Gold Standard®

Gold Standard for the Global Goals
Key Project Information &Project Design Document (PDD)

Version 1.1 – August2017

KEY PROJECT INFORMATION

Title of Project:	72 MWac Ramnad Solar Power Project
Brief description of Project:	The project activity is a 72 MW solar power project, promoted by Ramnad Solar Power Limited. The purpose of the project activity is to generate clean electricity with utilization of solar energy.
Expected Implemetation Date: Expected duration of Project:	NA 25 years
Project Developer:	Ramnad Solar Power Limited
Project Representative:	Infinite Solutions
Project Participants and any communities involved:	Ramnad Solar Power Limited
Version of PDD: Date of Version:	05~~4~~ ~~10/09~~01/11/2020
Host Country / Location:	India
Certification Pathway (Project Certificatin/Impact Statements & Products	Impact Statements & Products
Activity Requirements applied: (mark GS4GG if none relevant)	GS4GG
Methodologies applied:	ACM0002: Grid-connected electricity generation from renewable sources - Version 20.0
Product Requirements applied:	GS CER
Regular/Retroactive:	Retroactive
SDG Impacts:	1 - SDG 7 Affordable and Clean Energy 2 - SDG 8 Decent Work and Economic Growth 3 - SDG 13 Climate Action
Estimated amount of SDG Impact Certified	1. SDG 7: 117,~~708~~122 MWh 2. SDG 8: Number (employees): 20 Number(Trainings): minimum 1 training 3. SDG 13: 110,317~~868~~ tCO2e per annum

SECTION A. Description of project

A.1. Purpose and general description of project

The main purpose of this project activity is to generate clean form of electricity through renewable solar energy source for sale of electricity to the grid. Ramnad Solar Power Limited (RSPL) is the promoter of the proposed project activity.

The project activity involves installation of 72 MWAC (corresponding to 86.40 MWp) solar power project. The project is installed in the same project boundary at Village: O. Karisalkulam, Tehsil: Kamuthi, District: Ramanthpuram State: Tamil Nadu.

The electricity generated from project activity will be sold under the Power Purchase Agreement (PPA), signed with Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) wholly owned by the Government of Tamil Nadu. The electricity generated from the project activity will be evacuated through 110 kV sub-station located at Kamuthi for consumption in the Indian Electricity Grid.

The project will replace anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 110,317~~868~~ tCO2e per annum, thereon displacing 117,122~~708~~ MWh/year amount of electricity from the generation-mix of power plants connected to the Indian electricity grid, which is mainly dominated by thermal/fossil fuel-based power plant.

The project activity is the installation of a new grid-connected renewable power plant/unit and this is not a CPA that has been excluded from a registered CDM PoA as a result of erroneous inclusion of CPAs. The land for this project activity was private land which has been purchased by the project developer.

The details of the project are mentioned in the table:

Project Investors' Name	Ramnad Solar Power Limited
Capacity in MW	72
Commissioning Date	08/02/2016
PPA	04/07/2015
State	Tamil Nadu
Grid	TANGEDCO
Types of Solar PV Modules	Poly-crystalline

Scenario existing prior to the implementation of the project activity
As the project activity is the installation of a new grid-connected renewable power plant/unit. The scenario existing prior to the implementation of project activity is Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system" (Version 07).

Baseline Scenario
Baseline scenario and Scenario existing prior to the implementation of the project activity are both the same.

Sustainable Development
The National CDM Authority (NCDMA), which is the Designated National Authority (DNA) for the Government of India (GOI) under the Ministry of Environment, Forest and Climate Change (MoEFCC), has mentioned four indicators for the sustainable development in the interim approval guidelines for Clean Development Mechanism (CDM) projects from India .Thus the project's contribution towards sustainable development has been addressed based on the following sustainable development aspects:

- *Social well being*
  The project activity will provide job opportunity to local people during erection, commissioning and maintenance of the Solar power project. Frequency of visiting to villages and nearby areas by skilled, technical and industrialist has increased due to installation /site visit/operation and maintenance work related to Solar panels at plant site. This directly and indirectly positively effects the economy of nearby populace.
- *Environmental well being*
  Solar power is one of the cleanest renewable energy powers and does not involve any fossil fuel. There are no GHG emissions. The impact on land, water, air and soil is negligible. Thus the project activity contributes to environmental well-being without causing any negative impact on the surrounding environment.
- *Economic well being*
  The project activity generates permanent and temporary employment opportunity within the vicinity of the project. The electricity supply in the nearby area improves which directly and indirectly improves the economy and life style of the area.
- *Technological well being*
  The project activity is step forward in harnessing the untapped solar potential and further diffusion of the Solar technology in the region. The project activity leads to the promotion and demonstrates the success of solar projects in the region which further motivate more investors to invest in Solar power projects. Hence, the project activity leads to technological well-being.

A.2. Eligibility of the project under Gold Standard

The project activity meets the eligibility criteria as per section 3.1.1 of GS4GG Principles & Requirementsdocument as described below.

- The project applies methodology ACM0002, which is an approved methodology under Gold Standard.
- The project type is solar which is an eligible project type as it is in accordance with 1.1.1 a) and 1.1.1b) of the Eligible Project Types & Scope under Renewable Energy Activity Requirements.
- The project activity results in displacement of electricity from thermal power stations while contributingto sustainable development of India. Hence, the project contributes to the Gold Standard Visionand Mission.
- Solar projects are an approved project type and do not require further approval from Gold Standard.
- This project activity is not associated with geo-engineering or energy generated from fossil fuel ornuclear, fossil fuel switch, nor does it enhances or prolongs such energy generation.

General Eligibility Criteria under Renewable Energy Activity Requirements

Project Type : As discussed above, the project type is eligible.
Project Location : The project is located in India.
Project scale : The project activity is a 72 MW solar project and thus qualifies under large scale projects.

A.3. Legal ownership of products generated by the project and legal rights to alter use of resources required to service the project

The project participant has received Consent forEstablishment from TANGEDCO and TN Pollution Control Board; also the Power Purchase Agreement demonstrates the PP as the legal owner. Thus the project participant Ramnad Solar Power Limitedis the legal owner of the project and has the legal rights forthe credits that shall be generated by this project activity.

A.4. Location of project

A.4.1. Host Country

India

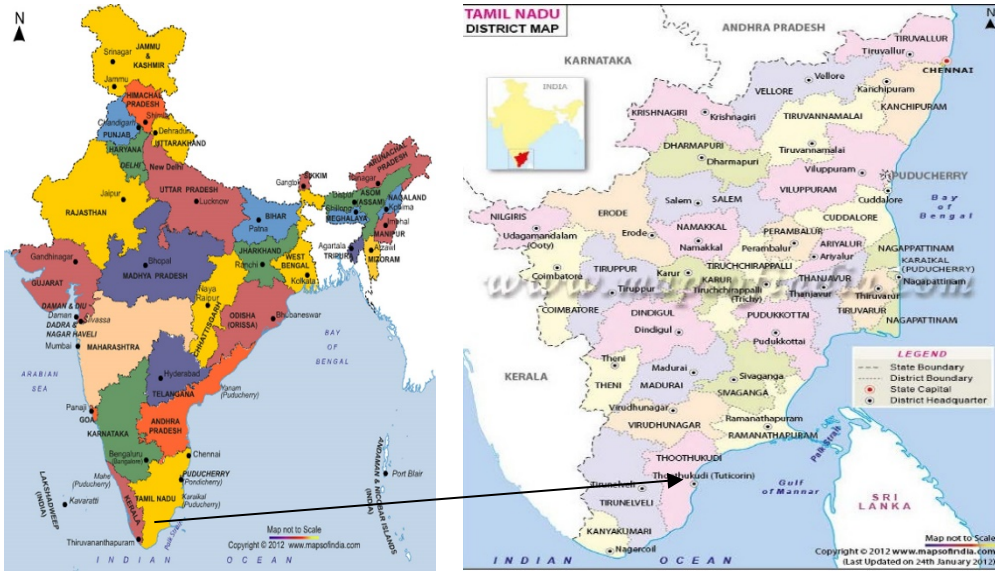
A.4.2. Region/State/Province etc.

Tamil Nadu

A.4.3. City/Town/Community etc.

Village: O. Karisalkulam,
Tehsil: Kamuthi,

A.4.4. Physical/Geographical location



The Project is located at Village: O. Karisalkulam, Tehsil: Kamuthi, District: Ramanthpuram State: Tamil Nadu. The site is well connected by state highway state highway (SH) 47 up to Arruppukottai and further national highway NH48 connects to Madurai.The nearest commercial city remains Madurai, which is approximately 90km from the Project site location.Nearest railway station is at Tiruchuli which is 25km form the site and Madurai is the the closest airport approximately 90km form the site. The project coordinates are 9°19'26.90"N and 78°23'40.62"E

A.5. Technologies and/or measures

The project activity aims to harness solar energy through installation of PV with total installed capacity of 72 MWac (corresponding to 86.4MWp). The solar PV power plant will have solar PV modules, inverters, transformers and other protection system and supporting components.

Technical Specifications at the time of commissioning and during CDM validation and registration of project activity

A. Solar PV modules:

Module Supplier	Module Model	Capacity (p)	Number	Total Capacity (MWp)
Hanwha	Poly C-Si	310	104740	32.4694
Hanwha	Poly C-Si	315	33120	10.4328
Trina	Poly C-Si	310	56800	17.608
Trina	Poly C-Si	315	23180	7.3017
SunTech	Poly C-Si	310	30080	9.3248
SunTech	Poly C-Si	315	28160	8.8704

B. Inverters:

S.No.	Make		
1.	Manufacturer	ABB	Hitachi
2.	Model	PVS800	NPi201
3.	Rated Capacity	1000 KW	1250 KW
4.	No. of Inverters	12	48
5	Rated Input Voltage(Max.Input Voltage)	380 V	350 V

C. Transformers

S.No.	Make			
1.	Manufacturer	ABB	SChneider	SChneider
3.	Capacity	40/45 MVA	4 MVA	5 MVA
4.	No. of Transformers	2	3	12
5.	Voltage Ratio	33/110 KV	0.380/33 KV	0.350/33 KV

D. Metering Equipment Details

S.No.	Make	Solar Plant End
1.	Manufacturer	Secure Make
2.	Type	ABT meters
3.	Accuracy Level	0.2s
4.	Total no of meter	3*2 = 6

The solar PV modules have a useful life of 25 years.

