASE OF CENTRAL FINANCIAL ASSISTANCE**

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### **6.1 Release of CFA for Waste to Energy Projects:**

- i) The Developer would inform the Ministry about COD of the project and request concern SNA for the physical inspection of the plant & fulfillment of plant performance. Representatives of SNA would visit plant to inspect plant performance after successful COD.
- ii) **Waste-to-Energy projects (Excluding projects based on MSW)**
  - a. The condition of successful COD of the Waste to Energy projects would, inter-alia, imply operation of the project for 3 consecutive months, including continuous operation for at least 72 hours at minimum of 80% of rated capacity or 80% of the quantum of generation as proposed in the DPR, whichever is applicable.
  - b. Condition of continuous operation for at least 72 hours is mandatory for Biogas& Power generation plants where plants must be operating continuously for at least 72 hours to generate Biogas& Power at minimum 80% of rated capacity, as applicable. However, in case of BioCNG generation plants, purification/compression of Biogas to BioCNG may not be necessarily continuous for 72hours but the cumulative generation of BioCNG (in kgs) during the 72hours should meet minimum 80% of rated capacity or 80% of the quantum of generation as proposed in the DPR, whichever is applicable.
- iii) **Waste-to-Energy projects based on MSW**
  - a. The condition of successful COD of the Waste to Energy projects based on MSW would, inter-alia, imply operation of the project for 3 consecutive months, including

continuous operation for at least 72 hours at minimum of 60% of rated capacity or 60% of the quantum of generation as proposed in the DPR, whichever is applicable.

**b.** In case of BioCNG generation plants based on biodegradable part of MSW, purification/compression of Biogas to BioCNG may not be necessarily continuous for 72 hours but cumulative generation of BioCNG (in kgs) during the 72 hours should meet minimum 60% of rated capacity or 60% of the quantum of generation as proposed in the DPR, whichever is applicable.

- iv)** Developers shall maintain record of generation from the date of operation of the plant mentioning date, quantity of raw material used daily and gross generation data in suitable units. Provision of suitable meter/system for measuring generation of Biogas/ BioCNG / electricity should be provided in the Waste to Energy plants.
- v)** Developers to ensure that there should not be any emission/leakage of Biogas/BioCNG from the plant in the atmosphere.
- vi)** During inspection, Representatives of SNA will witness plant operation to check whether the plant is operating at 80% of rated capacity (or 60% in case of MSW based projects). Accordingly, SNA team shall prepare a detailed inspection report along with its report on generation data for 3 consecutive months after COD, including performance data for at least 72 hours.
- vii)** Developer shall submit SNA inspection report, SNA authenticated generation data for a consecutive period of 3 months including 72 hours performance data and other requisite documents directly to this Ministry for processing of release of CFA. List of documents for release stage is given at *Annexure-II (Table B)*.
- viii)** At this stage, the Bank/FI, if loan is availed, would submit a certificate to the Ministry that the project is not a "Non-Performing Asset" (NPA) and the developer is not a defaulter.
- ix)** The entire CFA will be released to the developer's loan account maintained in the lending FIs/banks for the purpose of offsetting the loan amount only after successful COD subject to submission of complete documents as per terms & conditions of 'In-principle' approval letter, guidelines and availability of funds. In case of exemption of loan, as per clause 3.4(a) (iii), CFA will be released to the Developer directly.

## **6.2 Release of CFA for Biomass Gasifier projects:**

- i)** The Developer would inform the Ministry about COD of the project and request concern SNA for the physical inspection of the plant & fulfillment of plant performance. Representatives of SNA would visit plant to inspect plant performance after successful COD.
- ii)** The condition of successful COD of the Biomass Gasifier would, inter-alia, imply

operation of the project for 3 consecutive months, including operation for at least 72 hours at minimum of 60% of rated capacity.

- iii) Developers shall maintain record of generation from the date of operation of the plant mentioning date, quantity of raw material used daily and gross generation data in suitable units. In case of dual-fuel engine and thermal application Biomass Gasifier, data of consumption/saving of conventional fuel may be accepted.
- iv) During inspection, Representatives of SNA will witness plant operation to check whether the plant operates at 60% of rated capacity. Accordingly, SNA team shall prepare a detailed inspection report along with its report on generation data for 3 consecutive months after COD, including performance data for at least 72 hours.
- v) Developer will submit SNA inspection report, authenticated generation data of 3 months including 72 hours continuous operation data and other requisite documents directly or through SNA to this Ministry for processing of release of CFA. List of documents for release stage is given at *Annexure-IV (Table B)*.
- vi) In case of self-finance projects, the applicable CFA will be released directly to the developer/user through DBT (not to the manufacture) after successful COD and submission of all requisite documents of the project. In case of loan through bank/FI the applicable CFA will be released to bank/FI after successful COD subject to submission of complete documents as per terms & conditions of Sanction letter & Guideline and availability of funds.

