المجلس العالمي للبصمة الكربونية
GLOBAL CARBON COUNCIL

Project Submission Form

V4.0- 2022

CONTENTS

COVER PAGE- Project Submission Form (PSF)	
Complete this form in accordance with the instructions attached at the end of this form.	
BASIC INFORMATION	
Title of the Project Activity as per LON/LOA	**Bundled Solar Energy Project in Gujarat, Rajasthan and Uttar Pradesh**
PSF version number	01
Date of completion / Updating of this form	11/06/2022
Project Owner(s) as per LON/LOA (Shall be consistent with De-registered CDM Type B Projects)	Adani Solar Energy Four Private Limited Adani Solar Energy Kutchh Two Private Limited Adani Solar Energy Kutchh One Limited Adani Solar Energy Chitrakoot One Limited
Country where the Project Activity is located	India
GPS coordinates of the project site(s)	Kindly refer the section A.2
Eligible GCC Project Type as per the Project Standard (Tick applicable project type)	☒ **Type A:** ☒ Type A1 ☐ Type A2 ☐ Sub-Type 1 ☐ Sub-Type 2 ☐ Sub-Type 3 ☐ Sub-Type 4 ☐ Type A3 ☐ **Type B – De-registered CDM Projects:**[1]

[1] Owners of Type B projects shall fill in the form provided in Appendix 7.

	☐ Type B1 ☐ Type B2
Minimum compliance requirements	☒ Real and Measurable GHG Reductions ☒ National Sustainable Development Criteria (if any) ☒ Apply credible baseline and monitoring methodologies ☒ Additionality ☒ Local Stakeholder Consultation Process ☒ Global Stakeholder Consultation Process ☒ No GHG Double Counting ☒ Contributes to United Nations Sustainable Development Goal 13 (Climate Action)
Choose optional and additional requirements (Tick applicable label categories)	☒ Do-no-net-harm Safeguards to address Environmental Impacts ☒ Do-no-net-harm Safeguards to address Social Impacts ☒ Contributes to United Nations Sustainable Development Goals (in addition to Goal 13)
Applied methodologies including version No. (Shall be approved by the GCC or the CDM)	ACM0002: Grid connected electricity generation from renewable sources, Version 20.0
GHG Sectoral scope(s) linked to the applied methodology(ies)	GHG SS1 (Energy (renewable/non-renewable sources)

Applicable Rules and Requirements for Project Owners

(Tick applicable Rules and Requirements)

Rules and Requirements		Version
☒ ISO 14064-2		
☒ Applicable host country legal requirements /rules		
☒ GCC Rules and Requirements[2]	☒ Project Standard	03.1
	☐ Approved GCC Methodology (XXXXX)	
	☒ Program Definitions	03.1
	☒ Environment and Social Safeguards Standard	03.0
	☒ Project Sustainability Standard	03.0
	☒ Instructions in Project Submission Form (PSF)-template	04.0
	☒ Clarification No. 01	1.3
	☐ Clarification No. 02	
	☐ Clarification No. 03	
	☐ Clarification No. 04	
	☐ Clarification No. 05	
	☐ Standard on avoidance of double counting	
	☐ Add rows if required	
☒ CDM Rules[3]	☒ Approved CDM Methodology (ACM0002)	20
	☒ TOOL 1- Tool for the demonstration and assessment of additionality	07.0.0
	☐ TOOL 02- Combined tool to identify the baseline scenario and demonstrate additionality	

[2] GCC Program rules and requirements: http://www.globalcarboncouncil.com/resource-centre/
[3] CDM Program rules: https://cdm.unfccc.int/Reference/index.html

		☒ TOOL 07- Tool to calculate the emission factor for an electricity system	07.0
		☐ TOOL 19- Demonstration of additionality of microscale project activities	
		☐ TOOL 21- Demonstration of additionality of small-scale project activities	
		☐ TOOL 23- Additionality of first-of-its-kind project activities	
		☒ TOOL 24- Common practice	03.1
		☒ TOOL 27- Investment analysis	11.0
		☐ TOOL 32- Positive lists of technologies	
		☐ Guidelines for objective demonstration and assessment of barriers	
		☐ Add rows if required	
Choose Third Party Project Verification by approved GCC Verifiers[4] (Tick applicable verification categories)	☒ GHG emission reductions (i.e., Approved Carbon Credits **(ACCs)**) ☒ Environmental No-net-harm Label (**E+**) ☒ Social No-net-harm Label (**S+**) ☒ United Nations Sustainable Development Goals (**SDG+**) ☐ Bronze SDG Label ☐ Silver SDG Label ☐ Gold SDG Label ☐ Platinum SDG Label ☒ Diamond SDG Label ☒ CORSIA requirements (**C+**)		

[4] **Note:** GCC Verifiers under the Individual Track are not eligible to conduct verifications for GCC Project Activities whose owners intend to supply carbon credits (ACCs) for use within CORSIA.

	☒ Host Country Attestation on Double counting
Declaration by the 'Authorized Project Owner[5] and focal point' (Tick all applicable statements[6])	The Project Owner(s) declares that: **Generic Requirements applicable to all Project Types:** ☒ We confirm that the Project Activity complies with the eligibility of the applicable project type (A1, A2, A3, B1 or B2) as stipulated by the Project Standard and relevant clarifications. ☒ We confirm that the Project Activity shall start or have started operations, and shall start or have started generating emission reductions, on or after 1 January 2016. ☒ We confirm that the Project Activity is eligible to be registered under the GCC program. We shall ensure the following for the Project Activity (tick at least one of the two options): ☒ No outcomes (e.g., emission reductions, environmental attributes) generated by the Project Activity under GCC will be claimed as carbon credits or environmental attributes under any other GHG/non-GHG[7] program, either for compliance or voluntary purposes, during the entire GCC crediting period; or ☒ If the project activity has been issued with carbon credits or environmental attributes of compensating nature[8] by any other GHG/ non-GHG program, either for compliance or voluntary purposes, the ACCs will be claimed only for the remaining crediting period (subject to a maximum of 10 years of crediting period including the periods under other programs and GCC program) for which carbon credits/ environmental attributes of compensating nature have not been issued by any other GHG/ non-GHG program. **Specific requirements applicable to respective Project Types:** ***For Project Type A1:*** ☐ For Project Type A1, we confirm that the Project Activity is NOT registered as a GHG Project Activity in any other GHG/non-GHG program or any other

[5] The Project Owner means the legal entity or organization that has overall control and responsibility for the Project Activity

[6] **Consequences in case of Non-compliance with declaration statements:**
If at any point in time non-compliance with the declared statements is established as a result of negligence, fraud or wilful misconduct of the GCC Project Owner/s the GCC project activity will be disqualified, and the registration of the proposed Project Activity will be rejected.

[7] Non-GHG programs could be such as I-REC facilitating reliable energy claims with Renewable Energy Certificate (REC) schemes

8 The environmental attributes of compensating nature are those which are used by captive users (e.g., corporates/industries) for offsetting their GHG emissions

	voluntary program and has not issued or will not issue credits under any other program. ***For Project Type A2 (Sub-Type 1):*** ☒ For Project Type A2 Sub-Type 1, we confirm that the Project Activity is NOT registered as a GHG Project Activity in any other GHG/non-GHG program or any other voluntary program and has not issued or will not issue credits under any other program. ***For Project Type A2 (Sub-Type 2 or Sub-Type 3):*** For Project Type A2 Sub-Type 2 or Project Type A2 Sub-Type 3, we confirm that for Project Activity, which has been registered with CDM or any GHG/non-GHG Program and we shall (tick at least one of the two options): ☐ Submit a proof for deregistration from CDM; or ☐ Submit a signed & stamped public undertaking, stating that the Project Owner will never submit any request for Issuance of ACCs or request for renewal of crediting period to CDM-EB or under article 6.4 or any authority after submission to GCC Program and shall formally inform CDM-EB or authority under article 6.4 or any authority after submission to GCC Program. ☐ For Project Type A2 Sub-Type 2 or Project Type A2 Sub-Type 3, we confirm that the Project Activity is NOT included as a component Project Activity (CPA) in any registered GHG Programme of Activities (PoA) or any other functionally equivalent grouped/aggregated activities under any GHG program (such as the CDM or any other voluntary program). ***For Project Type A2 (Sub-Type 4):*** For Project Type A2 Sub-Type 4, we confirm that the Project Activity has been included in a registered CDM-POA and we shall (tick at least one of the two options): ☐ Submit the proof for exclusion of CPA(s) from registered CDM-POA prior to the date of initial submission to the GCC Program; or ☐ Submit the proof of exclusion of CPA(s) from the registered CDM-PoA after the request for registration has been submitted to GCC Program but before the final decision is made by the GCC Steering Committee. ***For Project Type A3:*** ☐ For Project Type A3, we confirm that the Project Activity is NOT registered as a GHG Project Activity in any other GHG/non-GHG program or any other voluntary program and has not issued or will not issue credits under any other program. ***For Project Type B1 or B2:***

	For Project Type B1 or Project Type B2, we confirm that for Project Activity, which has been registered with CDM or any GHG/non-GHG Program and we shall (tick at least one of the two options): ☐ Submit a proof for deregistration from CDM; or ☐ Submit a signed & stamped public undertaking, stating that the Project Owner will never submit any request for Issuance of ACCs or request for renewal of crediting period to CDM-EB or under article 6.4 or any authority after submission to GCC Program and shall formally inform CDM-EB or authority under article 6.4 or any authority after submission to GCC Program. **Requirements to avoid double counting:** We intend to submit or have submitted a written attestation[9] (Host Country Letter of Authorization - HCLOA) from the host country's national focal point or focal point designee for CORSIA eligible units generated beyond 31 December 2020 at the following stages[10] (tick at least one of the three options): ☒ The initial submission for GSC; or ☒ Along with the submission for a request for registration (after Project Verification is completed); or ☒ Along with the submission for a request for the first or subsequent issuance of ACCs. **Project specific requirements:** ***CORSIA specific requirements:*** ☒ We confirm that bundled projects or grouped projects shall have registered crediting period starting on or after 1 Jan 2016 for the grouped/aggregated project as a whole. ☒ We confirm that the Project Activity meets all the requirement of the CORSIA Eligible Emissions Units[11] required for GCC projects and does not fall under the excluded unit types, methodologies, programme elements, and/or procedural classes. ☒ We confirm that the Project Activity aims to achieve at least Silver or higher SDG+ label (i.e., positively impact at least 3 or more United Nations Sustainability Development Goals). ☒ We confirm that the Project Activity will be implemented in a country which is UN member state[12].

9 In case of any change of Host Country Letter of Authorisation (HCLOA) the project owner shall inform the GCC operations team immediately

10 If the host country attestation is not submitted at the initial submission of GSC, the project can be tagged with an indicative CORSIA flag if it's confirmed to be submitted later. If the host country attestation is not submitted at the request for registration, the project can be tagged with an indicative CORSIA flag if at least the PSF and Verification Report confirms to submit this letter, at first issuance. If the host country attestation is not submitted at request for first issuance, the ACCs will not be tagged as CORSIA (C+) compliant if this letter is not submitted.

11 CORSIA Eligible Emissions Units containing approval and conditions for GCC Program: https://www.icao.int/environmental-protection/CORSIA/Pages/CORSIA-Emissions-Units.aspx

12 The list of UN member states countries can be found at https://www.un.org/en/about-us/member-states

	Provide details (if any) below for the boxes ticked above:
	The Project Owner(s) declares that: ☒ All the information provided in this document, including any supporting documents submitted to the GCC or its registry operator IHS Markit at any time, is true and correct. ☒ They understand that a failure by them to provide accurate information or data, or concealing facts and information, can be considered as negligence, fraud or willful misconduct. Therefore, they are aware that they are fully responsible for any liability that arises as a result of such actions. Provide details below for the boxes ticked above
Appendixes 1-9	Details about the Project Activity are provided in Appendixes 1 through 9 to this document.
Name, designation, date and signature of the Focal point (as per LON/LOA)	**Adani Green Energy Limited (Authorized Representative)**  **Sandip Saha** **Date: 12/06/2022**

1. PROJECT SUBMISSION FORM

Section A. Description of the Project Activity

A.1. Purpose and general description of the Project Activity

The project activity is 475 MW bundled solar PV installation by different SPVs of Adani Green Energy Limited at Rajasthan, Gujarat and Uttar Pradesh in India. The project activity is a greenfield installation that produces average 1,029,537.86 MWh of electricity per annum. The annual average energy generation over the crediting period is estimated as 10,295,378.59 MWh from this bundled project activity, that displaces average 957,985 tCO2/Annum and 9,579,859 tCO2 inter he crediting period from all the bundled project activity. The quantity of electricity generated is being supplied to integrated Indian grid and that equivalently displaces carbon di oxide emissions from the high intensive fossil fuel based thermal generating systems.

Project Details

Project	SPV Name	Project Capacity (MW)	Location, State	Commissioning date	Total MWh of energy generation	Emission reduction achieved
Project 1	Adani Solar Energy Four Limited	50	Rajasthan	17-Apr-20	116,289	957,985
Project 2	Adani Solar Energy Kutchh Two Pvt Limited	100	Gujarat	23-Oct-20 (66.75 MW) 31-Dec-20 (33.25 MW)	229,512	
Project 3	Adani Solar Energy Kutchh One Limited	150	Gujarat	25-Nov-20 (43.75) 29-Dec-20 (56.25 MW) 19-Jan-21 (50 MW)	344,268	
Project 4	Adani Solar Energy Four Limited	50	UP	2-Mar-21	100,871	
Project 5	Adani Solar Energy Four Limited	50	UP	9-Mar-21	101,485	
Project 6	Adani Solar Energy Chitrakoot One Limited	25	UP	24-Mar-21	52,648	

Project	SPV Name	Project Capacity (MW)	Location, State	Commissioning date	Total MWh of energy generation	Emission reduction achieved
Project 7	Adani Solar Energy Chitrakoot One Limited	50	UP	15-Apr-21	106,872	
	Total	**475 MW**			1,051,944	

The project activity meets the following sustainable development criteria

1. Social Well being

The project activity improves the social well-being of all the peoples living in and around the project area. The project improves the daily wages of the local peoples and increase the opportunities of local people to upgrade their skill and improve their technical knowledge in operating the Solar PV Generators. There is plenty scope for the overall development of the village area including improvement in road and infrastructure around the project area

2. Environmental Well being

The project activity is a green technology infusion in host country India and installation of Solar PV reduces greenhouse gas emission into the atmosphere, thereby help in meeting the requirements of Article 6 of Kyoto protocol and national GHG inventory.

3. Economic Well being

The project activity will provide employment opportunity to all the men and woman living in that area. There is considerable direct and indirect permanent and temporary employment opportunity, leading to economic well-being of the people living in and around the project site

4. Technology Well being

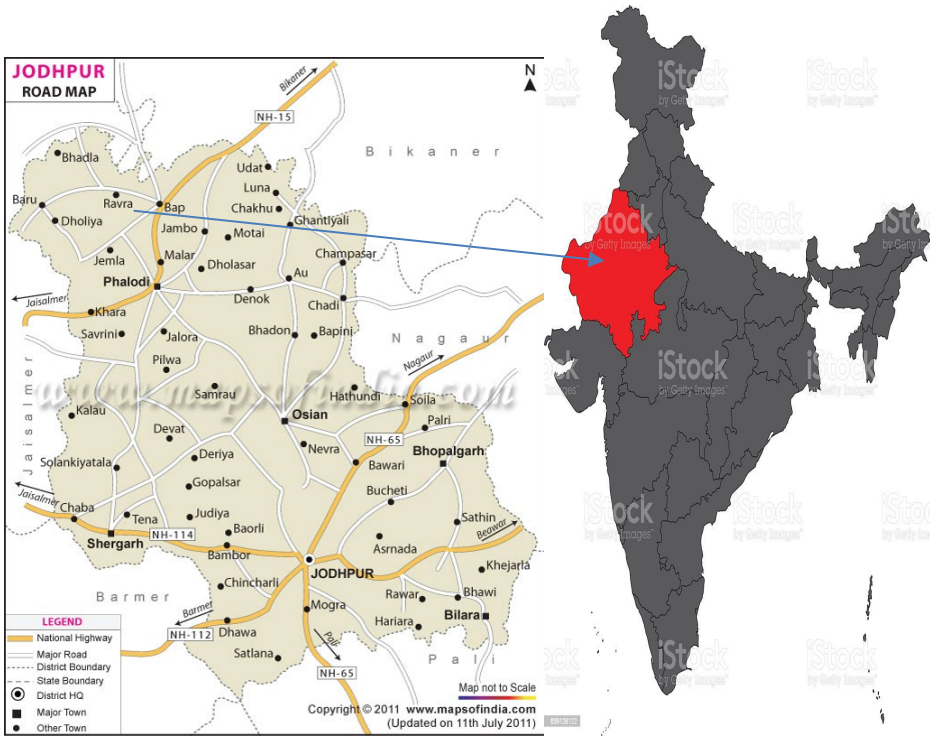
The implementation of project activity aid in upgrading the technical knowledge of the people through technology transfer and green field activity

A.2. Location of the Project Activity

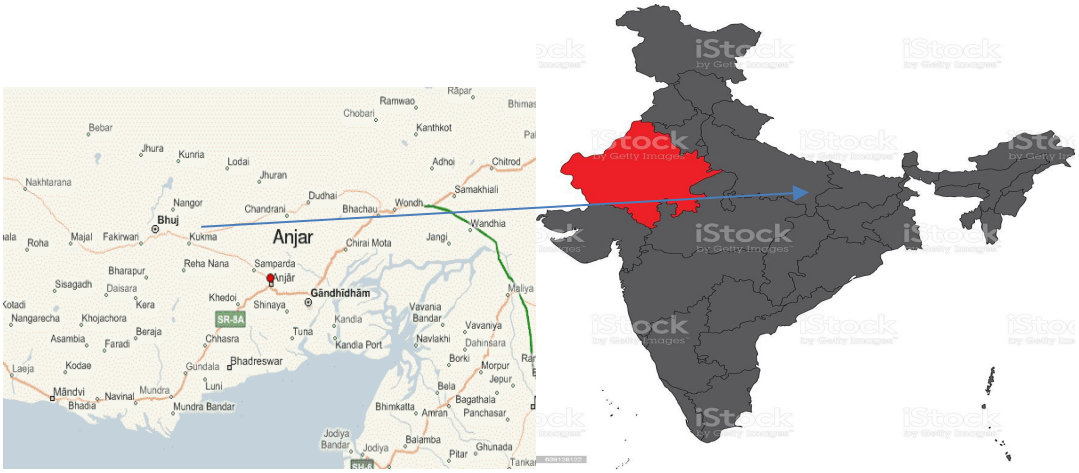
>>

Address and geodetic coordinates of the physical site of the Project Activity			
Physical address	**SPV**	**Latitude**	**Longitude**
Rawra, Bap / Phalodi,	Adani Solar Energy Four Private Limited	27.41° N (27° 25' 08.5" N)/27.4190	72.17352° E (72° 10' 24.7" E)/72.1735
Khirasara, Taluka Bhuj District Kutch, State Gujarat	Adani Solar Energy Kutchh Two Private Limited	23.37° N (23° 22' 12" N)/23.3700	70.09° E (70° 05' 24" E)/70.0900
Khirasara Taluka Bhuj District Kutch State Gujarat	Adani Solar Energy Kutchh One Limited	27.63° N (27° 37' 48" N)/27.6300	79.71° E (79° 42' 36" E)/79.7100
Bhahpur Sapha Taluka Shahabad District Hardoi State Uttar Pradesh	Adani Solar Energy Four Private Limited	28.04° N (28° 02' 24" N)/28.0400	78.79° E (78° 47' 24" E)/78.7900
Shukrulullapur & Jaunera, Tehsil: Sahaswan,UP	Adani Solar Energy Four Private Limited	25.30° N (25° 18' 2" N)/25.3005	81.22° E (81° 13' 34" E)/81.5566
Mandaur & Sakhaunha Taluka Mau District Chitrakoot State Uttar Pradesh	Adani Solar Energy Chitrakoot One Limited	25.30° N (25° 18' 2" N)/25.3005	81.22° E (81° 13' 34" E)/81.5566
Mandaur & SakhaunhaTaluka MauDistrict ChitrakootState Uttar Pradesh	Adani Solar Energy Chitrakoot One Limited	27.41° N (27° 25' 08.5" N)/27.4190	72.17° E (72° 10' 24.7" E)/71.1735

