LIST OF ANNEXURES FOR BIOGAS PROGRAMME

Annexure	Title							
I.	Biogas Consumer Interest Form for installation of small biogas plants (1 to 25 M3) under MNRE biogas programme							
II.	Application Form for installation of medium biogas plants (above 25 to 2500 M3) under MNRE biogas programme							
III.	Completion certificate of biogas plant under the biogas programme							
IV.	Proforma for submission of claims with respect to MNRE funds only, for settlement of accounts under national biogas programme (1 m3 to 25m3)							
V.	Monthly progress to be reported by PI of the State/UT & BDTCs							
VI.	Year-wise detail of beneficiaries for small biogas plants to be displayed on the websites of the respective PIA.							
VII.	Details of three (3) months performance report of biogas power / thermal energy project under National biogas programme.							
VIII.	Eight days' performance report							
IX.	Commissioning certificate of biogas project for biogas plant above 25 to 2500 m ³							
X.	Third Party Inspection Report After Completion & Commissioning of The Biogas Project (for biogas plant above 25 to 2500 M ³)							
XI.	Audited statement of expenditure (ASoE) for biogas power project							
XII.	Model Syllabus for Biogas Trainings under MNRE Biogas Programme							

Annexure I

Biogas Consumer Interest Form for installation of small biogas plants (1 to 25 M3) under MNRE biogas programme

- 1. Name
- 2. Contact Number
- 3. Email
- 4. Aadhar Card Number
- 5. Category
- 6. Address Details
- 7. House No.
- 8. Village
- 9. Post office
- 10. Block
- 11. Panchayat
- 12. Ward No.
- 13. Sub District
- 14. District
- 15. State
- 16. Other Details
- 17. Do you require toilet linked biogas?
- 18. Do you require biogas slurry filter unit?
- 19. Do you already have a biogas plant installed?
- 20. Number of cattle available
- 21. Comment if any:

This application form is also available at MNRE's biogas portal (at <u>https://biogas.mnre.gov.in</u>).

ANNEXURE-II

Application Form for installation of medium biogas plants (above 25 to 2500 M3) under MNRE biogas programme

(a) Format for projects upto 10 kW on biogas based power generation (off-grid) & thermal application)

1	Name and address of state Govt. Nodal Deptt. / Nodal Agency / BDTC/ KVIC Or other Approved Organization	
2	Name & Address of project executing organization/agency (if other than SNA/SND./BD TC/ KVIC)	
3	Details of Site indicating location and address with expected load and use of electricity o r biogas for thermal applications:	
4	Capacity of the biogas plant (cubic meter per day or cubic meter per hour)	
5.	Details of Cattle viz. in numbers-Adult, smaller than 5 years (Total availability of dung in kg.) plus Any other source of waste like goats, pigs, poultry dairy effluent, food & kit chen, Agro/Food processing waste etc. (Please specify the Nos. of animals/ birds & it s dropping in kg.) to the accuracy so as to work out total quantity of waste in Kgs. / Ton nes/Litres of dairy effluent etc.	
5	Name of manufacturer/supplier and cost of 100% biogas engines, DG-Genset and assoc jated control panel etc.	
6	Total daily demand /requirement of power in KWh/day and required amount of biogas g eneration daily(in cubic metre) for the same including for cooking/ heating / cooling etc. (Kcal requirement per day for thermal energy applications).	
7	No. of biogas plants Units with capacity of each in m ³ proposed	-
8	Proposed operational hours per day entirely based on Biogas i.e. on 100% biogas utilizat ion basis.	
9	Estimated actual cost as worked out by the concerned user agency /manufacturer and v erified by the concerned SND / SNA / KVIC / BDTC etc.	
10	Total Estimated cost of the project (in Rs.)	
11	Amount of CFA worked out as per the approved rates and norms of the scheme of BPGT P (in Rs.) And Category of the beneficiary General/ SC/ ST / Others.	

12. Further this is certified that:

(i)Adequate quantity of surplus cattle dung/biomass/ other eligible wastes are available at the proposed plant site and user/applicant is genuinely interested for installation and operation of biogas power plant/ thermal plant on regular basis at least for 10 years' period.

(ii)The User Organization has agreed and tied up to arrange balance funds from Bank and self-contribution over & above the eligible CFA for installation of proposed biogas based power /thermal project.

(iii) User organization has agreed to operate and maintain the biogas project at their own or by engaging the skilled personnel as Biogas Plant Operator on regular basis for a minimum period of 12-15 years.

(iv)The user organization has the capacity to operate the plant for12- 15 years and has tied up management of plant slurry and its disposal by making self-use/ sale of organic bio-manure to third party.

