Gold Standard
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TEMPLATE

MONITORING REPORT

PUBLICATION DATE **14.10.2020**

VERSION **v. 1.1**

RELATED SUPPORT **- TEMPLATE GUIDE Monitoring Report v. 1.1**

This document contains the following Sections

KEY PROJECT INFORMATION

Key project information

GS ID (s) of Project (s)	**GS11656**
Title of the project (s) covered by monitoring report	Implementation of clean energy technology in rural areas of India-2
Version number of the PDD/VPA-DD (s) applicable to this monitoring report	06
Version number of the monitoring report	03
Completion date of the monitoring report	18/12/2024
Date of project design certification	25/11/2022
Date of Last Annual Report	N/A
Monitoring period number	03
Duration of this monitoring period	01/10/2023-30/09/2024 (BOTH DAYS INCLUDED)
Project Representative	Shivani Garg Greneity Infocom Services Pvt Ltd
Host Country	India
Activity Requirements applied	☒ Community Services Activities ☐ Renewable Energy Activities ☐ Land Use and Forestry Activities/Risks & Capacities ☐ N/A
Methodology (ies) applied and version number	AMS-I.E. Switch from Non-Renewable Biomass for Thermal Applications by the User-version 12
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A

Table 1 - Sustainable Development Contributions Achieved

Sustainable Development Goals Targeted	SDG Impact	Amount Achieved	Units/ Products
13 Climate Action (mandatory)	Emission reductions	53,820	tCO_2e
7 Affordable and Clean Energy	Access to affordable and clean energy services	11,085 biogas plant users have to access clean energy	Number of affected users
8 Decent Work and Economic Growth	Unemployment rate, by sex, age and persons with disabilities	10 permanent employment.	Number of employments created.
8 Decent Work and Economic Growth	Unemployment rate, by sex, age and persons with disabilities	First Training: 8 Nov 2023 Second Training : 3 May 2024	Number of trainings provided.
3 Good health and well being	Improvement in health and decrease in illness	11,085 biogas plant users have improved health conditions.	Number of affected users.

Table 2 – Product Vintages

Start Dates	End Dates	GS VERs
01/10/2023	31/12/2023	13,528 tCO_2e
01/01/2024	30/09/2024	40,292 tCO_2e
	Total	53,820 tCO_2e

SECTION A. DESCRIPTION OF PROJECT

A.1. General description of project

>> A.1. General description of project

>> The project activity aims to replace the commonly used inefficient wood fired mud stove technology, with efficient Biogas based cook stove, which is clean and sustainable. The project activity involves bundling household biogas plants located in the state of Punjab, India. The

project activity includes 11,085 digesters of capacities 4m^3 which were implemented between June 2021 and January2022.

Each household will utilize the dung of its cows to feed the digester for the production of biogas for domestic purposes. The generated biogas from the plants to be used for the purpose of cooking and other thermal energy needs in households. The thermal energy generated from the project activity replaces the equal amount of thermal energy which otherwise would have been supplied from the woody biomass (fire-wood) based stove technology. Therefore, the project activity replaces firewood for equal thermal energy needs and thereby reduces harmful greenhouse gases in the atmosphere. In addition, the hygienic conditions in the rural areas is improved by an appropriate disposal of waste. Further, residue from the bio digesters is used as organic fertilizer and will improve soil conditions in rural areas.

All the 11,085 plants are fully commissioned and operational and there will be no further addition of the plants.

Project activity has resulted in 53,820 tCO2 emission reductions during this monitoring period.

A.2. Location of project

>> Host Country

>> India

Region/State/Province etc.

>> State- Punjab

City/Town/Community etc

The project activity is located in various districts of Punjab.

A.3. Reference of applied methodology

>>>> AMS-I. E. "Switch from Non-Renewable Biomass for Thermal Applications by the User" Version 12.0 is applicable to the proposed project because the project meets all applicability criteria.

