المجلس العالمي للبصمة الكربونية GLOBAL CARBON COUNCIL



Project Verification Report

V3.1 - 2020

Project Verification Report

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COVER PAGE **Project Verification Report Form (PVR) BASIC INFORMATION** 4K Earth Science Private Limited Name of approved GCC **Project Verifier /** https://www.globalcarboncouncil.com/wp-content/uploads/2021/12/GCCV005-Reference No. 00 4KES GCC-Verifier-Certificate 13122021.pdf (also provide weblink of approved GCC Certificate) Individual Track1 Type of Accreditation CDM Accreditation (Active accreditation from United Nations Framework Convention on Climate valid CDM-E-0069 Change till 14.06.2024 Ref. Number https://cdm.unfccc.int/DOE/list/DOE.html?entityCode=E-0069) ISO 14065 Accreditation GHG Sectoral Scope: **Approved GCC Scopes** Scope 1 - Energy (renewable/non-renewable sources) and GHG Sectoral scopes for Project GCC Scopes: Verification Environmental No-harm (E+) Social No-harm (S+) Sustainable Development Goals (SDG+) Validity of GCC 13/12/2021 to 12/12/2023. approval of Verifier Title, completion date, Bundled Solar Energy Project in Gujarat, Rajasthan and Uttar Pradesh Version: and Version number of 03 dated 15/12/2023. the PSF to which this report applies Title of the project Bundled Solar Energy Project in Gujarat, Rajasthan and Uttar Pradesh activity **Project submission** reference no. S00755. (as provided by GCC Program during GSC) Type A: **Eligible GCC Project** Type² as per the Type A1 **Project Standard** Type A2 (Sub-Type 1) (Tick applicable project type)

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¹ **Note:** GCC Verifier under Individual tack is not eligible to conduct verifications for the GCC project that intends to supply carbon credits (ACCs) for CORSIA requirements.

² Project Types defined in Project Standard and Program Definitions on GCC website.

	Type B –	De-registered CDM Projects:	<u> </u>			
	☐ Type I					
	☐ ☐ Type³		Location,	Date		
Date of completion of Local stakeholder	Project	oject SPV Name				
consultation	Project 1	Adani Solar Energy Four Limited	Rajasthan	15.7.2019		
	Project 2	Adani Solar Energy Kutchh Two Pvt Limited	Gujarat	27.2.2020		
	Project 3	Adani Solar Energy Kutchh One Limited	Gujarat	6-3-2020		
	Project 4	Adani Solar Energy Four Limited	UP			
	Project 5	Adani Solar Energy Four Limited	UP			
	Project 6	Adani Solar Energy Chitrakoot One Limited	UP	18.10.2019		
	Project 7	Adani Solar Energy Chitrakoot One Limited	UP	18.10.2019		
Date of completion and period of Global stakeholder consultation. Have the GSC comments been verified. Provide weblink.	05/01/2023 GSC was conducted between 22/12/2022 to 05/03/2023. https://www.globalcarboncouncil.com/global-stakeholders-consultation/ comments were received during the GSC period. No					
Name of Entity requesting verification service	Adani Green Ene	ergy Limited				
(can be Project Owners themselves or any Entity having authorization of Project Owners)						
Contact details of the representative of the Entity, requesting verification service	Mr. Debjit Bag, Adani Green Energy Limited, Indrapur, Pathar Pratima, South 24 Paraganas, Patharpratima, West Bengal, India Telephone: +91 8980018366					
(Focal Point assigned for all communications)	Email: debjit.bag@adani.com					
Country where project is located	India.					

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³ GCC Project Verifier shall conduct Project Verification for all project types except B₂.