Name & Signature of the User Organization/user

(Verified & Countersigned by Head of PIA)

Date: Place:

(b) <u>Format for basic information for projects above 10 kw biogas based power generation /</u> <u>thermal applications</u>

Name of the Beneficiary and address : GPS of the Plant site Telephone No. of the site Name of address of the State Agency/BDTC who propose to undertake the work	Thermal application
GPS of the Plant site Telephone No. of the site Name of address of the State Agency/BDTC who	
Name of address of the State Agency/BDTC who	
propose to undertake the work	
Category of Beneficiary / Institution Please (√) tick	 a) General/SC/ST/Others b) Private c) Government d) Public Organization e) Others
Proposed use of generated power with detailed configuration	
Mode of use and total requirement of power in kWh/day OR total requirements of biogas in cu.m.per day	
Proposed size of Biogas plant in cubic meter (m ³)	
 smaller than 5 years (Total availability of dung in kg.) b) Any other source of waste like goats, pigs, poultry dairy effluent, food & kitchen, Agro/ Food processing waste etc. (Please specify the Nos. of animals/ birds & its dropping in kg.) to the accuracy. c) Agricultural waste in kg. d) Other degradable biomass in kg. (please attach separate sheet along with the full details of each raw material) e) No. of latrine attached & No. of users f) Availability of land for proposed 	
for manufacturers and operation & Maintenance of the system suppliers to be given)	
Estimated quantum of power to be generated through biogas plant, keeping in view the minimum 10 hours daily operation of the proposed power plant entirely based on Biogas generation	
Proposed Electrical Load Distribution with Biogas power plant	
	 configuration Mode of use and total requirement of power in kWh/day OR total requirements of biogas in cu.m.per day Proposed size of Biogas plant in cubic meter (m³) Available population of cattle a) Details of Cattle viz. in numbers-Adult, smaller than 5 years (Total availability of dung in kg.) b) Any other source of waste like goats, pigs, poultry dairy effluent , food & kitchen , Agro/ Food processing waste etc. (Please specify the Nos. of animals/ birds & its dropping in kg.) to the accuracy. c) Agricultural waste in kg. d) Other degradable biomass in kg. (please attach separate sheet along with the full details of each raw material) e) No. of latrine attached & No. of users f) Availability of land for proposed biogas plant and housing generator etc. Procurement and commissioning of (Name of the proposed power generating system, Mechanism for manufacturers and operation & Maintenance of the system suppliers to be given) Estimated quantum of power to be generated through biogas plant, keeping in view the minimum 10 hours daily operation of the proposed power plant entirely based on Biogas generation

	c) Irrigation/Agriculture	
	d) Entire Power to be used for self & / Balance	
	surplus power / biogas to be sold locally	
13.	Types of engine proposed for power generation	
14.	Capacity of engine / dual fuel (used with bio fuel	
	only) or Biogas micro turbines etc. in kVA	
15.	a) Cost of 100% biogas engine or dual	
	fuel engine, coupled with Genset, associated	
	Central panel and power room etc. (in Rs)	
	b) Cost of internal transmission system used for	
	electrification (for a & b please attach separate sheet	
	along with full details)	A second s
16.	Cost of proposed biogas plant (in Rs):	
17.	Manure Management and	
	Handling system including safe and neat disposal	
	for sale of Bio-manure.	
18.	Approximate cost of electricity that may be	
	generated through Biogas (kWh/day)	
19.	Source of funding of the project (in Rs)	
	a) Own fund (Rs.)	
and the second	b) Bank loan (Rs.)	
	c) Central financial assistance (Rs.)	
1942	d) Total (in Rs.)	
20.	Source of funds for meeting operation and	
	maintenance cost of the system	
21.	Undertaking from State Nodal	
1.5.5.7.6	Deptt/Agencies/BDTC	
Section of	(An undertaking to this effect from agency for	
1.6. 1. 1.	procurement installation, operation and maintenance	
	of the system on regular basis.)	
22.	Mechanism to transfer the power plant to user /	
	panchayat/ Society/ Entrepreneur etc. by	
	SNA/SND/BDTC after specific period if applicable	
	for the project proposal.	
23.	Any other information with regard to the project	

Date Place

Signature of the Beneficiary Who undertakes the project

Date / Place Signature of the Developer/ promoter Undertake the work of power generation & construction of Biogas plant etc.

Verified & countersigned by the Head of the PIA

On Non - Judicial Stamp / e stamp Paper

UNDERTAKING

The management of <Name of the Enterprise> or <Name of the owner for individual user> has submitted proposal for setting up of < ... kWe power generation project> or < ... Cubic Meter biogas plant for thermal energy applications> at <project location> using <Name and type of raw material> as feed material for biogas generation and applied for availing Central Financial Assistance (CFA) from Ministry of New and Renewable Energy, Government of India.

We undertake that,

- our organization; and 1. The cost over and above the MNRE, GOI share will be borne by me/
- 2. We will operate the plant for a minimum period of 15 years and shall not dislocate or abandon the project including any of the related equipment/ part. If at any point of time the biogas project is found non-operational after its commissioning, I / we shall be liable to refund the Central installation, with interest thereon as Financial Assistance / subsidy received for the project MNRE, Government of India. decided and asked by the
- 3. We / the Company----- have not claimed any subsidy for the same biogas plant / project under any other programmes of Govt. of India. If there is any discrepancy found subsequently, the ministry is allowed to recover the subsidy under Biogas Power/ Thermal Energy projects from us.
- 4. The BDTC/MNRE / State Nodal Agency etc. will have the right to get all the project related technical and financial data to publish success stories/ case studies / technical papers and for third party inspection and evaluation on the operation and performance aspects of the project.
- 5. Above content of this affidavit are true and correct to the best of my knowledge and acceptable to the undersigned.