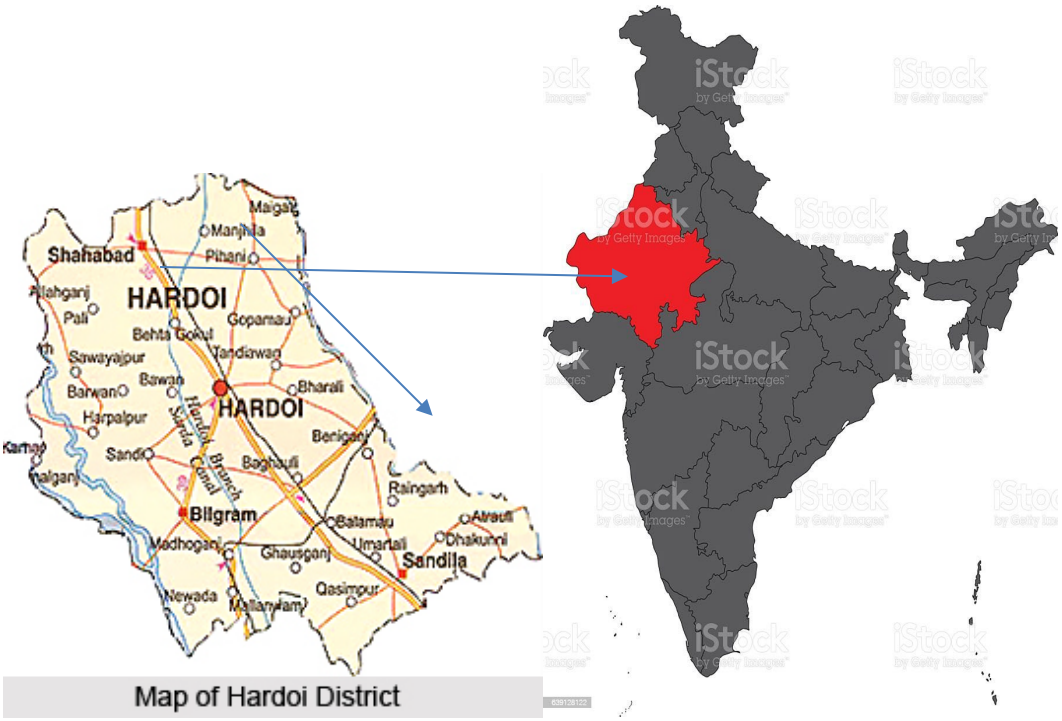
Project 1 Rawra,Bap / Phalodi,Jodhpur,Rajasthan, Adani Solar Energy Four Private Limited



Project 2 and 3, Khirasara,Taluka BhujDistrict Kutch,State Gujarat, Adani Solar Energy Kutchh Two Private Limited and Adani Solar Energy Kutchh One Limited

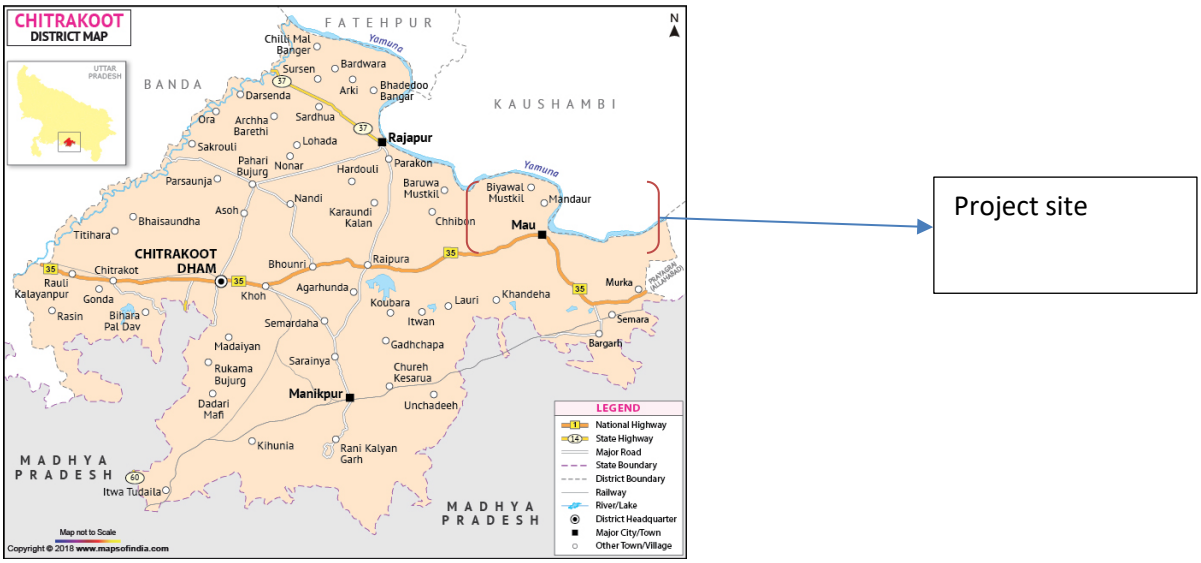


Project 4 Bhahpur SaphaTaluka Shahabad District Hardoi State Uttar Pradesh, Adani Solar Energy Four Private Limited



Project 5 Shukrulullapur & Jaunera, Tehsil: Sahaswan, UP, Adani Solar Energy Four Private Limited

Project 6 & 7- Mandaur & SakhaunhaTaluka MauDistrict ChitrakootState Uttar Pradesh,Adani Solar Energy Chitrakoot One Limited



A.3. Technologies/measures

The project activity involves installation of Solar Photovoltaic technology (SPV) technology as a greenfield installation that converts suns energy into electric energy and used for grid connected systems for power generation through DC cum AC invertors. There are many arrays of PV cell in a PV solar panel system which is arranged together to give the required output energy. In the absence of the project activity the same amount of power, will be generated from the national grid.

The parts of the Solar PV technology are

- Solar panels;
- Switchyard;
- Inverters;
- Transformers;
- Main Control Room;
- Associated Facilities
- Internal Access Road; and
- Additional Project infrastructure such as scrap yard, storage area.

Technical Specifications (Project 1)

Technical Summary	50 MW Total	23.36 MW Poly C-Si Seasonal	20.32 MW Poly C-Si Fixed	6.25 MW Single Axis Tracker
AC Capacity (MW)	50 MW	23.36 MW	20.32 MW	6.25 MW

Technical Summary	50 MW Total	23.36 MW Poly C-Si Seasonal	20.32 MW Poly C-Si Fixed	6.25 MW Single Axis Tracker
DC Capacity (MWp)	72.22 MWp	32.42 MWp	30.846 MWp	8.95 MWp
Mean DC / AC Factor	1.446	1.388	1.518	1.43
Block Size	8 x 6.25 MW	7 x 6.25 MW		1 x 6.25 MW
PV Module Make	-	Chint Solar, Znshine Solar		Longi Solar
Module Model	-	CHSM6612P/HV-330 ZXP6-LD72-345/P		LR4-72HBD-430M-glaze
Alternate Module Make Proposed	-	Any Tier-1 Module		
Module Technology	-	Poly Crystalline		Bi-Facial
Module Rating	-	330, 335, 345 Wp		430 Wp
No. of Modules	212,116	191,296		20,820
Mounting Structure	-	Seasonal Tilt	Fixed Tilt	Single Axis Tracker
Table Tilt Angle	-	Summer 5°, Winter 25°	8°	-45° to 45°
No. of tables	4,425	3,132	1,017	276
Structure Configuration	-	2 x 16	4 x 24	3 x 32
Module Orientation	-	Portrait	Portrait	Landscape
Pitch	-	7.5 m	11.5 m	5.5 m
No. of Inverters	312	146	127	39
Inverter Make	Huawei Technologies			
Inverter Model / Type	SUN2000-185KTL-INH0 / String Inverter			
Inverter Output	160 kW @ 50 °C, 175 kW @40 °C			

Technical specifications

Parameters	Project 2	Project 3	Project 4	Project 5
AC Capacity	100 MW	150.080 MW	50 MW	49.92 MW

Parameters	Project 2	Project 3	Project 4	Project 5
DC Capacity	140.247 MWp	210.376 MWp	72.49 MWp	72.5 MWp
Mean DC / AC Factor	1.402	1.403	1.45	1.45
PV Module Make	Jinergy 330 Wp	Jinergy 330 Wp	Longi Solar	Longi Solar
Module Model	JNMP72-330	JNMP72-330	-	-
Alternate Module Make	Proposed Any Tier-1 Module	Proposed Any Tier-1 Module	Proposed Any Tier-1 Module	Any Tier-1 Module
Module Technology	Poly Crystalline	Poly Crystalline	Mono Crystalline	Mono Crystalline
No. of Modules	424,992	6,37,504	167040	163676
Mounting Structure Seasonal tilt	Seasonal Tilt	Seasonal Tilt	Fixed tilt	Fixed Tilt
Table Tilt Angle	Tilt Angle 5° & 25°	5° & 25°	Table Tilt Angle 17°	Angle 17°
Module Orientation	Portrait	Portrait	Module Orientation Portrait	Portrait
Pitch	7.5 m	7.5 m	Pitch 7.5 m	Pitch 7.5 m
No. of Inverters	625 Nos.	938 Nos.	312 Nos	312 Nos.
Inverter Make	Huawei Technologies	Huawei Technologies UN2000-185KTL-INH0, String Inverter	UN2000-185KTL-INH0, String Inverter	Huawei Technologies

Technical specifications -Project 6 and 7

Description	50 Mwac (Project 7)	25 MW ac (Project 8)
Name of the Project: 50 MWac + 25 MWac Mau Solar Project, Chitrakoot, Uttar Pradesh		
Technical Summary		
AC Capacity	50.08 MWac	25.00 MWac
DC Capacity	72.446 MWp	37.5 MW
Mean DC / AC Factor	1.45	1.50
PV Module Make	Longi Solar	Longi Solar

Description	50 Mwac (Project 7)	25 MW ac (Project 8)
Module Model	LR4-72HPH-430M	LR4-72HPH-430M
Alternate Module Make Proposed	Any Tier-1 Module	Any Tier-1 Module
Module Technology	Mono PERC Technology	Mono PERC Technology
Module Rating	430 Wp	430 Wp
No. of Modules	1,68,480	87,210
Mounting Structure	Fixed Tilt	Fixed Tilt
Table Tilt Angle	17°	17°
Pitch	7.50 m	7.50 m
No. of Inverters	312 Nos.	125 Nos.
Inverter Make	Huawei Technologies	Sungrow
Inverter Model / Type	SUN2000-185KTL-INH0-DraftC-50C, String Inverter	SG250HX, String Inverter
Plant's Internal Substation		
Internal Pooling Voltage Level	33 kV	33 kV
Outgoing Voltage Level	132 kV	132 kV
Substation Ownership	Project Company	Project Company
Transmission Line		
TL Voltage Level	132 kV	
Transmission Line Capacity	75 MW	

A.4. Project Owner(s)

Location/ Country	Project Owner(s)	Where applicable[13], indicate if the host country has provided approval (Yes/No)
India	Adani Solar Energy Four Private Limited	Not Applicable
India	Adani Solar Energy Kutchh Two Private Limited	Not Applicable
India	Adani Solar Energy Kutchh One Limited	Not Applicable
India	Adani Solar Energy Chitrakoot One Limited	Not Applicable
India	Adani Green Energy Limited	Not Applicable

A.5. Declaration of intended use of Approved Carbon Credits (ACCs) generated by the

[13] For example, *Project Coordination Form* is to be filled-in by Project Owners for projects located in Qatar. A written attestation from the host country's national focal point or the focal point's designee, as required by CORSIA (Refer section A.5 of the PSF guidelines).

Project Activity

>> The Project Activity is expected to generate ACCs for a full 10-year crediting period and supply the credits to offset the following GHG emissions:

Period		Name of the Entities	Purpose and Quantity of ACCs to be supplied
From	To		
17/04/2020	16/04/2030		Offsetting for 10 years of Crediting Period
		Adani Solar Energy Four Private Limited	
		Adani Solar Energy Kutchh Two Private Limited	
		Adani Solar Energy Kutchh One Limited	
		Adani Solar Energy Chitrakoot One Limited	

A.6. Additional requirements for CORSIA

Refer Section E and F

Section B. Application of selected methodology(ies)

B.1. Reference to methodology(ies) and tools applied in the project

Applied methodology:
Approved CDM Methodology: Grid-connected electricity generation from Renewable sources, ACM0002, Version 20.0.

Applied Tools
Tool 01: Tool for the demonstration and assessment of additionality (Version 07.0.0 Annex 8)
Tool 07-Tool to calculate the emission factor of electricity system, Version 7.0
Tool 24-Common Practice, Version -3.1
Tool 27-Investment Analysis, Version-11.0

B.2. Applicability of methodology(ies) and tools applied in the project

The project activity at all the sites meets the following baseline scenario identifications

The bundled project activity meets the following baseline scenario identifications

The project activities meet the following applicability criteria as per the ACM0002, version 20

Para No.	Applicability Conditions as per ACM002,Version 20.0	Applicability to this Project Activity
1.	This methodology is applicable to grid-connected renewable energy power generation project activities that: (a) Install a Greenfield power plant; (b) Involve a capacity addition to (an) existing plant(s); (c) Involve a retrofit of (an) existing operating plants/units; (d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or (e) Involve a replacement of (an) existing plant(s)/unit(s).	The implementation of the bundled 487 MW Solar plant/unit at the aforesaid project sites is for generating electricity. It is a green field installation, and displaces equivalent amount of electricity that would have been supplied from the national grid in the absence of the project activity
2	In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power capacity addition projects) the existing plant/unit started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion, retrofit, or rehabilitation of the plant/unit has been undertaken between the start of this minimum historical reference period and the implementation of the project activity.	There is no capacity addition/Retrofit activity /rehabilitation/ replacement occurred. Hence this scenario is not applicable

3	(a) In case of hydro power plants, one of the following conditions shall apply:[14] The project activity is implemented in existing single or multiple reservoirs, with no change in the volume of any of the reservoirs; or (b) The project activity is implemented in existing single or multiple reservoirs, where the volume of the reservoir(s) is increased and the power density, calculated using equation (7), is greater than 4 W/m^2; or The project activity results in new single or multiple reservoirs and the power density, calculated using equation (7), is greater than 4 W/m^2; or	The project activity is not a hydropower plant. Hence scenario is not applicable
4	In the case of integrated hydro power projects, project proponent shall: Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project; or	The project activity is not an integrated hydro power plant, hence it is not applicable
5	The methodology is not applicable to: (f) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; (g) Biomass fired power plants/units.	The project activity is not a switch in fossil fuel and biomass based power plants. Hence it is not applicable
6	In the case of retrofits, rehabilitations, replacements, or capacity additions, this methodology is only applicable if the most	The project activity is not an retrofit/rehabilitation/replacement. Hence it is not applicable

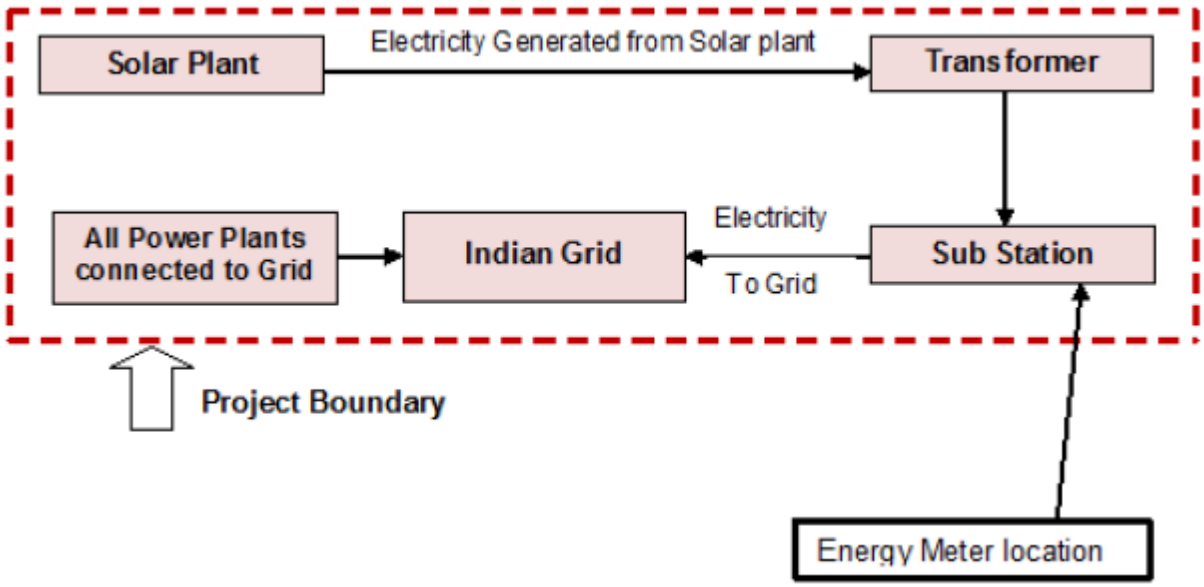
[14] Project participants wishing to undertake a hydroelectric project activity that results in a new reservoir or an increase in the volume of an existing reservoir, in particular where reservoirs have no significant vegetative biomass in the catchments area, may request a revision to the approved consolidated methodology.

	plausible baseline scenario, as a result of the identification of baseline scenario, is "the continuation of the current situation, that is to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance".	

Tools	**Applicability**
Tool 01: Tool for the demonstration and assessment of additionality (Version 07.0)	The project activity is large scale bundled project, that follows the recent tool and requirements of Additionality tool, Version 7. The procedures are followed as per the additionality tool to establish the appropriate method of computing the financial analysis for the project. (i.e) Investment analysis method .
Tool 07: Tool to calculate the emission factor for an electricity system (Version 07.0)	The baseline for the project activity is power consumption from grid, in the absence of the project activity and the combined emission factor for the National Grid is computed based on the mentioned tool.
Tool 24-Common Practice,(Version 03.1)	The project activity follows the steps from common practice tool, to prove the project scenario is not business as usual during the time of implementation
Tool 27-Investment Analysis, Version-11.0	The investment analysis recent version and its step wise procedure are followed to establish equity IRR for the project activity

B.3. Project boundary, sources and greenhouse gases (GHGs)

As per the approved methodology.ACM0002 Version 20,, the project boundary includes the renewable energy generation facility ie the Solar PV technology installed project site, the inverter and other components, National grid and metering systems.



The table below provides an overview of the emissions sources included or excluded from the project boundary for determination of baseline and project emissions.

Source		GHG	Included?	Justification/Explanation
Baseline	CO_2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to project activity	CO_2	Yes	CO_2 emission that would have occurred in the absence of project activity from fossil fuel based power plant.
		CH_4	No	Not applicable
		N_2O	No	Not applicable
Project Activity	Auxiliary power consumption due to operation of the project activity	CO_2	Yes	CDM Tool: "Tool to calculate baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation"
		CH_4	No	Not applicable
		N_2O	No	Not applicable

B.4. Establishment and description of the baseline scenario

As per the paragraph 5.2. of ACM0002, the Baseline scenario for Greenfield power plant 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”.