Tool 30- Calculation of the fraction of non-renewable biomass -Version 03.

Reference: https://cdm.unfccc.int/methodologies/DB/BLVN9ULDP1FRUVS2LYWW6WPYN9W78E

A.4. Crediting period of project

>> Crediting period of the project activity is from 01/06/2021 to 31/5/2026.

SECTION B. IMPLEMENTATION OF PROJECT

B.1. Description of implemented project

>> The project activity involves bundling of 11,085 household biogas plants located in the state of Punjab, India with varying capacities –4m^3. The project development is performed & maintained by Green Mission Welfare Society. Project activity involves installation of new biogas plant in the households of Punjab and produced biogas i.e biogas stoves for thermal energy needs. Hence, the project activity is a Greenfield project activity.

Residues from the bio digesters are used as organic fertilizer in the garden area and fields of the local people.

Activity/Milestone	Date
Start date of the project	01/06/2021
Final commissioning date	05/01/2022
Start date of GS crediting period	01/06/2021

Implementation schedule:

Year	No. of biogas units installed
2021	11,066
2022	19
Total	11,085

For the monitoring period from 01/10/2023 to 30/09/2024 emission reductions achieved is 53,820 tCO2e/year.

B.1.1 Forward Action Requests

N/A

B.2. Post-Design Certification changes

>>

B.2.1. Temporary deviations from the approved Monitoring & Reporting Plan, methodology or standardized baseline

>> There have been no changes in the project design that was envisaged at Design Certified PDD.

B.2.2. Corrections> There have been no changes in the project design that was envisaged at Design Certified PDD.

B.2.3. Changes to start date of crediting period

>> There have been no changes in the project design that was envisaged at Design Certified PDD.

B.2.4. Permanent changes from the Design Certified monitoring plan, applied methodology or applied standardized baseline

>> There have been no changes in the project design that was envisaged at Design Certified PDD.B.2.5. Changes to project design of approved project

>> There have been no changes in the project design that was envisaged at Design Certified PDD.

SECTION C. DESCRIPTION OF MONITORING SYSTEM APPLIED BY THE PROJECT

Greneity Infocom Service Pvt Ltd (hereafter Greneity) facilitates the End User families to set up village level institutions to take care of repairs, maintenance and the social controls/peer support needed to cope with various exigencies that crops up.

Biogas Project Management Unit

A dedicated team is set up within Greneity for management and monitoring of the Biogas Project. This Project Management & Monitoring Unit consist of the following staff:

Biogas Field Workers/RETs:

Biogas field workers oversee the operation & maintenance of biogas units.
Each field worker is in-charge of approximately 500 unit. They report to the Project Manager and their tasks are to:

- Inspect the bio-digesters in periodic intervals to ensure proper functioning of all the plants
- Identify local suppliers of material for village clusters
- Record the working of bio-digesters in specially designed formats and handover the data to manager on a regular basis
- Assist in selection of Volunteers, train and support them
- Contract Masons and attend to major repairs that cannot be handled by the village level institutions