Authorized Signature of Deponent/ beneficiary

Verification:

Verified that the content of this Affidavit are true and correct to the best of my knowledge and belief nothing has been concealed there in.

> ATTESTED AND IDENTIFIED DEPONENT

Dated.

NOTARY PUBLIC

Completion Certificate of Biogas Plant (for biogas plant 1 to 25 M³) Under the Biogas Programme

(Fill in Block Letters)

This is to certify that <.name of PIA> has set up a Biogas Plant of cubic metre/day) bearing the Serial No.....with captured GPS Coordinates (....latitude and longitudes) during the FY..... attached attached/not toilet sanitary with respect for the Biogas Beneficiary Name Shri/Smt..... Panchayat......Ward No.....Village..... House No..... Post.....Block......Taluk.....District.....State.....(with GPS Coordinateslatitude and..... longitudes). This plant has been constructed under the supervision of (Name and designation of the Officer.....) and the plant has been commissioned to the full satisfaction of the above mentioned beneficiary.

Date of Commissioning of Biogas Plant: Date of issuing completion certificate of Plant:

Signature/TI of the Signature of the Actual biogas Plant Owner PIA/TKW/RET/ BM

Signature of the concerned Officer of the PIA/ BDTC etc authorized to sign the C.C. With official seal

Signature of Two witnesses

1) (Neighbours of the beneficiary)

2) (Gram Panchayat member/Sarpanch)

Counter Signature with Official seal of the Higher Level Officer of the PIA /BDTC etc as applicable

<u>Claim Proforma for submission with respect to MNRE CFA only, for settlement of accounts</u> <u>under biogas programme (1 m³ to 25 m³)</u>

- 1. Name and address of the PIA:
- 2. Year of the implementation: FY..202.. 2..
- 3. Annual Physical target (Category-wise) :
- 4. Reported achievements for the months from ... to....)
- 5. Physical Achievement (Actual category -wise) Nos. of plants commissioned size wise:
- 6. Details of the Central Finance Assistance (CFA) claims:

Sl. No.	Particulars	Size of the Plant (in cub. Metre)	No. of Plants actually installed	Rate of CFA per plant (Rs.)	CFA to be disbursed (Rs.)	Remar ks, if any
A.	Central Subsidy					
1.	Hilly/NER States / Islands / SCs/ STs Categories of all other states					
2.	All others States (General Category)					
В.	Additional Subsidy (i) biogas plants if linked with sanitary toilets (ii) Biogas Slurry Filter Unit as and when approved by MNRE					
	Total Subsidy (A+B)					

7. Details of claims of Turn-key Job Fee paid to TKWs / RETs/BMs etc.:

Particulars of Biogas plant viz, model, type, size(s) and numbers in each size	Size(s) of biogas plants set up actually on Turn-key basis	Applica ble rate of TK Fee per biogas plant (Rs.)	Amount be disbursed (In Rupees)	to
Biogas plants involving brick masonry construction work for digester or gas holder or for both (give the numbers of biogas plants installed size-wise)	 a). 1 M³. b) 2-4 M³. c) 6 M³ d)8-10 M³. e) 15 M³. f)20-25 M³. 			
Total Turn – Key Job Charges				_

8. Training Courses:

Sl. No.	Type of Training Course	Target	Achievem ent	Venue Training course	ofPeriodicity (Dates from to)	of	Nos. of plants construct ed during training	Actual Expenditure incurred (Rs.)
(a)	Construction-cum- Maintenance / Refresher Course (CMC)							
(b)	Turn –Key Workers Management Training course for TKW / RET / SHG / Biogas Mitra etc.							
(c)	Users Training Course (UTC)							
(d)	Staff Training Course							
(e)	Skill Development Courses of BDTCs or other Biogas centres authorized and approved by MNRE TOTAL							

9. Details of Administrative Charges (As per actual achievements at the end of FY):

(i) Physical achievements (With reference to CFA claims) : --- Nos. of Biogas Plants

(ii) Total amount of Claims : Rs. -----

(As per the range given in the Administrative Sanction-cum-Guidelines).

10. Claim for Incentive for saving fossil fuel by using biogas in 100% biogas engine/Biogas generator sets for water pumping and for other small Farm Power/electricity needs-

Sl. No	Category of the beneficiary	Installed Actual Nos. of plants with 100% Biogas Engines/ Biogas Genset	Subsidy Rate	Beneficia ry's share (in Rs.)	Total eligible CFA (in Rs.)
1.	Biogas plant size up to 10 Cu. Met) With biogas engine/ gen set capacity				
2.	Biogas plant size from 15, 20 and 25 Cu. Met) With biogas engine/ genset capacity				
3.	Expenditure incurred in actual				

Total eligible claim (INR) (6+7+8+9+10) =

11. Further, this is to certify that:

i. The Biogas plants for which CFA / subsidies to beneficiaries including additional subsidy for

toilet linked plants and additional incentives to farmers for saving fossil fuels, and electricity and Administrative Charges, Turn – Key Job Fee etc. which have been claimed as above, have actually been commissioned during the period from ------to ------ and requisite prescribed Completion Certificate and documentations in respect of all these completed and commissioned biogas plants and machineries including 100% Biogas engine genset plants are available in the Office records of the PIA.

