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: 30th July, 2018

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 Financial Institutions

Subject: Programme on Energy from Urban, Industrial and Agricultural Wastes/Residues for 2017-18, 2018-19 & 2019-20 - Reg

Sir,

- I am directed to refer OM No. 10/1/2013-U&I, dated 12th September, 2013 and corrigendum issued on 21.06.2016 and OM. No. 14/47/2017-WTE dated 18th May, 2017 of above mentioned scheme and to convey the sanction of the Government of India for the continuation of the Programme on "Energy from Urban, Industrial and Agricultural Wastes / Residues" with modified terms and conditions from 2017-18 to 2019-20. The details of the programme guidelines are given in the Appendix.
- Approval is accorded for the biogas, bio-CNG / enriched biogas, power and biomass gasifier components under Waste to Energy programme at a total Central Financial Assistance (CFA) of Rs.78.0 crore with physical target of 57.0 MWeq for the period 2017- 18 to 2019-20.
- 3. Guidelines for power generation from MSW power projects would be issued separately.
- 4. The expenditure on this scheme will be met from the budget provisions given below for the year 2018-19:

Description

Allocated Amount

'2810' The Expenditure is debitable to Demand No.67, Ministry of New and Renewable Energy, Major Head '2810' New and Renewable Energy, 00-101 – Grid Interactive and Distributed Renewable Power 01 – Grid Interactive Renewable Power 03 – Bio Power

01.03.33 Subsidy

Rs.2.00 crore

02- Off Grid / Distributed Renewable Power 03 Bio Power 02.02.31 GIA 02.03.35 Subsidy

Rs. 0.50 crore Rs. 12.00 crore **Total Rs. 14.50 crore**

5. This issues in exercise of the powers conferred on this Ministry and with the concurrence

of IFD Division vide their diary No. 224, dated 30/07/2018.

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

Yours faithfully,

(

(Dr. G. Prasad) Director/Scientist-F

Copy to:

- 1. PS to Hon'ble Minister (NRE).
- 2. PSS to Secretary, MNRE.
- 3. PPS to AS & FA, MNRE.
- 4. PS to JS (Bio Group)/US(SKK)/Sci-B(VB)
- 5. Advisers/Directors, MNRE.
- 6. Pay & Accounts Officer, MNRE.
- 7. NIC- to upload the scheme on Ministry's Website.

Government of India Ministry of New and Renewable Energy (Waste to Energy Division)

PROGRAMME GUIDELINES on ENERGY FROM URBAN, INDUSTRIAL AND AGRICULTURAL WASTES/RESIDUES for PLAN PERIOD (2017-18, 2018-19 & 2019-20)

1.0 **OBJECTIVE**

The main objectives of the Programme are as follows:

- To promote setting up of projects for recovery of energy in the form of Biogas / BioCNG/Enriched Biogas/ Power from urban, industrial and agricultural wastes; and captive power and thermal use through gasification in industries.
- b. To promote Biomass Gasifier based power plants for producing electricity to meet the unmet demand of captive power and thermal needs of rice mills and other industries and villages for lighting, water pumping and micro-enterprises.
- c. 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.

2.0 **SCOPE**

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

- a. Biogas production from Industrial waste, Sewage Treatment Plants, Urban & Agricultural Waste/residue through Biomethanation.
- b. Power generation or production of Bio-CNG/enriched Biogas from biogas produced from Industrial waste, Sewage Treatment Plants, Urban & Agricultural Waste/residue.
- c Installation of biomass gasifier based projects in industry for producing electricity to meet the unmet demand of captive power and thermal needs of rice mills and other industries and villages for lighting, water pumping and micro-enterprises.
- d. Promotional activities including R&D, Resources assessment, technology up gradation and performance evaluation, etc.

3.0 ELIGIBILITY CRITERIA

3.1 Criteria based on type of waste

The eligibility criteria for type of waste are as follows:

- a. Projects based on any bio-waste from Urban waste (cattle dung, Vegetable & fruits market, Slaughter house, Poultry waste etc., Agricultural Waste (paddy straw, agro processing industries residues/ effluents, green grass etc.), Industrial wastes/Effluents (Agro processing industry, Paper & Pulp Industry, Milk processing, Sugar Industry etc. (excluding bagasse).
- b. Mixing of other wastes of renewable nature, including rice husk, bagasse, sewage, cow-dung, other biomass and industrial effluents (excluding distillery effluents) will be permissible up to extend of 10%.
- c. Biogas generation projects based on distillery effluents and projects based on wastes from fossil fuels and waste heat (flue gases) shall not be supported.
- d. BioCNG/enriched Biogas generation projects from Biogas for captive use /pipeline /bottling are eligible for CFA.
- e. Biomass Gasifier projects using agro residues / waste for captive thermal / electrical needs, distributed power are eligible for CFA.