As per the methodology the possible baseline scenario in the absence of the project activity will be the electricity delivered to the grid by the project activity, that would have been generated by the operation of grid-connected power plants and by the addition of new thermal generation sources into the grid. Hypothetically it means that a power plant with emission factor equivalent to grid mix would have supplied electricity in absence of new project plant or added capacity.

The bundled project activity is a green field project activity. In the absence of project activity, there is no on-site power production happening and if the project activity is not happening, the equivalent amount of power will be generated by the additional generation from fossil fuel-based power plant governed by Indian Grid. The grid emission factor is the relevant parameter, that need to be monitored for the achievable emission reduction in the baseline.

Implementation of renewable energy technologies, wind-based energy generation systems or solar energy generation systems, are not mandatory under local laws and regulations. Hence there is more possibility that in the absence, the power will be from fossil fuel-based power plant through National grid. The energy generation ratio during project planning stage and even now for India, shows that the fossil fuel-based power plant shares the major power generation share as it does not involve any capital cost of installation for the project owners. Hence the power generation through the national grid is the plausible baseline scenario for all the project activities.

The emission factor calculation is based on tool to calculate emission factor of electricity system.

The emission factor is calculated following the Indian National grid in the host country. The Combined margin emission factor is used to calculate the emission factor for the project activity. The CM is the result of a weighted average of two emission factors pertaining to the electricity system: the “operating margin” (OM) and the “build margin” (BM). The operating margin is the emission factor that refers to the group of existing power plants whose current electricity generation would be affected by the proposed CDM project activity. The build margin is the emission factor that refers to the group of prospective power plants whose construction and future operation would be affected by the proposed CDM project activity.

Parameter	Value	Nomenclature	Source
$EF_{grid,CM,y}$	0.9305 tCO_2 /MWh	Combined margin CO_2 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 $C0_2$ Emission Database, Version 17.0, CEA, GOI

Parameter	Value	Nomenclature	Source
$EF_{grid,OM,y}$	0.9522 tCO_2 /MWh	Operating margin CO_2 emission factor for the project electricity system in year y	Calculated as the last 3-year (2018-19 and 2019-20,2020-21) generation-weighted average, sourced from Baseline CO_2 Emission Database, Version 17.0, CEA, GOI
$EF_{grid,BM,y}$	0.8653 tCO_2 /MWh	Build margin CO_2 emission factor for the project electricity system in year y	Baseline CO_2 Emission Database, Version 17.0, CEA, GOI

B.5. Demonstration of additionality

As per the requirement of ACM0002 and Tool for demonstration of Additionality, the following steps are followed to establish additionality.

Step 0: Demonstration whether the proposed project activity is the first-of its-kind

The project is not a first of its kind activity. Describe how the proposed project meets the criteria for deemed additionality.	1. Project without carbon revenue is not financially attractive as discussed in investment analysis section below (benchmark and sensitivity analysis). 2. Continuation of the current situation supply of equal amount of electricity by the newly built grid connected power plants. Continuation of the current situation is not considered as a realistic alternative due to increasing electricity demand therefore new power plants should be constructed which includes mainly thermal power plants. Implementation of the project is additional to the baseline scenario which is an alternative 2 above and therefore reduces the emissions. 3. The project activity comes under white category as per local regulation, thus there shall be no necessity of obtaining the Consent to Operate'' for White category of industries. Since project activity falls under white category and the non-polluting nature of project fulfils the compliance to the local laws and regulations The Project activity conforms to all the applicable laws and regulations in India: ✓ Power generation using renewable energy is not a legal requirement or a mandatory option.

	✓ There are state and sectoral policies, framed primarily to encourage renewable power projects. ✓ These policies have also been drafted realizing the extent of risks involved in the projects and to attract private investments. ✓ The Indian Electricity Act, 2003 (May 2007 Amendment) does not influence the choice of fuel used for power generation. ✓ There is no legal requirement on the choice of a particular technology for power generation ✓ The both alternatives are in compliance with laws and regulations required. There is no any mandatory requirement to implement the project activity. 4. In accordance with common practice analysis there is no plants similar to the proposed project and built without carbon revenue, the proposed type of project should not be considered as a common practice. Hence, project is additional in this aspect.

The present 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.

Step 1: Identification of alternatives to the project activity consistent with current laws and regulations

Sub-step 1a: Define alternatives to the project activity:

Identify realistic and credible alternative(s) available to the project owners or similar project developers that provide outputs or services comparable with the proposed project activity.

The purpose of the project activity is to generate electrical power using solar energy and feed the electricity generated to the grid. Hence, the following alternatives are considered:

Alternative 1: The proposed project activity not undertaken as a GCC project activity.

The PP could proceed with the implementation of the project without Carbon credit benefits. The electricity produced from the renewable energy project would have been sold to the grid. This is in compliance with all applicable legal and regulatory requirements and can be a part of the baseline. However, the Project activity is not feasible without revenues from sale of Carbon Credits. This argument has been discussed in step 2 of the Additionality section.

Alternative 2: No proposed project activity and equivalent amount of energy would have been produced by the grid electricity system through its currently running power plants and by new capacity addition to the grid i.e. Continuation of the present situation.

The PP would have continued without investment in Project activity with usual business activities. The grid would continue with the fossil fuel-based power projects and this would result in GHG emissions. Hence, the new capacity add-on from a fossil fuel-based power plant is appropriate, realistic & credible baseline alternative for the project activity.

Outcome of Sub-step 1a: All the realistic alternatives for the project activity have been enlisted above.
Thus, though two alternatives are mentioned above as per step of additionality tool, the first alternative is not possible as project activity is not viable without carbon credit benefits and second alternative is the baseline scenario for the project activity as per methodology as mentioned in section B.4 of PSF.

It is to be noted that being the green field project activity, "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 the "Tool to calculate the emission factor for an electricity system".

Sub-step 1b: Consistency with mandatory laws and regulations:

The alternative(s) shall be in compliance with all applicable legal and regulatory requirements, even if these laws and regulations have objectives other than GHG reductions, e.g., to mitigate local air pollution. The project activity comes under white category as per local regulation, thus there shall be no necessity of obtaining the Consent to Operate'' for White category of industries. Since project activity falls under white category and the non-polluting nature of project fulfils the compliance to the local laws and regulations (This sub-step does not consider national and local policies that do not have legally-binding status.).

The relevant national laws and regulations pertaining to generation of energy in India are:

- Electricity Act 2003
- National Electricity Policy 2005
- Tariff Policy 2006
- The factories act 1948

The Project activity conforms to all the applicable laws and regulations in India:

- Power generation using renewable energy is not a legal requirement or a mandatory option.
- There are state and sectoral policies, framed primarily to encourage solar power projects.
- These policies have also been drafted realizing the extent of risks involved in the projects and to attract private investments.
- The Indian Electricity Act, 2003 (May 2007 Amendment) does not influence the choice of fuel used for power generation.

- There is no legal requirement on the choice of a particular technology for power generation.

The both alternatives are in compliance with laws and regulations required. There is no any mandatory requirement to implement the project activity.

Outcome of Sub-step 1b: Hence, both the alternatives enlisted above are found to comply with the mandatory laws and regulations taking into account the enforcement of the legislations in the region or country and EB decisions on national and/or sectoral policies and regulations. Since solar projects are categorized as white category, no any consent to operate required from pollution control board.

However, Alternative 2 has been selected as the appropriate baseline alternative for this project activity in line with methodology.

Step 2: Investment analysis[15]

The investment analysis has been done in order to make an economic and financial evaluation of the project. No public funding or ODA are available in India for finance of this type of projects. For investment analysis, loan conditions have been determined considering the average market rates/term sheets signed with the banks.

Sub-step 2a: Determine appropriate analysis method

There are three options for the determination of analysis method which are:
- Simple Cost Analysis
- Investment Comparison Analysis and
- Benchmark Analysis

The Project activity envisages to export the power to Indian grid and the revenues from the sale of electricity would be generated in accordance with the terms and tariffs established in the Power Purchase Agreement (PPA). Thus, simple cost analysis (Option I) cannot be used as the analysis method as the sale of the units of generated electricity shall result in a revenue stream during the operations of the Project activity.

In the absence of the project activity grid electricity would have been the obvious choice for the Project which requires no investment. Hence investment comparison analysis (Option II) is also not appropriate for the project activity.
However, after eliminating Option I and Option II, the use of Benchmark analysis (Option III) is the method of analysis that has been selected as the most suitable method. This method determines the attractiveness of the project activity for the investors, as well as provides a measure of the viability of the investment to generate revenues during its operation, as compared with other avenues and

[15] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v11.0.pdf

investment options. Hence, the Benchmark analysis method is to be employed for analysis of the said project.

Sub-step 2b (Option III): Apply benchmark analysis

Choice of Benchmark:

According to the "Tool for demonstration and assessment of Additionality", the financial indicator can be based either on (1) project IRR or (2) equity IRR. There is no general preference between the approaches (1) or (2). The benchmark chosen for analysis shall be fully consistent with the choice of approach. Therefore, in accordance with the guidance, the relevant financial indicator for project activity has been chosen as post tax equity IRR.
As per Investment Analysis tool, Required/expected returns on equity are appropriate benchmarks for an equity IRR. The Equity IRR is considered as the financial indicator and the benchmarks used is cost of equity. Hence the benchmarks used are applicable to the project activity and the type of IRR calculation presented.

Hence, Project Owner has used Methodological Tool for Investment Analysis version 11 (EB 112, Annex 2). The default value as mentioned in version 11 is 10.55% for group 1 project in India is used which is appropriate and more conservative for benchmark calculation and PP has considered the same tool for default value of return on equity for the respective SPVs.

As per paragraph 16 of Appendix A of the above-mentioned document, "In situations where an investment analysis is carried out in nominal terms, project owners can convert the real term values provided in the table below to nominal values by adding the inflation rate. The inflation rate shall be obtained from the inflation forecast of the central bank of the host c of the crediting period. If this information is not available, the target inflation rate of the central bank shall be used. If this information is also not available, then the average forecasted inflation rate for the host country published by the IMF (International Monetary Fund World Economic Outlook) or the World Bank for the next five years after the start of the project activity shall be used". For the concerned project activity, the inflation rate has been considered from the inflation forecast published by International monetary fund (IMF).

As per para 19 of EB 101, Annex 11 the cost of equity is determined by selecting the values provided in the Appendix, i.e., Default values for cost of equity (expected return on equity) is presented below:

The Required return on equity (benchmark) was computed in the following manner for all the projects in the bundle:

Benchmark Estimation

Nominal Benchmark = {(1+Real Benchmark) *(1+Inflation rate)}-1

Where:
- Default value for Real Benchmark = 10.55 %
Inflation rate as IMF report, 3.986
Nominal benchmark = {(1+10.55%) * (1+3.986%)}-1
= 14.96 %

The return on equity benchmark for the decision-making year is 14.96%
Where:

- Default value for Real Benchmark = 10.55 %

- Inflation Rate forecast for India, given by International Monetary Fund (IMF) is 3.986 % for medium term.

Sub-step 2c: Calculation and comparison of financial indicators

Key Assumptions supporting financial projections are provided in excel spreadsheet to the GCC Verifier. Based on result of IRR excel spreadsheets, equity IRR is less than Benchmark.
Internal Rate of Return (IRR) of the project has been calculated as based on the parameters given above without considering the carbon revenue

The input assumption and the IRR outcome can be referred in below:

Parameters for IRR calculation Adani Solar Energy Four Private Limited (50 MW)

Details of the project	Value	Source
State where the project is situated	Rajasthan	
Capacity in (MW)	50.0	As per DPR
Total Capacity (MW)	50.0	As per DPR
Generation and sale of electricity		
PLF (%)	26.55%	As per DPR
Total Annual generation (kWh)	116,289,000	Calculated Value
degradation %	0.6%	
Tariff rate at the decision making (INR/kWh)	2.54	As per DPR
Operation and maintenance cost and Insurance		
O & M Expenses (INR Mn.)	22.50	As per DPR
Escalation in the operational expenses (%)	5.00%	As per DPR
O & M free for (Yr.)	1	As per DPR
Insurance (INR Mn.)	5.30	As per DPR
Financial parameters		
TOTAL COST (INR Mn.)	2,120.00	As per DPR
Equity Investment (INR Mn.)	636.00	

Details of the project	Value	Source
Loan Amount (INR Mn.)	1,484.00	
Term loan		
Margin (%)	30.00%	As per DPR
Loan Amount (INR Mn.)	1,484.00	
Interest rate (%)	10.25%	As per DPR
Loan Tenure (Qtr.)	80	As per DPR
Moratorium Period (Qtr.)	4	As per DPR
Working Capital		
No. of Days Receivables	60	
O&M Expenses (Days)	30	
Interest on Working Capital Debt	10.65%	
Book Depreciation (SLM Method)		
Salvage Value (%)	10.00%	
IT Depreciation (SLM Method)		
IT Depreciation Rate (%)	7.69%	As Per Income Tax , Depreciation rates for power generating units
Income Tax		
Financial Year	FY 2018-19	
Income tax rate (%)	30.00%	Tax rates applicable to a domestic company
MAT (%)	18.50%	
Surcharge (%)	12.00%	
Health and Education Cess (%)	4.00%	

The obtained IRR for the project activity is **7.41 %,** that is below the equity benchmark value of **14.96%**

Parameters for IRR calculation Adani Solar Energy Kutchh Two Private Limited (100 MW)

Details of the project	Value	Source
State where the project is situated	**Gujarat**	
Capacity in (MW)	100.0	As per DPR
Total Capacity (MW)	100.0	As per DPR
Generation and sale of electricity		
PLF (%)	28.71%	As per DPR
Total Annual generation (kWh)	251,499,600	Calculated Value
degradation %	0.60%	As per DPR
Tariff rate at the decision making (INR/kWh)	2.44	As per DPR
Operation and maintenance cost and Insurance		
O & M Expenses (INR Mn.)	45.00	As per DPR

Details of the project	Value	Source
Escalation in the operational expenses (%)	5.00%	As per DPR
O & M free for (Yr.)	1	As per DPR
Insurance (INR Mn.)	10.55	
Financial parameters		
TOTAL COST (INR Mn.)	4,220.00	As per DPR
Equity Investment (INR Mn.)	1,055.00	
Loan Amount (INR Mn.)	3,165.00	
Term loan		
Margin (%)	25.00%	As per DPR
Loan Amount (INR Mn.)	3,165.00	
Interest rate (%)	10.25%	As per DPR
Loan Tenure (Qtr.)	80	As per DPR
Moratorium Period (Qtr.)	4	As per DPR
Working Capital		
No. of Days Receivables	60	
O&M Expenses (Days)	30	
Interest on Working Capital Debt	10.25%	
Book Depreciation (SLM Method)		
Land Cost (INR Mn.)		Calculated Value
Gross Depreciable Value (INR Mn.)	4,220.00	Calculated Value
Salvage Value (%)	10.00%	
IT Depreciation (SLM Method)		
IT Depreciation Rate (%)	7.69%	As Per Income Tax , Depreciation rates for power generating units
Income Tax		
Financial Year	FY 2018-19	
Income tax rate (%)	30.00%	Tax rates applicable to a domestic company
MAT (%)	18.50%	
Surcharge (%)	12.00%	
Health and Education Cess (%)	4.00%	
Final Tax rates		
Income tax rate (%)	34.94%	Calculated Value
MAT (%)	21.55%	Calculated Value
GST(%)	**18.00%**	

The obtained IRR for the project activity is **6.04%,** that is below the equity benchmark value of **14.96** %

Parameters for IRR calculation Adani Solar Energy Kutchh One Limited (150 MW)

Details of the project	Value	Source
State where the project is situated	**Gujarat**	
Capacity in (MW)	150.0	As per DPR
Total Capacity (MW)	150.0	As per DPR
Generation and sale of electricity		
PLF (%)	26.20%	As per DPR
Total Annual generation (kWh)	344,268,000	Calculated Value
degradation %	0	As per DPR
Tariff rate at the decision making (INR/kWh)	2.67	PPA
Operation and maintenance cost and Insurance		
O & M Expenses (INR Mn.)	67.50	As per DPR
Escalation in the operational expenses (%)	5.00%	As per DPR
O & M free for (Yr.)	1	As per DPR
Insurance (INR Mn.)	16.58	As per DPR
Financial parameters		
TOTAL COST (INR Mn.)	6,630.00	As per DPR
Equity Investment (INR Mn.)	1,657.50	
Loan Amount (INR Mn.)	4,972.50	
Term loan		
Margin (%)	25.00%	As per DPR
Loan Amount (INR Mn.)	4,972.50	
Interest rate (%)	10.25%	As per DPR
Loan Tenure (Qtr.)	80	As per DPR
Moratorium Period (Qtr.)	4	As per DPR
Working Capital		
No. of Days Receivables	60	
O&M Expenses (Days)	30	
Interest on Working Capital Debt	10.25%	
Book Depreciation (SLM Method)		
Salvage Value (%)	10.00%	
Residual Value (INR Mn.)	663.00	Calculated Value
IT Depreciation (SLM Method)		
IT Depreciation Rate (%)	7.69%	As Per Income Tax , Depreciation rates for power generating units
Income Tax		

Details of the project	Value	Source
Financial Year	FY 2018-19	
Income tax rate (%)	30.00%	Tax rates applicable to a domestic company
MAT (%)	18.50%	
Surcharge (%)	12.00%	
Health and Education Cess (%)	4.00%	

The obtained IRR for the project activity is **8.60 %,** that is below the equity benchmark value of **14.96** %

Parameters for IRR calculation Adani Solar Energy Four Private Limited (50 MW)

Details of the project	Value	Source
State where the project is situated	UP	
Capacity in (MW)	50.0	A per DPR
Total Capacity (MW)	50.0	A per DPR
Generation and sale of electricity		
PLF (%)	23.03%	As per DPR
Total Annual generation (kWh)	100,871,400	
degradation %	0	
Tariff rate at the decision making (INR/kWh)	3.19	As per DPR
Operation and maintenance cost and Insurance		
O & M Expenses (INR Mn.)	22.50	As per DPR
Escalation in the operational expenses (%)	5.00%	As per DPR
O & M free for (Yr.)	1	As per DPR
Insurance (INR Mn.)	6.08	As per DPR
Financial parameters		
TOTAL COST (INR Mn.)	2,430.00	As per DPR
Equity Investment (INR Mn.)	607.50	
Loan Amount (INR Mn.)	1,822.50	
Term loan		
Margin (%)	25.00%	As per DPR
Loan Amount (INR Mn.)	1,822.50	
Interest rate (%)	10.25%	As per DPR
Loan Tenure (Qtr.)	80	As per DPR
Moratorium Period (Qtr.)	4	
Repayment Period (Qtr.)	76	
Repayment instalments value (INR Mn.)	23.98	Calculated Value
1st instalment from (Qtr. end)		Considered from the next Quarter End

Details of the project	Value	Source
Working Capital		
No. of Days Receivables	60	
O&M Expenses (Days)	30	
Interest on Working Capital Debt	10.25%	
Book Depreciation (SLM Method)		
Salvage Value (%)	10.00%	
Salvage value (INR Mn.)	243.00	Calculated Value
IT Depreciation (SLM Method)		
IT Depreciation Rate (%)	7.69%	As Per Income Tax , Depreciation rates for power generating units
Income Tax		
Financial Year	FY 2018-19	
Income tax rate (%)	30.00%	Tax rates applicable to a domestic company
MAT (%)	18.50%	
Surcharge (%)	12.00%	
Health and Education Cess (%)	4.00%	

The obtained IRR for the project activity is **6.44 %,** that is below the equity benchmark value of **14.96** %

Parameters for IRR calculation Adani Solar Energy Four Private Limited (50 MW)