**6.3** No advance CFA will be released to any of the projects.

**6.4** The incentive to State Nodal Agencies shall be released at the time of release of CFA of the project.

## **7. MONITORING MECHANISM**

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**7.1 During execution of project:** The SNAs shall closely monitor the execution of the projects and provide guidance for their timely completion. Developer shall submit quarterly progress reports to MNRE.

**7.2 Post COD of project:** The SNAs shall closely monitor the performance of the projects during operational life-cycle of the project (minimum 10 Year from COD) and which may include the quantum of Energy produced, Quantum of Waste utilized, Operational efficiency of the project etc. It is mandatory for **Developer to submit half-yearly performance reports of the plant to MNRE.**

**7.3** SNAs will submit monthly reports on commissioned and non-functional plants installed in their states.

**7.4** 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.

*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 announcement 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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## **ANNEXURES**

**For**

**REVISED GUIDELINES OF WASTE-TO-ENERGY PROGRAMME dated**  
**28.02.2020**

**“Programme on Energy from Urban, Industrial, Agricultural Wastes/  
Residues and Municipal Solid Waste”**



**APPLICATION FORMAT FOR GRANT OF CFA  
of Waste to Energy Projects  
Under the Programme on Energy from Urban, Industrial, Agricultural Wastes / Residues and MSW**

1.	i. Name and address of Company with Tel. No./Fax No./E-Mail ii. Type of agency (whether Co-operative/ Private Sector /Public Ltd/joint sector/Public Sector Company etc.) iii. Name and Designation of Authorized signatory with Mobile No. &E-Mail	
2.	Name of Project along with capacity	
3.	Address of Proposed Plant- (city/district/state)	
4.	Details of Waste i. Type of waste ii. Quantity / Effluent Treated in the Plant per day	
5.	Construction Area used	
6.	Brief Description of the Technology Deployed	
7.	Technical Parameters i. Biogas Generated/ day ii. Bio-CNG/Enriched Biogas Generated/ Power Generation per day iii. Organic- Fertilizer Production/day	
8.	Use of Biogas/Bio-CNG/Power produced in the Plant	
9.	Bio-CNG Plant Details if set up under the project i. Biogas Scrubbing & Cleaning System ii. Biogas Compression & Bottling Unit	
10.	Cost Estimation of end product i. Cost of Bio-CNG/ Enriched Biogas (Rs./kg) ii. Cost of Organic-Fertilizer (Dry/Wet) (Rs./kg or Rs./lit) iii. Price of sale of unit power (Rs./kwh)	
11.	Name of FI/Bank Sanctioned Term Loan and Break up of Project Cost, as per Appraisal Note of the Bank	
12.	Means of Financing i. Promoter's Direct Equity ii. Loans (with details) from Bank/ FIs iii. From other Sources	
13.	Details of Project Cost (Rs. in lakhs): i. Pre-project Costs ii. Capital Cost with Breakup for Critical Plant & Machinery and Civil Works iii. Other Costs iv. Total Costs	
14.	Financial Viability of the Project i. IRR ii. Payback Period iii. DSCR	
15.	Whether Grid connected/captive	
16.	Project Period (in months)	
17.	Expected Date of COD of the Project/Status of the project	

*Enclosures as per Annexure-II: 1 set of hard copy [arranged in the sequence as given in Annexure-II] + 1 set of scanned soft copy [in **colored & text searchable pdf (OCR)format**].*

**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)  
With Stamp

**A. Documents to be submitted for Sanction of CFA for Waste to Energy Project:**

Annexure	Document Name	Page no.
1.	Forwarding letter from lending Bank/FI, If applicable	[ ]
2.	Application Form for Grant of CFA(Annexure -I).	[ ]
3.	Detailed Techno-commercial Project Report including:	[ ]
	(a) Layout of the plant and its associated sub- units;	[ ]
	(b) Technical Specifications of the Digester/Compressor/Biogas Engine/Turbine;	[ ]
	(c) Latest Progress report of the project with tentative date of COD along with photographs.	[ ]
4.	Certificate of Incorporation of the company.	[ ]
5.	Undertaking for not claiming subsidy from other institution(Center) and for keeping the plant operational for a minimum period of 10years on non –judicial stamp paper of Rs.100/-	[ ]
6.	Consent to Establish from State Pollution Control Board for Waste to Energy plant.	[ ]
7.	Approval for layout of the Bio-CNG Plant from Petroleum and Explosives Safety Organization (PESO), Nagpur, if applicable.	[ ]
8.	Land Document translated in English.	[ ]
9.	Raw Material Supply Agreement or <b>Concession agreement for MSW</b> , as applicable.	[ ]
10.	Power Purchase Agreement (PPA) valid for at least 10years or Agreement for sale of Bio-CNG, is applicable.	[ ]
11.	Loan Sanction Letter(s) of Financial Institution, if applicable.	[ ]
12.	Appraisal Note by Bank, if applicable.	[ ]