- ii. _____Nos. of Biogas plants have been physically verified on 100% basis at the and claims sent herewith relate only to the commissioned biogas plants as reported for actual physical progress for the period _____, the details of all the commissioned plants in the prescribed proforma have been uploaded on the website of PIA... (url).
- iii. The CFA/Subsidy in respect of ------ plants shall be disbursed to the beneficiaries concerned according to the prescribed applicable rates for the respective category of beneficiary and size of the plant, after the plant was commissioned and physically verified by an Officer authorized for this purpose. This is also to state that no State share has been included in these above mentioned claims.
- iv. All the Biogas Plant have been assigned a unique serial Number. The Geo-tagging of every biogas plant site has been done & records kept as per the guidelines of the scheme.
- v. This is certified that details of the above mentioned installed biogas plants / beneficiaries have been shared with the other implementing agencies including KVIC who are working in the State and it has been ensured that no case of any kind of duplicity/re-reporting of the old biogas plants installed during previous years. These installed and reported biogas plants have not been reported under other scheme such and MGNREGA and/or GOBARDHAN etc.
- vi. Out of------ biogas plants installed during the year-----, biogas plants have actually been completed on Turn-Key Job Fee basis and Turn Key Job Fee for these plants have not been claimed earlier from the Central or State Government/ KVIC/ Other Agencies.
- vii. The concerned beneficiaries are satisfied with the construction, fabrication, installation & commissioning and working of the biogas plants and certificate to this effect have been obtained from them for record.
- viii. A written undertaking and warranty cards for 5 years free post commissioning maintenance have been given to the beneficiary concerned for free cost service, inspection, guidance and to repair defects, if occurred during the period of five years from the date of commissioning of the plants. Beneficiary's service card containing complaint cards has been also handed over to him for post installation complaints and services.
 - ix. It is certified that detailed documents of accounts/vouchers have been maintained for each of the biogas plants and training course at an appropriate level for post -facto verifications and audit purposes.
 - x. It is also certified that all the terms and conditions stipulated in the Biogas Programme Guidelines issued vide MNRE sanction No. 253/16/2017-Biogas dated August, 2022 have been followed in all respects.

Signatures with Name & Designation of the Head of the PIA with Official Seal

Place/ Date:

<u>Monthly Progress Report</u> Part (i) by State/UT's PIA for setting up small Biogas Plants (1 to 25 M³)

Name of PIA				
Progress Report for the Month				
Annual target allocated	General	SC	ST	Total
No of Biogas plants installed (1 to 25M ³)				
Cumulative biogas plant installed upto this reported month				
Nos. of Biogas plants connected with sanitary toilets				
No of plant connected with biogas slurry filter unit				
No of beneficiary for which CFA disbursed via DBT route				-
Amount disbursed to biogas users via DBT route				
Details of Biogas Training conducted with consultation of BDTC				
Cumulative total Nos. of villages covered under the Scheme so far.				
Outcomes of the conducted biogas training courses & response /issues of BDTC regarding assistance				

(Counter Signature with Official seal of the Officer of the PIA)

<u>Part (ii) by the each BDTC for achieving the targets of various biogas trainings allocated to the PIA</u> of the State/UT) under MNRE biogas programme

Month	year	Name of BDTC	
No of Request received of PIA and Types of Ti	d from the PIA for raining	or technical assistance/ training courses, with Name	
No of Request attended separately)	d and provided tec	chnical assistance during the reported month (brief	
No of Inspections of sr	nall Biogas Plants	s conducted	
No of conducted field s	seminars/webinars	s (State wise) and Prepare a success story of the	
Outcomes of the condu		rs/webinars/ technical assistance/ training courses	
Details of technical bo	ooklets / guidelines	es / training & publicity material prepared for biogas	
Details of pilot demon Testing & performance	strations of new de e evaluation of pla	lesign and models of the Biogas Plants & their ants	
No of Inspections of m			
any		the field of biogas technology and it application, if	
Other observation to b	e highlighted to M	MNRE for improving the Implementation of Biogas	

Counter Signature with Official seal of the PI of BDTC

Year-wise detail of small biogas plants (1 to 25M³) supported by MNRE to be displayed on the websites of the respective PIA.

Village, District and Year-wise and beneficiary-wise detail of beneficiaries of the family type/ Small biogas plants to be displayed on the websites of the respective PIA and other concerned organizations and for putting on Notice Boards of concerned Village Panchayat/Gram Panchayat.