In case of degradation / damage / destroy of any equipment in future:
At a given time in the future, the equipment of the same capacity might not be available with the supplier or in the market. So, the equipment of available capacity will be installed keeping the overall output capacity of the project within the project capacity as in registered PDD.

Thus, the changes in project activity specifications information will not affect the design of project activity, the applicability of methodology, additionality of project activity and scale of project activity. And there would be no need to revise PDD in case of equipment configuration changes as the overall output capacity of the project is within the project capacity as in registered PDD. It is to be noted that in case of future replacement, PP will replace the equipment's by the same make and the changes made in the future will be transparently reflected in the monitoring report.

For monitoring equipment, their location and technical specifications, refer Section B.7.3. For Plant Load Factor (PLF), please refer Section B.6.4.

Baseline Scenario
As the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is the following as per applied methodology: "*Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system*".

Hence, pre-project scenario and baseline scenario are the same.

Purpose of the Project
The purpose of the project activity is to generate electrical power using solar energy through operation of Solar Panels, there by displacing non-renewable fossil resources resulting to sustainable, economic and environmental development. In the absence of the project activity equivalent amount of power generation would have taken place through fossil fuel dominated power generating stations. Thus the renewable energy generation from Ramnad Solar Power LimitedProject will result in reduction of the greenhouse gas emissions.

The total installed capacity of the project activity is 72 MW. The annual GHG emission reduction through this project activityis 110,317~~868~~ tCO2e.

Positive contribution of the project to the following Sustainable Development Goals:
1. **SDG13: Climate Action :** The project would lead to average reduction of approx. 110,317~~868~~ tCO2 per annum due to implementation of project activity.
2. **SDG 7: Affordable and Clean Energy :** The project is expected to generate average of 117,122~~708~~ MWh of clean energy per annum

3. **SDG 8: Decent Work and Economic Growth :** The project provides employment to around 20 persons. The project leads to Trainings & workshops which are conducted for the staff of the project.

A.6. Scale of the project

Arenewable energy project activity with a maximum output capacity of 15 MW (or an appropriate equivalent) is small scale projectactivity and the Project activity with more than 15 MW is considered a large-scale CDM project activity.

As the project activity is 72 MW hence clearly it is Large Scale project.

A.7. Funding sources of project

Private funding and funding from bank. The PP hereby confirms that there is no public funding from Annex 1 countries and no diversion of Official Development Assistance (ODA) involved in the project activity.

A.8. Assessment that project complies with 'gender sensitive' requirements

Question 1: Does the project reflect the key issues and requirements of Gender Sensitive design andimplementation as outlined in the Gender Policy? Explain how.
Response: As per Gold Standard Gender Policy, para 13(i) "*Foundational gender-sensitive requirement – This strengthens Gold Standard's 'do no harm' approach and addresses safeguards to prevent or mitigate adverseimpacts on women or men and girls and boys. Such action is mandatory for all projects seeking Gold Standardcertification and includes compliance with the gender 'do no harm' safeguards, gender gap analysis and gendersensitive stakeholder consultations.*"The project being a renewable energy project is not gender sensitive project. The project does not adverselyimpact women or men.

Question 2: Does the project align with existing country policies, strategies and best practices? Explain how.
Response: India is party to "Convention on the Elimination of All Forms of Discrimination against Women[1]"and the project has aligned its policies which does not discriminate on gender.

Question 3: Does the project address the questions raised in the Gold Standard Safeguarding Principles & Requirements document? Explain how.
Response: The Project shall complete the following gender assessment questions below:

1. *Is there a possibility that the Project might reduce or put at risk women's access to or control of resources, entitlements and benefits?* No, the Project being a solar project does not reduce access to or control of resources for women.
2. *Is there a possibility that the Project can adversely affect men and women in marginalised or vulnerable communities (e.g., potential increased burden on women or social isolation of men)?* No, the Project beneficiaries in terms of employment and social upliftment of the area are common for both the gender. Further the project has carried out various CSR[2] activities in line with their CSR policy leading to welfare of community at large.
3. *Is there a possibility that the Project might not take into account gender roles and the abilities of women or men to participate in the decisions/designs of the project's activities (such as lack of time, child care duties, low literacy or educational levels, or societal discrimination)?* No, the CSR activities carried our by the project proponent are discussed with the community consisting both the genders.
4. *Does the Project take into account gender roles and the abilities of women or men to benefit from the Project's activities (e.g., Does the project criteria ensure that it includes minority groups or landless peoples)?*No, the project does not take into account gender roles and abilities of women/men. Job profile is allocated based on the type of work to be carried out and on the expertise basis.
5. *Does the Project design contribute to an increase in women's workload that adds to their care responsibilities or that prevents them from engaging in other activities?* No, on the contrary the project leads to increased availability of electricity in the regional grid thereby uplifiting the living standards.
6. *Would the Project potentially reproduce or further deepen discrimination against women based on gender, for instance, regarding their full participation in design and implementation or access to opportunities and benefits?* No, since the project is a renewable electiricity generation project, thus it will not have discriminated against women.

1 http://hrlibrary.umn.edu/research/ratification-india.html
2 http://orangerenewable.net/download/OrangeRenewable-CSR-Policy.pdf

7. *Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and priorities of women and men in accessing and managing environmental goods and services?* No, in fact, the project leads to improved electricity in the regional grid thereby leading to less usage of fueil for lighting.
8. *Is there a likelihood that the proposed Project would expose women and girls to further risks or hazards?*No, in fact, due to improved electricity availability the usage of fuel for lighting would be reduced as well as indoor air quality would be improved.

Question 4: Does the project apply the Gold Standard Stakeholder Consultation & Engagement Procedure Requirements? Explain how.

Response~~:Since the project is applying retroactively for GS registration, a Stakeholder Feedback round would be carried out accordingly. Further, a~~A stakeholder consultation was conducted in line with CDM requirements on 10/06/2015 at the project site.

The queries from the stakeholders and replies answered by the project representative and the assessment team is mentioned in section E.2 "Summary of Comments received".

No negative comments were received.

Moreover, the Stakeholder Feedback Round has also been conducted on 25/05/2019 Kamuthi, District: Ramanthpuram, Tamil Nadu.. The stakeholders from all categories suggested by Gold standard were invited to the meeting, the same has been documented as per the guidelines.

According to the requirement of "GS4GG Gold Standard for the Global Goals Stakeholder Consultation & Engagement Procedure, Requirements & Guidelines" Stakeholder Feedback Round has been conducted at the project site which was attended by local stakeholders & the DOE. The expert stakeholders have been intimated for the SFR round and along with the invitations they were provided with a public link where all the project related documents are available. All the documents have been made available to public through website http://infisolutions.org/rspl-adani/ for 2 months i.e. from 09/05/2019 to 08/07/2019 before Validation is finalized to allow time for stakeholders to review and comment. They are free to comment either online or during the actual SFR meeting. There were no negative comments from the stakeholders through any means of communication channels (E mails, Phone calls, Grievance Register available at the project site). The documentation is available permanently to stakeholders at project site & company's website.

SECTION B. Application of selected approved Gold Standard methodology

B.1. Reference of approved methodology

Title : Grid-connected electricity generation from renewable sources.

References : Approved Large Scale Consolidated Methodology: ACM0002 "Grid-connected electricity generation from renewable sources" (Version 20.0, EB 105 Annex 3)[3]

ACM0002 draws upon the following tools which have been used in the PDD:

- Methodological Tool: Tool to calculate the emission factor for an electricity system - Version 07.0
- Methodological Tool: Tool for the demonstration and assessment of additionality - Version 07.0.0, EB 70 Annex 8[4]

B.2. Applicability of methodology

As per para 2 of ACM0002 (Version 20.0, EB 105, Annex 3), "*This methodology applies to project activities that include retrofitting, rehabilitation (or refurbishment), replacement or capacity addition of an existing power plant or construction and operation of a Greenfield power plant*".The project activity meets the applicability conditions of the approved consolidated baseline and monitoring methodology ACM0002, Version 20.0, Sectoral Scope 1, EB 105 for Greenfield projects. The same has been described in the CDM PDD.

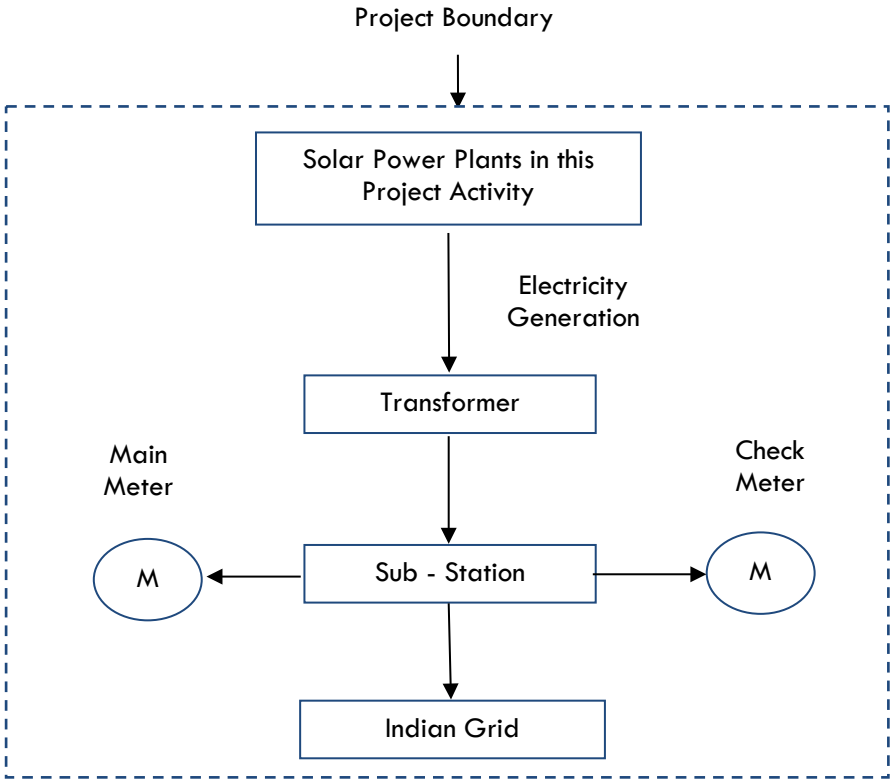
3https://cdm.unfccc.int/methodologies/DB/XP2LKUSA61DKUQC0PIWPGWDN8ED5PG

4https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf

B.3. Project boundary

Project boundary has ascertained using para 20 of ACM0002 (Version 20.0, EB 105, Annex 3) - "*The spatial extent of the project boundary includes the project power plant/unit and all power plants/units connected physically to the electricity system that the CDM project power plant is connected to.*"

Hence the project boundary includes the SolarProject activity, sub-station, grid and all powerplants connected to grid. The proposed project activity will evacuate power to the Indian grid.