**B. Documents to be submitted for Release of CFA**

Annexure	Document Name	Page No
1.	Document indicating the project COD date.	[ ]
2.	Inspection report of the Project SNA (Annexure-III).	[ ]
3.	Performance report of Biogas/bio-CNG/power generation for 3 months authenticated by SNA.	[ ]
4.	Biogas/bio-CNG/power generation data for 72 hours operation authenticated by SNA.	[ ]
5.	Consent to Operate from State Pollution Control Board for Waste to Energy plant.	[ ]
6.	Approval for storage & filling of Bio-CNG Plant from Petroleum and Explosives Safety Organization (PESO), Nagpur, if applicable.	[ ]
7.	Invoices for critical machinery	[ ]
8.	Statement of Expenditure made so far, duly certified by C.A. with seal and Firm Registration No. & C.A. Membership No.	[ ]
9.	Bank letter(s) for disbursement of the sanctioned loan amount for the Waste to Energy project, if applicable.	[ ]
10.	Mandate form for payment transfer of promoter (Annexure-XIII&XIV).	[ ]
11.	Soft and Hard Copy of photographs with high resolution.	[ ]
12.	Non-NPA certificate from the lending banks/FIs if loan availed.	[ ]

**Note: A scanned copy (in pdf searchable format) of all documents is also required for sanction as well as release of CFA.**

**(Name and Address of the SNA)**

**Format for Inspection Report of Waste to Energy Project**

1. Title of the Project with capacity:-
2. Location:-
3. Date of COD of the Project:-
4. Visiting Date:-
5. Visiting Official:-
6. Certifying the following:
  - i. Biogas Generated/ day:-
  - ii. Bio-CNG Generated/ Power Generation per day:-
  - iii. Organic Fertilizer Production/day
  - iv. Biogas/Bio-CNG/Power Generation Data
    - a. 72 Hours operation indicating date and time
    - b. 3 Months Operation Report with date:-
  - v. Rated Capacity ---- % Observed during the inspection
  - vi. Use of Biogas/Bio-CNG/Power produced in the Plant:-
  - vii. Bio-CNG Plant Details if set up under the project:
    - a. Biogas Scrubbing & Cleaning System:-
    - b. Biogas Compression & Bottling Unit:-

**This is to certify 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)**

With Stamp

**(Signature of the Verifying Officer from SNA)**

With Stamp

## ELIGIBILITY CHECKLIST FOR GRANT OF SUBSIDY for BIOMASS GASIFIER s

**(a) Documents to be submitted for Sanction of Central Financial Assistance (CFA) for Biomass Gasifier**

Annexure	Document Name	Tick Mark
1.	Application in the prescribed format (Annexure –VI or VII) for ≤500kW Gasifiers or Detailed Project Report for >500kW Gasifiers. (Annexure –VIII or IX and X)	[ ]
2.	Layout of the plant and its associated sub- units (for Gasifiers >500kW size).	[ ]
3.	Technical Specifications of the Gasifier.	[ ]
4.	Latest Progress report of the project with tentative date of COD.	[ ]
5.	Copy of the Certificate of Incorporation.	[ ]
6.	Undertaking for not claiming subsidy from other institution and keeping the plant operational for a minimum period of 5 years on non –judicial stamp paper of Rs.100/-.	[ ]
7.	Land Document translated in English.	[ ]
8.	PPA valid for at least 10years, if applicable.	[ ]
9.	Loan Sanction Letter(s) of Financial Institution, if applicable.	[ ]
10.	Appraisal Note by Bank, if applicable.	[ ]
11.	Balance sheet and profit & loss statement of the company for last two FY's, as applicable.	[ ]
12.	Board/proprietor resolution for meeting the project cost from internal accruals/ Bank, if applicable.	[ ]