2

1. Name of State/UT

2.	Name	of the	SND/	KVIC	of the	State
----	------	--------	------	-------------	--------	-------

- 3. Block/Taluka
- 4. District
- 5. Report on website for the year
- 6. Total nos. Biogas Plants reported as complete in all respect :_____
- 7. Date of putting the list on web-site
- 8. Particulars of the beneficiaries viz:

CI	Nama	Full	Categ	Nos	Nos.	Size	Date	Amou	nt of	Date and	name	and	Name of	GPS	Photograph of
SI N o.	Name / Fathe r's name / Husb and's name of benef iciary	Full addres s (villag e, block, district and state and contac t numbe r of benefi ciary)	Categ ory of the benef iciary , Gener al/ SC/S T/ Other s	Nos. of fami ly me mbe rs	Nos. of cattl es own ed	Size and Model of biogas plant and unique identifi cation mark/ code number of the biogas plant	of com missi oning of bioga s plant	MN RE subsi dy	y paid	amount of subsidy disbursed through DBT	address registered	of	the Plant work supervising	coordin ates (lat./	the real beneficiary with the commissioned biogas plant (three photos of three different stages of construction & commissioning to be kept in the record along with Geo- tagging of Biogas Plant
1	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.		13.	14.	15.

٦

Details of Three (3) Months Performance Report (for biogas plant above 25 to 2500 M³)

(i) Sanctioned Capacity of the Project:.....kW.

(ii) Installed capacity of the Generator:.....kW.

	Date	Daily feedstock feeding & biogas generation		Operation of GensetKW & electricity units produced per day recorded from Energy meter r eading (kWhs/day)					
Sl. No.	(dd/m m/	Tons/ day	Biogas produced (Cubic M etre/ Day)	Previou s Reading	Current Reading	Total energy units generate d/ day (KWhrs)	g Hours (from		plant operati onal
1									
2									
3									
4					-				
5									-

Signature of the Beneficiary/ User Organization Signatures of Plant Developer Signatures with official seal of the authorized Officer of Programme Implementing Agency

Counter Signatures of the Head of the State PIA with Official Seal.

Date& Place:

٦

т

8 DAYS PERFORMANCE REPORT (for biogas plant above 25 to 2500 M³)

Performance Report for 8 consecutive days' operation of the plant at 80 % rated capacity of Biogas Power Generation/ Thermal energy Project.

- a. Sanctioned Capacity of the Project:KW.
- b. Installed capacity of the Generator:KW.

	Date	feeding & biogas				Plant operating ho urs			
S1. No.	(dd/ mm/ yyyy)	Tons/ da y	Biogas p roduced (Cubic Metre/D ay)		Readin	Total energy u nits generated/ day (KWhrs)	Morning Hours (from - to -)		the second se
1									
2									
3									
4									
5									

Signature of the Beneficiary/ User Organization Signatures of Plant Developer Signatures with official seal of the authorized Officer of Programme Implementing Agency

Counter Signatures of the Head of the State PIA with Official Seal.

Date& Place:

Commissioning Certificate of Biogas Project for biogas plant above 25 to 2500 M³)

(on Letterhead of the PIA)

Reference: MNRE Administrative Sanction No.----- Dated: ---

It is certified that a Biogas Power Generation (Off-grid/ Grid)/ Thermal Energy application plant of ------KW(KVA) / ------Cubic metre Capacity per day has been installed at the premises of Shri/ Smt. (Name of the Beneficiary) ______, at Village, Mandal/ Taluka -----, District :----- State: ---- with captured GPS Coordinates (....latitude and longitudes) under the technical guidance, implementation supervision and monitoring of the designated programme agency "...".

It is also certified that the <Biogas Developer/ Company / Farmer of (Name of the Developer)> has installed and commissioned the project as per the Administrative Sanction & Scheme Guidelines of the MNRE and has started stabilized functioning from the Date(dd/mm/yyyy) which is the declared commissioning date of this project and thereafter it is being operated continuously and the required performance output data are being recorded.

Remarks and Recommendation:

The above Biogas Power Project (Off-Grid) is working satisfactorily in terms of the required and desired outputs parameters as recorded during the three months period post commissioning and now the third party may inspect the same so that the eligible CFA can be disbursed at the earliest.

Signatures with official seal of the authorized Officer of PIA

<u>Third Party Inspection Report After Completion & Commissioning of The Biogas Project (for</u> <u>biogas plant above 25 to 2500 M³</u>)

General Information

	Name and Address of the beneficiary with captured GPS Coordinates (latitude and longitudes)	
	Date of 3 rd Party Inspection :	
3.	Size of the plant (M3/kW)	
4.	Feed stock used :	
5.	Use of biogas	

Technical Specification verification:

1.	Genset Capacity Details	
	(a) Engine make	
	(b) Capacity of the generator	
2	Cooling Arrangement	
3	No. of Cylinders and Alignment	
4	Out put	
5	Governing – Electronic	
6	Engine control panel	
	a. Energy meter	
	b. Change over switch	
1.3	c. Engine Earthing	
	d. Canopy	
7	Biogas flow meter	
8	Biogas Scrubbing/ Cleaning System	
9	Observation on electricity generation	
	(Units per day)	
10	No. of hours engine runs /day	
11	Estimated Savings per month (units)	

Remarks:

(a) Third Party's Remarks on recorded and reported performance data:

1.

(b) Overall satisfaction remarks:

Name, Contact and Signature:

2.

3.