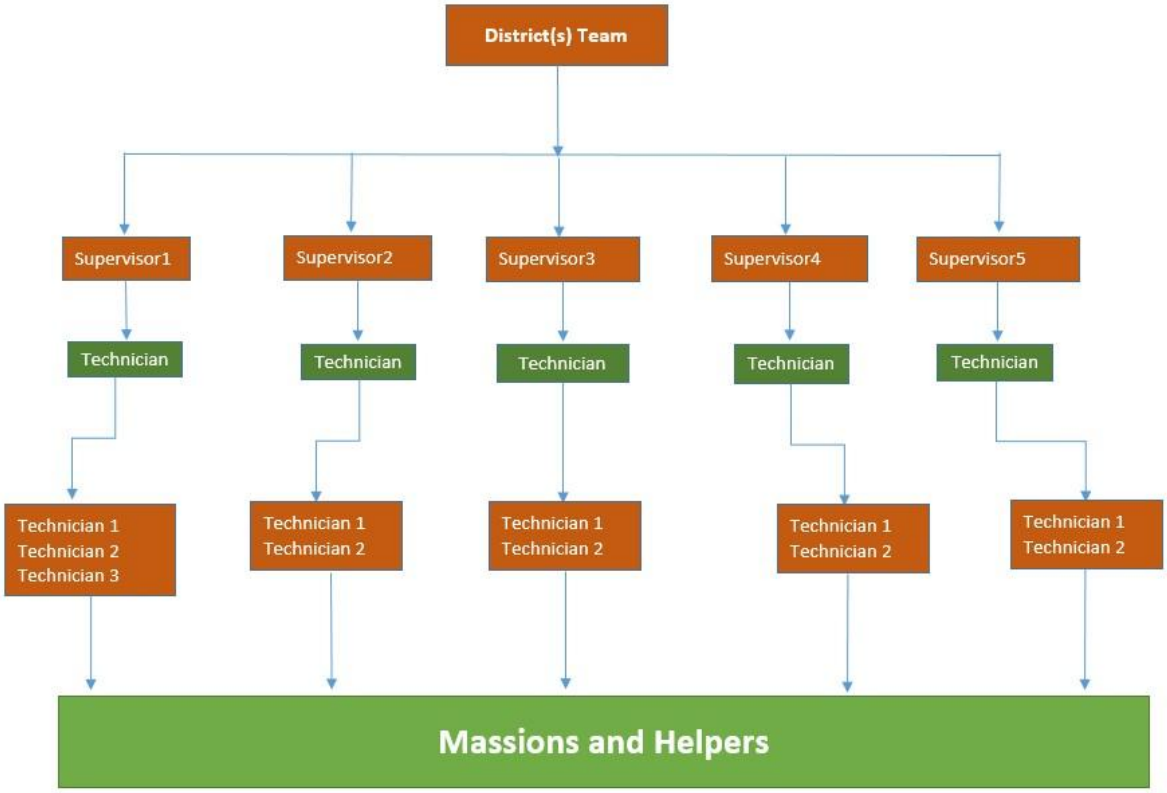
Management system at village level:

Village level Volunteers maintain the Monitoring log Books where the reasons for nonusage are recorded. Every participating village have a Volunteer to monitor usage of biogas units. Volunteer(s)/mason(s) will be responsible for monitoring of usage and is the first to identify dysfunctional units. The Volunteer either prompts the End User to set right a problem or bring it to the notice of the Biogas Technician.

Each Biogas Unit is marked with a unique Identification Number and date of construction.

A Monitoring log Book is maintained for the project activity. If any Biogas Unit is faulty or not functional, the problem report is automatically passed on to Volunteer(s)/mason(s). There is a continuous database maintained of all the Biogas Units not operational on a regular basis where number of non-operational days, and the reasons of non-operation are recorded. Mostly, volunteers are able to handle the problem arises, in case of major issues, Biogas technicians are informed to handle the situation

Information flow diagram is as follows;



During current Monitoring period, regular interval spot checks were conducted to ensure functionality of the biogas systems and avoid the usage of firewood in the project activity. Regular checks include pipeline checks, burner check, valves, tank check etc.

Spare parts were repaired/replaced as required (records are maintained in biogas service record book).

During maintenance checks, end users are advised not to use the biogas plant which generally last for 1-2 hours depending upon the condition of the plant.

During current monitoring period, apart from maintenance check, plants were not shutdown/non-functional. Minor repair issues were addressed either same day/next day (records in log books and biogas service record books)

Monitoring survey conducted, records the usage of firewood in the monitoring period along with the reasons for usage. From the survey results it has been calculated that, Average No. of days of firewood consumption in the monitoring period is 5 days by 7% of the population and same is considered in the ER calculation.