**(b) Documents to be submitted for Release of Central Financial Assistance (CFA) for Biomass Gasifier**

Annexure	Document Name	Tick Mark
1.	Document indicating the project COD date.	[ ]
2.	Joint COD Report duly signed by verification team of SNA (Annex. XI& XII)	[ ]
3.	Performance report for 3 months and 72 hours authenticated by SNA.	[ ]
4.	Statement of Expenditure made so far, duly certified by C.A. with seal and Firm Registration No. & C.A. Membership No.	[ ]
5.	Bank letter(s) for disbursement of the sanctioned amount for the project, if applicable.	[ ]
6.	Mandate form for payment transfer of promoter (Annexure-XIII&XIV).	[ ]
7.	Soft and Hard Copy of photographs at the premises with beneficiary in high resolution.	[ ]

**Note: A scanned copy (in pdf searchable format) of all documents is also required for sanction as well as release of CFA.**

**Annexure-V**

**FORMAT FOR BASIC INFORMATION FOR PROJECTS ON BIOMASS GASIFIER  
SYSTEMS FOR THERMAL AND ELECTRICAL APPLICATIONS, 100% PRODUCER  
GAS BASED PROJECTS AND CONVERSION OF EXISTING POWER PLANTS**

.

Sl. No.	User's address Mode of application	Name of Manufacturer / Supplier	Rating of system Thermal / Mech./ Electrical	No. of systems proposed	Unit Cost Estimate / actual price as intimated by the user / manufacturer	Amount of Central Financial Assistance (CFA) as per approved scheme of Biomass Gasifier

Certified that:

1. Certified that adequate quantity of surplus biomass is available at the site and user/applicant is genuinely interested for installation and operation of Gasifier on regular basis.
2. User Industry has agreed to provide balance funds over and above CFA for installation of proposed Gasifier system.
3. User Industry has agreed to operate and maintain the system at their own on a regular basis.

Name & Signature of the Promoter/User

(Countersigned by Manufacturer)

Date:

Place:

**Proforma for submission of the Project Proposal on ( $\leq 500\text{kW}$ )  
Biomass Gasifier for Distributed / off-grid Power Generation in rural areas**

1. **Name and full postal address of the Implementing Organization / Agency / NGOs**
  - a. Name of the contact persons
  - b. Name and full postal address of the Implementing Organization / Agency
  - c. Fax No / Email.: if any
  - d. Telephone No.
  - e. Mobile No.
  - f. Registration details of the implementing organization / agency / NGOs (Enclose copy of the Registration Certificate, Memorandum of Association, and By-laws etc.)
2. **Details of the Proposed site:**
  - a. Name of the village (s), tehsil, district, state.
  - b. Census Code No of the Village (s) to be covered
  - c. Proposed village (s) is / are Electrified or Unelectrified
  - d. Total number of the households in a village (s)
  - e. Indicate total number of house holds of the village (s) to be connected
3. **Proposed Load Profile**
  - a. Furnish load profile in table given below:

S. No	Load	Unit	Load	Total load	Time of Supply of Electricity (0100 hrs to 2400 hrs)																							
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
			(in Watt)	(in watt)																								
1	Domestic	Nos. of H/H .....	CFL watt and nos.....																									
2.	Commercial	Nos. of units																										
3.	Industrial	Nos. of units																										
4.	Irrigation	Nos. of pumps																										

*\* - in the absence of full details, proposals will not be considered for approval in-principle.*

- b. If proposed to provide electricity for irrigation purposes, give following details
      - i. No of pumps to be connected and average hours of operation
      - ii. Capacity of the pumps (HP / kW)
      - iii. Existing Diesel consumption per pump (liters per hours)
      - iv. Likely Diesel saving per pump (liters per hours)
      - v. No of days irrigation required (total number days in one year)
      - vi. Total area to be irrigated annually (acres / hectare)
      - vii. Hours of supply (from ... AM / PM to ... AM / PM)
4. **Fixed cost**
  - a. **Details of proposed Gasifier and 100% producer gas engines and cost**
    - i. Name of the supplier of Gasifier
    - ii. Name of the supplier of producer gas engine and generator
    - iii. Capacity of Gasifier (kW)
    - iv. Capacity of the 100% producer gas engine (kW)
    - v. Rice Husk / Biomass consumption .... Kg/hr
    - vi. Cost of Gasifier
    - vii. Cost of producer gas engine
    - viii. Civil & Other cost
    - ix. **Total system cost - in Rs.....**
    - x. Copy of Invoice, time schedule for supply & terms and condition of warrant and charges for 2 years AMC (Please attach copies)
    - xi. Expected date of COD.
  - b. **Transmission / Distribution line (follow safety norms)**
    - i. Total length of transmission lines (in meters)