Statement of Expenditure (SoE) (for biogas plant of 1 M³ to 25 M³)

This is to certify that according to the Statement of Expenditure incurred the following Expenditure for installation of small biogas plants (1 to 25 M^3) by < Name of PIA> during the month...to ... month of the F.Y. 202...-2....

Sl No	Component	Size & Number	Amount (INR) incurred
	CFA for installed Biogas plants		
	Additional Subsidy		
	(i) biogas plants if linked with sanitary toilets		
	(ii) Biogas Slurry Filter Unit as and when approved by MNRE		
3	Turn-key Job Fee to be paid		
4	Training Courses		
5	Administrative charges		
6	Incentive for saving fossil fuel by using biogas in 100% biogas engine/Biogas generator sets		
	Total		
	(Rupees		only)

Seal and Signature of the Finance Officer of PIA

Seal and Signature of the Head of the PIA

<u>Audited Statement of Expenditure (ASoE)</u> (for biogas plant above 25 M³ to 2500 M³)

on CA Letterhead with Firm Registration Number and Membership Number.)

CERTIFICATE

This is to certify that according to the Statement of Expenditure produced and information furnished by ______ (Beneficiary name and address) have incurred the following project expenditure regarding to Biogas Power Project (Off-Grid) installed at ______ (site location)

Sl No	Component	Cost in Rs.		
1	Construction of Biogas plant			
2	Generator, Engine with alternator			
3	Biogas Scrubbing System			
4	Control Panel, energy meter and flow meter and pipeline			
5	Machine Room /Shed			
6	Manure management System			
7	Any other			

(Rupees _____

_only)

Signature of the CA with seal

Model Syllabus for Biogas Trainings under MNRE Biogas Programme

(I) Users' One Day Training Courses on Biogas

- 1. **Objective**: To raise awareness and publicity about the benefits of biogas, operation and maintenance of plants amongst the potential biogas users
- 2. Venue/ Nos. of Participants: Villages having biogas plants in operation condition or newly commissioned biogas plants will be selected as venue and 50-60 households of the selected village(s) will be contacted and invited for participating in the User's Course.
 - 3. Topics to be covered:
 - i. Benefits, operational and Maintenance activities including use of Biogas Plants
 - ii. Financial and Other Assistance and cost-economics of Biogas Plants of various sizes and Models.
 - iii. How to access biogas web portal and application for Biogas Plants and loan applications.
 - iv. Field visits and practical demonstrations on how to connect biogas pipe line to biogas burner/Biogas engines for operating Biogas Water Pump Sets/ Biogas Electricity Generators.

(II) <u>Staff Training Course (for PIA/ Bank Officers / Field Officers / Field Functionaries</u> etc.)

1. **Purpose To** give exposure to Officials of Rural Development Departments and KVIC and other stakeholders such as Supervisors / Functionaries of Panchayati Raj Institutions / Bank Officials & Staff to various aspects of biogas technology and to familiarize them with the importance of Biogas Technology and biogas as a fuel for many applications and present status of biogas programme, interalia details about how Biogas Plants are constructed and operated.

2. Participants The course is intended for field supervisory functionaries involved in the implementation of biogas extension programme. Persons of following categories may be selected / nominated for such training courses-

- i. Block and District level Supervisory Functionaries involved in the promotion and execution of New National Biogas and Organic Manure Programme (NNBOMP). These functionaries include Block Development Officers, Agriculture Development Officers, Agriculture Extension Officers, Assistant Engineers, Junior Engineers, Assistant Agricultural Engineers, Agricultural Inspectors / Assistant Directors and Development Officers of Khadi and Village Industries Commission and Khadi and Village Industries Board, Field Supervisors and Staff of Agro Industries Corporation Ltd., Dairy Development Board / Corporations, Entrepreneurs of Agroservices Centres, Field Supervisory Staff of recognized Voluntary Organizations / Self Help Groups / Registered Societies. Women-functionaries of all above mentioned organizations should be also nominated.
- ii. Instructors / Teachers from ITIs, selected Farmers Training Centres / Extension Centres / Gram Sevaks Training Centres etc. Such Training Centres should be selected as the venue for organization of subsequent Training Courses for local masons in the construction of biogas plants.

Medi	um of Instruction	Hindi/ English / Regional Language
Durat		Four Days
Numbers of Participants		10
	ous / Curriculum	
Day	SUDIECT	
ıst	Due anomino (NINIRON	iogas Technology & Introduction to National Biogas and Organic Manure
2nd	 i. Design of differ of building ma plants based on ii. Motivation / se Socio-Economi houses iii. Rates of Fina maintenance of iv Institutional Si 	rent approved models of biogas plants, capacity determination, selection terials and accessories. Type of different approved models of Biogas material and accessories, appliances etc. lection of biogas models and selection of biogas potential beneficiaries, c Aspects, Ensvironmental Aspects of having biogas plants installed in incial Assistance / disbursement of subsidy /utilization of funds, c Accounts
3rd	 i. Construction ii. Details of bio iii. Identification iv. Connecting a v. Installation a 	methodologies for biogas models popular in the region. ogas stoves / burners / appliances and spares for O &M of biogas plant n of faults and their rectifications. a cattle dung based biogas plant with sanitary toilet and its operation and Commissioning of prefabricated approved Biogas Plants
4th	i. Field / Site V ii. Operational commission	Visit to: Biogas Plants, Biogas plants under construction, Biogas plants unde ing for biogas generation, Connection of biogas plant to biogas burner fo y the new user, Handling and application of biogas plant effluent and Maintenance of biogas plant and; Valedictory and concluding