	Source	GHGs	Included?	Justification/Explanation
Baseline scenario	Gridconnectedelectricitygeneration	CO_2	Yes	Main emission source
		CH_4	No	Minor emission source
		N_2O	No	Minor emission source
Project scenario	GreenfieldSolarPowerProjectActivity	CO_2	No	No CO2 emissions are emitted from the projectactivity
		CH_4	No	No, Project Activity does not emit CH4
		N_2O	No	No, Project Activity does not emit N2O

B.4. Establishment and description of baseline scenario

As the project activity is the installation of a new grid-connected wind power plant, according to ACM0002 Version 20, the baseline scenario is the following:

If the project activity is the installation of a Greenfield power plant, the baseline scenario is electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in "TOOL07: Tool to calculate the emission factor for an electricity system".

CO2 Baseline Database for the Indian Power Sector, Version 15, Dec 2019 published by Central Electricity Authority (CEA), Government of India has been used for the calculation of emission reduction.

Although CO2 Baseline Database version 13.0 has been used in CDM PDD, but her in GS, version 15.0 is being used for conservativeness.

As per Methodological tool: Tool to calculate the emission factor for an electricity system (Version 07.0, EB 100, Annex 4), following six steps have been followed:

(a) Step 1: Identify the relevant electricity systems;
(b) Step 2: Choose whether to include off-grid power plants in the project electricity system (optional);
(c) Step 3: Select a method to determine the operating margin (OM);
(d) Step 4: Calculate the operating margin emission factor according to the selected method;
(e) Step 5: Calculate the build margin (BM) emission factor;
(f) Step 6: Calculate the combined margin (CM) emission factor.

Step 1: Identify the relevant electricity systems
As described in tool "For determining the electricity emission factors, identify the relevant project electricity system. Similarly, identify any connected electricity systems". It also states that "If the DNA of the host country has published a delineation of the project electricity system and connected electricity systems, these delineations should be used". Keeping this into consideration, the Central Electricity Authority (CEA), Government of India has divided the Indian Power Sector into five regional grids viz. Northern, Eastern, Western, North-eastern and Southern.

However since August 2006, however, all regional grids except the Southern Grid had been integrated and were operating in synchronous mode, i.e. at same frequency. Consequently, the Northern, Eastern, Western and North-Eastern grids were treated as a single grid named as NEWNE grid from FY 2007-08 onwards for the purpose of this CO2 Baseline Database. As of 31 December 2013, the Southern grid has also been synchronised with the NEWNE grid, hence forming one unified Indian Grid. Since the project supplies electricity to the Indian grid, emissions generated due to the electricity generated by the Indian grid as per CM calculations will serve as the baseline for this project.

Table: Geographical Scope of Indian Electricity Grid

Northern	Eastern	Western	North-Eastern	Southern
Chandigarh	Bihar	Chhattisgarh	Arunachal Pradesh	Andhra Pradesh
Delhi	Jharkhand	Gujarat	Assam	Karnataka
Haryana	Orissa	Daman & Diu	Manipur	Kerala
Himachal Pradesh	West Bengal	Dadar& Nagar Haveli	Meghalaya	Tamil Nadu
Jammu & Kashmir	Sikkim	Madhya Pradesh	Mizoram	Telangana
Punjab	Andaman & Nicobar	Maharashtra	Nagaland	Puducherry
Rajasthan		Goa	Tripura	Lakshadweep
Uttar Pradesh				
Uttarakhand				

Step 2: Choose whether to include off-grid power plants in the project electricity system (optional)

Option I is opted for the project activity i.e. only grid connected power plants are included in the calculation.

Step 3: Select a method to determine the operating margin (OM)

According to the tool, the calculation of the operating margin emission factor is based on one of the following methods:

a) Simple OM; or
b) Simple adjusted OM; or
c) Dispatch data analysis OM; or
d) Average OM.

Any of the four methods can be used for calculating OM. However, the simple adjusted OM and dispatch data analysis OM cannot be currently applied in India due to lack of necessary data however, the simple OM method (option a) can only be used if low cost/must-run resources constitute less than 50% of total grid generation in:

1) average of the five most recent years, or
2) based on long-term averages for hydroelectricity production.

The Share of Low Cost / Must-Run (% of Net Generation) in the generation profile of the different grids in India in the last five years is as follows:

Share of Must-Run (Hydro/Nuclear) (% of Net Generation)

	2014-15	2015-16	2016-17	2017-18	2018-19
India	16.8%	15.1%	14.6%	14.3%	14.5%

Source: CO2 Baseline Database for the Indian Power Sector - Central Electricity Authority (CEA)

The above data clearly shows that the percentage of total grid generation by low cost/must run plants (on the basis of average of five most recent years) for the Indian regional grid is less than 50% of the total generation. Hence the Simple OM method can be used to calculate the Operating Margin Emission factor. The average operating margin method cannot be applied, as low cost/ must run resources constitute less than 50% of total grid generation.

The project proponent haschoosen an ex ante option for calculation of the OM with a 3-year generation weighted average, based on the most recent data available, without requirement to monitor and recalculate the emissions factor during the crediting period.

Step 4: Calculate the operating margin emission factor according to the selected method
The simple OM emission factor is calculated as the generation-weighted average CO2 emissions per unit net electricity generation (tCO2/MWh) of all generating power plants serving the system, not including low-cost / must-run power plants / units. It may be calculated:

- Based on the net electricity generation, and a CO2 emission factor of each power unit. (Option A), or
- Based on the total net electricity generation of all power plants serving the system and the fuel types and total fuel consumption of the project electricity system (option B)

The Central Electricity Authority, Ministry of Power, Government of India has published a database of Carbon Dioxide Emission from the power sector in India based on detailed authenticated information obtained from all operating power stations in the country. This database i.e. The CO2 Baseline Database provides information about the Combined Margin Emission Factors of the Indian grid. The Combined Margin in the CEA database is calculated ex anteusing the guidelines provided by the UNFCCC in the "Tool to calculate the emission factor for an electricity system". We have, therefore, used the Combined Margin data published in the CEA database, for calculating the Baseline Emission Factor.

The CEA database uses the option A i.e. data on net electricity generation and CO2 emission factor for each power unit, the average efficiency of each power unit and the fuel type(s) used in each power unit, to calculate the OM of the different regional grids.

$EF_{grid,OMsimple,y} = \Sigma(EG_{m,y} \times EF_{EL,m,y}) / \Sigma EG_{m,y}$

Where:
$EF_{grid,OMsimple,y}$: Simple operating margin CO2 emission factor in year y (tCO2/MWh)

$EG_{m,y}$: Net quantity of electricity generated and delivered to the grid by power unit m in year y (MWh)
$EF_{EL,m,y}$: CO2 emission factor of power unit m in year y (tCO2/MWh)
m : All power units serving the grid in year y except low-cost / must-run power units
y : The relevant year as per the data vintage chosen in step 3

In India, the Central Electricity Authority (CEA) has estimated the baseline emission factor for thepower sector. This data has also been endorsed by the DNA and is the most authentic informationavailable in the public domain.

Following tables shows the simple OM and Net generation[5] respectively for the recent three years:

Simple Operating Margin Emission Factors (t CO2/MWh) (incl. Imports)			
	2016-17	**2017-18**	**2018-19**
Indian Grid	0.9636	0.9543	0.9685
Net Generation in Operating Margin (GWh) (incl. imports)			
	2016-17	**2017-18**	**2018-19**
Indian Grid	916,278	960,693	995,957

Therefore the 3 years net generation weighted OM average for Indian grid comes out to be 0.9622 tCO2/MWh

The emission factor of each power unit m has been determined as follows:
$EF_{EL,m,y} = (\Sigma i FC_{i,m,y} \times NCV_{i,y} \times EF_{CO2,i,y}) / EG_{m,y}$

Where:
$EF_{EL,m,y}$: CO2 emission factor of power unit m in year y (tCO2/MWh)
$FC_{i,m,y}$: Amount of fossil fuel type i consumed by power unit m in year y (Mass or volume unit)
$NCV_{i,y}$: Net calorific value (energy content) of fossil fuel type i in year y (GJ / mass or volume unit)
$EF_{CO2,i,y}$: CO2 emission factor of fossil fuel type i in year y (tCO2/GJ)
$EG_{m,y}$: Net quantity of electricity generated and delivered to the grid by power unit m in year y (MWh)
m : All power units serving the grid in year y except low-cost / must-run power units
i : All fossil fuel types combusted in power unit m in year y
y : The relevant year as per the data vintage chosen in step 3

Step 5: Calculate the build margin (BM) emission factor
The sample group of power units m used to calculate the build margin consists of either:

a) The set of five power units that have been built most recently, or
b) The set of power capacity additions in the electricity system that comprise 20% of the system generation (in MWh) and that have been built most recently.

Project participants should use the set of power units that comprises the larger annual generation.Accordingly, the CEA database calculates the build margin as the average emissions intensity of the 20% most recent capacity additions in the grid based on net generation. The build margin emission factor has been calculated ex-ante based on the most recent information available on units already built for sample group m at the time of PDD submission to the DOE for validation. This option does not require monitoring the emission factor during the crediting period.

The build margin emissions factor is the generation-weighted average emission factor of all power units m during the most recent year y for which power generation data is available, calculated as follows:

$EF_{grid,BM,y} = (\Sigma EG_{m,y} \times EF_{EL,m,y}) / \Sigma EG_{m,y}$

Where:

$EF_{grid,BM,y}$	Build margin CO2 emission factor in year y (tCO2/MWh)
$EG_{m,y}$	Net quantity of electricity generated and delivered to the grid by power unit m in year y (MWh)
$EF_{EL,m,y}$	CO2 emission factor of power unit m in year y (tCO2/MWh)
m	Power units included in the build margin
y	Most recent historical year for which power generation data is available

The CO2 emission factor of each power unit m ($EF_{EL,m,y}$) is determined as per the procedures given instep 4 (a) for the simple OM, using option A1 for y most recent historical year for which powergeneration data is available, and using for mthe power units included in the build margin.