Details of the project	Value	Source
State where the project is situated	UP	
Capacity in (MW)	50.0	As per DPR
Generation and sale of electricity		
PLF (%)	23.17%	As per DPR
degradation %	0.60%	
Total Annual generation (kWh)	101,484,600	Calculated Value
Tariff rate at the decision making (INR/kWh)	3.19	As per DPR
Operation and maintenance cost and Insurance		
O & M Expenses (INR Mn.)	22.50	As per DPR
Escalation in the operational expenses (%)	5.00%	As per DPR
O & M free for (Yr.)	1	As per DPR
Insurance (INR Mn.)	6.08	As per DPR
Financial parameters		
TOTAL COST (INR Mn.)	2,430.00	As per DPR
Equity Investment (INR Mn.)	607.50	
Loan Amount (INR Mn.)	1,822.50	
Term loan		

Details of the project	Value	Source
Margin (%)	25.00%	As per DPR
Loan Amount (INR Mn.)	1,822.50	
Interest rate (%)	10.25%	As per DPR
Loan Tenure (Qtr.)	80	As per DPR
Moratorium Period (Qtr.)	4	As per DPR
Working Capital		
No. of Days Receivables	60	
O&M Expenses (Days)	30	
Interest on Working Capital Debt	10.25%	As per DPR
Book Depreciation (SLM Method)		
Land Cost (INR Mn.)	-	Calculated Value
Gross Depreciable Value (INR Mn.)	2,430.00	Calculated Value
Salvage Value (%)	10.00%	
Salvage value (INR Mn.)	243.00	Calculated Value
IT Depreciation (SLM Method)		
IT Depreciation Rate (%)	7.69%	As Per Income Tax , Depreciation rates for power generating units
Income Tax		
Financial Year	**FY 2017-18**	
Income tax rate (%)	30.00%	Tax rates applicable to a domestic company
MAT (%)	18.50%	
Surcharge (%)	12.00%	
Health and Education Cess (%)	3.00%	

The obtained IRR for the project activity is **6.66 %,** that is below the equity benchmark value of **14.96** %

Parameters for IRR calculation Adani Solar Energy Chitrakoot One Limited (25 MW)

Details of the project		Source
State where the project is situated	UP	
Capacity in (MW)	25.0	As per DPR
Generation and sale of electricity		
PLF (%)	24.04%	As per DPR
Total Annual generation (kWh)	52,647,600	Calculated Value
degradation %	0.60%	As per DPR
Tariff rate at the decision making (INR/kWh)	3.08	As per DPR
Operation and maintenance cost and Insurance		
O & M Expenses (INR Mn.)	11.25	As per DPR

Escalation in the operational expenses (%)	5.00%	As per DPR
O & M free for (Yr.)	1	As per DPR
Insurance (INR Mn.)		As per DPR
Financial parameters		
TOTAL COST (INR Mn.)	1,223.33	As per DPR
Equity Investment (INR Mn.)	305.83	
Loan Amount (INR Mn.)	917.50	
Term loan		
Margin (%)	25.00%	
Loan Amount (INR Mn.)	917.50	
Interest rate (%)	10.25%	As per DPR
Loan Tenure (Qtr.)	80	As per DPR
Moratorium Period (Qtr.)	4	As per DPR
Repayment Period (Qtr.)	76	
Repayment instalments value (INR Mn.)	12.07	Calculated Value
1st instalment from (Qtr. end)		Considered from the next Quarter End
Working Capital		
No. of Days Receivables	60	
O&M Expenses (Days)	30	
Interest on Working Capital Debt	10.25%	As per DPR
Book Depreciation (SLM Method)		
Land Cost (INR Mn.)	-	Calculated Value
Gross Depreciable Value (INR Mn.)	1,223.33	Calculated Value
Salvage Value (%)	10.00%	
IT Depreciation (SLM Method)		
IT Depreciation Rate (%)	7.69%	As Per Income Tax , Depreciation rates for power generating units
Income Tax		
Financial Year	FY 2017-18	Tax rates applicable to a domestic company
Income tax rate (%)	30.00%	
MAT (%)	18.50%	
Surcharge (%)	12.00%	
Health and Education Cess (%)	4.00%	

The obtained IRR for the project activity is **6.71 %,** that is below the equity benchmark value of **14.96%**

Parameters for IRR calculation Adani Solar Energy Chitrakoot One Limited (50 MW)

Details of the project	Value	Source
State where the project is situated	UP	
Capacity in (MW)	50.0	DPR
Generation and sale of electricity		
PLF (%)	24.04%	PPA
Total Annual generation (kWh)	105,295,200	Calculated Value
degradation	0.6%	As per DPR
Tariff rate at the decision making (INR/kWh)	3.07	DPR
Operation and maintenance cost and Insurance		
O & M Expenses (INR Mn.)	22.50	DPR
Escalation in the operational expenses (%)	5.00%	DPR
O & M free for (Yr.)	1	DPR
Insurance (INR Mn.)	6.12	DPR
Financial parameters		
TOTAL COST (INR Mn.)	2,446.67	DPR
Equity Investment (INR Mn.)	611.67	
Loan Amount (INR Mn.)	1,835.00	
Term loan		
Margin (%)	25.00%	DPR
Loan Amount (INR Mn.)	1,835.00	
Interest rate (%)	10.25%	DPR
Loan Tenure (Qtr.)	80	DPR
Moratorium Period (Qtr.)	4	DPR
Working Capital		
No. of Days Receivables	60	
O&M Expenses (Days)	30	
Interest on Working Capital Debt	10.65%	
Book Depreciation (SLM Method)		
Land Cost (INR Mn.)	-	Calculated Value
Gross Depreciable Value (INR Mn.)	2,446.67	Calculated Value
Salvage Value (%)	10.00%	
IT Depreciation (SLM Method)		
IT Depreciation Rate (%)	7.69%	As Per Income Tax , Depreciation rates for power generating units
Income Tax		
Financial Year	FY 2019-20	
Income tax rate (%)	30.00%	Tax rates applicable to a domestic company
MAT (%)	18.50%	
Surcharge (%)	12.00%	

Details of the project	Value	Source
Health and Education Cess (%)	4.00%	

The obtained IRR for the project activity is 6.17 **%,** that is below the equity benchmark value of **14.96%**

Sub-step 2d: Sensitivity Analysis

Addressing Guidance 28 & 29 of EB 92, Annex 5, following factors has been subjected to sensitivity analysis:

1. PLF
2. O&M Cost
3. Project Cost
4. Tariff

The results of sensitivity analysis show that even with a variation of +10% & -10% in project cost, O&M cost, PLF and Tariff Rate Equity IRR is significantly lower than the benchmark. And it is evident from the results given above; the project remains additional even under the most favorable conditions.

Adani Solar Energy Four Private Limited (50 MW)

Variation %	-10%	Normal	10%	Variation required to reach benchmark
PLF	**4.93%**	**7.41%**	**9.82%**	**24.19%**
O&M	**7.53%**	**7. 41%**	**6.99%**	**-300.90%**
Project Cost	**9.81%**	**7. 41%**	**5.42%**	**-20.69%**
Tariff Rate	**4.93%**	**7. 41%**	**9.82%**	**24.20%**

Adani Solar Energy Kutchh Two Private limited (100 MW)

Variation %	-10%	Normal	10%	Variation required to reach benchmark
PLF	**3.57%**	**6.04%**	**8.45%**	**30.08%**
O&M	**6.35%**	**6.04%**	**5.71%**	**-329.30%**
Project Cost	**8.39%**	**6.04%**	**4.12%**	**-24.63%**
Tariff Rate	**3.57%**	**6.04%**	**8.45%**	**30.08%**

Adani Solar Energy Kutchh One Limited (150 MW)

Variation %	-10%	Normal	10%	Variation required to reach benchmark
PLF	**6.14%**	**8.60%**	**11.28%**	**20.56%**

O&M	**8.86%**	**8.60%**	**8.33%**	**-255.50%**
Project Cost	**11.31%**	**8.60%**	**6.61%**	**-18.14%**
Tariff Rate	**6.14%**	**8.60%**	**11.28%**	**20.55%**

Adani Solar Energy Four Private Limited (50 MW)

Variation %	-10%	Normal	10%	Variation required to reach benchmark
PLF	**4.05%**	**6.44%**	**8.81%**	**29.30%**
O&M	**6.70%**	**6.44%**	**6.17'%**	**-367.00%**
Project Cost	**8.80%**	**6.44%**	**4.53%**	**-23.98%**
Tariff Rate	**4.05%**	**6.44%**	**8.81%**	**29.31%**

Adani Solar Energy Four Private Limited (50 MW)

Variation %	-10%	Normal	10%	Variation required to reach benchmark
PLF	**4.28%**	**6.66%**	**9.06%**	**28.08%**
O&M	**6.93%**	**6.66%**	**6.40%**	**-357.70%**
Project Cost	**9.06%**	**6.66%**	**4.76%**	**-23.18%**
Tariff Rate	**4.28%**	**6.66%**	**9.06%**	**28.09%**

Adani Solar Energy Chitrakoot One Limited (25 MW)

Variation %	-10%	Normal	10%	Variation required to reach benchmark
PLF	**4.50%**	**6.71%**	**8.96%**	**29.85%**
O&M	**6.95%**	**6.71%**	**6.46%**	**-371.50%**
Project Cost	**8.95%**	**6.71%**	**4.95%**	**-24.31%**
Tariff Rate	**4.50%**	**6.71%**	**8.96%**	**29.83%**

Adani Solar Energy Chitrakoot One Limited (75 MW)

Variation %	-10%	Normal	10%	Variation required to reach benchmark
PLF	**3.96%**	**6.17%**	**8.38%**	**32.31%**
O&M	**6.42%**	**6.17%**	**5.92%**	**-397.90%**
Project Cost	**8.36%**	**6.17%**	**4.41%**	**-25.82%**
Tariff Rate	**3.96%**	**6.17%**	**8.38%**	**32.30%**

Outcome of Step 2:

This substantiates that the investment is not financially attractive (Equity IRR for the project activity is less than the Benchmark Equity IRR) for any of the investor. Thus, it can be easily concluded that project activity is additional & is not business as usual scenario.
The investment and sensitivity analysis shows that the ACC revenues will improve the financial indicators of the Project remarkably. Considering that figures above are based on a higher price rather than the government guaranteed floor price, optimistic estimations for yearly generation and

that those figures do not reflect the risk for investment, role of carbon income is a most significant number to enable the project to proceed.

Step 3: Barrier analysis

Barrier analysis has not been used.

Step 4: Common practice analysis

The project activity involves generation of electricity from solar energy.

Stepwise approach for common practice analysis has been carried out as per Methodological tool "Common Practice", version 03.1 EB 84, Annex 7:

CPA for **Adani Solar Energy Four Private Limited (50 MW)**

Step (1): Calculate applicable capacity or output range as +/-50% of the total design capacity or output of the proposed project activity.

Range	Capacity	Unit
+50%	75	MW
Capacity of the proposed project activity	50	MW
-50%	25	MW

Step (2): Identify similar projects (both CDM and non-CDM) which fulfil all of the following conditions:

- The projects are located in the applicable geographical area;
- The projects apply the same measure as the proposed project activity;
- The projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity;
- The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant;
- The capacity or output of the projects is within the applicable capacity range for the chosen projects.
- The projects started commercial operation before the PSF is published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project activity.

Identification of the similar projects (CDM and non-CDM) is carried out as per sub-steps of Step

(2) as follows:

The project activity happened in Rajasthan, India. The Solar Project in Rajasthan is considered for our project activity common practice analysis, as different states in India have different investment

climatic conditions and formulated their own schemes and tariff structure in promoting the solar based energy generation activities for power generation

As per the sub step of step 2 the project chosen is Solar technology with grid power as output, the no of solar energy-based project is (+/-50%) capacity as identified from CDM ratification date until PO placement (Start date of the project) is 25-75 MW. The no of projects following all the conditions, as identified above is N solar = 19

Step 3: within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing validation. Note their number, Nall.

The number of project activities under different carbon credits /programmers are identified and found as 4 and hence the remaining projects identified **N all = 15**

Step 4: within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. As per the tool on CPA, 14 projects have different nature of investments, hence N diff = 14

The project numbers identified as per step 4 is N **diff = 14**

Step 5: The share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity is

N all-N diff is **15-14 =1**

Hence the project is not a common practice as F =1-14/15=1/15=0.06 and **N all –N diff is less than 3** in the identified geographical area.

CPA for **Adani Solar Energy Kutchh Two Private Limited (100 MW)**

Step (1): Calculate applicable capacity or output range as +/-50% of the total design capacity or output of the proposed project activity.

Range	Capacity	Unit
+50%	150	MW
Capacity of the proposed project activity	100	MW
-50%	50	MW

Step (2): Identify similar projects (both CDM and non-CDM) which fulfil all of the following conditions:

- The projects are located in the applicable geographical area;
- The projects apply the same measure as the proposed project activity;
- The projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity;
- The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant;
- The capacity or output of the projects is within the applicable capacity range for the chosen projects.
- The projects started commercial operation before the PSF is published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project activity.

Identification of the similar projects (CDM and non-CDM) is carried out as per sub-steps of Step

(2) as follows:

The project activity happened in Gujarat, India. The Solar Project in Gujarat is considered for our project activity common practice analysis, as different states in India have different investment climatic conditions and formulated their own schemes and tariff structure in promoting the solar based energy generation activities for power generation

As per the substep of step 2, the no of solar energy-based project is (+/-50%) capacity as identified as per same technology and output power generation from the CDM ratification date until PO placement is 50-150 MW . The no of projects following all the conditions, as identified above is **N solar = 5**

Step 3: within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing validation. Note their number, Nall.

The number of project activities under different carbon credits /programmers are identified and found as 3 and hence the remaining projects identified **N all = 2**

Step 4: within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. As per the tool on CPA,2 projects have different nature of investments, hence **N diff = 1**

The project numbers identified as per step 4 is **N diff = 1**

Step 5: The share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity is

N all-N diff is 2-1 =1

Hence the project is not a common practice as N all –N diff is less than 3 and F=1-1/2=0.5 >0.2 in the identified geographical area.

CPA for **Adani Solar Energy Kutchh One Limited (150 MW)**
Step (1): Calculate applicable capacity or output range as +/-50% of the total design capacity or output of the proposed project activity.

Range	Capacity	Unit
+50%	225	MW
Capacity of the proposed project activity	150	MW
-50%	75	MW

Step (2): Identify similar projects (both CDM and non-CDM) which fulfil all of the following conditions:

- The projects are located in the applicable geographical area;
- The projects apply the same measure as the proposed project activity;
- The projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity;
- The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant;
- The capacity or output of the projects is within the applicable capacity range for the chosen projects.
- The projects started commercial operation before the PSF is published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project activity.

Identification of the similar projects (CDM and non-CDM) is carried out as per sub-steps of Step (2) as follows:

The project activity happened in Gujarat, India. The Solar Project in Gujarat is considered for our project activity common practice analysis, as different states in India have different investment climatic conditions and formulated their own schemes and tariff structure in promoting the solar based energy generation activities for power generation

As per the substep of step 2, the no of solar energy-based project is (+/-50%) capacity as identified fro CDM ratification date until PO placement is 75-225 MW. The no of projects following all the conditions, as identified above is **N solar = 2**

Step 3: within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing validation. Note their number, Nall.

The number of project activities under different carbon credits /programmers are identified and found as 0 and hence the remaining projects identified **N all = 2**

Step 4: within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. As per the tool on CPA,1 projects have different nature of investments, hence **N diff = 1**

The project numbers identified as per step 4 is **N diff = 1**

Step 5: The share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity is

N all-N diff is 2-1 =1

Hence the project is not a common practice as N all –N diff is less than 3 and F=1-1/2=0.5 is greater than 2 in the identified geographical area.

CPA for **Adani Solar Energy Four Private Limited (50 MW)**
Step (1): Calculate applicable capacity or output range as +/-50% of the total design capacity or output of the proposed project activity.

Range	Capacity	Unit
+50%	75	MW
Capacity of the proposed project activity	50	MW
-50%	25	MW

Step (2): Identify similar projects (both CDM and non-CDM) which fulfil all of the following conditions:

- The projects are located in the applicable geographical area;
- The projects apply the same measure as the proposed project activity;
- The projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity;
- The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant;
- The capacity or output of the projects is within the applicable capacity range for the chosen projects.
- The projects started commercial operation before the PSF is published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project activity.

Identification of the similar projects (CDM and non-CDM) is carried out as per sub-steps of Step

(2) as follows:

The project activity happened in UP, India. The Solar Project in UP is considered for our project activity common practice analysis, as different states in India have different investment climatic conditions and formulated their own schemes and tariff structure in promoting the solar based energy generation activities for power generation

As per the substep of step 2, the no of solar energy-based project is (+/-50%) capacity as identified fro CDM ratification date until PO placement is 25-75 MW. The no of projects following all the conditions, as identified above is **N solar = 11**

Step 3: within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing validation. Note their number, Nall.

The number of project activities under different carbon credits /programmers are identified and found as 2 and hence the remaining projects identified **N all = 7**

Step 4: within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. As per the tool on CPA,6 projects have different nature of investments, **hence N diff = 6**

The project numbers identified as per step 4 is **N diff = 6**

Step 5: The share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity is **N all-N diff is 9-6 =3**

Hence the project is not a common practice as **N all –N diff is 3** 1-6/7=1/7 =0.14and F= 0.14 <0.2 in the identified geographical area.

CPA for **Adani Solar Energy Four Private Limited (50 MW)**
Step (1): Calculate applicable capacity or output range as +/-50% of the total design capacity or output of the proposed project activity.

Range	Capacity	Unit
+50%	75	MW
Capacity of the proposed project activity	50	MW
-50%	25	MW

Step (2): Identify similar projects (both CDM and non-CDM) which fulfil all of the following conditions:

- The projects are located in the applicable geographical area;
- The projects apply the same measure as the proposed project activity;
- The projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity;
- The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant;
- The capacity or output of the projects is within the applicable capacity range for the chosen projects.
- The projects started commercial operation before the PSF is published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project activity.

Identification of the similar projects (CDM and non-CDM) is carried out as per sub-steps of Step (2) as follows:

The project activity happened in UP, India. The Solar Project in UP is considered for our project activity common practice analysis, as different states in India have different investment climatic conditions and formulated their own schemes and tariff structure in promoting the solar based energy generation activities for power generation

As per the substep of step 2, the no of solar energy-based project is (+/-50%) capacity as identified fro CDM ratification date until PO placement is 25-75 MW. The no of projects following all the conditions, as identified above is **N solar = 11**

Step 3: within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing validation. Note their number, Nall.

The number of project activities under different carbon credits /programmers are identified and found as 2 and hence the remaining projects identified **N all = 9**

Step 4: within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. As per the tool on CPA,6 projects have different nature of investments, hence **N diff = 6.**The project numbers identified as per step 4 is N diff = 6

Step 5: The share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity is**N all-N diff is 9-6 =3**

Hence the project is not a common practice as N all –N diff is less than 3 and F=1-6/9=3/9=0.33 is greater than 0.2 in the identified geographical area.

CPA for **Adani Solar Energy Chitrakoot One Limited (25 MW)**
Step (1): Calculate applicable capacity or output range as +/-50% of the total design capacity or output of the proposed project activity.

Range	Capacity	Unit
+50%	37.5	MW
Capacity of the proposed project activity	25	MW
-50%	12.5	MW

Step (2): Identify similar projects (both CDM and non-CDM) which fulfil all of the following conditions:

- The projects are located in the applicable geographical area;
- The projects apply the same measure as the proposed project activity;
- The projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity;
- The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant;
- The capacity or output of the projects is within the applicable capacity range for the chosen projects.
- The projects started commercial operation before the PSF is published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project activity.