SECTION D. DATA AND PARAMETERS

D.1. Data and parameters fixed ex ante or at renewal of crediting period

Data/parameter	N_{HH}
Unit	Number
Description	Number of households in the project activity in year
Source of data	Project Proponent's project database
Value(s) applied	11,085
Choice of data or Measurement methods and procedures	Project database
Purpose of data	Estimation of Baseline
Additional comment	NIL

Data/parameter	$BC_{BL,HH,y}$
Unit	tonnes/household/year
Description	Average annual consumption of woody biomass per household before the start of the project activity
Source of data	Baseline survey
Value(s) applied	5.38

Choice of data or Measurement methods and procedures	To know the baseline fuel/technologies which is the firewood and its consumption pattern, a survey was conducted in the state of Punjab. The survey is conducted in line with the methodology and following UNFCCC sampling standard 'Sampling and surveys for CDM project activities and programmes of activities' version 09 and guideline 'Sampling and surveys for CDM project activities and programmes of activities' version 04. A 95% confidence interval and 10% error margin applied for sample calculation.
Purpose of data	Estimation of Baseline
Additional comment	NIL

Data/parameter	$f_{NRB,y}$
Unit	Percentage
Description	Fraction of woody biomass saved by the project activity during year y that can be established as non-renewable biomass
Source of data	Calculated as per the requirements of methodological tool - Calculation of the fraction of non-renewable biomass, version 03.
Value(s) applied	95.61%
Choice of data or Measurement methods and procedures	Calculation of the fraction of non-renewable biomass, version 03 (Methodological tool)
Purpose of data	Estimation of Baseline
Additional comment	NIL

Data/parameter	$NCV_{biomass}$

Unit	TJ/tonne
Description	Net calorific value of the non-renewable woody biomass that is substituted
Source of data	Default value from the methodology, AMS-I.E - Switch from non-renewable biomass for thermal applications by the user, Version 12.0.
Value(s) applied	0.0156 TJ/tonne
Choice of data or Measurement methods and procedures	Default value from the methodology, AMS-I.E - Switch from non-renewable biomass for thermal applications by the user, Version 12.0.
Purpose of data	Estimation of Baseline
Additional comment	NIL

Data/parameter	$EF_{projected\_fossilfuel}$
Unit	tCO_2/TJ
Description	Emission factor for the substitution of non-renewable woody biomass
Source of data	Default value from the methodology, AMS-I.E - Switch from non-renewable biomass for thermal applications by the user, Version 12.0.
Value(s) applied	64.4 tCO_2/TJ
Choice of data or Measurement methods and procedures	Default value from the methodology, AMS-I.E - Switch from non-renewable biomass for thermal applications by the user, Version 12.0.
Purpose of data	Estimation of Baseline
Additional comment	NIL

D.2 Data and parameters monitored
>>>> **SDG 13**

Data / Parameter	$BC_{PJ,HH,y}$
Unit	tonnes/household/year
Description	Average annual consumption of woody biomass per household in the pre-project devices during the project activity, if it is found that pre-project devices were not completely displaced but continue to be used to some extent.
Source of data	Survey
Value(s) applied Measurement methods and procedures	0.074t/household/year During survey it was found 7 % of sampled population 300) used firewood for 5 days. Third party survey was conducted from 11/04/2024-31/05/2024 By KSPL to assess the above parameter. Survey was conducted in accordance to the "Standard: Sampling and surveys for CDM project activities and programme of activities" wherein sample Population was randomly selected through random sample generator.
Monitoring frequency	At least once in every two years.
QA/QC procedures	Third party survey was conducted following standard sampling approach.
Purpose of data	Estimation of Baseline Emissions.
Additional comment	To assess the above Parameter the survey was conducted by third party from 11/04/2024 to 31/05/2024. The survey is conducted in line with the methodology and Sampling and surveys for CDM project activities and programme of activities" version 09. Wherein as per the guidelines provided by UNFCCC, for the representative sampling methods, sample size shall be chosen for a 95/10 precision (95% confidence interval and 10% margin of error) applied for sample calculation.