(III) <u>10 DAYS CONSTRUCTION-CUM-MAINTENANCE COURSE (CMC) /</u> <u>REFRESHER COURSE</u>

- 1. **Purpose** :To create a cadre of biogas masons and technicians skilled in the construction, installation commissioning and maintenance of approved models of biogas plants i.e. Deenbandhu fixed dome model, KVIC floating metal Gas holder with brick masonry digester models, digester made of ferro-cement, gas holder model of FRP and Pragati models as approved models by MNRE. Also imparting training for new and innovative models of plants as and when approved by MNRE for inclusion in the NNBOMP.
- 2. Selection of Trainees: Construction-cum-maintenance training course are intended for professional masons having experience of working independently on civil construction works and fabricators/technicians having the facilities of workshop, welding lit, etc. The trainees should have knowledge to understand construction and fabrication, methodology of approved design and specifications of Biogas Plants.
- 3. Number of Participants: At least ten trainees can be recruited for each course
- 4. Medium of Instruction: Hindi or Regional Language
- 5. Duration of Training : 10 Days

6. **Syllabus**: The training is of practical in nature. However, a few classroom lectures should be arranged completely tied up with the construction of approved Biogas plants in the field. The suggested curriculum and schedule is given below: -

1. Theory

- i. Importance & benefits of biogas programme.
- ii. Appropriate site selection for installation of BGP and Pre-requisite for setting up of a biogas plant such as availability of cattle dung and verify for water need and end usage of biogas.
- iii. Description of different approved models of biogas plants,
- iv. Selection of beneficiaries and selection of site.
- v. Material requirements for biogas plants of different capacities/models.
- vi. Quality of construction materials.
- vii. Construction methodologies for various approved models and designs of plants.
- viii. Plumbing aids and fitting of pipeline, water removal device, gas appliances.
- ix. Installation of system for testing for gas and water leakages.
- x. Commissioning and operational procedure
- xi. The importance of required quantity and quality of materials for construction, commissioning of Biogas Plants.

2. **Practical:** A minimum of two biogas plant needs to be constructed and installed during the training course by the trainees under the full supervision and guidance of experts from the BDTCs. Emphasis should be mainly on proper practical training and not on construction of a large number of biogas plants to achieve targets. The practical training may be also arranged wherever possible for standard MNRE approved prefabricated design biogas plants.

Approximate value of days	Field work
1	selection of site, marking of layout, Digging of pit
1	Laying of foundation
4	Digester construction; Construction of outlet chamber in Deenbandhu Model Fixation of guide frame in case of floating drum KVIC or Pragati mode
2	Plastering
5	Curing of civil work
	Laying of gas distribution pipeline, fixing accessories etc.
2	Slurry making filling of digester
1	Testing for gas leakages

Work may be organized as follows:

4. Financial Provisions: Estimated cost per course is as under:-

CI M	b. Item of Expenditure	Estimated cost
51. NC 1.	Stipend up to a maximum of Rs. 450/- trainees/day or 10 trainees for a maximum period of 10 days (pro-rata basis) to meet boarding and lodging expenditure	45,000
2.	To and fro transport charges to 10 trainees as per actual but no exceeding of Rs. 300/- per trainee on pro-rata basis.	3000
3.	Contingency for transportation/POL, Stationery, books, honorarium to guest speakers etc.	2000
	Total	50,000/-

PLANNING The State/Agency should fix location, tentative date for organizing course in the beginning of the year as per the target allocated to them.

- 1. The faculty for training should include a master mason trained in one of the Regional Biogas Development & Training Centre and who have constructed plants no less than ten.
- 2. The Nodal Officer at Block level should ensure the quality of training for the purpose of monitoring the district nodal officer should ensure participation in the course. The State level officials should also visit at least 10% of the course organized.
- 3. Preference should be given for organizing course in such areas where less number of persons have been trained so far and also construction of biogas plants has yet to pick up.
- 4. At the closing of the course a test has to be conducted for ensuring the skill of trainees Certificates may be issued to qualified trainees and a notification should be issued containing there in their names & address.
- 5. A user training course should be also organized, the day following the closing of course

TURN-KEY WORKERS TRAINING (TKWT) (IV)

Objective: To create a cadre of Biogas Turn-Key Workers / Biogas entrepreneurs in rural areas for setting up of biogas plants on Turn-Key basis and providing post-installation servicing of plants as a self-employed vocation.

Participants: The programme is meant for unemployed rural youths having inclination to take up biogas as a self-vocation. He/she may be functionary in voluntary organization. A minimum educational qualification may be kept as 12th Standard pass or 10th pass with ITI certificate. If they have already some relevant experience certificate in biogas work, they should also be given chance.