Identification of the similar projects (CDM and non-CDM) is carried out as per sub-steps of Step (2) as follows:

The project activity happened in UP, India. The Solar Project in UP is considered for our project activity common practice analysis, as different states in India have different investment climatic conditions and formulated their own schemes and tariff structure in promoting the solar based energy generation activities for power generation

As per the substep of step 2, the no of solar energy-based project is (+/-50%) capacity as identified fro CDM ratification date until PO placement is 25-75 MW. The no of projects following all the conditions, as identified above is **N solar = 11**

Step 3: within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing validation. Note their number, Nall.

The number of project activities under different carbon credits /programmers are identified and found as 9 and hence the remaining projects identified **N all = 9**

Step 4: within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. As per the tool on CPA,6 projects have different nature of investments, hence **N diff = 6**

The project numbers identified as per step 4 is N diff = 6

Step 5: The share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity is**N all-N diff is 9-6 =3**

Hence the project is not a common practice as **N all –N diff is 3** and F=1-6/9 =3/9=0.5 greater than 0.2 in the identified geographical area.

CPA for **Adani Solar Energy Chitrakoot One Limited (50 MW)**
Step (1): Calculate applicable capacity or output range as +/-50% of the total design capacity or output of the proposed project activity.

Range	Capacity	Unit
+50%	75	MW
Capacity of the proposed project activity	50	MW
-50%	25	MW

Step (2): Identify similar projects (both CDM and non-CDM) which fulfil all of the following conditions:

- The projects are located in the applicable geographical area;
- The projects apply the same measure as the proposed project activity;
- The projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity;
- The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant;
- The capacity or output of the projects is within the applicable capacity range for the chosen projects.
- The projects started commercial operation before the PSF is published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project activity.

Identification of the similar projects (CDM and non-CDM) is carried out as per sub-steps of Step (2) as follows:

The project activity happened in UP, India. The Solar Project in UP is considered for our project activity common practice analysis, as different states in India have different investment climatic

conditions and formulated their own schemes and tariff structure in promoting the solar based energy generation activities for power generation

As per the substep of step 2, the no of solar energy-based project is (+/-50%) capacity as identified fro CDM ratification date until PO placement is 25-75 MW. The no of projects following all the conditions, as identified above is **N solar = 11**

Step 3: within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing validation. Note their number, Nall.

The number of project activities under different carbon credits /programmers are identified and found as 2 and hence the remaining projects identified **N all = 9**
Step 4: within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. As per the tool on CPA,6 projects have different nature of investments, hence **N diff = 6**

The project numbers identified as per step 4 is **N diff = 6**

Step 5: The share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity is **N all-N diff is 9-6 =3**

Hence the project is not a common practice as N all –N diff is less than 3 and F =1-6/9=0.5 greater

B.6. Estimation of emission reductions

As per ACM002, Emission reductions are calculated as follows:

$$ER_y = BE_y - PE_y \qquad \text{Equation (1)}$$

Where:

ER_y = Emission reductions in year *y* (t CO_2e/yr)

BE_y = Baseline emissions in year *y* (t CO_2/yr)

PE_y = Project emissions in year *y* (t CO_2e/yr)

B.6.1. Explanation of methodological choices

As per 5.5.1 and 5.5.2 , of the ACM0002 methodology, the baseline emission includes only CO_2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants. The baseline emissions are to be calculated as follows:

$$BE_y = EG_{PJ,y} \times EF_{grid,CM,y} \quad \text{Equation (2)}$$

Where:

BE_y = Baseline emissions in year *y* (t CO_2/yr)

$EG_{PJ,y}$ = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year *y* (MWh/yr)

$EF_{grid,CM,y}$ = Combined margin CO_2 emission factor for grid connected power generation in year *y* calculated using the latest version of "TOOL07: Tool to calculate the emission factor for an electricity system" (t CO_2/MWh)

If the project activity is the installation of a Greenfield power plant, then:

$$EG_{PJ,y} = EG_{facility,y} \quad \text{Equation (3)}$$

Where:

$EG_{PJ,y}$ = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year *y* (MWh/yr)

$EG_{facility,y}$ = Quantity of net electricity generation supplied by the project plant/unit to the grid in year *y* (MWh/yr)

Annual average electricity generation EG $_{pj,y\ (MWh/yr)}$	1,029,537.86
Combined margin CO2 emission factor for grid (tCO2/MWh)	0.9305

Combined margin CO2 emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system" (t CO2/MWh) of the CDM

Project participants shall apply the following six steps:

(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.

Project participants may delineate the project electricity system using any of the following options: (a) **Option 1.** A delineation of the project electricity system and connected electricity systems published by the DNA or the group of the DNAs of the host country(ies), In case a delineation is provided by a group of DNAs, the same delineation should be used by all the project participants applying the tool in these countries.

A national grid is, directly or indirectly affected by the project activities in host country India. Indian power system was divided into five independent regional grids, namely Northern, Eastern, Western, Southern, and North-Eastern. Each grid covered several states (see Table 2). Since August 2006, however, all regional grids except the Southern Grid had been integrated and were operating in synchronous mode. As of 31 December 2013, the Southern grid has also been synchronized with the NEWNE grid, hence forming one unified Indian Grid.

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

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

Project participants may choose between the following two options to calculate the operating margin and build margin emission factor:

Option I: Only grid power plants are included in the calculation.

Option II: Both grid power plants and off-grid power plants are included in the calculation.

The Project Participants **has chosen only grid power plants** in the calculation, as the baseline is power generation from the Grid.

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

The calculation of the operating margin emission factor ($EF_{grid,OM,Y}$) is based on one of the following methods, which are described under Step 4:

(a) Simple OM: or

(b) Simple adjusted OM: or

(c) Dispatch data analysis OM: or

(d) Average OM.

The data required to calculate Simple adjusted OM and Dispatch data analysis OM is not possible due to lack of availability of data to project developers. The choice of other two options for calculating operating margin emission factor depends on generation of electricity from low-cost/ must-run sources. In the context of the methodology low cost/must run resources typically include hydro, geothermal

The percentage share of the hydro (16.15%), nuclear energy (2.36%), as per the CO2 baseline database, Version 17, hence the percentage of total grid generation by low-cost/ must-run plants for the Indian grid is less than 50 % of the total generation. Thus, the Average OM method cannot be applied, as low cost/must run resources constitute less than 50% of total grid generation. Hence the Simple OM emission factor is calculated as the generation-weighted average $C0_2$ emissions per unit net electricity generation (t CO_2/MWh) of all generating power plants serving this system, not including low-cost/must-run power plants/units. Ex ante emission factor calculation approach is chosen, were chosen and the parameter remains constant over the whole crediting period.

Step 4: Calculate the operating margin emission factor ($EF_{grid,OMSimple,y}$) according to the selected method

The operating margin emission factor has been calculated using a 3-year data vintage:

Net Generation in Operating Margin (GWH) (incl. Imports)			
	2018-19	**2019-2020**	**2020-21**
Indian Grid	995,957	965,009	958,218

Simple Operating Margin (tCO2/MWh) (incl. Imports) (1) (2)			
	2018-19	**2019-2020**	**2020-21**
Indian Grid	0.9603	0.9555	0.9405

Weighted Generation Operating Margin	
Indian Grid	0.9522

Step 5: Calculate the build margin (BM) emission factor ($EF_{grid,BM,Y}$)

As per Methodological tool" Tool to calculate the emission factor for an electricity system" (Version 07.0, EB 100, Annex 4) para 72:

In terms of vintage of data, project participants can choose between one of the following two options:

Option 1- for the first crediting period, calculate the build margin emission factor ex ante based on the most recent information available on units already built for sample group m at the time of PD submission to the GCC Verifier for project verification. For the second crediting period, the build margin emission factor should be updated based on the most recent information available on units already built at the time of submission of the request for renewal of the crediting period to the GCC Verifier. For the third crediting period, the build margin emission factor calculated for the second crediting period should be used. This option does not require monitoring the emission factor during the crediting period.

Option 2- For the first crediting period, the build margin emission factor shall be updated annually, ex post, including those units built up to the year of registration of the project activity or, if information up to the year of registration is not yet available, including those units built up to the latest year for which information is available. For the second crediting period, the build margin emissions factor shall be calculated ex-ante as described in Option 1 above. For the third crediting period, the build margin emission factor calculated for the second crediting period should be used.

Option 1 as described above is chosen by PP to calculate the build margin emission factor for the project activity. BM is calculated ex-ante based on the most recent information available at the time of submission of PSF and is fixed for the entire crediting period.

Build Margin (tCO2/MWh) (not adjusted for imports)			
	2018-2019	**2019-20**	**2020-21**
Indian Grid	0.8812	0.8682	0.8650

Step: Calculate the combined margin (CM) emission factor ($EF_{grid,CM,y}$)

As per Methodological too "Tool to calculate the emission factor for an electricity system" (Version 07.0, EB 100, Annex 4) para 81, The calculation of the combined margin (CM) emission factor ($EF_{grid,CM,y}$) is based on one of the following methods: Weighted average CM: or Simplified CM. PP has chosen option **(a) i.e. weighted average CM** to calculate the combined margin emission factor for the project activity.

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

$EF_{grid,BM,y}$ = Build margin CO_2 emission factor in year y (t CO_2/ MWh)

$EF_{grid,OM,Y}$ = Operating margin CO_2 emission factor in year y (t CO_2/MWh)

W_{OM} = Weighting of operating margin emissions factor (per cent)

W_{BM} = Weighting of build margin emissions factor (per cent)

The following default values should be used for W_{OM} and W_{BM}:

For project activities W_{OM} =0.75 and W_{BM} = 0.25 (owing to their intermittent and non-dispatchable nature) for the second crediting period and for subsequent crediting periods. Since project activity is of power generation by using Wind, the above weightage has been considered for OM and BM.

$EF_{grid,CM,y}$ =0.9522*0.75+ 0.863 *0.25

= 0.9305 tCO_2/MWh

B.6.2. Data and parameters fixed *ex ante*

Data / Parameter Table 1.

Data / Parameter:	EFgrid,CM,y
Methodology reference	ACM0002 and Tool to calculate emission factor of electricity system
Data unit	tCO_2/MWh
Description	Combined Margin CO_2 emission factor in the year y
Measured/calculated /default	Calculated
Data source	CO2 Emission Database, Version 17.0, October 2021 published by Central Electricity Authority (CEA), Government of India
Value(s) of monitored parameter	0.9305
Measurement/ Monitoring equipment (if applicable)	<table><tr><td colspan="2"></td></tr><tr><td>Type of meter</td><td>Not applicable</td></tr><tr><td>Location of meter</td><td>Not applicable</td></tr><tr><td>Accuracy of meter</td><td>Not applicable</td></tr><tr><td>Serial number of meters</td><td>Not applicable</td></tr></table>
Calculation method (if applicable)	The combined margin emissions factor is calculated as follows: EF grid, CM,y =EF grid,OM,y *WOM + EF grid,BM,y * WBM
QA/QC procedures	Not applicable
Purpose of data	To calculate baseline emissions

Additional comments	Not applicable

B.6.3. Ex-ante calculation of emission reductions

As per ACM0002, Emission reductions are calculated as follows:

$$ER_y = BE_y - PE_y \quad \text{Equation (4)}$$

Where:

ER_y = Emission reductions in year *y* (t CO_2e/yr)

BE_y = Baseline emissions in year *y* (t CO_2/yr)

PE_y = Project emissions in year *y* (t CO_2e/yr)

Project emissions

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:

$$PE_y = PE_{FF,y} + PE_{GP,y} + PE_{HP,y} \quad \text{Equation (5)}$$

Where:

PE_y = Project emissions in year *y* (t CO_2e/yr)

$PE_{FF,y}$ = Project emissions from fossil fuel consumption in year *y* (t CO_2/yr)

$PE_{GP,y}$ = Project emissions from the operation of dry, flash steam or binary geothermal power plants in year *y* (t CO_2e/yr)

$PE_{HP,y}$ = Project emissions from water reservoirs of hydro power plants in year *y* (t CO_2e/yr)

The project activity is not a Solar-Thermal/Geothermal/hydro power. More over as per para 33, For all renewable energy power generation project activities, emissions due to the use of fossil fuels for the backup generator can be neglected. Hence Project emission is 0

Leakage emissions LE_y=0 tCO_2e

Therefore, $ER_y = BE_Y$

SPV Name	Project code	Capacity (MW)	PLF (%)	Generation (MWh)
Adani Solar Energy Four Limited	Rawra	50.00	26.55%	116,289
Adani Solar Energy Kutchh Two Pvt Limited	GUVNL	100.00	26.20%	229,512
Adani Solar Energy Kutchh One Limited	GUNVL	150.00	26.20%	344,268
Adani Solar Energy Four Limited	JALALBAD	50.00	23.03%	100,871
Adani Solar Energy Four Limited	Sahaswan	50.00	23.17%	101,485
Adani Solar Energy Chitrakoot One Limited	NPPCL	25.00	24.04%	52,648
Adani Solar Energy Chitrakoot One Limited	UPPCL	50.00	24.40%	106,872
		475.0		**1,051,944.6**

Calculation of Emission Reductions

Year	Net Generation at considering yearly degradation	Baseline Emission factor	Baseline emissions	Emission reductions
	(MWh/year)	(tCO_2/MWh)	(tCO_2e/year)	(tCO_2e/year)
Year 1	1,051,944.60	0.9305	978,835.00	978,835.00
Year 2	1,051,944.60	0.9305	978,835.00	978,835.00
Year 3	1,045,632.93	0.9305	972,962.00	972,962.00
Year 4	1,039,359.13	0.9305	967,125.00	967,125.00
Year 5	1,033,122.98	0.9305	961,322.00	961,322.00
Year 6	1,026,924.24	0.9305	955,554.00	955,554.00
Year 7	1,020,762.70	0.9305	949,821.00	949,821.00
Year 8	1,014,638.12	0.9305	944,122.00	944,122.00
Year 9	1,008,550.29	0.9305	938,457.00	938,457.00
Year 10	1,002,498.99	0.9305	932,826.00	932,826.00
Total	**10,295,378.59**		**9,579,859.00**	**9,579,859.00**

Average	**1,029,537.86**		**957,985.00**	**957,985.00**

B.6.4. Summary of ex ante estimates of emission reductions

Year	Baseline emissions (t CO_2e)	Project emissions (t CO_2e)	Leakage (t CO_2e)	Emission reductions (t CO_2e)
Year 1	978,835.00	0	0	978,835.00
Year 2	978,835.00	0	0	978,835.00
Year 3	972,962.00	0	0	972,962.00
Year 4	967,125.00	0	0	967,125.00
Year 5	961,322.00	0	0	961,322.00
Year 6	955,554.00	0	0	955,554.00
Year 7	949,821.00	0	0	949,821.00
Year 8	944,122.00	0	0	944,122.00
Year 9	938,457.00	0	0	938,457.00
Year 10	932,826.00	0	0	932,826.00
Total	**9,579,859.00**	0	0	**9,579,859.00**
Total number of crediting years	10 Years			
Annual average over the crediting period	957,985	0	0	957,985

B.7. Monitoring plan

>>

B.7.1. Data and parameters to be monitored *ex-post*

Data / Parameter Table 2.

<table>
<tr><td>Data / Parameter:</td><td>EG _{PJ, y}</td></tr>
<tr><td>Methodology reference</td><td>ACM0002, Version 20</td></tr>
<tr><td>Data unit</td><td>MWh/year</td></tr>
<tr><td>Description</td><td>Quantity of net electricity generation supplied by the project plant/unit to the grid in year y</td></tr>
<tr><td>Measured/calculated /default</td><td>Measured and calculated</td></tr>
<tr><td>Data source</td><td>Monthly JMR readings/B Form/ REA database</td></tr>
<tr><td>Value(s) of monitored parameter applied with basis</td><td>1,029,537.86</td></tr>
<tr><td>Measurement/ Monitoring equipment</td><td>
<table>
<tr><td colspan="2"></td></tr>
<tr><td>Type of meter(s)</td><td>Details will provide at time of verification</td></tr>
<tr><td>Location of meter(s)</td><td>Details will provide at time of verification</td></tr>
<tr><td>Accuracy of meter(s)</td><td>Details will provide at time of verification</td></tr>
<tr><td>Serial number of meter(s)</td><td>Details will provide at time of verification</td></tr>
<tr><td>Calibration frequency</td><td>Details will provide at time of verification</td></tr>
<tr><td>Date of Calibration/ validity</td><td>Details will provide at time of verification</td></tr>
<tr><td>Reference No. of Calibration Certificates</td><td>Details will provide at time of verification</td></tr>
<tr><td>Calibration Status</td><td>Details will provide at time of verification</td></tr>
</table>
</td></tr>
<tr><td>Frequency of Measuring/reading</td><td>Continuous measurement</td></tr>
<tr><td>Recording frequency</td><td>monthly recording</td></tr>
<tr><td>Calculation method (if applicable)</td><td>During particular day of every month, the joint meter reading is taken at both HTSC mater and substation meter by the SECI personnel in presence of Project owner or their representatives SECI issues a HTSC wise monthly generation statement. Net electricity exported by each HTSC is arrived after discounting for the electricity import and transmission loss from generation point to the substation.

Cross Checking: Quantity of net electricity supplied to the grid will be cross checked from the Invoices/ Monthly Bill raised by the Project Participant</td></tr>
<tr><td>QA/QC procedures</td><td>The calibration of all the meters will be undertaken at required intervals (at least once in five years) and faulty meters will be duly replaced immediately. The meters will be of accuracy class 0.2s or 0.5s. The meter(s) shall be calibrated and maintained by the state utility as per their own schedule, and this frequency of meter calibration is not within the control of the Project Owner. Calibration of electricity meters is carried out in-line with the Nation standard which recommends at least once in 5-year calibration or whenever</td></tr>
</table>

	abnormal difference/inconsistency is observed between main meter and check meter.
Purpose of data	To calculate baseline emissions
Additional comments	Data will be archived electronically for a period of 2 years beyond the end of crediting period

For Parameters to be monitored for E+/S+ assessments and SDG labels (positive impacts)

Data / Parameter:	**SDG 13**
Purpose:	Take urgent action to combat climate change and its impacts (same parameter is used to monitor EA03
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	Mitigation of climate change. Reduction global warming
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	Parameter to be monitored: GHG emission reductions (957,985 tCO2/year) Frequency of monitoring: Annual Legal /regulatory / corporate limits (if any): N/A QA/QC: Reduction of Greenhouse gases results in clean environment
Remarks	Data will be archived in paper & electronically for a period of 2 years beyond the end of crediting period or of the last issuance of credits for this project activity, whichever occurs later.

Data / Parameter:	**SDG-9**
Purpose:	Provides one clean and resilient energy generation facility. The project helps adaptation of clean energy technologies by implementing a solar power plant.
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	CO_2 emissions reductions per year

Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td></td><td></td></tr><tr><td>Parameter to be monitored</td><td>GHG emissions reductions (tCO_2/year)</td></tr><tr><td>Frequency of monitoring</td><td>Continuously measured and monthly recorded</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>-</td></tr><tr><td>QA/QC</td><td>Monitored data will be stored and archived till the end of the crediting period</td></tr></table>
Remarks	

Data / Parameter:	**SDG 8**
Purpose:	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	Number of local employment generation including both direct or indirect employment during project construction and project operation
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td></td><td></td></tr><tr><td>Parameter to be monitored</td><td>HR records</td></tr><tr><td>Frequency of monitoring</td><td>Annual</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>N/A</td></tr><tr><td>QA/QC</td><td>HR records for employment</td></tr></table>
Remarks	Data will be archived in paper & electronically for a period of 2 years beyond the end of crediting period or of the last issuance of credits for this project activity, whichever occurs later.

Data / Parameter:	**SDG 5-**
Purpose:	Achieve gender equality and empower all women and girls.

Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	Number of women employed due to the project activity and number of women empowered through creation of livelihood opportunities for women
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td colspan="2"></td></tr><tr><td>Parameter to be monitored</td><td>No of woman employed</td></tr><tr><td>Frequency of monitoring</td><td>Annual</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>No</td></tr><tr><td>QA/QC</td><td>Annual pay slip</td></tr></table>
Remarks	Data will be archived in paper & electronically for a period of 2 years beyond the end of crediting period or of the last issuance of credits for this project activity, whichever occurs later.

Data / Parameter:	**SDG 3**
Purpose:	Ensure healthy lives and promote well-being for all at all ages
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicine
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td colspan="2"></td></tr><tr><td>Parameter to be monitored</td><td>health card of employees</td></tr><tr><td>Frequency of monitoring</td><td>Annual</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>N/A</td></tr><tr><td>QA/QC</td><td>Monitored data will be stored and archived till the end of the crediting period</td></tr></table>
Remarks	Data will be archived in paper & electronically for a period of 2 years beyond the end of crediting period or of the last issuance of credits for this project activity, whichever occurs later.

Data / Parameter:	**Job related training imparted or not**
Purpose:	*To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.*
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	The employees will receive on job training as per training needs. It imparts a positive impact by helping employees in all-round development.
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td colspan="2"></td></tr><tr><td>Parameter to be monitored</td><td>Number of trainings</td></tr><tr><td>Frequency of monitoring</td><td>Annual</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>-</td></tr><tr><td>QA/QC</td><td>Records will be maintained and archived till the end of the crediting period</td></tr></table>
Remarks	

Data / Parameter:	**Reducing / increasing accidents/incidents/fatality**
Purpose:	*To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.*
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	Cause of Physical hazards in project sites due to human intervention or technical failure or emergency

Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td colspan="2"></td></tr><tr><td>Parameter to be monitored</td><td>Number of trainings</td></tr><tr><td>Frequency of monitoring</td><td>Annual</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>In compliance with the EHS policy</td></tr><tr><td>QA/QC</td><td>Records will be maintained and archived till the end of the crediting period</td></tr></table>
Remarks	

Data / Parameter:	**Occupational health hazards**
Purpose:	*To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.*
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	Cause of Physical hazards in project sites due to human intervention or technical failure or emergency
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td colspan="2"></td></tr><tr><td>Parameter to be monitored</td><td>Number of trainings</td></tr><tr><td>Frequency of monitoring</td><td>Annual</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>In compliance with the EHS policy</td></tr><tr><td>QA/QC</td><td>Records will be maintained and archived till the end of the crediting period</td></tr></table>
Remarks	

Data / Parameter:	**New short-term jobs (< 1 year) created**
Purpose:	*To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.*

Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	Short term job opportunities created during the operation of the project activity.
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td colspan="2"></td></tr><tr><td>Parameter to be monitored</td><td>Employment records</td></tr><tr><td>Frequency of monitoring</td><td>Annual</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>Employment is in compliance with the Labour Act</td></tr><tr><td>QA/QC</td><td>Records will be maintained and archived till the end of the crediting period</td></tr></table>
Remarks	

Data / Parameter:	**Long-term jobs (> 10 year) created**
Purpose:	*To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.*
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	Long term job opportunities created during the operation of the project activity.
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td colspan="2"></td></tr><tr><td>Parameter to be monitored</td><td>Employment records</td></tr><tr><td>Frequency of monitoring</td><td>Annual</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>Employment is in compliance with the Labour Act</td></tr><tr><td>QA/QC</td><td>Records will be maintained and archived till the end of the crediting period</td></tr></table>
Remarks	

B.7.2. Data and parameters to be monitored for E+/S+ assessments (negative impacts)

<table>
<tr><td>Data / Parameter:</td><td>Batteries</td></tr>
<tr><td>Purpose:</td><td>To demonstrate compliance of Environment aspects to legal/regulatory/corporate requirements or to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.</td></tr>
<tr><td>Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.</td><td>Improper disposal of generated batteries may create soil contamination. To mitigate/reduce an environmental impact identified as harmful in the risk assessment and to develop a Program of Risk Management Actions plan to address the risk of EL05.

Battery waste id generated as a result of end-of life or defect in the storage cell if not handled with utmost care may create soil and water pollution and also create health hazardous for the people working around (form leakage and spillage from batteries)</td></tr>
<tr><td>Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate “harmless” condition or demonstrate Impact on SDG</td><td>
<table>
<tr><td colspan="2"></td></tr>
<tr><td>Parameter to be monitored</td><td>Quantity of Battery Disposal Record</td></tr>
<tr><td>Frequency of monitoring</td><td>Annual</td></tr>
<tr><td>Legal /regulatory / corporate limits (if any)</td><td>N/A</td></tr>
<tr><td>QA/QC</td><td>Record of disposed battery will be maintained and summited during verification.</td></tr>
</table>
</td></tr>
<tr><td>Program of Risk Management Actions to mitigate risk related to aspect (if any for aspects assessed to be harmful)</td><td>
<table>
<tr><th>S.No.</th><th>Action and targets</th><th>Responsibility</th><th>Resource Requirement</th><th>Target to be Achieved by (insert date)</th><th>Key Performance Indicators (KPI)</th><th>Targets achieved on (insert date)</th></tr>
<tr><td>1</td><td>Disposal of Used batteries (if any) as per regulator norms</td><td>Project owner</td><td>1</td><td>17/04/2020</td><td>Quantity/number of Battery Disposal Record</td><td>End of lifetime(25 years)</td></tr>
<tr><td colspan="7"></td></tr>
<tr><td colspan="3">Date of Closing the Program:</td><td></td><td colspan="3"></td></tr>
<tr><td colspan="7"></td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>Data / Parameter:</td><td>End of life products/ equipment</td></tr>
<tr><td>Purpose:</td><td>To demonstrate compliance of Environment aspects to legal/regulatory/corporate requirements or to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.</td></tr>
<tr><td>Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.</td><td>Improper disposal of generated equipment may create soil contamination. To mitigate/reduce an environmental impact identified as harmful in the risk assessment and to develop a Program of Risk Management Actions plan to address the risk of EL06.</td></tr>
<tr><td>Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate “harmless” condition or demonstrate Impact on SDG</td><td>
<table>
<tr><td colspan="2"></td></tr>
<tr><td>Parameter to be monitored</td><td>Quantity of damaged Solar PV modules handled safely.</td></tr>
<tr><td>Frequency of monitoring</td><td>Annual</td></tr>
<tr><td>Legal /regulatory / corporate limits (if any)</td><td>N/A</td></tr>
<tr><td>QA/QC</td><td>Record of damaged solar PV modules will be maintained and summited during verification.</td></tr>
</table>
</td></tr>
<tr><td>Program of Risk Management Actions to mitigate risk related to aspect (if any for aspects assessed to be harmful)</td><td>
<table>
<tr><th>S.No.</th><th>Action and targets</th><th>Responsibility</th><th>Resource Requirement</th><th>Target to be Achieved by (insert date)</th><th>Key Performance Indicators (KPI)</th><th>Targets achieved on (insert date)</th></tr>
<tr><td>1</td><td>End of life solar PV modules shall be stored and disposed-off as per the guidance of national / local laws.</td><td>Project owner</td><td>1</td><td>17/04/2020</td><td>Quantity of damaged Solar PV modules handled safely.</td><td>End of life time (25 years)</td></tr>
<tr><td colspan="7"></td></tr>
<tr><td colspan="3">Date of Closing the Program:</td><td></td><td colspan="3"></td></tr>
<tr><td colspan="7"></td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>Data / Parameter:</td><td>E-waste</td></tr>
<tr><td>Purpose:</td><td>To demonstrate compliance of Environment aspects to legal/regulatory/corporate requirements or to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.</td></tr>
<tr><td>Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.</td><td>Improper disposal of generated e-waste may create soil contamination. To mitigate/reduce an environmental impact identified as harmful in the risk assessment and to develop a Program of Risk Management Actions plan to address the risk of EL04.</td></tr>
<tr><td>Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate “harmless” condition or demonstrate Impact on SDG</td><td>
<table>
<tr><td colspan="2"></td></tr>
<tr><td>Parameter to be monitored</td><td>Quantity of E-waste</td></tr>
<tr><td>Frequency of monitoring</td><td>Annual</td></tr>
<tr><td>Legal /regulatory / corporate limits (if any)</td><td>N/A</td></tr>
<tr><td>QA/QC</td><td>Record of E-waste will be maintained and summited during verification.</td></tr>
</table>
</td></tr>
<tr><td>Program of Risk Management Actions to mitigate risk related to aspect (if any for aspects assessed to be harmful)</td><td>
<table>
<tr><th>S.No.</th><th>Action and targets</th><th>Responsibility</th><th>Resource Requirement</th><th>Target to be Achieved by (insert date)</th><th>Key Performance Indicators (KPI)</th><th>Targets achieved on (insert date)</th></tr>
<tr><td>1</td><td>E-waste records of storage and disposal</td><td>Project owner</td><td>1</td><td>17/04/2020</td><td>E-waste generated</td><td>End of lifetime(25 years)</td></tr>
<tr><td colspan="7"></td></tr>
<tr><td colspan="3">Date of Closing the Program:</td><td></td><td colspan="3"></td></tr>
<tr><td colspan="7"></td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>Data / Parameter:</td><td>Solid waste Pollution from Hazardous wastes</td></tr>
<tr><td>Purpose:</td><td>To demonstrate compliance of Environment aspects to legal/regulatory/corporate requirements or to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.</td></tr>
<tr><td>Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.</td><td>Improper disposal of generated hazardous waste may create soil contamination Program of Risk Management Actions for Solid waste Pollution from Hazardous wastes (EL02)</td></tr>
</table>

Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	

Parameter to be monitored	Quantity of Solid waste Pollution from Hazardous wastes
Frequency of monitoring	At the end of life time
Legal /regulatory / corporate limits (if any)	N/A
QA/QC	Record of Damaged/defunct solar PV modules will be maintained and summited during verification. For wind Quantity of hazardous waste (transformer oil) will be discarded through the registered licensed vendor for safety disposal and recycling as applicable in compliance to the applicable host country laws and regulations and the records of the same will be maintained by the project owner

Program of Risk Management Actions to mitigate risk related to aspect (if any for aspects assessed to be harmful)

S.No.	Action and targets	Responsibility	Resource Requirement	Target to be Achieved by *(insert date)*	Key Performance Indicators (KPI)	Targets achieved on *(insert date)*
1	Damaged/defunct solar PV modules shall be stored and Monitoring of hazardous waste generati and disposed-off as per the guidance of national / local laws.	Project owner	01	17/08/2020	Quantity of damaged Solar PV modules and waste generation and handled safely.	end of life time 25 years
Date of Closing the Program:						

B.7.3. Sampling plan

Not Applicable

B.7.4. Other elements of the monitoring plan

Organizational Structure for Monitoring

The monitoring plan is developed in accordance with the modalities and procedure with project activity and is proposed for grid-connected Solar energy power projects being implemented in Telangana, India. The monitoring plan describes about the monitoring organization, parameters to be monitored, monitoring practices, quality assurance, quality control procedures, data storage and archiving.
The authority and responsibility for registration, monitoring, measurement, reporting and reviewing of the data rests with the project participants. The following structure is proposed for data monitoring, collection, data archiving and calibration of equipment for this project activity. The team comprises of the following members:

Responsibilities of Head- Projects: Tracking and reviewing the overall functioning and maintenance of the project activity from Head (Operations). Head (Operations) will be reporting Head (Projects).

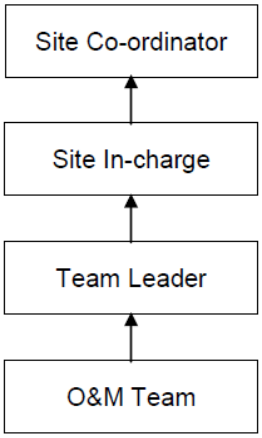
Responsibilities of Head- Operations: Overall functioning of the project activity and Coordinating with the O & M Team for the proper functioning of Project activity. He will be reporting to Head (Projects).

Responsibilities of O & M Team:

O & M team is responsible for Operations and Maintenance related issues, they are also responsible for day-to-day data collection and monitoring, ensures completeness and reliability of data (calibration of equipment).

The Site In-charge will be responsible for carrying out internal auditing and QA/QC.

The meters will be tested & sealed by the State Utility and are in the custody of State Utility. The metering arrangement, accuracy class of meters, calibration frequency is under control of state utility and Project owner do not have any control on it. The calibration of all the meters will be carried out in-line with the National standard which recommends at least once in 5-year calibration. Faulty meters will be duly replaced. The meters will be of accuracy class 0.2s or 0.5s.
In any case where values have slightest of variation in different records the most conservative value will be taken in the project monitoring report.



Data collection and archiving

Export & Import readings from main & check meter are collected under the supervision of PP or its authorized representative. The net electricity supplied to grid are calculated based on export & import readings. Export and Import data would be recorded and stored in electronic &/or paper. 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 2 years after the end of crediting period or till the last issuance of ACCs for the project activity whichever 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
A= Difference of number of days which are not matching of billing period and monitoring period.
B=Number of days of the billing period/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 or **conservative among two different values will be used.**

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 both Main meter & Check meter installed at sub-station, where both the faulty meters are required to repair or replaced simultaneously, the export & import readings from Main & Check Meter installed at the inter-connection point at the project site will be used for monitoring of net electricity exported to the grid.

Personnel Training

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

Section C. Start date, crediting period type and duration

C.1. Start date of the Project Activity

17/04/2020 (Earliest of the bundle commissioning date)

C.2. Expected operational lifetime of the Project Activity

25 Years

C.3. Crediting period of the Project Activity

10 Years

C.3.1. Start and end date of the crediting period

Start Date- 17/04/2020

End Date- 16/04/2030

C.3.2. Duration of crediting period

10 years and 00 months

Section D. Environmental impacts

D.1. Analysis of environmental impacts

The project activity does not involve any major construction activity. It primarily requires the installation of the Wind Turbines, interfacing the generators with the State Electricity Board by setting up HT transmission lines and installation of other accessories.

The report on “Developmental Impacts and Sustainable Governance Aspects of Renewable Energy Projects” prepared by MNRE dated September 2013. This report clearly mentioned that Wind project activity operations do not result in direct air pollution, noise pollution. Thus, there is no any

significant impact due to implementation of project activity on air, water, soil quality and ambience are envisaged due to the project activity.

D.2. Environmental impact assessment and management action plans

The guidelines on Environmental Impact Assessment have been published by Ministry of Environment, Forests and Climate Change (MoEFCC), Government of India (GOI) under Environmental Impact Assessment notification 14/09/2006. Further amendments to the notification have been done on 14/07/2018. As per notification:

"The following projects or activities shall require prior environmental clearance from the concerned regulatory authority, which shall herein after referred to be as the Central Government in the Ministry of Environment and Forests for matters falling under Category 'A' in the Schedule and at Category 'B' in the said schedule, before any construction work, or preparation of land by the project management except for securing the land, is started on the project or activity:

1) All new projects or activities listed in the Schedule to this notification:
2) Expansion and modernization of existing projects or activities listed in the Schedule to this notification with addition of capacity beyond the limits given in the Schedule, after expansion or modernization:
3) Any change in product- mix in a manufacturing unit included in Schedule beyond the specified range."

As the Solar energy projects are not listed in any of the categories in the Schedule, the project is considered environmentally safe and as per regulations in Host party-India no EIA is required.

However, an Environmental Impact Assessment has been carried out by third party ERM dated 15/07/2019 for project at Rawra location, and 27/02/2020 ,06/03/2020 for both 150 and 100 MW project at Gujarat, and 18/10/2019 for other projects at Uttar Pradesh and all suggested mitigation measures and control technologies, safeguards identified through the process are listed below:

S. No.	Environmental/ Social Resource	Impacts/ Issue	Applicable Project Phase	Mitigation Measures
1.	Topography & Drainage	Changes in Topography and Drainage	Construction Phase	■ Design of contour level with minimum alteration to be considered for the project site. ■ Provide alternatives to collect surface runoff from the project site during the monsoon period;

S. No.	Environmental/ Social Resource	Impacts/ Issue	Applicable Project Phase	Mitigation Measures
				■ Don't allow exit of runoff from the project site in the adjacent surrounding land area.
2.	Land Use	Permanent and temporary changes in land use	Construction Phase	■ After the construction phase, the areas acquired by labor colonies should be reverted to the preconstruction stage ■ On completion of construction activities, land used for temporary facilities such as stockyard, batching plant and labour camps should be restored to the extent possible; and ■ The land use in and around permanent project facilities should not be disturbed. area.
3.	Soil	Soil compaction and erosion	Construction Phase	■ Provide appropriate storage of topsoil in an isolated and covered area to prevent its loss in high wind and runoff; ■ Allow only covered transportation of topsoil within the project site; ■ Use topsoil at the time of plantation, and it can be given to nearby agricultural field after

S. No.	Environmental/ Social Resource	Impacts/ Issue	Applicable Project Phase	Mitigation Measures
				taking consent with the landowners/farmers; ■ Plantation activities should be undertaken by AWETNL to appease the chances of soil erosion; ■ Store hazardous material like diesel and used oil in an isolated room and on the impervious surface to prevent seepage into project site soil; ■ Filling and transfer of oil to and from the container shall be on an impervious surface. ■ Top soil that has been stripped should be stored for landscaping of the site; ■ The stock piles of soil should be kept moist to avoid wind erosion of the soil; ■ Soil should be ploughed in compacted areas after completion of construction work; and ■ Site should be restored at the end of the Project life cycle to pre-Project levels.

S. No.	Environmental/ Social Resource	Impacts/ Issue	Applicable Project Phase	Mitigation Measures
4.	***Impact on Water Resources and Availability***	Depletion of water resources and Water contamination	Construction Phase Operation and Maintenance (O&M) Phase	■ Dry wiping method using microfiber cloth can be adopted to minimize water consumption for solar panel cleaning; ■ Ensure optimal usage of water viz., storage and reuse of wash water after module washing and plantation of low water requirement species; ■ Construct rainwater harvesting pit to recharge the groundwater table.the project site. ■ Water for construction activities will be met through authorized water tankers. Drinking water in the labour camps is being supplied through packaged water cans.
5.	***Air Quality***	■Site preparation and excavation for foundation and piling work ■Fugitive dust emissions from site clearing,	Construction Phase Decommissioning Phase	■ Vehicles speed to be restricted to 20-30 km/hr. On an unpaved road. ■ Raw material should be covered with tarpaulin sheets during transportation and in the storage area.