Data / Parameter	N_{HH}
Unit	Number
Description	Number of households (biogas system) in the project activity in operational per year
Source of data	Survey
Value(s) applied	11,085
Measurement methods and procedures	Monitoring consist of checking of representative sample, to ensure that bio-digesters operating. Calculated as NHH*Py, where NHH is the number of bio digesters installed in the project and Py is Proportion of Biodigesters operational estimated based on the sample survey. $N_{HH=}$11,085 $P_{y=}$100 As part of third party survey 300 biogas plants were surveyed and all were found in operational state.
Monitoring frequency	At least once in every two years.
QA/QC procedures	Third party survey to be conducted following standard sampling approach
Purpose of data	Estimation of Baseline Emissions.
Additional comment	The survey was conducted from 18/4/2024-31/05/2024 by KSPL to check the operational rate of biogas plant.

SDG 8:

Data / Parameter	Unemployment rate, by sex, age and persons with disabilities
Unit	Numbers
Description	Provided training for improving employability. Thereby improving Quality of Employment.

Source of data	Records of the training programmes
Value(s) applied	2
Measurement methods and procedures	Two trainings per year was conducted
Monitoring frequency	Annual
QA/QC procedures	Continuation of regular trainings/workshops.
Purpose of data	Assessment of contribution towards 'Safeguarding Principles' and to monitor the contribution to SDG 8
Additional comment	Two trainings were conducted Wherein total 20 people attended including RETs, masons, contractors, volunteers, etc. The overall objective of the meeting was to network local staff with volunteers to share lessons and discuss possibilities for the improvements on the training activities related to domestic biogas program. The major topics which were covered but not limited to were related to Planning, Operation and Maintenance of the plants. Do's and Don't's during plant handling. Identifying of problems and suggestive remedies. Recording of the trainings have been recorded.

Data / Parameter	Quantitative employment and income generation (8.5)
Unit	Numbers
Description	Number of people employed for the maintenance and servicing of bio digesters.
Source of data	Employment records
Value(s) applied	10(permanent)
Measurement methods and procedures	Manually by Project Developer
Monitoring frequency	Annual
QA/QC procedures	Income generation to be enhanced by creating job opportunities through training and capacity building.

Purpose of data	To monitor the contribution to SDG 8
Additional comment	

SDG 7

Data / Parameter	Access to affordable and clean energy services (7.1.2)
Unit	Numbers
Description	Number of biogas system operational under the project activity
Source of data	Biogas User Survey
Value(s) applied	11,085
Measurement methods and procedures	Survey was conducted from 11/04/2024 to 31/05/2024 by KSPL in the 300 sampled population and were found operational at the time of survey. Therefore, it is evident from the survey that 100% operational rate of all the biogas plants and in turn all the users have access to affordable and clean energy.
Monitoring frequency	At least once in two years
QA/QC procedures	Required sample size shall be determined following UNFCCC sampling standard
Purpose of data	To monitor the contribution to SDG 7
Additional comment	To assess the above parameter the survey was conducted by third party and it was found the all (11085)bio gas plants were in working state.

SDG 3

Data / Parameter	(SDG 3) Improvement in health and decrease in illness (3.9.1)
Unit	Numbers
Description	Decrease in illness
Source of data	Biogas User Survey
Value(s) applied	11,085 plant users.