Build margin emission factor is calculated, ex-ante as per the most recent data available**Error! Bookmark not defined.**. So, build margin emission factor for Indian grid for 2018-19 is 0.8811 tCO2/MWh

Step 6: Calculate the combined margin (CM) emission factor ($EF_{grid,CM,y}$)
The emission factor $EF_y$of the grid is represented as a combination of the Operating Margin (OM) andthe Build Margin (BM). Considering the emission factors for these two margins as $EF_{OM,y}$and$EF_{BM,y}$then the $EF_y$is given by:

$$EF_y = EF_{grid,OM,y} * w_{OM} + EF_{grid,BM,y} * w_{BM}$$

Where:

$EF_{grid,BM,y}$	=Build margin CO2 emission factor in year y (t CO2/MWh)
$EF_{grid,OM,y}$	= Operating margin CO2 emission factor in year y (t CO2/MWh)
w_{OM}	= Weighting of operating margin emissions factor (per cent)
w_{BM}	= Weighting of build margin emissions factor (per cent)

According to "Tool to calculate the emission factor for an electricity system" the weights for OM and BM are 0.75 and 0.25 respectively.

Using the values for operating and build margin emission factor provided in the CEA database andtheir respective weights for calculation of combined margin emission factor, the baseline carbon emission factor (CM) is 0.9419 tCO2e/MWh.

The combined margin of the Indian grid used for the project activity is as follows:

Parameter	Value	Nomenclature	Source
EFgrid,CM,y	0.9419 tCO2/MWh	Combined margin CO2 emission factor for the project electricity system in year y	Calculated as the weighted average of the operating margin (0.75) & build margin (0.25) values, sourced from Baseline CO2 Emission Database, Version 15 published by Central Electricity Authority (CEA), Government of India in the month of Dec 2019.
EFgrid,OM,y	0.9622 tCO2/MWh	Operating margin CO2 emission factor for the project electricity system in year y	Calculated as the last 3 year (2016-17, 2017-18 & 2018-19) generation-weighted average, sourced from Baseline CO2 Emission Database, Version 15, published by Central Electricity Authority (CEA), Government of India.
EFgrid,BM,y	0.8811 tCO2/MWh	Build margin CO2 emission factor for the project electricity system in year y	Baseline CO2 Emission Database, Version 15, published by Central Electricity Authority (CEA), Government of India.

Project Emission

As per the ACM0002 ver-20.0, Project Emission for most renewable energy power generation project activities, $PE_y = 0$. However, some project activities may involve project emissions that can be significant. These emissions shall be accounted for as project emissions by using the following equation:

$PE_y = PE_{FF,y} + PE_{GP,y} + PE_{HP,y}$

Where:

PE_y = Project emissions in year y (tCO2e/yr)
$PE_{FF,y}$ = Project emissions from fossil fuel consumption in year y (tCO2/yr)
$PE_{GP,y}$ = Project emissions from the operation of geothermal power plants due to the release of non condensable gases in year y (tCO2e/yr)
$PE_{HP,y}$ = Project emissions from water reservoirs of hydro power plants in year y (tCO2e/yr).

The project activity involves the generation of electricity from the installation of solar turbines. Hence, as per ACM0002, Version 20.0, there is no project emission for solar projects. Therefore, project emissions are zero. Hence PEy= 0

Leakage Emissions

No leakage emissions are considered in the project activity. The main emissions potentially giving rise to leakage in the context of electric sector projects are emissions arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g. extraction, processing, transport). Since the emissions sources are small, it is neglected.

B.5. Demonstration of additionality

The table below is only applicable if the proposed project is deemed additional, as defined by the applied approved methodologyor activity requirement or product requirement.

Specify the methodologyor activity requirement or product requirementthat establish deemed additionality for the proposed project (including the version number and the specific paragraph, if applicable).	Not Applicable
Describe how the proposed project meets the criteria for deemed additionality.	Not Applicable

The proposed CDM project generates power using solar energy which is a renewable, zero emission source of energy. Baseline considerations for the project are based on approved consolidated baseline methodology ACM0002 (Version 20.0).

Thus the project follows section 5.3.2 of the applied methodology which requires the project proponent to determine the additionality based on "Tool for the demonstration and assessment of additionality", Version 07.0.0.

The project is under RfR (Request for registration) under CDM. For Additionality, CDM PDD (UN10583) can be refered.[6]

B.6. Sustainable Development Goals (SDG) outcomes

B.6.1. Relevant target for each of the three SDGs

Item	Goals and Targets	Indicators

[6] https://cdm.unfccc.int/Projects/completeness_check.html

SDG 7: Affordable and Clean Energy	**7.2:** By 2030, increase substantially the share of renewable energy in the global energy mix	**7.2.1:** Renewable energy share in the total final energy consumption
	Target: 117,122~~708~~ MWh per annum	
SDG 8: Decent Work and Economic Growth	**8.5** By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	**8.5.1:** Average hourly earnings of female and male employees, by occupation, age and persons with disabilities. • No. of trainings provided to the employees per year • Employment generated due to project activity
	Target: • Training: 1 nos annually • Employment of 20 staff	
SDG 13: Climate Action	**13.2:** Integrate climate change measures into national policies, strategies and planning	**13.2.1:** Number of countries that have communicated establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)
	Target: 110,317~~868~~ tCO2 per annum	

B.6.2. Explanation of methodological choices/approaches for estimating the SDG outcome

The company has a Corporate Social Responsibility Policy[7] in place. In sync with the overall policy, the company conductsregular surveys during construction as well as O&M phases in the villages near project locations to check the requirement of facilities by the villages. Based on the surveys, PP identifies and works on several scope(s) of developmental activities such as health camps, distribution of furniture& sports kits in schools, toilet requirements in government schools, drinking water requirements etc. For this project activity, following SDGs are expected to be impacted:

SDG 7 : Affordable and Clean Energy

The baseline for the project is no project, thus leading to generation in the relevant grid which is dominated by fossil fuel. The clean energy generated by the project is calculated based on the amount of electricity generated by the project per annum. The project is expected to generate 117,122~~708~~ MWh of clean energy per annum.

SDG 8: Decent Work and Economic Growth

The project leads to Trainings & workshops which are conducted for the O&M staff ofthe project, by their respective companies.Apart from other trainings/workshops that may be organized, the following are also carried out;

- HSE Training Record
- Regular Drill Record
- Handling of Equipment Traning
- Soft Skill Training

7http://www.adanigreenenergy.com/downloads/CSR%20Policy.pdf

It is expected that a minimum of 1 training would be carried out annually.

The project will also provide employement to approximately 20 persons including O&M staff, management, outsourced jobs as well as security guards during the O&M phase.

SDG13 : Climate Action :
The project leads to mitigation of 110,317~~868~~ tCO2 per annum.

As per the approved consolidated Methodology ACM0002 (Version 20.0, EB 105 Annex 3), Emission reductions are calculated as follows:
$ER_y = BE_y - PE_y$

Where:
ER_y = Emission reductions in year *y* (t CO2e/yr)
BE_y =Baseline emissions in year *y* (t CO2/yr)
PE_y = Project emissions in year *y* (t CO2e/yr)

B.6.3. Data and parameters fixed ex ante for monitoring contribution to each of the three SDGs

Relevant SDG Indicator	**SDG13 : Climate Action**
Data/parameter	$EF_{OM,y}$
Unit	tCO2e/MWh
Description	Operating Margin Emission Factor of Indian Grid
Source of data	Calculated from CEA database, Version 15, December 2019[8]
Value(s) applied	0.9622
Choice of data or Measurement methods and procedures	Calculated as per "Tool to calculate the emission factor for an electricity system," as 3-year generation weighted average using data for the years 2016-17, 2017-18 & 2018-19. The data are obtained from "CO2 Baseline Database for Indian Power Sector" version 15.0, published by the Central Electricity Authority, Ministry of Power, Government of India.
Purpose of data	The data is used to calculate baseline emission reductions.
Additional comment	This parameter is fixed ex-ante for the entire crediting period.

Relevant SDG Indicator	**SDG13 : Climate Action**
Data/parameter	$EF_{BM,y}$
Unit	tCO2e/MWh
Description	Build Margin Emission Factor of Indian Grid
Source of data	Calculated from CEA database, Version 15, December 2019
Value(s) applied	0.8811
Choice of data or Measurement methods and procedures	Calculated as per "Tool to calculate the emission factor for an electricity system,". The data are obtained from "CO2 Baseline Database for Indian Power Sector" version 15.0, published by theCentral Electricity Authority, Ministry of Power, Government of India.
Purpose of data	The data is used to calculate baseline emission reductions.
Additional comment	This parameter is fixed ex-ante for the entire crediting period.

[8] http://cea.nic.in/tpeandce.html

Relevant SDG Indicator	**SDG13 : Climate Action**
Data/parameter	$EF_{CM, y}$
Unit	tCO2e/MWh
Description	Combined Margin Emission Factor of Indian Grid
Source of data	Calculated from CEA database, Version 15, December 2019
Value(s) applied	0.9419
Choice of data or Measurement methods and procedures	The combined margin emissions factor is calculated as follows: $EF_{grid,CM,y} = EF_{grid,OM,y} * W_{OM} + EF_{grid, BM,y} * W_{BM}$ Where: EFgrid,BM,y = Build margin CO2 emission factor in year y (tCO2/MWh) EFgrid,OM,y = Operating margin CO2 emission factor in year y (tCO2/MWh) WOM = Weighting of operating margin emissions factor (%) = 75% WBM= Weighting of build margin emissions factor (%) = 25%
Purpose of data	The data is used to calculate baseline emission reductions.
Additional comment	-

B.6.4. Ex ante estimation of outcomes linked to each of the three SDGs

SDG 7: Affordable and Clean Energy - Project expected to generate 117,122~~708~~ MWh clean energy every year

SDG 8: Decent Work and Economic Growth - Minimum 1 training to be carried out for O&M staff annually.The project will also provide employement to approximately 20 persons.

SDG13 : Climate Action - The project leads to mitigation of 110,317~~868~~ tCO2 per annum.

Calculation of Oucome for SDG13 : Climate Action

Baseline emissions

The baseline emissions are the product of electrical energy baseline $EG_{PJ,y}$ expressed in MWh of electricity produced by the renewable generating unit multiplied by an emission factor.

$BE_Y = EG_{PJ,y} * EF_{grid,CM,y}$

Where,

$EG_{PJ,y}$ = Total quantity of net electricity delivered to the Indian grid.