Numbers of participants	10 (Ten)
Medium of instruction	Hindi/ English/ Regional language [depending upon the facility available at the Biogas Development and Training
Centre	BDTC
Duration of training	15 Days
Venue	Biogas Development & Training Centre

Syllabus: The programme should cover the following: -

Technical Aspects: Importance and benefits of biogas programme, Economic viability of biogas I. plants, an over-view of Indian Biogas Programme, present level of achievement and estimated potential for future exploitation; and Technological advances in biogas technology and barriers removal.

Management aspects: B

- i. Marketing Management: Technique of motivation, project formulation, filling up and process of applications for arrangements of subsidy.
- ii. Personal Management: Training of masons, placement of masons in different village to be covered, identification of plumber and his training liaison with beneficiary, masons and plumbers, supervision of the persons engaged in plants construction
- iii. Material Management: Types of the material required for biogas plant construction, testing of quality of material, procurement of the materials.
- iv. Financial Management: Estimation of Unit cost of biogas plants arrangement of bank loans and

subsidy special motivation support from social organizations, principle of accounting.

- v. **Office Management:** Record keeping of individual beneficiaries and other records on financial and physical programmes, methods of maintaining the accounts, payment made to the beneficiary and masons etc.
- vi. Break-down Management: Feed-back, monitoring and evaluation of plants repair and maintenance of sick plant.

C. Project Reports: A project for turn-key operation for their respective areas may be prepared by the trainees during the duration of the training.

D. Field Visit: Field visits should be organized to banks, to villages having large number of Biogas plants and interactions with the Biogas plant beneficiaries.

E. Financial Provision Turn-key Workers Training Course: Estimated cost per course is as under:

SN	Item of Expenditure	cost (in Rs.)
1.	Stipend up to a maximum of Rs.300/- trainees/day or 10 trainees	45,000/-
2.	To and fro fare charges/ cost up to a maximum of Rs.700/- per trainee, subject to actual.	7,000/-
3.	Contingency, POL for field visit, honorarium to guest speakers @ Rs.300/- per lecture, project reports, books, stationery, blue prints, technical literature, manuals, etc.	23,000/-
Total		75,000/-

F. Suggested Planning: (i) The programme high lights should be widely circulated; (ii) Nomination may be asked from State Nodal Departments/Agencies, Voluntary Organizations in advance; and (iii) The faculty for training should include technical and management experts.

(V) BIOGAS SKILL DEVELOPMENT TRAINING PROGRAMME(BSDTP)

Objective: The core objective of the Biogas Skill Development Training Programme Training is to empower the individuals, by enabling them to realize their full potential through a process of Skill Development and Entrepreneurship for the purpose of developing competencies/skills in the domain of Biogas Technology sector of Renewable Energy.

1. Make quality vocational training for Biogas sector aspiration for productivity linked to skilled workforce to supplement Skill India Mission. Focus on an outcome-based approach towards quality skilling that on one hand it results in increased biogas production and development and dissemination of Biogas as Renewable Energy source for individuals/societies/communities and on the other increase the capacity and quality of biogas based training infrastructures and trainers to ensure easy access to the potential targeted potential beneficiaries and stakeholders.

2. Promote national standards in the biogas skilling space through active involvement of the Biogas Development and Training Centres/ Institutions and industry in setting occupational standards, helping develop curriculum, providing apprenticeship opportunities, participating in assessments, and create opportunities for gainful employment/ Self Employment to skilled workforce.

Biogas Skill and entrepreneurship development course will cover:

a) Educate and equip potential and skilful entrepreneurs for BIOGAS across India. The existing 8 Biogas Development and Training Centres would get their affiliations and empanelment as Skill development Centres for Biogas with the Skill Council for Green Jobs under the Ministry of Skill Development & Entrepreneurs, GoI, for the development of standards qualification pack for Biogas Plants and Biogas Plant produced slurry for Level 4/5. This curriculum will be delivered at no cost or as per the guidelines of SCGI.

b) Promoting Biogas Entrepreneurship amongst Women and Farmers Producers Group: Focus will also be placed on encouraging women entrepreneurs and Farmers Groups through appropriate incentives for women owned Biogas businesses. Priority will be given for mentorship, support system for women entrepreneurs and farmers/farmers recognized groups in existing Biogas Development and Training Centres. This would hold in developing Entrepreneurship specially supporting Biogas Sector.

Numbers of participants	Twenty five per course
Medium of instruction	Hindi/ English/ Regional language
Duration of training	10 Days
	Biogas Development & Training Centre of MNRE as
Venue	empanelled for by SCGJ

Financial Provision for Biogas Skill Development Training Programme: Estimated cost per course is as under: -

		Estimated cost
Sl. No.	Item of Expenditure	(in Rs.)
1.	Stipend up to a maximum of Rs.250/- Per trainee/day for 25 trainees	62,500/-
	Contingency, POL for field visit, honorarium to guest speakers project	
2.	reports, books, stationery, blue prints, technical literature, manuals, etc.	12,500/-
Total		75,000/-

The course curriculum and inter-component expenditure may be adjusted finally in line with the Surya Mitra Scheme of MNRE including total numbers of training hours to <u>200 hours and limiting the expenditure per course to a maximum of Rs.75,000/- per course.</u>