3.2 Criteria based on 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.
- b. Projects for generation of power from biogas will be based either on 100% biogas engines or steam turbines with a minimum steam pressure of 42bar.
- c Bio-CNG/Enriched biogas to be produced will have to meet the BIS specifications as per IS 16087: 2013.

3.3 Criteria based on capacity

There will be no minimum / maximum limit on capacity of projects supported under this programme, however, cattle dung-based power generation projects of up to 250 kW capacity will not be considered under this programme.

4.0 CENTRAL FINANCIAL ASSISTANCE

4.1 Central Financial Assistance (CFA) for different categories of projects is given below:

Sno.	Output	Capital Subsidy	Description
1	Biogas	Rs. 1.0 crore <i>per 12000m3 Biogas /day.</i> (Max. Rs.10 crore/project)	Biogas generation from Urban waste/ Agricultural Waste/ Industrial wastes/ Effluents or mix of these wastes. (Distillery effluent is excluded)
2	Power	Rs 3.0 crore. <i>per MW</i> . (Max. Rs.10 crore/project)	Power generation based on Biogas generated from Urban waste/ Agricultural Waste/ Industrial wastes/Effluents or mix of these wastes. In case, developer wants to set up power generating unit at already existing Biogas generation unit, in that case, the applicable CFA will be only Rs 2.0 crore per MW.
3	Bio-CNG / Enriched Biogas	Rs 4.0 crore. Per 4800 kgs of BioCNG/day generated from 12000m3 Biogas /day. (Max. Rs.10 crore/project)	BioCNG generation based on Biogas generated from Urban waste/ Agricultural Waste/ Industrial wastes/Effluents or mix of these wastes. In case developer wants to set up BioCNG generating unit at already existing Biogas generation unit, applicable CFA will be Rs 3.0 crore.
4	Gasifier Thermal / Electrical in Industries / Villages	 Electrical Rs. 2,500 per kW with duel fuel engines Rs. 15,000 per kW with 100% gas engines 	Biomass gasifier based Captive Power & thermal applications in industries Distributed / off-grid power for villages using biomass gasifier systems.

	Thermal
	• Rs. 2 lakh per 300 kW for
	thermal applications.

4.2 The amount of capital subsidy would be calculated on the basis of installed capacity subject to maximum ceiling of Rs. 10 Cr/project.

4.3 Incentive to State Nodal Agencies

State Nodal Agencies would be provided an incentive / service charge @ Rs.1% of the eligible CFA (incentive maximum of Rs.5.00 lakh per project) in order to facilitate development of projects and their monitoring during implementation / post commissioning.

4.4 **Financial Assistance for promotional activities**

For organizing training courses, business meets, seminars/ workshops and publicity /awareness on case-to- case basis, subject to a maximum of Rs. 3.0 lakhs per event/ activity.

4.5 **Financial support for R&D projects**

Financial support would be provided for R&D projects, setting of test centers and technology up gradation, performance evaluation etc. to institutions/ industries. This will be governed by the procedures /guidelines issued by MNRE.

5.0 **IMPLEMENTATION ARRANGEMENT**

5.1 The scheme will be implemented through State Nodal Agencies (SNA), Urban Local Bodies / Municipal Corporations, private or public sector enterprises or organizations, as well as Energy Service Companies (ESCOs).

5.2 **Waste to Energy project** proposals for financial support will be submitted by the promoters to the Ministry through financial institutions with all statutory clearances before commissioning of the plant. The prescribed format for submission of the Waste to

Energy project proposal is given at Annexure-II.

5.3 **Gasifier projects** proposals can be directly submitted to the Ministry through SNA for seeking financial support. No DPR is required for Gasifier based small off-grid distributed power / thermal projects of size upto 100kW. Only brief proposal of the project required as per pro-forma given at Annexure-IV&V.