$EF_{grid,CM,y}$ =Combined margin CO2 emission factor for grid connected power generationin year y = 0.9419 t CO2/MWh.

Project Participant	Capacity	PLF (%)	Average Annual Generated Power in 1st crediting period (MWh/year)	Baseline Emission Factor (tCO2/MWh)	Baseline emissions (tCO2/ year)
Ramnad Solar Power Limited	72 MW	18.85%	117,122~~708~~	0.9419	110,317~~868~~

BE_y = 117,122~~708~~ *0.9419 t CO2/ year = 110,317~~868~~ tCO2/year

Project emissions

$PE_y = 0$

Leakage

No leakage emissions are applicable.

Emission reductions

$ER_y = BE_y - PEy = 110,317\sout{868} - 0 = 110,317\sout{868}$ tCO2/year

B.6.5. Summary of ex ante estimates of each SDG outcome

SDG 7: Affordable and Clean Energy

Year	Baseline estimate (MWh)	Project estimate (MWh)	Net benefit (MWh)
Year 1	0 MWh	118,891	118,891
Year 2	0 MWh	118,296	118,296
Year 3	0 MWh	117,705	117,705
Year 4	0 MWh	117,116	117,116
Year 5	0 MWh	116,531	116,531
Year 6	0 MWh	115,948	115,948
Year 7	0 MWh	115,368	115,368
Total	0 MWh	~~588,539~~ 819,855	~~588,539~~ 819,855
Total number of crediting years	**~~5~~ 7 Years**		
Annual average over the crediting period	0 MWh	117,122~~708~~	117,122~~708~~

The proposed project activity falls under Indian grid, which constitutes of both fossil fuels and non-fossil fuels sources of electricity generation hence in baseline, theaffordable and Clean Energy generated was 0. Since the project is solar energy therefore the Affordable and Clean Energy produced by the project is 117,122~~708~~ MWh per year.

SDG 8: Decent Work and Economic Growth

Year	Baseline estimate	Project estimate	Net benefit
Year 1	0 Training, 0 Jobs	1 Training, 20 Jobs	1 Training, 20 Jobs
Year 2	0 Training, 0 Jobs	1 Training, 20 Jobs	1 Training, 20 Jobs
Year 3	0 Training, 0 Jobs	1 Training, 20 Jobs	1 Training, 20 Jobs
Year 4	0 Training, 0 Jobs	1 Training, 20 Jobs	1 Training, 20 Jobs
Year 5	0 Training, 0 Jobs	1 Training, 20 Jobs	1 Training, 20 Jobs
Year 6	0 Training, 0 Jobs	1 Training, 20 Jobs	1 Training, 20 Jobs
Year 7	0 Training, 0 Jobs	1 Training, 20 Jobs	1 Training, 20 Jobs
Total	0 Training, 0 Jobs	~~5~~7 Trainings, 20 Jobs	~~5~~7 Trainings, 20 Jobs
Total number of crediting years	**~~5~~7 Years**		
Annual average over the crediting period	0 Training, 0 Jobs	1 Training, 20 Jobs	1 Training, 20 Jobs

There was no training in the baseline however the training and jobs generated by the project activity is 1 and 20 jobs.

SDG13 : Climate Action

Year	Baseline estimate tCO2	Project estimate tCO2	Net benefit tCO2
Year 1	111,983	0 tCO2	111,983
Year 2	111,423	0 tCO2	111,423
Year 3	110,866	0 tCO2	110,866

Year 4	110,312	0 tCO2	110,312
Year 5	109,760	0 tCO2	109,760
Year 6	109,211	0 tCO2	109,211
Year 7	108,665	0 tCO2	108,665
Total	~~**554,345**~~ **772,221**	**0 tCO2**	~~**554,345**~~ **772,221**
Total number of crediting years	~~**7**~~**5 Years**		
Annual average over the crediting period	110,317~~868~~	0 tCO2	110,317~~868~~

The proposed project activity falls under Indian grid, which constitutes of both fossil fuels and non-fossil fuels sources of electricity generation hence in baseline, the estimated emissionis110,317~~868~~ tCO2 per year. Since the project is solar energy therefore the project does not emit any GHG.

B.7. Monitoring plan

B.7.1. Data and parameters to be monitored

Relevant SDG Indicator	**SDG 7.2.1 : Affordable and Clean Energy**
Data / Parameter	$EG_{PJ,y}$
Unit	MWh
Description	Quantity of net electricity supplied to the grid
Source of data	Monthly Statement of Solar Power Generation by TANGEDCO
Value(s) applied	117,122~~708~~ MWh

Measurement methods and procedures	Data Type: Measured Monitoring equipment:Energy Meters of accuracy class 0.2s Recording Frequency: Continuous monitoring and Monthly recording from Energy Meters, Summarized Annually. Archiving Policy: Paper &/or Electronic Calibration frequency: Once in 5 years as per CEA guidelines[9] Electricity exported/imported to the grid is in kWh. However for thecalculation purpose electricity exported is converted in MWh.The Net electricity supplied to the grid by the project activity will becalculated as a difference of electricity exported to the grid and electricityimported from the grid obtained from Monthly Meter reading reportsprovided by TANGEDCO (Ramnad Electricity Distribution Circle) as per below equation: $EG_{PJ,y} = EG_{Export} - EG_{Import}$ The calculation is done by Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) and the PP has no say in the calculation. Based on the Monthly generation Statement issued by TANGEDCO, the project shall raise the invoice. The electricity exported to the grid by the project activity connected to the sub-station is measured by electronic trivector meters of accuracy class 0.2s. The electricity exported will be measured continuously using Main & Checkmeters. Export readings of Main & Checkmeters shall be taken on monthly basis by authorized officer of TANGEDCO in the presence of PP or representative of PP. Cross Checking: Quantity of net electricity supplied to the grid will be cross checked fromthe Invoices/ Monthly Bill raised by the Project Participant to Ramnad Electricity Distribution Circle,TANGEDCO.
Monitoring frequency	Monthly
QA/QC procedures	Calibration of all the meters will be undertaken once every five year and faulty meters will be duly replaced immediately. The meters will be of accuracy class 0.2s.
Purpose of data	The Data/Parameter is required to calculate the baseline emission
Additional comment	Data will be archived electronically for a period of 2 years beyond theend of crediting period.

Relevant SDG Indicator	**SDG 8.5.1: Decent Work and Economic Growth**
Data / Parameter	Quantitative employment , Quality of employment Income generation.
Unit	Number (employees) Number(Trainings) INR (salary)
Description	• Number of Trainings provided to employees & O&M staff • Number of project employees with the description like (male/female, occupation, age and persons with disabilities • Salary given to the employees of the project.

9http://www.cea.nic.in/reports/regulation/meter_reg.pdf, page 12

Source of data	Plant employment records, Training Records (HSE & HR) and/or Employee feedback forms Salary Slip of the project employees. The income to all the unskilled workers are made on day to day basis with the minimum being Rs. 350 per day.Annual records of income paid to all the employees would be available.
Value(s) applied	Minimum of 1 training would be carried out annually. At least 10 people are expected to be employed at site during crediting period The income to all the unskilled workers are made on day to day basis with the minimum being Rs. 350 per day. Annual records of income paid to all the employees would be available.
Measurement methods and procedures	• Training Attendance sheets and records. • Employment Records • Salary slip of the employees
Monitoring frequency	Annually
QA/QC procedures	The number of persons employed would be mentioned in the plant register, which can be crossed checked with daily attendance register. Salary slip can be checked for earnings of female and maleemployees
Purpose of data	Continuation of regular trainings/workshops for employees & O&M staffs
Additional comment	-

Relevant SDG Indicator	**SDG13.2.1 : Climate Action**
Data / Parameter	Air quality
Unit	tCO2
Description	Reduction in CO2 emission reduction due to implementation of project activity
Source of data	Calculated as per "Tool to calculate the emission factor for an electricity system,". The data are obtained from "CO2 Baseline Database for Indian Power Sector" version 15.0, published by theCentral Electricity Authority, Ministry of Power, Government of India.
Value(s) applied	110,317~~868~~ tCO2 emission reductions estimated per annum
Measurement methods and procedures	Calculated from CEA database and Energy Generation
Monitoring frequency	Annually
QA/QC procedures	A check meter is also installed near to the export meter to cross check the electricity exported to the grid. The check meter reading would also be used in case of failure of export meter
Purpose of data	Calculation of baseline emissions
Additional comment	-

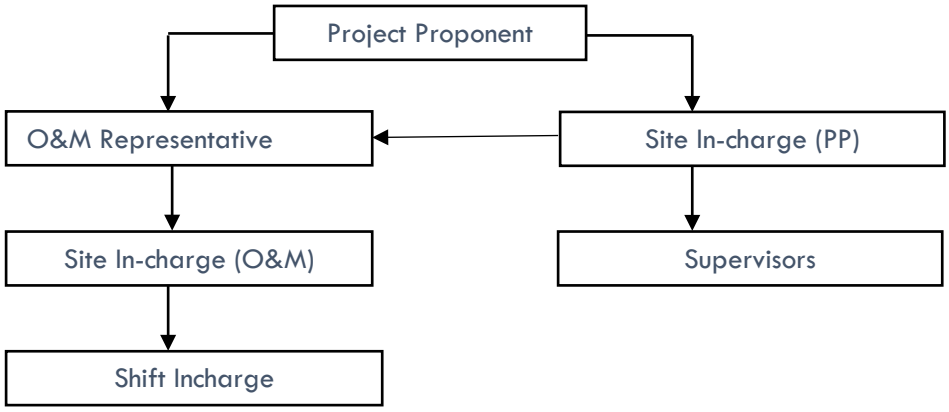
B.7.2. Sampling plan

Sampling is not required for the given project activity.

B.7.3. Other elements of monitoring plan

The monitoring plan is developed in accordance with the modalities and procedures for CDM project activities and is proposed for grid-connected solar power project/ unit being implemented in Tamil Nadu, India. The monitoring plan, which will be implemented by the project participant describes about the monitoring

organisation, parameters to be monitored, monitoring practices, quality assurance, quality control procedures, data storage and archiving.