- ii. No of poles per km
- iii. Cost of the transmission lines (in Rs.) indicating the following
  - 1. Cost of wire,
  - 2. Cost of poles,
  - 3. Other installation expenses
  - 4. Average cost of distribution line for household connection
- iv. **Total Cost of Transmission & Distribution lines**
- c. **Total Fixed Project Cost**
  - i. Cost of Gasifier
  - ii. Cost of producer gas engine & generator
  - iii. Cost of Transmission / distribution lines
  - iv. Civil cost
  - v. Any other cost (please specify)
  - vi. **Total Project Cost**

**5. Expected Revenue Generation**

S. No.	Load	Unit Rate	No.	Monthly (in Rs.)	Yearly (in Rs.)
1.	Domestic	Rs. per Households per Month	No of Connection		
2.	Commercial	Rs. per Month			
3.	Industrial	Rs. per Month			
4.	Irrigation	Rs. per hour of operation	Capacity and Nos. of pump sets		
			<b>Total</b>		

**6. Recurring Cost**

S. No	Component	Unit Cost	Quantity	Monthly (in Rs.)	Yearly (in Rs.)
1	Biomass	Rs./ton	tones		
2.	Manpower	Salary per person	No of person		
3.	Interest if any	Rate of interest	Total Amount		
4.	Consumable				
5.	AMC				
6	Any other such as interest on loans etc.				
			<b>Total</b>		

**7. Surplus Revenue Expected Revenue Generation (-) Recurring Cost = Rs..... per year**

**8. Biomass availability and sustainable supply option**

- a. Type of biomass (Please enclose details of availability of biomass)
  - i. Rice husk
  - ii. Other (Please specify)
- b. Quantity required
  - i. Daily
  - ii. Yearly
- c. Cost of Biomass at site (Rs. per ton)
- d. Proposed biomass storage facility

**9. Financing Details**

- a. Own Equity - Rs. ....
- b. If loan sought form the banks
  - i. Total loan Amount sanctioned / sought – Rs. ....
  - ii. Name & full Address of the Bank / Branch
- c. Central Financial assistance (Subsidy from MNRE) Rs.....
- d. Any other source of funding (please give full details)

10. **Details of Bank Account of Implementing Organization / Agency / NGOs:**  
a. Name of account Holder  
b. Name & Address of the Bank& Branch  
c. Branch Code  
d. RTGS Code  
e. Bank Account No
11. **In case, loan taken from bank**  
a. Name & Address of the Bank& Branch  
b. Branch Code  
c. RTGS Code  
d. Loan Account No of the Bank
12. Please enclose any other details for justification of the project indicating financial viability, revenue / business model, economical and social benefits, mode of Operation & Maintenance, collection mechanism of biomass, electricity charges etc.
13. **Certificates:** Please send the following certificates while submitting the proposal to the MNRE along with covering letter seeking financial support from the MNRE addressed to **Director, Waste to Energy Division, Ministry of New & Renewable Energy, Block No. 14, CGO Complex, Lodhi Road, New Delhi-110003 :**

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**Certificate from developer / Implementing Organization / Agency / NGOs**

This is to certify that the above information are correct to the best of my knowledge.

( )

Signature of the Developer /  
Implementing Organization / Agency  
/ NGOs with full name & address  
with seal.

Date: .....  
Place .....

---

**Certificate from Forwarding Agency, if any**

This is to certify that the all the above information have been verified and are found correct to the best of my knowledge.

( )

Signature of the Forwarding Agency  
with full name, & address with seal.

Date: .....  
Place .....

**Proforma for submission of the Project Proposal on ( $\leq 500\text{kW}$ )  
Biomass Gasifier for Captive Power Generation and thermal applications in Industries&  
other Institutions**

- 1. Name and full postal address of the Industry**
  - a. Name of the contact persons
  - b. Name and full postal address of the Industry
  - c. Fax No / Email.: if any
  - d. Telephone No.
  - e. Mobile No.
  - f. Registration No. of Industry (e.g. SSI etc.) (copy enclose)
  
- 2. Details of the Industry:**
  - a. Present installed Capacity for power & thermal need of industry
  - b. Average daily operation ..... hrs per day
  - c. Average days of operation in a year ..... days /years
  - d. Whether having electricity connection - Yes / No
  - e. Existing Diesel Engines
    - i. Capacity- ....kW
    - ii. Make / Model No. ....
    - iii. Year of purchase .....
    - iv. Present Diesel consumption ..... liter per hour
  - f. Brief description of the Industry with existing process and proposed process with Gasifier for thermal and / or electrical applications. Pl indicate present conventional fuel used, hrs of operation, cost of fuel,
  