6.0 APPROVALS AND CLEARANCES

6.1 **Waste to Energy Projects**: The developers seeking Government support for their projects will submit proposals to Ministry through Financial Institutions. A Project Advisory Committee (PAC) for Waste to Energy projects would be constituted with the approval of Secretary, MNRE under the Chairmanship of Joint Secretary (In-charge), MNRE. PAC will evaluate and recommend the project proposals for financial support. The Ministry would issue sanction with the concurrence of IFD and approval of Secretary, MNRE. Based on this sanction/approval the developer can complete their projects as per guidelines of the scheme. The time period for completion of the project is 24 months. No extension of implementation period of the project will be considered. After 24 months the sanction stands cancelled and no claim for CFA will be entertained.

6.2 **Biomass Gasifier**: In case of biomass gasifier projects, after soliciting concurrence of IFD and approval of Secretary, MNRE, sanction letters of CFA would be issued. The time line for completion of Biomass gasifier projects is 12 months.

7.0 RELEASE OF CENTRAL FINANCIAL ASSISTANCE

7.1 **Waste to Energy Projects**: The entire CFA will be released to the developer's loan account in the lending financial institution/banks for the purpose of offsetting the loan amount only after successful commissioning of the project. Waste to Energy Projects without loan will not be supported. The condition of successful commissioning of the Waste to Energy project would, *inter-alia*, imply operation of the project for three months, including continuous operation for at least 72 hours at minimum of 80% of rated capacity. No advance CFA will be released to any projects.

7.2 **Biomass Gasifier**: In case of self-finance projects, the applicable CFA will be released directly to the user through DBT (not to the manufacture) and to bank/FI in case of loan after successful commissioning and submission of all requisite documents of the project. The condition of successful commissioning of the Gasifier would, *inter-alia*, imply operation

of the project for 3 months, including continuous operation for at least 72 hours at minimum of 60% of rated capacity. No advance CFA will be released to any projects.

7.3 The incentive to State Nodal Agencies will be released at the time of settlement of account of the project.

8.0 MONITORING MECHANISM

8.1 The State Nodal Agencies concerned will closely monitor the execution of the projects and provide guidance for their timely completion. They would also submit periodic progress reports to MNRE.

8.2 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.

9.0 The aforesaid programme is subject to change(s) and modification(s) as may be decided by the MNRE, Govt. of India from time to time, and subject to availability of funds. The Ministry shall in no way be liable for expenditure incurred by promoters for pre-project preparation or other activities, merely on the basis of these circular and / or related announcements 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.

Annexure List

Annexure-I	Eligibility Checklist for Grant of Subsidy
Table A:	Documents to be submitted for Sanction of CFA for Waste to Energy Project:
Table B:	Documents to be submitted for Release of CFA for Waste to Energy Project:
Table C:	Documents to be submitted for Sanction of CFA for Biomass Gasifier
Table D:	Documents to be submitted for Release of CFA for Biomass Gasifier
Annexure-II	Application Form for Grant of Subsidy of Waste to Energy Projects
Annexure-II	Format for Inspection Report of Waste to Energy Project
Annexure-I	✓ Proforma for submission of the Project Proposal on (<100kW) Biomass Gasifier for Distributed / off-grid Power Generation in rural areas
Annexure-V	Proforma for submission of the Project Proposal on (<100kW) Biomass Gasifier for Captive Power Generation and thermal applications in Industries
Annexure-\	(I Registration form for Government Subsidy Credit
Annexure-V	II Mandate Form for Government Subsidy Credit

ELIGIBILITY CHECKLIST FOR GRANT OF SUBSIDY Under the Programme on Energy from Urban, Industrial and Agricultural Wastes / Residues

Eligibility checklist to be filled by promoter and countersigned by Financial Institutions for grant of eligible capital subsidy against the request for setting up of **Biomethanation/Bio-CNG/Power** project under the programme on energy from urban, industrial and agricultural wastes/ residues.

A. <u>Documents to be submitted for Sanction of Central Financial Assistance (CFA)</u> <u>for Waste to Energy Project:</u>

Annex	kure Document Name	Tick Mark
1.	Application in the prescribed format (Annexure -II).	[]
2.	Copy of Detailed Project Report.	[]
3.	Layout of the plant and its associated sub- units.	[]
4.	Technical Specifications of the Digester/Compressor/Biogas Engine/Turbine.	[]
5.	Latest Progress report of the project with tentative date of commissioning along	[]
	with photographs.	
6.	Copy of the Certificate of Incorporation.	[]
7.	Undertaking for not claiming subsidy from other institution and keeping the	[]
	plant operational for a minimum period of 10years on non –judicial stamp paper	
	of Rs.100/	
8.	Valid Consent to Establish from State Pollution Control Board.	[]
9.	Approval for layout of the Bio-CNG Plant from Petroleum and Explosives Safety	[]
	Organization (PESO), Nagpur, if applicable.	
10.	Land Document translated in English.	[]
11.	Raw Material Details Invoice/ Agreement, if applicable.	[]
12.	Agreement for sale of Bio-CNG, if applicable.	[]
13.	PPA valid for at least 10years, if applicable.	[]
14.	Loan Sanction Letter(s) of Financial Institution.	[]
15.	Appraisal Note by Bank.	[]