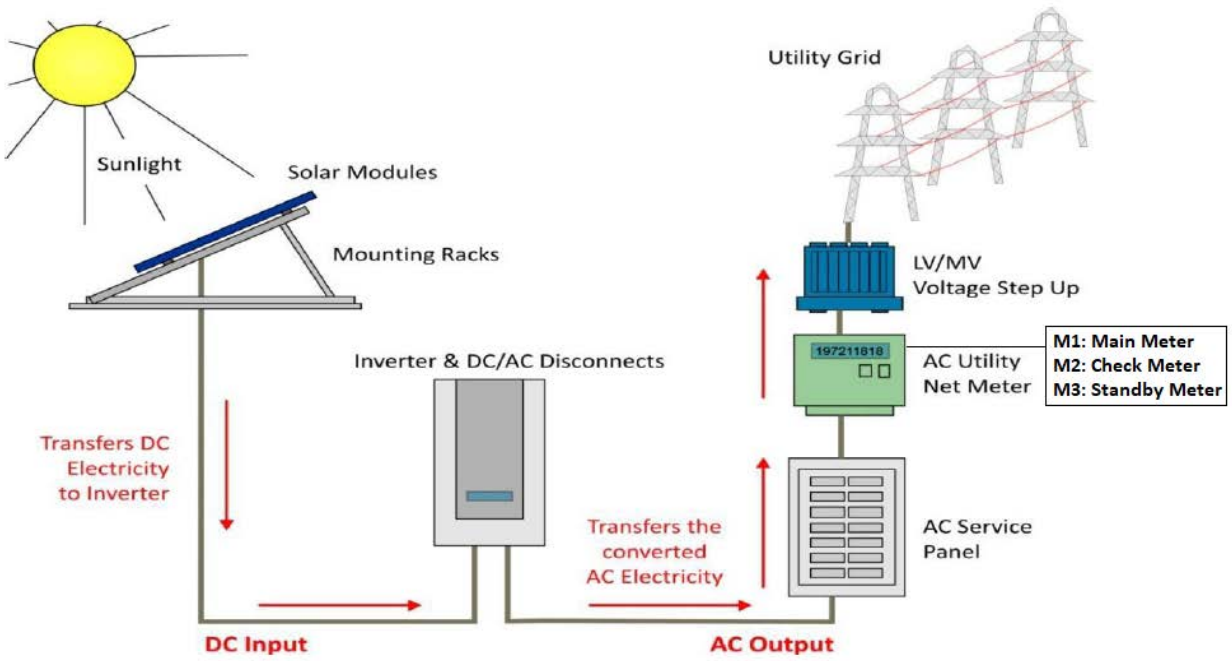
Responsibilities of Site Incharge (PP): Overall functioning and maintenance of the project activity, the Site incharge shall coordinate with the O&M operator as well as the site supervisors.
Responsibilities of O&M Representative: Co-ordination between Site incharge of the O&M operator as well as the project participant and further report to PP head office.
Responsibilities of Site In-charge (O&M Operator): Responsibility for maintaining the data records, ensures completeness of data, and reliability of data (calibration of equipment) as well as data recording for all the parameters.
Responsibilities of Shift In-charge: Responsibility for day to day data collection and maintains day to day monitored data.

QA/QC procedures: The energy meters at the feeders are maintained and owned by Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO). Neither the project proponent nor the site personnel have any control over it. The records will be cross-checked with the records of sold electricity TANGEDCO. The meters are calibrated by TANGEDCO at-least once in five years.

Data Measurement

Projects activity comprises of installation of 6 Energy meters installed at the at project site, 3 Energy meters (1 main meter and 1 check meter, 1 standby meter) under control of PP and 3 Energy meters (1 main meter, 1 check meter, 1 standby meter) sealed and under control of TENGEDCO used for joint metering installed at interconnection point of the Grid at project site.

The export and import energy will be measured continuously using above mentioned Main & Check meters. Export & Import readings of Main & Check meters installed at the project site shall be taken on monthly basis by authorized officer of TANGEDCO in the presence of PP or representative of PP. The meter reading will be taken jointly and signed by the representatives of the TANGEDCO and project investors. Based on the readings, invoices will be raised by project investors. These invoices can be used for cross checking the meter readings taken for the project activity. It is to be noted though PP or PP representative is available during meter reading, the calculations of net electricity supplied to grid is completely under purview of TANGEDCO officer and PP do not have any control on it. Also accuracy class of meters and calibration frequency is under purview of TANGEDCO officer and PP do not have any control on it. PP get the monthly generation report from where net electricity supplied to grid is obtained and used for emission reduction calculations.



Data collection and archiving

Export & Import readings from the meters will be collected under the supervision of the authorized representatives of PP. The net electricity supplied to grid would becalculated based on export & import readings. Export and Import data would be recorded andstored in electronic&/or Paper format. The records are checked periodically by the Head (Operations) and discussed thoroughly with the O&M Team. The period of storage of the monitored data will be 2years after the end of crediting period or till the last issuance of GS CERs for the project activitywhichever occurs later.

Mismatch in Monitoring Period and the Billing Period

In case the dates of a particular monitoring period do not match with the dates of the billing period, the net electricity exported to the grid would be calculated from:

$D = (A/B)*C$

Where,
A = Difference of number of days which are not matching of billing period and monitoring period.
B = Number of days of the billingperiod/ month which was not matched with the monitoring period.
C = Net Electricity supplied to the grid for that given billing period/ month.

The calculated value after apportioning would be used for calculation of emission reductions during that period.

Emergency preparedness

The project activity will not result in any unidentified activity that can result in substantial emissions from the project activity. No need for emergency preparedness in data monitoring is visualized.

In the unlikely event of failure of all Main, Check as well as Standby meter installed at Substation, where all the faulty meters are required to be repaired or replaced simultaneously, the export & importreadings from Main, Check & Standby Meters installed at the inter-connection point at the project site will beused for monitoring of net electricity exported to the grid.

Personnel training

In order to ensure a proper functioning of the project activity and a proper monitoring of emissionreductions, the staff (CDM team) will be trained. The plant helpers will be trained in equipmentoperation, data recording, reports writing, operation and maintenance and emergency proceduresin compliance with the monitoring plan.

SECTION C. Duration and crediting period

C.1. Duration of project

C.1.1. Start date of project

13/06/2015 as per the date of earliest purchase order by Ramnad Solar Power Limited.

C.1.2. Expected operational lifetime of project

25 years 00 Months

C.2. Crediting period of project

C.2.1. Start date of crediting period

~~25~~01/1~~0~~2/2018 or two years prior to the date of Project Design Certification, whichever is later.

C.2.2. Total length of crediting period

~~5~~7 years (Renewable twice totaling 15 years i.e. 7+7+1).

SECTION D. Safeguarding principles assessment

D.1. Analysis of social, economic and environmental impacts

Safeguarding principles	Assessment questions	Assessment of relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)
3.1 Human Rights	1. The Project Developer and the Project shall respect internationally proclaimed human rights and shall not be complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights. 2. The Project shall not discriminate with regards to participation and inclusion.	No	1. During construction and operation of the project the project proponent respected all the human rights. The project is not in any kind of conflict with the livelihood of local people. Project proponent had conducted stakeholder's consultation and sought their opinion. 2. The project will not employ any personnel based on gender, race,	Not Required

			religion, sexual orientation or any other basis. As the Constitution of the host country prohibits discrimination on the basis of a person's race, sex, religion, place of birth, or social status. The host country has signed the Convention 100 (equal remuneration) and convention 111 (discrimination in employment /occupation) under the ILO Declaration on Fundamental Principles and rights[10].	
3.2 Gender Equality and Women's Rights	The Project shall complete the following gender assessment questions in order to inform Requirements, below: 1. Is there a possibility that the Project might reduce or put at risk women's access to or control of resources, entitlements and benefits? 2. Is there a possibility that the Project can adversely affect men and women in marginalised or vulnerable communities (e.g., potential increased burden on women or social isolation of men)? 3. Is there a possibility that the Project might not take into account gender roles and the abilities of women or men to participate in the decisions/designs of the project's activities (such as lack of time, child care duties, low literacy or educational levels, or societal discrimination)? 4. Does the Project take into account gender roles and the abilities of women or men to benefit from the Project's activities (e.g., Does the project criteria ensure that it includes minority groups or landless peoples)? 5. Does the Project design contribute to an increase in women's workload that adds to their care responsibilities or that prevents them from engaging in other activities? 6. Would the Project potentially reproduce or further deepen discrimination against women based on gender, for instance, regarding their full participation in design and implementation or access to opportunities and benefits? 7. Would the Project potentially limit women's ability to use, develop and	No	1. The project does not decrease women´s access to or control of resources. 2. No, there is no possibility of adverse effect. 3. No, the Project does not consider gender roles and in fact actively engages both women and men. Community meetings are scheduled considering participation by both Men and Women. 4. The project does not discriminate on basis of gender, caste or religion. 5. No the Project was not designed to increase women´s workload nor add care responsibilities. 6. There is no place for discrimination against women in this Project. The project does nto discriminate on basis of gender, caste or religion. 7. The Project will not limit women´s ability regarding natural resources. The project being solar power project thus does not have	Not Required

10http://www.mfcindia.org/main/bgpapers/bgpapers2013/am/bgpap2013c.pdf

	protect natural resources, taking into account different roles and priorities of women and men in accessing and managing environmental goods and services? 8. Is there a likelihood that the proposed Project would expose women and girls to further risks or hazards? The Project shall not directly or indirectly lead to/contribute to adverse impacts on gender equality and/or the situation of women. 1. Sexual harassment and/or any forms of violence against women - address the multiple risks of gender-based violence, including sexual exploitation or human trafficking. 2. Slavery, imprisonment, physical and mental drudgery, punishment or coercion of women and girls. 3. Restriction of women's rights or access to resources (natural or economic). 4. Recognise women's ownership rights regardless of marital status - adopt project measures where possible to support to women's access to inherit and own land, homes, and other assets or natural resources. Projects shall apply the principles of nondiscrimination, equal treatment, and equal pay for equal work, specifically: 1. Where appropriate for the implementation of a Project, paid, volunteer work or community contributions will be organised to provide the conditions for equitable participation of men and women in the identified tasks/activities. 2. Introduce conditions that ensure the participation of women or men in Project activities and benefits based on pregnancy, maternity/paternity leave, or marital status. 3. Ensure that these conditions do not limit the access of women or men, as the case may be, to Project participation and benefits. The Project shall refer to the country's national gender strategy or equivalent national commitment to aid in assessing gender risks.		any major impact on natural resources of the region. 8. No the Project will not expose women and girls to further risks or hazards. The project proponent has a grievance cell which would look into complaints. 1. There is no such risk for the project. Participation in the project is 100% voluntary. The project proponent has a grievance cell which would look into complaints. 2. The project does not involve in slavery, imprisonment or coercion of women and girls. 3. The Project will not restrict women´s rights or access regarding natural resources. The project proponent does not discriminate on gender, caste, religion etc. 4. Marital status is completely irrelevant to the Project. The project proponent does not discriminate on gender, caste, religion etc. Yes, the Project has equal opportunity for women and men to contribute both in volunteer and working positions 1. The project proponent has a stipulated CSR policy, Appointment Policy, Domestic travel policy, Leave Policy and Timekeeping/ Attendance Policy that takes into account participation by both men and women. Further, the CSR projects designed are implemented for equal participation of both men and women. 2. There is no limit on the access to Project participation and benefits from either of these conditions. 3. There are no such conditions that limit the access of women or men for participation.	