- 3. Details of proposed Gasifier to be installed**
  - a. **With 100% producer gas engines, if required.**
  - b. **Retrofitted with existing / new DG sets**
  - c. **Retrofitted with boiler / furnace**
    - i. Name of the supplier of Gasifier / producer gas engine / DG sets
    - ii. Capacity (kW)
    - iii. Type of biomass to be used
    - iv. Biomass consumption .... Kg/hr
    - v. Availability of biomass and its cost and proposed supply mechanism
    - vi. Expected saving and economics etc
    - vii. Cost of Gasifier / producer gas engine / DG sets if new (any other equipments)
    - viii. Civil & Other cost
    - ix. Total cost - in Rs.....
    - x. Copy of Invoice, time schedule for supply & terms and condition of warrant and charges for 2 years AMC (Please attach copies)
  - d. Expected date of COD.
  
- 4. Financing Details**
  - a. Own Equity - Rs. ....
  - b. If loan sought form the banks
    - i. Total loan Amount sanctioned / sought – Rs. ....
    - ii. Name & full Address of the Bank / Branch
  - c. Central Financial assistance (Subsidy from MNRE) Rs.....
  
- 5. Details of Bank Account of Industry:**
  - a. Name of account Holder
  - b. Name & Address of the Bank& Branch
  - c. Branch Code
  - d. RTGS No and MICR Code
  - e. Bank Account No

6. **In case, loan taken from bank**
- a. Name & Address of the Bank& Branch
  - b. Branch Code
  - c. RTGS and MICR Code
  - d. Loan Account No of the Bank
7. **Certificates** - Please send the following certificates while submitting the proposal to the MNRE along with covering letter seeking financial support from the MNRE addressed to **Director, Waste to Energy Division, Ministry of New & Renewable Energy, Block No. 14, CGO Complex, Lodhi Road, New Delhi-110003:**

---

**Certificate from developer / owner of the Industry**

This is to certify that the above information is correct to the best of my knowledge.

( )

Signature of the developer / owner of  
the industry with full name & address  
with seal.

Date: .....

Place .....

---

**Certificate from Forwarding Agency, if any.**

This is to certify that the above information has been verified and are found correct to the best of my knowledge.

( )

Signature of the forwarding agency  
with full name & address with seal.

Date: .....

Place .....

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**APPLICATION FORMAT FOR CAPITAL SUBSIDY -BIOMASS GASIFIER  
PROJECTS >500 kW**

**1. GENERAL**

- (i) Name, Address, Phone, Fax & :  
Email of the Promoter and industry separately.
- (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 with address :

**2. PROJECT DETAILS**

- (i) Installed capacity (MW) :  
(a) Thermal (MW)  
(b) Power (MW)
- (ii) Captive requirement (MW) :
- (iii) Surplus Exportable (MW), if any :

**3. DETAILS OF TECHNOLOGY USED WITH SCHEMATIC DIAGRAM etc**

(Please specify whether Gasification for electrical / thermal applications or both)

**4. BIOMASS**

- (i) Biomass proposed :
- (ii) Quantity required per day :
- (iii) Biomass Availability in the region :

**5. SUPPORT FUEL**

Type of other fuels, if proposed to be used as :

Support / supplementary fuel

**6. AVERAGE COST OF GENERATION (Rs/Kwh) and OTHER BENEFITS  
GIVE DETAIL:****7. PROJECT DETAILS**

- Total cost of project
  - i. Civil Works
  - ii. Plant & Machinery
  - iii. Misc. Equipment
  - iv. Pre-operative expenses
  - v. Others
- If loan sought, total cost 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) CFA from MNRE
  - (iv) Any other source :
- Loan repayment period (FI Wise) :
- Anticipated COD schedule

**8. Any other issues related to the project****9. Enclose all relevant documents of the industry, statutory clearances sought, pollution clearances etc.**

**AUTHORIZED SIGNATORY**

**Indicative Application Format for Biomass Gasifier Based  
Grid Power Generation Projects / Distributed power (>500 kW- 2 MW)**