S. No.	Environmental/ Social Resource	Impacts/ Issue	Applicable Project Phase	Mitigation Measures
		excavation work, cutting and levelling work at sites and access/ internal roads, TL tower foot print, stacking of soils, handling of construction material, transportation of material, emission due to movement of vehicles and heavy construction machinery etc.; ■ Access road widening, strengthening and maintenance;		■ Water sprinkling on the unpaved area but ensure the use of tanker water purchased form suitable authorized vendor only. ■ All the project vehicles shall have a valid Pollution Under Control (PUC) certificate. Ensure regular maintenance of project vehicles during the construction and operational phase. ■ Turn off the machinery when not in use.
6.	**Occupational and Community Health and Safety**	• Working at height during erection of transmission towers and establishment	Construction Phase Operation Phase Maintenance Phase	• Identify route for movement of project vehicles which, should not include narrow village • road and road passing through a cluster of settlements; • Depute traffic escorts as and

S. No.	Environmental/ Social Resource	Impacts/ Issue	Applicable Project Phase	Mitigation Measures
		of transmission lines; • Working in confined spaces and pooling substation; • Working with live electrical components; and • Operation of cranes and other mechanical lifting equipment	Decommissioning Phase	when required near the project site and major settlements to guide movement of project vehicles; Keep the limited speed of project vehicles near settlements and within the project site; • Provide necessary training to the drivers for speed restrictions and on do's and don'ts. Regular electrical safety training to workers; • Implement Lock out/ Tag Out (LOTO) system; • Use work equipment or other methods to prevent a fall from occurring. Collective protection systems, such as edge protection or guardrails, should be implemented before resorting to individual fall arrest equipment. In addition, safety nets or airbags can be used to minimize the consequences of a fall should it occur. • Personal Protective Equipment (PPEs) e.g., shock resistant rubber gloves, shoes,

S. No.	Environmental/ Social Resource	Impacts/ Issue	Applicable Project Phase	Mitigation Measures
				other protective gear etc. should be provided to workers handling electricity and related components; • The transformer yard should be provided with fire extinguishers and sand buckets at all strategic locations to deal with any incident of fire; • Employees involved in electrical works shall be trained in and familiar with the safety-related work practices, safety procedures and other safety requirements that pertain to their respective job assignments; and • An accident reporting and monitoring record shall be maintained.
7.	**Ambient Noise Levels**	• Noise from heavy vehicular traffic movement; • Noise from increased workforce and	Construction Phase Operation Phase	• Keep a stationary source of noise such as DG sets (currently used only for back up) at the farthest point from the settlements • Restrict major noise-generating activities during time 10:00 PM to 06:00 AM

S. No.	Environmental/ Social Resource	Impacts/ Issue	Applicable Project Phase	Mitigation Measures
		construction/demolition; • Noise from cranes, drillers, bulldozers, excavators, etc.; and • Noise from D.G. sets.		• Provide personal protective equipment to workers wherever noise is generated due to machinery operation. • Regular maintenance of project vehicles

Section E. Environmental and social safeguards

The main purpose of the environment and social safeguard assessment is to identify, evaluate and manage environmental and social impacts that may arise due to implementation and operation of the project. The document has been made to comply with the requirements of Enel Green Power's Environmental and Social commitment, Environment & social safeguard standard (version.02) of GCC, as well as applicable local and national regulations.

Further, with reference to the CPCB modified direction No. B29012/ESS(CPA)/2015-16; dated March 07, 2016 (Appendix A) wind power project falls in White category and it is mentioned in the notification that there shall be no necessity of obtaining the Consent to Operate'' for White category of industries.

Hence, as per below assessment, the wind power project is not likely to have significant adverse environmental and social impacts during the construction & operation period of the project activity.

E.1. Environmental safeguards

>>

Impact of Project Activity on		Information on Impacts, Do-No-Harm Risk Assessment and Establishing Safeguards								Project Owner's Conclusion		GCC Project Verifier's Conclusion (To be included in Project Verification Report only)
		Description of Impact *(positive or negative)*	**Legal/ voluntary corporate requirement / regulatory/ voluntary corporate threshold Limits**	**Do-No-Harm Risk Assessment (choose which ever is applicable)**			**Risk Mitigation Action Plans for aspects marked as Harmful**		**Performance indicator for monitoring of impact**	***Ex-ante* scoring of environmental impact**	***Explanation of the Conclusion***	**3rd Party Audit**
				Not Applicable	**Harmless**	**Harmful**	**Operational Controls**	**Program of Risk Management Actions**	**Monitoring parameter and frequency of monitoring**	**Ex- Ante scoring of the environmental impact (as per scoring matrix Appendix-02)**	**Ex- Ante description and justification/explanation of the scoring of the environmental impact**	**Verification Process**
Environmental Aspects on the identified categories [16] ***indicated below.***	*Indicators for environmental impacts*	*Describe and identify anticipated and actual significant environmental impacts, both positive and negative from all sources (stationary and mobile) during normal and abnormal/emergency conditions, that may result from the construction and operations of the Project Activity, within and outside the project boundary, over which the Project Owner(s) has/have control.*	*Describe the applicable national regulatory requirements /legal limits / voluntary corporate limits related to the identified risks of environmental impacts.*	*If no environmental impacts are anticipated, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as* ***Not Applicable***	*If environmental impacts exist but are expected to be in compliance with applicable national regulatory /stricter voluntary corporate requirements and will be within legal/ voluntary corporate*	*If negative environmental impacts exist that will not be in compliance with the applicable national legal/ regulatory requirements or are likely to exceed legal limits, then the Project*	*Describe the operational controls and best practices, focusing on how to implement and operate the Project Activity, to reduce the risk of impacts that have been identified as '****Harmful*** *at least to a level that is in compliance with applicable legal/regulatory requirements or industry best practice or*	*Describe the Program of Risk Management Actions (refer to Table 3), focusing on additional actions (e.g., installation of pollution control equipment) that will be adopted to reduce or eliminate the risk of impacts that have been identified as* ***Harmful****.*	*Describe the monitoring approach and the parameters (KPI) to be monitored for each impact irrespective of whether it is harmless of harmful. The frequency of monitoring to be specified as well including the data source.*	*-1* *0* *+1*	*Confirm the score of environmental impact of the project with respect to the aspect and its monitored value in relation to legal /regulatory limits (if any) including basis of conclusion.*	*Describe how the GCC Verifier has assessed that the impact of the Project Activity against the particular aspect and in case of "harmful impacts" how has the project adopted Risk Mitigation Action Plans to mitigate the risks of negative environmental impacts to levels that are unlikely to cause any harm as well as the net positive impacts of the project with respect to the most likely baseline alternative.* .

[16] sourced from the CDM SD Tool and the sample reports are available (https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx)

					*limits by way of plant design and operating principles, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as **Harmless** /If the project has a positive impact on the environment mark it as "harmless" as well.*	*Activity is likely to cause harm (may be un-safe) and shall be indicated as **Harmful***	*stricter voluntary corporate requirements*					
Reference to paragraphs of Environmental and Social Safeguards Standard		*Paragraph 12 (a)*	*Paragraph 13 (c)*	*Paragraph 13 (d) (i)*	*Paragraph 13 (d) (ii)*	*Paragraph 13 (d) (iii)*	*Paragraph 13 (e) (i)*	*Paragraph 13 (e) (ii)*	*Paragraph 12 (c) and Paragraph 13 (f)*	*Paragraph 22*		*Paragraph 24 and Paragraph 26 (a) (i)*
Environment - *Air*	*SO_x emissions (EA01)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	NO_x emissions (EA02)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	CO_2 emissions (EA03)	The project is expected to reduce CO_2 emissions wrt to baseline scenario of generation of equivalent amount of power in grid connected power plant.	Not Applicable	Not Applicable	Harmless The overall impact is positive with respect to the baseline alternative.	Not Applicable	Not Applicable	Not Applicable	GHG emission reduction (Tonnes of CO_2e / Yr.) The parameter will be monitored on monthly basis.	+1	The overall impact is positive with respect to the baseline and hence the impact is harmless	Not Applicable

	CO emissions (EA04)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Suspended particulate matter (SPM) emissions (EA05)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Fly ash generation (EA06)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Non-Methane Volatile Organic Compounds (NMVOCs) (EA07)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Odor (EA08)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Noise Pollution (EA09)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Others (EA10)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Add more rows if required and corresponding notation with EA as prefix)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
		Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Environment - *Land*	*Solid waste Pollution from Plastics (EL-01)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Solid waste Pollution from Hazardous wastes (EL02)	Project anticipates generating hazardous waste (solar PV model).	Hazardous s s and waste managed ent rules 2016[17].	NA	Harmless Project owner will dispose the hazardous waste (solar PV model) for recycling through the licensed hazardous waste vendor	Not Applicable	Not Applicable	Not Applicable	Hazardous waste (solar PV model) quantity generated and disposed will be continuously and monitored and recorded in the hazardous waste register.	+1	The impact is unlikely to cause any harm.	Not Applicable
	Solid waste Pollution from Bio-medical wastes (EL03)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Solid waste Pollution from E-wastes (EL04)	E- waste generation from the Solar Power Project in terms of damaged equipments, electronic equipment wires and computer auxiliary etc	E-Waste Management Amendment rules, 2018[18].	Not Applicable	Harmless Lifetime of the project activity is 25 years. Project Owner will collect, store and dispose the E-waste to the	Not Applicable	Not Applicable	Not Applicable	Quantity of E-waste discarded at the end of life time will be monitored and recorded.	+1	The impact is unlikely to cause any harm.	Not Applicable

[17] https://cpcb.nic.in/rules/

[18] https://cpcb.nic.in/uploads/Projects/E-Waste/e-waste_amendment_notification_06.04.2018.pdf

					licensed vendors/ manufacturers at the end of life of products/ equipment's in compliance to the Ewaste Management rules.							
	Solid waste Pollution from Batteries (EL05)	Batteries waste generation from the Solar Power Project in terms of damaged equipments, electronic equipment wires and computer auxiliary etc	Not Applicable	Not Applicable	Harmless	Not Applicable	Not Applicable	Not Applicable	Quantity of Battery Disposal data will be monitored and recorded	+1	The impact is unlikely to cause any harm.	Not Applicable
	Solid waste Pollution from end-of-life products/ equipment (EL06)	In the absence of the project activity no Solid waste Pollution from endof-life products/ equipment will be generated. Project activity may result in the E-waste from the panels and other electronic products at the end of its lifetime.	E-Waste Management Amendment rules, 2018	Not Applicable	Harmless Lifetime of the project activity is 25 years. Project Owner will collect, store and dispose the E-waste to the licensed vendors/ manufacturers at the end of life of products/ equipment's in complian	Not Applicable	Not Applicable	Not Applicable	Quantity of waste discarded at the end-of-life time will be monitored and recorded	+1	The impact is unlikely to cause any harm.	Not Applicable

					c e to the Ewaste Manage me nt rules.							
	Soil Pollution from Chemicals (including Pesticides, heavy metals, lead, mercury) (EL07)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	land use change (change from cropland /forest land to project land) (EL08)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Others (EL09)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Add more rows if required	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
		Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Environment - *Water*	*Reliability/ accessibility of water supply (EW01)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Water Consumption from ground and other sources (EW02)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

	Generation of wastewater (EW03)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Wastewater discharge without/with insufficient treatment (EW04)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Pollution of Surface, Ground and/or Bodies of water (EW05)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Discharge of harmful chemicals like marine pollutants / toxic waste (EW06)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Others (EW07)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Add more rows if required	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
		Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Environment – *Natural Resources*	*Conserving mineral resources (ENR01)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Protecting/ enhancing plant life (ENR02)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

	Protecting/ enhancing species diversity (ENR03)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Protecting/ enhancing forests (ENR04)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Protecting/ enhancing other depletable natural resources (ENR05)	This is a renewable energy power project generating power through the solar energy which is renewable source of energy and hence there is no impact.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Conserving energy (ENR06)	There is no scope for energy conservation since it is a solar power plant generating and supplying electricity through the grid. Hence not applicable.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Replacing fossil fuels with renewable sources of energy (ENR07)	The solar power project replaces fossil fuel with the renewable solar energy for the power generation by installing the solar power plant which would have been otherwise generated from the fossil fuel dominant.	Not Applicable	Not Applicable	Harmless The overall impact is positive compared to the baseline alternative.	Not Applicable	Not Applicable	Not Applicable	Considering the occurrence of emission reductions through the electricity generation form the solar power project. This parameter will be monitored through the monthly Power generation from the proposed solar Project. Monthly electricity generation will be monitored through the energy meters installed at the substation. Energy Generation reports will be provided for the verification of generation.	+1	The impact is unlikely to cause any harm.	Not Applicable

	Replacing ODS with non-ODS refrigerants (ENR08)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Others (ENR09)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Add more rows if required											
Net Score:			**+6**									
Project Owner's Conclusion in PSF:			The Project Owner confirms that the Project Activity will not cause any net harm to Environment.									
GCC Project Verifier's Opinion:			The GCC Verifier certifies that the Project Activity [is not likely to cause any] or [is likely to cause] net harm to the environment...									

E.2. Social Safeguards

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Impact of Project Activity on	**Information on Impacts, Do-No-Harm Risk Assessment and Establishing Safeguards**	**Project Owner's Conclusion**	**GCC project Verifier's Conclusion** **(To be included in Project Verification Report only)**

		Description of Impact (*positive or negative*)	Legal requirement /Limit, Corporate policies / Industry best practice	Do-No-Harm Risk Assessment (Choose which ever is applicable)			Risk Mitigation Action Plans (for aspects marked as Harmful)	Performance indicator for monitoring of impact.	Ex-ante scoring of environmental impact	Explanation of the Conclusion	3rd Party Audit
				Not Applicable	**Harmless**	**Harmful**	**Operational / Management Controls**	**Monitoring parameter and frequency of monitoring (as per scoring matrix Appendix-02)**	**Ex- Ante scoring of social impact of the project**	**Ex- Ante description and justification/explanation of the scoring of social impact of the project**	**Verification Process** **Will the Project Activity cause any harm?**
Social Aspects on the identified categories[19] indicated below.	*Indicators for social impacts*	*Describe and identify actual and anticipated impacts on society and stakeholders, both positive or negative, from all sources during normal and abnormal/emergency conditions that may result from constructing and operating of the Project Activity within or outside the project boundary, over which the project Owner(s) has/have control*	*Describe the applicable national regulatory requirements / legal limits or organizational policies or industry best practices related to the identified risks of social impacts*	*If no social impacts are anticipated, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as* ***Not Applicable***	*If social impacts exist but are expected to be in compliance with applicable national regulatory requirements/ stricter voluntary corporate limits by way of plant design and operating principles then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as* ***Harmless****), project having positive impact on society. To the BAU / baseline scenario must also mark their aspect as* ***"harmless"***	*If negative social impacts exist that will not be in compliance with the applicable national legal/ regulatory requirements or are likely to exceed legal limits, then the Project Activity is likely to cause harm and shall be indicated as* ***Harmful***	*Describe the operational or management controls that can be implemented as well as best practices, focusing on how to implement and operate the Project Activity, to reduce the risk of impacts that have been identified as* ***Harmful****.*	*Describe the monitoring approach and the parameters (KPI) to be monitored for each impact irrespective of whether it is harmless of harmful. The frequency of monitoring to be specified as well. Monitoring parameters can be quantitative or qualitative in nature along with the data source*	*-1* *0* *+1*	*Confirm the score of the social impacts of the project with respect to the aspect and its monitored value in relation to legal/regulatory limits (if any) including basis of conclusion*	*Describe how the GCC Verifier has assessed that the impact of Project Activity on social aspects (based on monitored parameters, quantitative or qualitative) and in case of "harmful aspects how has the project owner adopted Risk Mitigation Action / management actions plans and policies to mitigate the risks of negative social impacts to levels that are unlikely to cause any harm.* *Also describe the positive impacts of the project on the society as compared to the baseline alternative or BAU scenario.*
Reference to paragraphs of Environmental and Social Safeguards Standard		*Paragraph 12 (a)*	*Paragraph 13 (c)*	*Paragraph 13 (d) (i)*	*Paragraph 13 (d) (ii)*	*Paragraph 13 (d) (iii)*	*Paragraph 13 (e) (i)*	*Paragraph 12 (c) and Paragraph 13 (f)*	*Paragraph 23*		*Paragraph 24 and Paragraph 26 (a) (ii)*

[19] sourced from the CDM SD Tool and the sample reports are available (https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx)

Social - *Jobs*	*Long-term jobs (> 10 year) created/ lost (SJ01)*	The project activity generates long term job opportunities during the operation the project activity.	Host country minimal wage requirements. Regulations on Minimum Wage for Employees working by Labor Contract[20].	Not Applicable	Harmless As the impact is positive in nature	Not Applicable	Not Applicable	No of Permanent Jobs to be monitored on annual basis. Ex-Ante 10 permanent jobs will be created.	+1	The project is unlikely to cause any harm.	Not Applicable
	New short-term jobs (< 1 year) created/ lost (SJ02)	The project activity generates short term job opportunities during the operation the project activity.	Host country minimal wage requirements. Regulations on Minimum Wage for Employees working by Labor Contract.	Not Applicable	Harmless As the impact is positive in nature	Not Applicable	Not Applicable	No of Seasonal/ Contractual/ Temporary Jobs to be monitored on annual basis.	+1	The project is unlikely to cause any harm.	Not Applicable
	Sources of income generation increased / reduced (SJ03)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Avoiding discrimination when hiring people from different race, gender, ethnics, religion, marginalized groups, people with disabilities (SJ04)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

[20] https://thukyluat.vn/vb/decree-90-2019-nd-cp-2019-based-minimum-wages-applied-to-employees-under-labour-contracts-68a65.html#VanBanTA

	(Human rights)										
Social - *Health & Safety*	*Disease prevention (SHS01)*	This is a renewable energy-based power generation plant through solar energy which is clean energy and does not emit any gasses or chemicals impacting the livelihood. There is no impact.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Occupational health hazards (SHS02)	There is a possibility of physical hazards in project sites due to human intervention or technical failure or emergency	EHS policy	Not Applicable	Harmless By establishing EHS policy guidelines, and imparting periodic trainings and providing PPE kits to employees and visitors	Not Applicable	Establishing EHS Guidelines Imparting Trainings, Keeping Sign boards, Providing PPE Kits.	Trainings to Employees	+1	By implementing Risk mitigation measures the project is unlikely to cause any harm	Not Applicable
	Reducing / increasing accidents /Incidents/fatality (SHS03)	There is a possibility of accidents/incidents/near miss in project sites due to human intervention or technical failure or emergency.	EHS policy	Not Applicable	Harmless By establishing EHS policy guidelines, and imparting periodic trainings and providing PPE kits to employees and visitors	-	Establishing EHS Guidelines Imparting Trainings, Keeping Sign boards Providing PPE Kits	Trainings to Employees	+1	By implementing Risk mitigation measures the project is unlikely to cause any harm	Not Applicable
	Reducing / increasing crime (SHS04)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Reducing / increasing food wastage (SHS05)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

	Reducing / increasing indoor air pollution (SHS06)	This is a renewable energy power generation project through solar power and supplying electricity to the national grid. Hence there is no impact on indoor air pollution	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Efficiency of health services (SHS07)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Sanitation and waste management (SHS08)	Project will generate domestic waste during construction and operation of the project.	As per Factories Act, Solid waste management rules	Not Applicable	Harmless The project will have proper sanitation facilities (during construction portable toilets, during operation permanent toilets) for both men and women as per factories act and domestic waste generated will be disposed as per local regulations.	Not Applicable	Not Applicable	Not Applicable	0	The project is unlikely to cause any harm.	Not Applicable
	Other health and safety issues (SHS09)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Add more rows if required										

Social - *Education*	*specialized training / education to local personnel (SE01)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Educational services improved or not (SE02)	The employees will receive on job training as per training needs. It imparts a positive impact by helping employees in all-round development.	None	-	Harmless It is a positive impact.	-	-	No. of Trainings	+1	This is a positive impact.	-
	Project-related knowledge dissemination effective or not (SE03)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Other educational issues (SE03)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Add more rows if required (SE04)										
Social - *Welfare*	*Improving/ deteriorating working conditions (SW01)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Community and rural welfare (indigenous people and	Though the project creates certain no of employment the impact is not considerable in scale.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

	communities) *(SW02)*										
	Poverty alleviation (more people above poverty level) (SW03)	Though the project creates certain no of employment the impact is not considerable in scale.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Improving / deteriorating wealth distribution/ generation of income and assets (SW04)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Increased or / deteriorating municipal revenues (SW05)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Women's empowerment (SW06) *(Human rights)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Reduced / increased traffic congestion (SW07)	No impact	Labour law	-	Harmless Child Labour and forced labour are strictly prohibited by law.	-	-	Harmless Child Labour and forced labour are strictly prohibited by law	0	The project is unlikely to cause any harm.	-

	Exploitation of Child labour *(Human rights)* *(SW08)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Minimum wage protection *(Human rights) (SW09)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Abuse at workplace. (With specific reference to women and people with special disabilities / challenges) *(Human rights) (SW10)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Other social welfare issues (SW11)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Avoidance of human traffickin g and forced labour	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

	(Human rights) *(SW12)*										
	Avoidance of forced eviction and/or partial physical or economic displacement of IPLCs *(Human rights)* *(CW13)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Provisions of resettlement and human settlement displacement *(Human rights)* *(CW14)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Add more rows if required										
Net Score:		+5									
Project Owner's Conclusion in PSF:		The Project Owner confirms that the Project Activity will not cause any net harm to society.									