			The project is aligned to India's strategy for elimination of all discrimination. India ratified the International Convention on the Elimination of All Forms of Racial Discrimination on 03/12/1968 with certain reservation[11].	
3.3 Community Health, Safety and Working Conditions	The Project shall avoid community exposure to increased health risks and shall notadversely affect the health of the workers and the community.	No	The project is in compliance with all relevant local and national laws. The Project does not threaten human health or environment and does not adversely affect the health of the workers and the community.	Not Required
3.4.1 Sites of Cultural and Historical Heritage	Does the Project Area include sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g., knowledge, innovations, or practices)?	No	The project does not alter, damage or remove any cultural heritage. As per the list of cultural heritage sites in India by UNESCO[12], it is clear that the project site is not a cultural heritage site.	Not Required
3.4.2 Forced Eviction and Displacement	Does the Project require or cause the physical or economic relocation of peoples (temporary or permanent, full or partial)?	No	The project does not involve and is not complicit in involuntary resettlement of peoples in any way. The Project Developer has also obtained all necessary clearances from nodal agencies and NOCs from all the Gram Panchayats for establishing the project.	Not Required
3.4.3 Land Tenure and Other Rights	1. Does the Project require any change to land tenure arrangements and/ or other rights? 2. For Projects involving land-use tenure, are there any uncertainties with regards land tenure, access rights, usage rights or land ownership?	No	1. The project has all the legal, customary rights on the land and does not require any change to land tenure arrangements. The proponent has also obtained necessary clearances from nodal agencies for establishing the plant. 2. This is not applicable as the project does not require any change to land tenure arrangements.	
3.4.4 Indigenous Peoples	Are indigenous peoples present in or within the area of influence of the Project and/or is the Project located on land/territory claimed by indigenous peoples?	No	The project is a solar power project and it is not located on land/territory claimed by any indigenous peoples.	Not Required
3.5 Corruption	The Project shall not involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt Projects.	No	The proponent confirms that there is no corruption involved in the project activity. The host country has strict laws[13] and robust arrangements to prevent such activities.	Not Required

11 http://nhrc.nic.in/documents/india_ratification_status.pdf
12 http://whc.unesco.org/en/statesparties/in
13 http://cbi.nic.in/

3.6.1 Labour Rights	1. The Project Developer shall ensure that there is no forced labour and that all employment is in compliance with national labour and occupational health and safety laws, with obligations under international law, and consistency with the principles and standards embodied in the International Labour Organization (ILO) fundamental conventions. Where these are contradictory and a breach of one or other cannot be avoided, then guidance shall be sought from Gold Standard. 2. Workers shall be able to establish and join labour organisations. 3. Working agreements with all individual workers shall be documented and implemented. These shall at minimum comprise: (a) Working hours (must not exceed48 hours per week on a regular basis), AND (b) Duties and tasks, AND (c) Remuneration (must include provision for payment of overtime), AND (d) Modalities on health insurance, AND (e) Modalities on termination of the contract with provision for voluntary resignation by employee, AND Provision for annual leave of not less than 10 days per year, not including sick and casual leave. 4. The Project Developer shall justify that the employment model applied is locally and culturally appropriate. 5. Child labour, as defined by the ILO Minimum Age Convention is not allowed. The Project Developer shall use adequate and verifiable mechanisms for age verification in recruitment procedures. Exceptions are children for work on their families' property as long as: (a) Their compulsory schooling (minimum of 6 schooling years) is not hindered, AND (b) The tasks they perform do not harm their physical and mental development, AND (c) The opinions and recommendations of an Expert Stakeholder shall be sought and	No	1. The proponent assures that there was no bonded or forced labor during construction and operation of the project activity. Uniform policy was implemented for all employees. The host country has robust laws in place prohibiting forced and compulsory labor[14]. 2. The proponent confirms that all the fundamental rights of the employees will be respected. The rights of industrial trade unions and their members have been protected by law in India since 1926 by The Trade Unions Act, 1926[15]. 3. Working agreements with all individual workers are documented and implemented. 4. The Project Developer ensures that local workers/employees are preferred, to the extent possible, for employment during construction as well as operation phase of the project ensuring skill developmentin the local populace. 5. Child labor is strictly prohibited in the country [16] .The proponent assures that no child labor will be employed during construction and operation of the plant. The project proponent has a set mechanism to ensure the age of all the temporary/ permanentemployees during the life time of the project. 6. The Project Developer has an active HSE team which ensures that all employees are given appropriate equipment and	Not Required

14http://labour.nic.in/content/
15http://ncw.nic.in/acts/TheTradeUnionsAct1926.pdf
16http://www.indianchild.com/child_labour_law_in_india.htm

	demonstrated asbeing included in the Project design. 6. The Project Developer shall ensure the use of appropriate equipment, training of workers, documentation and reporting of accidents and incidents, and emergency preparedness and response measures.		training. The same is properly documented and appropriate measures taken in case of emergencies.	
3.6.2 Negative Economic Consequences	1. The Project Developer shall demonstrate the financial sustainability of the Projectsimplemented, also including those that will occur beyond the Project Certification period. 2. The Projects shall consider economic impacts and demonstrate a consideration ofpotential risks to the local economy and how these have been taken into account in Project design, implementation, operation and after the Project. Particular focus shall begiven to vulnerable and marginalised social groups in targeted communities and thatbenefits are socially-inclusive and sustainable.	No	1. Financial Sustainability of the project has been discussed under Section B.5 above. The calculations are for the entire life of the project. 2. There are no negative economic impacts or potential risks to the local economy due to the project activity.	Not Required
4.1.1 Emissions	Will the Project increase greenhouse gas emissions over the Baseline Scenario?	No	The project is a solar power project and does not lead to any greenhouse gas emissions in project scenario.	Not Required
4.1.2 Energy Supply	Will the Project use energy from a local grid or power supply (i.e., not connected to anational or regional grid) or fuel resource (such as wood, biomass) that provides for otherlocal users?	No	The project is connected to the grid, as well as being a solar power project it will be a net provider of power to the local grid.	Not Required
4.2.1 Impact on natural water patterns and flow	Will the Project affect the natural or pre-existing pattern of watercourses, ground-waterand/or the watershed(s) such as high seasonal flow variability, flooding potential, lack ofaquatic connectivity or water scarcity?	No	The project being a solar power project will not have any such impacts.	Not Required
4.2.2 Erosion and/or water body stability	1. Could the Project directly or indirectly cause additional erosion and/or water bodyinstability or disrupt the natural pattern of erosion? If 'Yes' or 'Potentially' proceed toquestion 2. 2. Is the Project's area of influence susceptible to excessive erosion and/or water body instability?	No	1. Nothe Project activity has no effect on soil conditions because it has no waste coming out. 2. The project area is not susceptible to excessive erosion or water body instability.	Not Required
4.3.1 Landscape modification and soil	Does the Project involve the use of land and soil for production of crops or other products?	No	The project does not involve the use of land and soil for production of crops or other products.	Not Required

4.3.2 Vulnerability to Natural Disaster	Will the Project be susceptible to or lead to increased vulnerability to solar, earthquakes,subsidence, landslides, erosion, flooding, drought or other extreme climatic conditions?	No	The Project will not be susceptible to or lead to increased vulnerability to solar, earthquakes, subsidence, landslides, erosion, flooding, drought orother extreme climaticconditions.	Not Required
4.3.3 Genetic Resources	Could the Project be negatively impacted by the use of genetically modified organisms or GMOs (e.g., contamination, collection and/or harvesting, commercial development)?	No	The project does not have any impact by used of GMOs.	Not Required
4.3.4 Release of pollutants	Could the Project potentially result in the release of pollutants to the environment?	No	The project being a solar power project does not lead to release of any pollutants. The report on "Developmental Impacts and Sustainable Governance Aspects of Renewable Energy Projects" prepared by MNRE dated September 2013 [17] clearly mentions that Solar farms operations do not result in direct air pollution, noise pollution.	Not Required
4.3.5 Hazardous and Non-hazardous Waste	Will the Project involve the manufacture, trade, release, and/ or use of hazardous and non-hazardous chemicals and/or materials?	No	The project is renewable energy technology. Theproject does not involvegeneration of Hazardous andNon-hazardous Waste. Standard procedure isfollowed at site duringoperation and maintenance.	Not Required
4.3.6 Pesticides and fertilizers	Will the Project involve the application of pesticides and/or fertilisers?	No	The Project will not involve the application of pesticides and/or fertilisers.	Not Required
4.3.7 Harvesting of forests	Will the Project involve the harvesting of forests?	No	The Project does not involve the harvesting of forests.	Not Required
4.3.8 Food	Does the Project modify the quantity or nutritional quality of food available such as throughcrop regime alteration or export or economic incentives?	No	The Project does not have any impact on the quantity or nutritional quality of food available such as throughcrop regime alteration or export or economic incentives.	Not Required
4.3.9 Animal Husbandry	Will the Project involve animal husbandry?	No	The Project will not involve animal husbandry.	Not Required
4.3.10 High Conservation Value Areas and Critical Habitats	Does the Project physically affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified?	No	Being Solar project, it does not affect or alter largely intact or HCV ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified.	Not Required

17http://mnre.gov.in/file-manager/UserFiles/report-on-developmental-impacts-of-RE.pdf

4.3.11 Endangered Species	1. Are there any endangered species identified as potentially being present within the Project boundary(including those that may route through the area)? 2. Does the Project potentially impact other areas where endangered species may be present through transboundary affects?	No	1. There are no endangered species identified as potentially being present within the Project boundary. 2. The Project does not impact other areas where endangered species may be present through transboundary affects.	Not Required

SECTION E. Local stakeholder consultation

E.1. Solicitation of comments from stakeholders

The Local Stakeholder Meetings were organized for local stakeholder consultation and informed local stakeholder regarding the meeting. The following are the stakeholders for the project activity:

- Local community
- Local village administration
- Technology suppliers
- Local vendors

All the stakeholders have been invited through public notice which were displayed to the nearby areas. Further, stakeholders were invited individually to attend the stakeholders meeting. The meeting was held on 10/06/2015.