Measurement methods and procedures	Improvement in health and decrease in illness will be assessed through interview with end users due to project implementation. Users opinion on indoor air quality due to biogas usage was collected during monitoring survey. survey was conducted where 100% of the users confirmed improvement in their health after the installation of the project activity.
Monitoring frequency	At least once in two years
QA/QC procedures	Required sample size shall be determined following UNFCCC sampling standard
Purpose of data	To monitor the contribution to SDG 3
Additional comment	Third party survey was conducted from 11/04/2024-31/05/2024 by KSPL where in biogas users were interviewed about their health and decrease in illness due to project implementation. Users' opinion on indoor air quality due to biogas usage was collected during monitoring survey. 100% of the users faced positive impact on their health

D.3. Comparison of monitored parameters with last monitoring period

Data/Parameter	Value obtained in this monitoring period	Value obtained last monitoring period
13 Climate Action (mandatory)	53,820	54,573
7 Affordable and Clean Energy	11,085 biogas plant users have access clean energy	11,085 plants users have acess to clean energy
8 Decent Work and Economic Growth	10 permanent employment	10 employments
8 Decent Work and Economic Growth	2 training per year	2 trainings
3 Good health and well being	11,085 biogas plant users have improved health conditions.	11,085 biogas plant users have improved health conditions.

D.4. Implementation of sampling plan >>

A third-party sample survey was performed during 11/04/2024-31/05/2024. The survey was conducted in line with the methodology and following UNFCCC sampling standard 'Sampling and surveys for CDM project activities and programs of activities' version 09 and guideline 'Sampling and surveys for CDM project activities and programmes of activities' version04.

To establish a statistically representative sample size, from the total rural targeted households in Punjab, Guidelines for sampling and surveys for CDM project activities and programmes of activities (Ver04.0, CDM-EB67-A06-GUID) issued by UNFCCC, is used. As per the guidelines provided by UNFCCC, for the representative sampling methods, sample size shall be chosen for a 95/10 precision (95% confidence interval and 10% margin of error) for parameter values used to determine emission reductions.

The sample population has homogeneous characteristics which are as follows:

- Basic functioning of the bio digesters is same irrespective of their sizes.
- All of the bio digesters are used by villagers
- Main usage of the bio digesters is to suffice domestic needs

Therefore, simple random sampling has been adopted.

The following equation is used for arriving the sample size.

$$n \geq \frac{1.96^2 N \times p(1-p)}{(N-1)\times 0.1^2 \times p^2 + 1.96^2 p(1-p)}$$

Where:

n= Sample size

N = Total number of biogas system of type i installed under the project p

= expected proportion

1.96 = represents the 95% confidence required

0.1 = represents the 10% relative precision

The total sample size arrived is 251 households. However, 300 samples were surveyed to be conservative.

Simple random sampling was adopted while performing the survey. Sampling was conducted according to "Standard: Sampling and surveys for CDM project activities and programme of activities" version 09. Wherein as per the guidelines provided by UNFCCC, for the representative sampling methods, sample size shall be chosen for a 95/10 precision (95% confidence interval and 10% margin of error) for parameter values used to determine emission reductions. 60% proportion has been considered and therefore 251 samples were obtained. However, to be on conservative side300 samples were considered to get a higher precision. As per calculation below shows 300 sample size gives a higher relative precision.

Sample Size Determination for a Proportion Parameter	confidence/precision criterion
Survey design: Simple random sampling	95/10
Calculation method: Precision via confidence interval	

Instruction for using this calculator	
Input information in cells coloured in orange	
Outputs are displayed in cells coloured in green	

Input	Value	Notes
Expected proportion, p	0.6	enter on a decimal scale
Confidence level	95%	e.g. for 90% enter 90
z multiplier	1.960	determined by confidence level
Relative precision	10%	e.g. for 10% enter 10
Population size, N	11,085	
Predicted sample size, n	251	rounded up to nearest integer

Input	Value	Notes
Actual sample size	300	
Sample proportion	0.6000	
Standard error of the proportion	0.0279	
Precision associated with a proportion	0.0547	
Relative precision	9.1%	

SECTION E. CALCULATION OF SDG IMPACTS

E.1. Calculation of baseline value or estimation of baseline situation of each SDG Impact

>>

SDG13:

As per "AMS I.E- Switch from non-renewable biomass for thermal applications by the user, Version 12, the baseline emissions (BEy) are calculated as:

$$BEy = By \times f_{NRB,y} \times NCVbiomass \times EF_{projected\_fossil\_fuel}$$

Where,

BE_y = Baseline emissions during the year y in t CO_2e

B_y = Quantity of woody biomass that is substituted or displaced in tonnes

$f_{NRB,}$ = Fraction of woody biomass used in the absence of the project activity in year y that can be established as non-renewable biomass (fNRB)

$NCV_{biomass}$ = Net calorific value of the non-renewable woody biomass that is substituted (IPCC default for wood fuel, 0.0156 TJ/tonne)

$EF_{projected\_fossil\ fuel}$ = Emission factor for the substitution of non-renewable woody biomass by similar consumers. Use a value of 64.4 tCO2/TJ

fNRB is fixed for the entire crediting period.

NCV_{biomas} and EF is default value as per applied methodology.

$$By = N_{HH} \times (BC_{BL,HH,y} - BC_{PJ,HH,y})$$

N_{HH} = Number of households in the project activity, number

BCBL,HH,y = Average annual consumption of woody biomass per household before the start of the project activity, tonnes/household/year

$BCPJ,HH,y$ = If it is found that pre-project devices were not completely displaced but continue to be used to some extent, average annual consumption of woody biomass per household in the pre-project devices during the project activity, tonnes/household/year

BCBL,HH,y for the project have been considered based on survey.

Accordingly, BEy would be:

$$BEy = By \times fNRB,y \times NCVbiomass \times EFprojected\_fossil\_fuel$$

$$B_y = N_{HH} \times (BC_{BL,HH,y} - BC_{PJ,HH,y})$$

	Total Population (N_{HH})	BC $_{BL,HH,y}$ (ton/yr)	f_{NRB}	$NCV_{biomass}$	EF
punjab	11,085	5.38	95.61%	0.0156	64.4

$BC_{,PJ,HH,Y}$ = if it is found that pre-project devices were not completely displaced but continue to be used to some extent, average annual consumption of woody biomass per household in the pre-project devices during the project activity, tonnes/household/year) .

Value obtained as per the survey results:

States	Average No. of days of firewood consumption in the monitoring period	% of household used firewood	Total households used firewood in the project activity	$BC_{BL,HH,y}$ (fixed ex-ante) (tonnes/household/year)	$BC_{,PJ,HH,Y}$ (tonnes/household/year)
Punjab	5	7%	300	5.38	0.074

Leakage factor of 0.95 is applied the Emission reductions. Therefore, the final emission reduction after applying the leakage factor is 53,820.

Project Emissions (PEy): Not applicable for the project activity

SDG 8: The employment records and training records will be monitored and maintained to estimate impact of SDG 8.

SDG 7: For 'access to affordable and clean energy services' the baseline scenario can be described as poor due to that fact that firewood-based cooking practice leads to generation of smoke as well as harmful CO_2 in the atmosphere.

SDG 3: For 'Improvement in health and decrease in illness' the baseline situation is poor due to firing of firewood which generates smoke and leads

E.2. Calculation of project value or estimation of project situation of each SDG Impact >>

Sustainable Development Goals Targeted	SDG Impact (defined in B.6.)	Estimated Annual Average	Units or Products
13 Climate Action (mandatory)	Emission reductions	53,820	tCO_2e
7 Affordable and Clean Energy	Access to affordable and clean energy services	11,085 biogas plant users have access to clean energy	Number of affected users
8 Decent Work and Economic Growth	Unemployment rate, by sex, age and persons with disabilities	10 permanent employments	Number of employments created.
8 Decent Work and Economic Growth	Unemployment rate, by sex, age and persons with disabilities	2 trainings per year.	Number of trainings provided.
3 Good health and well being	Improvement in health and decrease in illness	11,085 biogas plant users now have improved health conditions.	Number of affected users.