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

Promoter	Financial Institutions
Authorized signatory (With seal and date)	Authorized signatory

Continued...

B. <u>Documents to be submitted for Release of Central Financial Assistance (CFA)</u> for Waste to Energy Project:

	ure Document Name	Tick Mark
1.	Document indicating the project commissioning date.	[]
2.	Inspection report of the Project by Executive Engineer of 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 continuous operation on	[]
	hourly basis authenticated by SNA.	
5.	Valid Consent to Operate from State Pollution Control Board.	[]
6.	Approval for storage & filling of Bio-CNG Plant from Petroleum and	[]
	Explosives Safety Organisation (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 amount for the project.	[]
10.	Mandate form for payment transfer of promoter (Annexure-VI & VII).	[]
11.	Soft and Hard Copy of photographs with high resolution.	[]

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

Promoter

Financial Institutions

Authorized signatory (With seal and date)

Authorized signatory

C. <u>Documents to be submitted for Sanction of Central Financial Assistance (CFA)</u> for Biomass Gasifier

Annex	ure Document Name	Tick Mark
1.	Application in the prescribed format (Annexure –IV or V) for <100kW Gasifiers or	[]
	Detailed Project Report for \geq 100kW Gasifiers.	
2.	Layout of the plant and its associated sub- units (for Gasifiers \ge 100kW size).	[]
3.	Technical Specifications of the Gasifier.	[]
4.	Latest Progress report of the project with tentative date of commissioning.	[]
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 resolution for meeting the project cost from internal accruals/ Bank, if	г л
	applicable.	[]

D. <u>Documents to be submitted for Release of Central Financial Assistance (CFA)</u> for Biomass Gasifier

Annex	ure Document Name	Tick Mark
1.	Document indicating the project commissioning date.	[]
2.	Joint Commissioning Report duly signed by verification team of SNA	[]
3.	Performance report for 3 months 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-VI & VII).	[]
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.

APPLICATION FORM FOR GRANT OF SUBSIDY of Waste to Energy Projects Under the Programme on Energy from Urban, Industrial and Agricultural Wastes / Residues

1.	Name and address of Promoter/ Investor with Tel. No./Fax No./E-Mail	
2.	Name of Project along with capacity	
3.	Address of Proposed Plant- (city/district/state)	
4.	Details of Waste	
ч.	i. Type of waste	
	ii. Quantity / Effluent Treated in the Plant per day	
5.	Construction Area used	
5.		
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. Bio- 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 Bio-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	
11.	per Appraisal Note of the Bank	
12.	Means of Financing	
	i. Promoter's Direct Equity	
	ii. Loans (with details) from 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 Commissioning 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 <u>colored & text searchable pdf (OCR)format</u>].

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

(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 Commissioning 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. Bio- Fertilizer Production/day
 - iv. Biogas/Bio-CNG/Power Generation Data
 - a. 72 Hours continuously in operation indicating dates
 - 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

Proforma for submission of the Project Proposal on (<100kW) Biomass Gasifier for Distributed / off-grid Power Generation in <u>rural areas</u>

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)																						
			(in Watt)	(in watt)	1	2	3	4	5	6	7	8	9	1 0	1 1	1 2	1 3	1 4	1 5	1 6	1 7	1 8	1 9	2 0	2 1	2 2	2 3	2 4
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 commissioning.
- 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		
			Total		

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.						
			Total				

- Rs.

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

b.

- a. Own Equity
 - 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 :

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 (<100kW) Biomass Gasifier for Captive Power Generation and thermal applications in <u>Industries</u>

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 Rice Mill (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-
 - ii. Make / Model No.
 - iii. Year of purchase
 - iv. Present Diesel consumption liter per hour

....kW

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 commissioning.

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 rice mill

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

Annexure-VI

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-

Annexure-VII

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 ACCOUNTDETAILS:-

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 Brach'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.