1. GENERAL
  - a. Name, Address, Phone, Fax & Email of applicant.
  - b. Name and designation of authorized signatory
  - c. Constitution (Private Sector/Proprietorship/joint sector/Coop. etc.)
  - d. Location Address of project (Village, District, State)
2. PROJECT DETAILS
  - a. Proposed Installed capacity (MW)
  - b. Proposed Captive / Distributed component and surplus to grid (kW)
  - c. If proposes, waste heat utilization (heating / cooling) furnish details with possible use for cold storage etc with cost and source of finances.
  - d. Cost of the project (As approved by FIs if loan is tie up)
    - i. Civil Works
    - ii. Plant & Machinery
    - iii. Misc. Equipment, Pre-operative expenses, Others
  - e. Anticipated COD schedule
3. WHETHER TIE-UP/AGREEMENT FINALISED
  - a. PPA: (Yes/No)
    - i. Whether power purchase agreement with SEB or private utilities has been made? If yes, Copy of PPA
  - b. Firming of equipment/technology: (Yes/No)
4. TECHNOLOGY Proposed: Gasification with 100% producer Gas Engines / Biomass-Turbine-Generator (BTG)
5. BIOMASS
  - a. Biomass used & Quantity used per day / per year
  - b. Envisaged Fuel linkage mechanism.
6. AVERAGE COST OF GENERATION (Rs/kWh)
7. FINANCING
  - a. Total cost of project as approved by FIs
  - b. Means of financing
  - c. Debt: Equity Ratio
  - d. Promoter's contribution (Equity)
  - e. Term loans with rate of Interest (FI wise)
  - f. Any other source
  - g. Name of the Lead FI (and other FIs, Lending to the Project) complete **Bank & Branch Name with address, Branch Code,RTGSCode,Account No** telephone number, fax number, e-mail etc., and name & designation of the contact person with bank.
8. TECHNICAL
  - a. Design & make of Gasifier with detail
  - b. Capacity
  - c. Capacity of 100% gas engines & make / Turbines & Generators
  - d. Grid voltage at which interconnection is to be done

(Authorized Signatory)  
Date /Place



**Indicative points to be covered in the Detailed Project Reports (DPR) for biomass Gasifier based off grid / distributed power generation projects (>500 kW)**

The Detailed Project Report (DPR) should provide information on the following aspects:

- i. Demand – Current and expected (tentative).
- ii. Load management – Load chart preparation taking into account seasonal variations in use of electricity, especially for irrigation etc.
- iii. Plant sizing - Sizing of the plant, capacity utilization factor for the plant as per the load chart.
- iv. Technological options – (Gasification taking into account load pattern, capacity utilization factor and type of biomass fuel available).
- v. Project Details
  - a. Proposed Installed capacity (kW)
  - b. Cost of the project (As approved by FIs if loan is tie up)
    - i. Civil Works
    - ii. Plant & Machinery
    - iii. Misc. Equipment
    - iv. Pre-operative expenses & Others
  - c. Anticipated COD schedule
- vi. Project cost estimates and financial calculations. Costs details of each item, i.e., equipments, power distribution network, civil work etc.
- vii. Details of Power Distribution Network (PDN) along with a drawing indicating types and no. of poles, length, specifications of the wires, fixtures, service lines from pole to the households and inside house wirings etc.
- viii. Proposed system, energy balance etc.
- ix. Technical specifications of each of the system/equipment proposed.
- x. Sources of biomass – current and potential, its stability
- xi. Proposed Fuel Linkages mechanisms.
- xii. Financing plan – Capital expenditure for power plant and other investments needed to reach projected demand. Sourcing working capital, sources of revenue, tariff setting, other non-tariff sources of revenue, operational sustainability, cash flow statement, plan to meet revenue gap if any, pay back period.
- xiii. Utilities & maintenance facilities – power, water, biomass storage & handling etc
- xiv. Environmental aspects
- xv. Human resources – Community empowerment, involving them in ownership and decision-making, training in operation and management of the power plant
- xvi. Strategy for operation and maintenance of electricity generating system and other systems and devices, economics of operation and maintenance Risk management – Identification of risk and how it would be managed.
- xvii. Project implementation plan – Tasks and milestones with timelines and clear identification of responsibilities should be presented.
- xviii. Details of cost of energy/electricity generation, tariff to be charged, revenue collection from the beneficiary households, revenue and expenditure gap, if any, and the mode of filling up this gap. The net proposed payment from the each household must be clearly indicated.

**INDICATIVE FORMAT FOR JOINT COD REPORT (JCR)  
BIOMASS GASIFIER BASED PROJECTS**

Reference MNRE in- principle approval Letter No. & Date	Users Name & Address	Name of Manufacturer / Supplier	Rating / capacity of systems, both for Gasifier and engines kW / KVA	Mode of application	Machine No.	Date of COD	Amount of CFA
1	2	3	4	5	6	7	8

Certified that:

- i. Training on operation and maintenance and safety aspects has been given adequately to users/ operators of the Institutes/Organizations concerned.
- ii. Operating manuals, warranty card etc. have been provided to the Institute/ Organization concerned.
- iii. Undertakings for the regular operation & maintenance of the systems have been obtained from the concerned Institute/Organization.
- iv. Gasifier system and sub-system (including equipments and instruments) have been verified at site and functioning satisfactorily as per terms & reference of the grant.
- v. Verified operation of project at least a period of one month.
- vi. Verified agreement between the user and supplier of the Gasifier systems for full guarantee and warrantee for one year followed by AMC for two years