E.3. Calculation of leakage

>>

SDG 13: In line with the applied methodology and PDD, By is multiplied with 0.95 to account leakage.Therefore, the net benefit is = 53,820 tCO2e

SDG 3: There is no leakage emissions for SDG 3

SDG 7: There is no leakage emissions for SDG 7

SDG 8: There is no leakage emissions for SDG 8

E.4. Calculation of net benefits or direct calculation for each SDG Impact

Sustainable Development Goals Targeted	SDG Impact	Baseline Estimate	Project Estimate	Net Benefit
13 Climate Action (mandatory)	Emission reductions	56653 tCO_2e	2,833 (leakage)	52,820 tCO_2e
7 Affordable and Clean Energy	Access to affordable and clean energy services	Firewood based conventional	11,085	11,085
8 Decent Work and Economic Growth	Unemployment rate, by sex, age and persons with disabilities	0	10	10 employments
8 Decent Work and Economic Growth	Unemployment rate, by sex, age and persons with disabilities	0	2	2 training
3 Good health and well being	Improvement in health and decrease in illness	Illness due to smoke	11085	11,085

E.5. Comparison of actual SDG Impacts with estimates in approved PDD

SDG	Values estimated in ex ante calculation of approved PDD for this monitoring period	Actual values[1] achieved during this monitoring period
13	54,573 tCO_2e	53,820 tCO_2e
8	Estimated 10 permanent employments	10 permanent employments
	Estimated 2 trainings/year	2 trainings
7	100% users were using firewood which is not a Clean Source of energy	11,085 users are accessed to clean energy source.
3	Improvement in health and decrease in illness	11,085 biogas plant users now have improved health conditions.

[1] Whenever emission reductions are capped, both the original and capped values used for calculations must be transparently reported. Use brackets to denote original values.

E.5.1. Explanation of calculation of value estimated ex ante calculation of approved PDD for this monitoring period

>>

As per ex ante calculation with respect to the PDD, the annual emission reductions from the project activity for this monitoring period (01/10/2023 to 30/09/2024) is 54,573 tCO_2e. However, reductions for the current monitoring period are 53,820 tCO_2e.

E.6. Remarks on increase in achieved SDG Impacts from estimated value in approved PDD >>

There is no increase in the values.

SECTION F. SAFEGUARDS REPORTING

>>>> As per approved PDD of the project, no safeguarding principles are required to be monitored. Moreover, the safeguarding principles are not adversely affected by the project activity. The project has been appropriately aligned with the safeguarding principles.

SECTION G. STAKEHOLDER INPUTS AND LEGAL DISPUTES

>> G.1. List all Inputs and Grievances which have been received via the Continuous Input and Grievance Mechanism together with their respective responses/mitigations.

>> There were minor issues reported by users

The project details and grievance logbook has been maintained in the panchayat office. The issues were directly recorded by the registered user in the grievance register. The same was addressed by the local technician by cleaning of the pipeline, burner cleaning, burner replacement. The logbooks are maintained.

G.2. Report on any stakeholder mitigations that were agreed to be monitored.

>> There was no mitigation that was agreed to be monitored with any stakeholder during the monitoring period.

G.3. Provide details of any legal contest that has arisen with the project during the monitoring period

>>There was no legal contest arises due to the project or against the project during the monitoring period

Revision History

Version	Date	Remarks
1.1		14 October 2020 Hyperlinked section summary to enable quick access to key sections Improved clarity on Key Project Information Section for POA monitoring Forward action request section Improved Clarity on SDG contribution/SDG Impact term used throughout Clarity on safeguard reporting Clarity on design changes Leakage section added for VER/CER projects Addition of Comparison of monitored parameters with last monitoring period Provision of an accompanying Guide to help the user understand detailed rules and requirements
1.0	10 July 2017	Initial adoption