GCC Project Verifier's Opinion:	The GCC Verifier certifies that the Project Activity [is not likely to cause any] or [is likely to cause] net harm to society.

Section F. United Nations Sustainable Development Goals (SDG)

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UN-level SDGs	**UN-level Target**	**Declared Country-level SDG**	**Defining Project-level SDGs**				**GCC Project Verifier's Conclusion** (To be included in Project Verification Report only)	
			Project-level SDGs	**Project-level Targets/Actions**	**Contribution of Project-level Actions to SDG Targets**	**Monitoring**	**Verification Process**	**Are Goal/ Targets Likely to be Achieved?**
Describe UN SDG targets and indicators *See: https://unstats.un.org/sdgs/indicators/indicators-list/*	*Describe the UN-level target(s) and corresponding indicator no(s)*	*Has the host country declared the SDG to be a national priority? Indicate Yes or No*	*Define project-level SDGs by suitably modifying and customizing UN/ Country-level SDGs to the project scope or creating a new indicator(s). Refer to previous column for guidance.*	*Define project-level targets/actions in line with nee project level indicators chosen. Define the target date by which the project Activity is expected to achieve the project-level SDG target(s).*	*Describe and justify how actions taken under the Project Activity are likely to result in a direct positive effect that contributes to achieving the defined project-level SDG targets*	*Describe the monitoring approach and the monitoring parameters to be applied for each project-level SDG indicator and its correspondi ng target, frequency of monitoring*	*Describe how the GCC Verifier has verified the claims that the project is likely to achieve the identified Project level SDGs target(s).*	*Describe whether the project-level SDG target(s) is likely to be achieved by the target date (Yes or no)*

							and data source		
Goal 1: End poverty in all its forms everywhere	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Goal 3. Ensure healthy lives and promote well-being for all at all ages	3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe,	YES	CSR sustainability and community outreach arm of The Project Owner, the Foundation aligns its mission with the Group philosophy of 'Growth with Goodness'. The Foundation is committed to the cause of the deprived and underprivileged and has been working relentlessly across 2,250 villages in 18 states to uplift the lives of 3.2 million people a year with a multi-faceted approach	The Foundation emphasises on long-term behaviour change processes through special projects, namely SuPoshan, Swachhagraha, Saksham and Udaan.	The Foundation emphasises on long-term behaviour change processes through special projects, namely SuPoshan, Swachhagraha, Saksham and Udaan.	Project owner implement and maintain the policy to ensure that to promote proper Healthy lives	Project owner implement and maintain proper health camps which will be recorded annually	Project owner concludes that by strictly implementing to promote healthy lives for all ages	YES Since the project activity is already operational Project activity targeted SDG is likely to be achieved during the project entire crediting period.

	effective, quality and affordable essential medicines and vaccines for all								
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Goal 5. Achieve gender equality and empower all women and girls	5.C Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels	YES	Equal employment opportunities and pay scales for both men and women in the project activities	Equal working opportunity for both men and women	Equal working opportunity for both men and women	Project owner implement and maintain the HR policy to ensure that no gender discrimination should be entertained while employing the workforce and paying the wages for the project activity 100% probability and equal pay packages will be provided to the both men and women employees.	Project owner monitors the parameter through Employment register for cross checking the numbers and values.	Project owner concludes that by strictly implementing the company policy men & women have equal rights and no discrimination will be tolerated against women. Project is already implemented and hence the targeted SDG is already is being under implementation.	YES Since the project activity is already operational Project activity targeted SDG is likely to be achieved during the project entire crediting period.

Goal 6. Ensure availability and sustainable management of water and sanitation for all	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Goal 7. Ensure access to affordable, reliable, sustainable, and modern energy for all	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix. 7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investme	Yes	Quantity of net electricity supplied to the grid by project activity in year y	1,029,537.86MWh/yr	7.2.1 Renewable energy share in the total energy consumption 7.a.1 International financial flows to developing countries in support of clean energy research and development and renewable energy production, including in hybrid systems 7.b.1 Installed renewable energy-generating capacity in developing countries (in watts per capita)	Contribute renewable energy share in total grid energy consumption	The net electricity supplied to the grid by the project activity is continuously monitored through energy meter (main and check meter) installed at the sub-station. The meters remain under the custody of state utility	Contributing clean energy mix of grid.	Yes

	nt in energy infrastructure and clean energy technology. 7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respectiv								

	e programmes of support								
Goal 8. Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all	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 8.8 Protect labor rights and promote safe and secure working environments for all workers, including migrant	Yes	Project activity supports creation of short term and long term job opportunities during the construction and operation of the project activity. Supports economic productivity through technology up gradation and innovation through training of labour in high intensive sector. Project protects labour rights and promotes safe and secure working environments. Supports a transition to a low-carbon society through employment training for former fossil fuel industry employees	Project creates new employment and generates income for 25 no of people during the project lifetime. Through Project activity economic development has been achieved in the project location by creating opportunities to the other allied services and indirect employment.	Project creates new employment and generates income for 25 no of people during the project lifetime. 15 Long term jobs and 10 short term jobs will be provided	8.5.2 Employment per the national labour and company law. 8.8.2 Maintains company HR policy to create standard operating procedures (SOPs) to follow and maintain safe and secure work environment and by paying the wages as per the minimum wages act of the country.	Project owner monitors the implantation of the policies and employee grievances if any through the separate HR manager and site in charge. Quantity of employment will be monitored through employment records.		YES Targeted SDG is likely to be achieved during the entire crediting period.

	workers, in particular women migrants, and those in precarious employment								
Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respectiv	Yes	Provides one clean and resilient energy generation facility	-	9.4.1 CO_2 emission per unit of value added	The project helps adaptation of clean energy technologies by implementing a wind power plant.	The net electricity supplied to the grid by the project activity is continuously monitored through energy meter (main and check meter) installed at the sub-station. The meters remain under the custody of state utility-	Project owner is in operation the plant from 17/04/2020 and comply with targeted SDG. 475 MW capacity which will give an annual average of **1,029,537.86** MWh generation which leads to 957,985 tCO_2 emission reduction	Yes

	e capabilities								
Goal 10. Reduce inequality within and among countries	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Goal 11. Make cities and human settlements inclusive, safe, resilient, and sustainable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Goal 12. Ensure sustainable consumption and production patterns	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Goal 13. Take urgent action to combat climate change and its impacts	Improve education, awarenessraising and human and institutional capacity on climate change mitigation adaptation, impact reduction and early warning	Yes	The project activity generates electricity through Renewable energy (solar) which result in reduction of power generation from fossil fuelbased generation unit supplying electricity to the grid and hence reduction in Greenhouse gases emission	The project activity through implementation of 475 MW of solar power generation unit will result in reduction of 957,985 tCO2 /year	The reduced greenhouse gas emissions per year will be used as proper project-level indicator and the information regarding the project activity will be disseminated to enhance stakeholders 'awareness	Emission reductions achieved per year	Electricity produced by the renewable generating unit multiplied by an emission factor	Reduction of Greenhous e gases	Yes
Goal 14. Conserve and sustainably use the oceans, seas, and marine resources for	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

sustainable development									
Goal 15. Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

SUMMARY	**Targeted**	**Likely to be Achieved**
Total Number of SDGs	**6**	**6**
Certification label (Bronze, Silver, Gold, Platinum, or Diamond) for the ACCs as defined in the PSF	**diamond**	**Diamond**

Section G. Local stakeholder consultation

G.1. MODALITIES FOR LOCAL STAKEHOLDER CONSULTATION

The scope of local stakeholder consultation: Awareness about Climate Change; Project and Sustainable Development Goals.

The date of LSC for different project activity

Project	SPV Name	Location, State	Date
Project 1	Adani Solar Energy Four Limited	Rajasthan	19.08.2021
Project 2	Adani Solar Energy Kutchh Two Pvt Limited	Gujarat	02.08.2021
Project 3	Adani Solar Energy Kutchh One Limited	Gujarat	02.08.2021
Project 4	Adani Solar Energy Four Limited	UP	12.07.2021
Project 5	Adani Solar Energy Four Limited	UP	12.07.2021
Project 6	Adani Solar Energy Chitrakoot One Limited	UP	14.07.2021
Project 7	Adani Solar Energy Chitrakoot One Limited	UP	14.07.2021

The group of stakeholders invited are

• Land team

• CSR team

• Local Laborer and Grazers

• Taluka Development Officer, Dayapar, Lakhpat Taluka

• Vulnerable social groups such as women, BPL and Schedule Class

• Regulatory Authorities at district levels, Sarpanch, ward member and Gram Sewak of Panchayats.

- Local Communities in Area of Interest =

The means for inviting stakeholders' participation;

Most of the stakeholders were given private phone calls followed by official letters and Invitation posters where possible. Especially the nearby village heads were asked to inform the locals about the project and the meeting.

Agenda of Meeting:

- Introduction of the project
- Brief of Climate Change and Certification Process
- Social No-net-harm Label
- Environmental No-net-harm Label

Sustainable Development Goals and project benefits to the local stakeholders

50 MW Rawra, Adani Solar Energy 4 Limited

S.No	Name	Village	Occupation
1	Hema Ram	Rawra	Farmer
2	Shravan	Rawra	Farmer
3	Shravan Singh	Rawra	Farmer

100 and 150 MW GUVNL LSC details (Adani Solar Energy Kutch1 and Kutch 2) Attendee list

S.No	Name	Occupation
1	Hira Bai	Land Seller
2	Siddique	Land seller
3	Bhiv Bhai	Land seller
4	Moham bhai	Land seller

Adani Solar Energy One Chitrakoot Limited LSC list

S.No	Name	Occupation
1	Vyas Narayan pandey	Govt employee
2	Luv Kush Mishra	Teacher
3	Uttam Prasad	Farmer
4	Raghvindra singh	Farmer
5	Vijay Mishra	Farmer
6	Sagar Pandey	contractor
7	Sanjai Pandey	Army
8	Bhiya lal pal	Farmer
9	Lavlesh Harijan	Farmer

Adani Solar Energy 4 limited LSC list

S.No	Name	Occupation

1	Chedi Lal	Farmer
2	Sumilan Sahu	Farmer
3	Ramilan Sahu	Farmer
4	Raju Tripathi	Farmer
5	Bablu Tripathi	Farmer
6	MAhipal	Farmer
7	Motilal	Farmer
8	Hublal	Farmer
9	Lov Kush	Farmer
10	Sanjai kumar sinha	Advocate

G.2. SUMMARY OF COMMENTS RECEIVED

All stakeholders interviewed are supportive to the implementation of the project, believing that the Project will help mitigate the air pollutions by wind power project, improve the community environment and promote local economic development.

1. Are you aware of the project?

2. What do you like about the project?

3. What do you not like about the project?

4. Is there any concern over the project activity?

5. Any other comments?

No concerns are reported

G.3. CONSIDERATION OF COMMENTS RECEIVED

All comments raised during local stakeholder consultation have been considered in EIA report and corresponding precaution measures and corrective actions (if any) have been proposed to ensure all issues during construction and operation of the project are properly addressed.

Section H. Approval and authorization

As per the guideline available in this regard, submission of Host Country Attestation (HCA) on Double Counting as and when required by CORSIA will provide during the verification.

APPENDIX 1. CONTACT INFORMATION OF PROJECT OWNERS

Project Owner name (as per LON/LOA)	Adani Solar Energy Four Limited Adani Solar Energy Kutchh Two Pvt Limited Adani Solar Energy Kutchh One Limited Adani Solar Energy Chitrakoot Limited
Country	India
Address	Adani Corporate House, 4th Floor, South Wing, ACH Shantigram, Near Vaishnodevi Circle, S. G. Highway, Ahmedabad – 382 421, Gujarat
Telephone	+91 79 2656 5555
Fax	-
E-mail	emission.reductions@adani.com
Website	www.adanigreenenergy.com
Contact person	Sameer Darji

Project Owner name (as per LON/LOA)	Adani Green Energy Limited
Country	India
Address	Adani Corporate House, 4th Floor, South Wing, ACH Shantigram, Near Vaishnodevi Circle, S. G. Highway, Ahmedabad – 382 421 Gujarat
Telephone	+91 79 2656 5555
Fax	-
E-mail	Sandip.Saha@adani.com
Website	www.adanigreenenergy.com
Contact person	Sandip Saha

APPENDIX 2. AFFIRMATION REGARDING PUBLIC FUNDING

Not Applicable

APPENDIX 3. APPLICABILITY OF METHODOLOGY(IES)

Not Applicable

APPENDIX 4. FURTHER BACKGROUND INFORMATION ON EX ANTE CALCULATION OF EMISSION REDUCTIONS

Not Applicable

APPENDIX 5. FURTHER BACKGROUND INFORMATION ON MONITORING PLAN

Not Applicable

APPENDIX 6. SUMMARY REPORT OF COMMENTS RECEIVED FROM LOCAL STAKEHOLDERS

Not Applicable

APPENDIX 7. SUMMARY OF DE-REGISTERED CDM PROJECT OR PROJECTS FROM OTHER GHG / NON-GHG PROGRAMS (TYPE B)

Not Applicable

Complete this form in accordance with the instructions attached at the end of this form.	
Program Name	
Project registration number	
Date of registration in the program	
Title of the Project Activity	
Project de-registration reference number	
Date of de-registration of the Project	
Project Participants (Authorized by the host / annex 1 country letter of approval)	
Country where the project is located	
Applied methodology(ies) (Provide reference and version number(s))	

Pre-registration changes to the Project Activity

(Tick as applicable)

Pre-registration Changes	Reference number	Approved	Provide a summary of pre-registration changes
Deviations from approved baseline and monitoring methodology		☐	
Deviations from applied Tool & Guidance		☐	
Deviations from the rules		☐	
Other…….		☐	

Post-registration changes to the Project Activity

(Tick as applicable)

Post registration Changes	Reference number	Approved	Provide a summary of post-registration changes
Change in project design		☐	
Request for revision of monitoring plan		☐	
Request for change in start date of crediting period		☐	
Renewal of crediting period		☐	
Temporary deviations		☐	
Other…….		☐	

Crediting Period(s)

Crediting period(s)			Period (start & end dates)	ERs as per registered PDD/MR/Project documents	Credits issued
Crediting Period (Shall start on or after 1 Jan 2016)	Fixed 10 year				
	Renewable (7 years, with 2 approved renewals)	1st			
		2nd			
		3rd			
Period for which Credits have been issued					
Period for which Credits have been requested but not issued					-
Period for which Credits have never been requested for issuance (No monitoring reports submitted)					-
Period for which Credits have never been requested for issuance prior to CDM de-registration					-
Remaining Crediting period, after de-registration, for which Credits have not been issued by the program , subject to a ceiling of 10 years as allowed under the GCC Program					-

<table>
<tr><td>Details of Previous Issuance Requests</td><td>
<table>
<tr><th>Issuance Request</th><th>Period (start & end dates)</th><th>ERs as per registered PDD</th><th>Quantity of Credits requested to be issued</th><th>Quantity of Credits issued</th></tr>
<tr><td>1st</td><td></td><td></td><td></td><td></td></tr>
<tr><td>2nd</td><td></td><td></td><td></td><td></td></tr>
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<tr><td>Total</td><td></td><td></td><td></td><td></td></tr>
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</td></tr>
<tr><td>List any open issues in the Validation and last Verification Report (e.g., FARs, if any) and how they have been addressed</td><td></td></tr>
<tr><td>Any other relevant information that has not been reported in the registered documents and that may have adverse impacts on the environmental integrity of the Project Activity</td><td></td></tr>
<tr><td>Provide the list of all the registered documents related to this project, as available on the program’s website and the</td><td></td></tr>
</table>

corresponding URLs.	

Appendix 8. FURTHER INFORMATION ON DETERMINATION OF BUNDLE IN PROJECT ACTIVITY.

Double counting Requirement

Avoidance of Double Accounting in regional Emission Trading Schemes: Allows A1 or A2 type projects from the jurisdiction where Emission Trading Schemes (ETS) are in operation (e.g., European Union Emission Trading Scheme (EUETS), Chinese ETS) to be submitted as a GCC project, provided that they are not included or covered in the ETS and avoid double accounting (new requirement)

A self-declaration from the Project Owner that written attestation from the host country's national focal point or focal point designee will be provided at the earliest opportunity, but prior to submission of requesting issuance to the GCC Program.

Bundling criteria

Criteria	Project Specific information
Criteria 1-(**Not a bundled project) Project which apply same technology (wind power**) and methodology (ACM0002, v20.0), has same baseline (which is national electricity grid), generate the same output (electricity), apply the same additionality approach (Investment analysis) and has single investment decision for all the activities in the project, are by default 'homogenous' and is not a bundled project, therefore can apply requirements applicable to single projects (with single or multiple sites	The 475 MW bundled project activity, has different investment decision dates **and hence criteria 1 is not applicable**
Criteria 2- The bundled project has 2 legal owners who implements the project in 2 different locations at different time of investment decision within the must be one year bundling project. Investment climate is same	The project activity is located at different locations and have different project owner and the investment decision is within one year for both the projects. Hence **criteria 2 is chosen for the project establishment by the project owner. The details will be provided during validation**
Criteria 3-The bundling project by a legal owner and two/three project owner at different district	**Not applicable,** as project is not in different districts .

Criteria	Project Specific information
with investment decision making within the bundle is 1 year. The IRR should be 5% variation across each projects in a bundle	

Appendix 9. PUBLIC DECLARATION FOR A2 (Sub Type 2 and 3), B1 & B2 PROJECTS ON NON CONTINUATION FROM CDM/GHG/NON-GHG PROGRAMS.

>>Not applicable

DOCUMENT HISTORY

Version	Date	Comment
V 4.0	27/09/2022	▪ Revised version released on approval by Steering Committee as per GCC Program Process. ▪ Revised version contains following changes: ○ Introduced A3 type projects A2 project sub-types. ○ Included revised Declaration by the 'Authorized Project Owner and focal point' on GCC requirements. ○ Included modified format for E+/S+/ SDG assessment. ○ Revised instructions for filling in the PSF. ○ Editorial changes to the document.
V 3.2	31/12/2020	▪ The name of GCC Program's emission units has been changed from "Approved Carbon Reductions" or ACRs to "Approved Carbon Credits" or ACCs.
V 3.1	17/08/2020	▪ Editorial revisions made ○ Revised Table in section B.7.2 on Monitoring-program of risk management actions ○ Revised Table in section E.1 on Environmental Safeguards ○ Revised Table in section E.1 on Social Safeguards ○ Revised Table in section F on United Nations Sustainable Development Goals (SDG)
V 3.0	05/07/2020	▪ Revised version released on approval by Steering Committee as per GCC Program Process. ▪ Revised version contains following changes: ○ Change of name from Global Carbon Trust (GCT) to Global Carbon Council (GCC). ○ Considered and addressed comments raised by Steering Committee: ➢ during physical meeting (SCM 01, dated 29 Oct 2019, Doha Qatar); and ➢ electronic consultations EC01-Round 01 (15.09.2019 – 25.09.2019), EC01-Round 02 (27.03.2020 – 27.06.2020). ○ Feedback from Technical Advisory Board (TAB) of ICAO on GCC submission for approval under CORSIA[21];

[21]See ICAO recommendation for conditional approval of GCC at https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/Excerpt_TAB_Report_Jan_2020_final.pdf

V 2.0	25/06/2019	▪ Revised version released for approval by the GCC Steering Committee. ▪ Revised version includes additional details and instructions on the information to be provided, consequent to the latest developments world-wide (e.g., CORSIA EUC).
V 1.0	01/11/2016	Initial version released under the GCC Program Version 1

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