In the introductory speech, the representatives of Project Participant welcomed the gathering and given a brief about the project activity. Subsequent to the introductory speech, stakeholders were explained about the electricity generation from solar project is an environmental friendly power generation technology contributing to reduction in GHG emissions. They were also explained about the benefits of the solar power projects like, increasing energy availability and improving quality of power and its assistance to the local population by providing employment opportunities to both skilled & unskilled labours.

Now Stakeholder's Feedback round was defined jointly by the project owner and Infinite Solutions, who is the consultant to the GS project cycle, taking into account the characteristics and possible impacts of the project activity. The stakeholders from all categories suggested by Gold standard were invited to the meeting dated 25/05/2019.

The following were the types of invitations for Stakeholders Feedback Round (SFR):
-Public announcement in the village on 15th May 2019
Email sent to the GS nominated NGO stakeholders on 09th May 2019.

According to the requirement of "GS4GG Gold Standard for the Global Goals Stakeholder Consultation & Engagement Procedure, Requirements & Guidelines" Stakeholder Feedback Round has been conducted at the project site which was attended by local stakeholders & the DOE. The expert stakeholders have been intimated for the SFR round and along with the invitations they were provided with a public link where all the project related documents are available. All the documents have been made available to public through website http://infisolutions.org/rspl-adani/ for 2 months i.e. from 09th May 2019 to 08th July 2019 before Validation is finalized to allow time for stakeholders to review and comment. They are free to comment either online or during the actual SFR meeting. There were no negative comments from the stakeholders through any means of communication channels (E mails, Phone calls, Grievance Register available at the project site). The documentation is available permanently to stakeholders at project site & company's website.

The DOE has taken the feedback directly from the stakeholders. The list of attendees of the physical meeting has been provided to DOE for validation.

Munities of meeting of stakeholders' feedback round is mentioned in Annex-I.
Grievance Mechanism information is mentioned in Annex-II

The Stakeholders were happy about the project & the benefits they are getting by the project activity.

E.2. Summary of comments received

The representative of project participantexplained about the power generation process from this proposed solar power Plant and emphasised on the positive impacts that this project would leave on the local community via:

- This would create employment opportunity for a large number of people during construction period and continued employment opportunities for the local skill set over the project life time.
- This would improvise the standard of living of the local community
- In addition as this project would utilise available solar resource to generate power and there would be no associated emissions which would help in maintaining the environment clean.

The villagers raised various queries and clarification provided is as summarised below:

Name of the stakeholder:	Aminur Miah
Comment: What are the fuels used in the operation of the project activity or any boiler will be installed on-site? Reply from PP/ PP Representative: The project activity does not uses any fuel, instead it uses potential of solar energy to generate Electricity with the help of PV modules, and there is no installation of boilers on-site. Solar panels are used to generate electricity.	

Name of the stakeholder:	D. George
Concerns: Does the project activity have any negative impact on local climate conditions like air, land and soil quality, rain and agriculture scenario of the area? Reply from PP/ PP Representative:The project activity does not have any negative impact on local climate conditions like air, land and soil quality, rain and agriculture scenario of the area, as already told motive of this project activity is to reduce future anthropogenic emission caused by conventional power generating unit like thermal power plants. The project activity will result in improvement in climate conditions, improve quality of air, land, water, and agriculture scenario.	

Name of the stakeholder:	D. Senthil Kumar
Concerns: 3. Will the project help in improving the electricity supply to the villagers or the neighborhood areas? Reply from PP/ PP Representative:Project proponents informed him that as the project exports the electricity to local substation first, there is clear possibility that the local electricity supply situation will be better and local populace will get benefited as a result of it. However, they have also mentioned the preference of supply of electricity is not under the control of project. Since, the electricity is generated in the region, wesincerely hope that the local requirements of electricity are given due consideration by thediscom.	

Name of the stakeholder:	T. Prabhakaran
Concerns:What will be the operational lifetime of the project activity? Reply from PP/ PP Representative:The Operational lifetime of the Project activity is of 25 years.	

Name of the stakeholder:	Kumar
Concerns: Does the project provide employment opportunities to local populace? Reply from PP/ PP Representative: They were informed that except technical staff, preference will be give to local population inemployment, who have desired skills and qualifications. Possibility of imparting training to theeducated unemployed youth will also be considered.	

E.3. Report on consideration of comments received

There were no negative comments raised by the stakeholders and they were totally in support forsetting up of these kinds of projects in the region.

ANNEX:I:
SFR Minutes of Meeting

Venue:

Site office, Kamuthi Village of district Ramanthpuram, Tamilnadu
Date: 25th May, 2019, Time: 12:00 PM

Attendees: Local villagers and employees from AGETL

Agenda:

- Welcome address and introduction
- Project profile, CDM, environmental and social issues
- Description about solar energy conversion
- Suggestions and Opinions
- Queries and Responses from the stakeholders and company authorities respectively.
- Vote of thanks
- Refreshment for the stakeholders

Program Proceedings:

Mr. Alpesh Gedia, Associate Manager Adani Group, mediated the meeting and started the meeting by welcoming all the stakeholders and then explained the agenda for the meeting and why this feedback round is being carried out in both local and English Language. He briefly explained how this project applies to CDM and Gold standards mechanism. He explained how such power projects help in providing clean energy and thereby help in mitigating impacts due to Global Warming. He briefly explained the gist of Gold standards prerequisites and sustainability projects in the country. Further, he explained the impacts of solar power projects which lead to providing clean energy, increase in employment opportunities both long term and short term, increased income and thereby leading to improvement in living standard of the people.

He also discussed the sustainable development matrix parameters with the impacts on each by the project along with the monitoring plan for the sustainable development indicators related to the project activity. In the process it was also explained that the impacts assessment process would be done yearly.

He also explained how the project participants (RSPL) proposes to set up a Grievance procedure where any comment/suggestion could be provided. In line with the Annex W of GS Requirement– he explained how Ramnad Solar Power Limited proposes to establish continuous input and grievance procedure. He called upon Mr. Sankaranarayanan N to further discuss about the project and CSR activity.

Mr. Sankaranarayanan N from (RSPL) informed about Adani group and various projects in the area being undertaken and how the area has been benefitted by operation of power projects. He further explained the CSR Policy and projects being carried out as well as planned. On project specific case he explained the whole process right from inception of the project till the current execution levels and future proposed steps and expected commissioning. He shared the long-term vision of the company regarding CSR activities to be developed in parallel to the project implementation.

Benefits from the solar power project are summarized as below:

- Employment: Due to the project there would be employment opportunities for both construction phase as well as operational phase.
- CSR Activity: Adani group has initiated various CSR activities in the vicinity of its ongoing projects.

- Social development: With increased economic activity and employment opportunities the project would lead to overall social and financial development of the area.
- Infrastructure development: The project would lead to infrastructure development in the area, like roads, electricity situation etc.

Technological benefits: The project employs the best in class technology available and helps promoting latest technology

ANNEX-II
Grievance Mechanism information

Methods	Details	Reason for Selection
Continuous Input/Grievance Expression	Input/Grievance Register to be maintained at project site office. The format of receiving inputs/complaints is as per GS requirements and is attached as annex 1. The inputs/grievance received shall be processed in line with the procedure as described in Annex2.	The administrative office of the plant is located in the plant premises. Thus, it is appropriate publicly accessible location at which local stakeholders can provide their feedback on the project.
Process Book	The format of receiving inputs/complaints is as per GS requirements and is attached as annex 1. The inputs/grievance received shall be processed in line with the procedure as described in Annex2.	The local stakeholder shall be informed about the process book during the SFR. Further, a public notice shall be posted at the site informing the stakeholders about the grievance procedure.
Telephone access	Mr. Sankaranarayanan N, an employee of the company who is based at the project location is responsible and his mobile number +91 9099005305 shall be available for any stakeholder to comment. The comments mentioned shall be recorded in the grievance register and shall be processed in line with procedure described in Annex 2.	For those who are unable to travel to site or are not literate, they may contact the Project Implementer via telephone. Persons dialing this telephone number will have access to a Project representative who speaks both English and the local language, Hindi. The stakeholders may also contact the DOE appointed for the Validation, i.e. Mr. Ravikant Soni (+91-9818561801)
Internet/email access	Email address: 1. Mr. Alpesh Gedia: alpeshk.gedia@adani.com	Two email id of the project Implementer has been provided for continuous input / grievance

	2. Gold Standard: info@sustain-cert.com DOE: Mr. Ravikant Soni ravikant.soni@climensys.com The comments mentioned shall be recorded in the grievance register and shall be processed in line with procedure described in Annex 2.	for the convenience of stakeholders with internet access. Email address for the Gold Standard's has also been provided along with the details of the DOE (Auditor) for the project.
Nominated Independent Mediator	No Independent mediator is assigned. However, Mr. Sankaranarayanan N, an employee of company has been assigned as the point of contact for all the local issues. The comments mentioned shall be recorded in the grievance register and shall be processed in line with procedure described in Annex 2.	The use of a Nominated Independent Mediator is not being employed. As the use of the process book, telephone and internet will sufficiently capture feedback as necessary. However a local employee shall be available in case stakeholders have any comments.

Appendix 1. Contact information of project participants

Organization name	Ramnad Solar Power Limited
Registration number with relevant authority	U40106GJ2015PLC083404
Street/P.O. Box	Judges Bunglow Road, Bodakdev
Building	Sambhav Press Building
City	Ahmedabad
State/Region	Gujarat
Postcode	380054
Country	India
Telephone	+91 79 2555 7429
Fax	
E-mail	
Website	http://www.adanigreenenergy.com/
Contact person	Dhaval Trivedi
Title	Sr. Manager - Business Development
Salutation	Mr.
Last name	Trivedi
Middle name	
First name	Dhaval
Department	Solar
Mobile	+91 79 2555 7429
Direct fax	
Direct tel.	
Personal e-mail	dhaval.trivedi@adani.com

Appendix 2. Summary of post registration design changes

Revision History

Version	Date	Remarks
1.1	24 August 2017	Updated to include section A.8 on 'gender sensitive' requirements
1	10 July 2017	Initial adoption