Name & Address of the Manufacturer / Supplier with seal

User Name & Signature

Signature of authorized verifying authority

Date:

Place:

**Indicative Proforma- Verification Check list**

1	Project File No. and date of in-principle approval		
2	Name & address of the Developer		
3	Location of the system (Full address)		
		Approved	Verified
4	Project Type (Gasification / BTG)		
	Captive Generation in Rice Mills		
	Off grid / Distributed power for villages		
	Grid Connected Project or Combination with captive / distributed / grid		
5	Biomass		
	Rice Husk		
	Wood		
	Other Agro residues (give details of agro residues)		
	Multiple Biomass (give details of other biomass)		
6	Project Type		
	100% Gasification / BTG		
	Dual fuel		
7	Gasifier Supplier Name and Address		
8	Gasifier / BTG Capacity (kW)		
9	Machine number of Gasifier, producer gas engines / turbine / generator set (as provided by the manufacturer)		
10	Load (kW)		
11	Engine / turbines manufacturer		
12	Rating of the engine / turbines (kVA)		
13	Date of COD		
14	Total Project Cost (Lakhs) Indicate cost of Gasifier, engine, turbines, local distribution network (in meters) etc		
15	Amount of CFA (Lakhs) sanctioned		
16	O&M as per logs		
	Hours of operation		
	Amount of biomass / rice husk consumed per unit		
	Number of filters changed in a month		
	Shutdowns in the last three months		
	Revenue collected during last two - three months		
	Training to operators (by manufacturer):Duration of training <i>On O&amp;M</i>	On site	External
	Duration of training: <i>On Safety aspects</i>		
17.	Attach original COD Report, Utilization certificates and audited statement of expenditure (as per proforma).		
18.	Verified operation of project at least a period of one month through log book or other supporting documents.		
19	Verified agreement between the user and supplier of the Gasifier systems for full guarantee and warrantee for one year followed by AMC for two years	Attach copy	
20	Support towards project formulation – Indicate Name & Address, Account No of the promoter complete details of Bank & Branch Name with address, Branch Code, RTGS Code,		
Gasifier system and sub-system (including equipments and instruments) have been verified at site and functioning satisfactorily as per terms & reference of the grant			
Signature of authorized independent verification authority			
Date / Place:			

**Registration form for Government Subsidy Credit**

**Registration details of Bank/F.I.**

1. Type of Registration-
2. Agency Name-
3. Act/Registration No.-
4. Date of Registration (DD/MM/YY)-
5. Registering Authority-
6. State of Registration-
7. TIN Number-
8. TAN Number
9. GST Number
10. Block No./Building/Village/Name of Premises-
11. Road/Street/Post Office-
12. Area/Locality-
13. City-
14. State-
15. District-
16. Pin Code-
17. Contact Person-
18. Phone No.-
19. Alternate Phone/Mobile No.
20. Email-

## **Mandate Form for Government Subsidy Credit**

### **Electronic Clearing Service (Credit Clearing) Real Time Gross Settlement (RTGS) Facility for Receiving Payments**

#### **A. DETAIL OF ACCOUNT HOLDER:- For Government subsidy credit**

Name Of Account Holder	
Complete Contact Address	
TELEPHONE NUMBER/FAX/EMAIL	

#### **B. BANK ACCOUNT DETAILS:-**

Bank Name	
Branch Name With Complete Address, Telephone Number And Email	
Whether The Branch Is Computerized?	
Whether The Branch Is RTGS Enabled? If Yes, Then What Is The Branch's IFSC Code	
Is The Branch Also NEFT Enabled?	
TYPE OF BANK ACCOUNT (Term Loan Account Of Bank Where Government Subsidy Getting Credited)	
Complete Bank Account Number	
MICR Code Of Bank	

#### **DATE of EFFECT:-**

I hereby declare that the particulars given above are correct and complete. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information I would not hold the user Institution responsible. I have read the option invitation letter and agree to discharge responsibility expected of me as a participant under the Scheme.

-----  
Signature of Bank/F.I.

#### **Date:**

Certified that the particulars furnished above are correct as per our records.

(Bank's Stamp)

-----  
Signature of Bank/F.I.

Date:

1. Please attach a photocopy of cheque along with the verification obtained from the bank.
2. In case your Bank Branch is presently not "RTGS enabled", then upon its up gradation to "RTGS Enabled" branch, please submit the information again in the above proforma to the Department at earliest.