GPS coordinates of the Project site(s)	Provided in Section A.1 of the report.
Applied methodologies (approved methodologies of GCC or CDM can be used)	ACM0002 "Grid-connected electricity generation from renewable sources" (Version 21.0, EB 105 Annex 3).
GHG Sectoral scopes linked to the applied methodologies	GHG-SS: Scope 1 Energy (renewable/non-renewable sources)
Project Verification Criteria: Mandatory requirements to be assessed	 □ ISO 14064-2, ISO 14064-3 □ GCC Rules and Requirements □ Applicable Approved Methodology □ Applicable Legal requirements /rules of host country □ National Sustainable Development Criteria (if any) □ Eligibility of the Project Type □ Start date of the Project activity □ Meet applicability conditions in the applied methodology □ Credible Baseline □ Additionality □ Emission Reduction calculations □ Monitoring Plan □ No GHG Double Counting □ Local Stakeholder Consultation Process □ Global Stakeholder Consultation Process □ United Nations Sustainable Development Goals (Goal No 13- Climate Change) □ Others (please mention below)
Project Verification Criteria: Optional requirements to be assessed	 Environmental Safeguards Standard and do-no-harm criteria Social Safeguards Standard do-no-harm criteria United Nations Sustainable Development Goals (in additional to SDG 13) CORSIA requirements
Project Verifier's Confirmation: The GCC Project Verifier has verified the GCC project activity	The GCC Project Verifier 4K Earth Science Private Limited certifies the following with respect to the GCC Project Activity "Bundled Solar Energy Project in Gujarat, Rajasthan and Uttar Pradesh". The Project Owner has correctly described the Project Activity in the Project Submission Form (version 03 dated 21/12/2023) including the applicability of

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and therefore confirms the following:	the approved methodology ACM0002 "Grid-connected electricity generation from renewable sources" Version 21.0 and meets the methodology applicability conditions and is expected to achieve the forecasted real, measurable and additional GHG emission reductions, complies with the monitoring methodology, has appropriately conducted local and global stakeholder consultation processes and has calculated emission reductions estimates correctly and conservatively.				
	The Project Activity is likely to generate GHG emission reductions amounting to the estimated 8,839,087 tCO _{2e} , over the fixed crediting period of ten years as indicated in the PSF, which are additional to the reductions that are likely to occur in absence of the Project Activity and complies with all applicable GCC rules, including ISO 14064-2 and ISO 14064-3.				
	The Project Activity is not likely to cause any net-harm to the environment and/or society and complies with the Environmental and Social Safeguards Standard, and is likely to achieve the following labels:				
	Environmental No-net-harm Label (E+)				
	Social No-net-harm Label (S +)				
	The Project Activity is likely to contribute to the achievement of United Nations Sustainable Development Goals (SDGs), complies with the Project Sustainability Standard, and contributes to achieving a total of <i>03</i> SDGs, with the following ⁴ SDG certification label (SDG ⁺):				
	Bronze SDG Label				
	Silver SDG Label				
	Gold SDG Label				
	Platinum SDG Label				
	☐ Diamond SDG Label				
	The Project Activity complies with all the applicable requirement of the GCC Program and ICAO's requirements on CORSIA Emissions Unit Eligibility Criteria and CORSIA Eligible Emissions Units, as per Clarification No 1., v1.3 paragraph 23-25, and the ACCs expected to be issued during the crediting period is likely to be CORSIA eligible and can be used by International Airlines for offsetting their emissions during all phases of CORSIA and therefore requests GCC Steering Committee to append CORSIA Certification label (C+) to this project				
	The Project Activity complies with all the applicable GCC rules ⁵ and therefore recommends GCC Program to register the Project activity with above mentioned labels.				
Project Verification	01.0 dated 21/12/2023				
Report, reference number and date of approval	Ref No: 22144-GCC-PV				

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SDG Certification labels: Bronze label (1 star): by achieving 2 out of 17 SDGs; Silver label (2 star): by achieving 3 out of 17 SDGs; Gold label (3 star): by achieving 4 out of 17 SDGs; Platinum label (4 star): by achieving 5 out of 17 SDGs; and Diamond label (5 star): by achieving more than 5 out of 17 SDGs.

GCC Rules" are defined in Project Definitions and refers to the rules and requirements set out by the GCC program related to GHG emission reductions and its voluntary certification labels and are available on the GCC Program's public website: https://www.globalcarboncouncil.com/resource-centre.html

Name of the authorised personnel of GCC Project Verifier and his/her signature with date Chandrakala R

October

Managing Director

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1. PROJECT VERIFICATION REORT

Section A. Executive summary

Summary of the Project activity:

The project involves installation of 475MW_{AC} (50MW X 1, 100MW X 2, 150MW X 1,75MW X 1)) Solar Photovoltaic (SPV) Panels in the states of Gujarat, Uttar Pradesh and Rajasthan. The electricity generated from project activity is exported to the Indian grid in India through power purchase agreement with their respective distribution companies., there by displacing electricity from the Indian grid generated by fossil fuel-based power plants. This project activity consists poly crystalline cells type of panels of and associated connection boxes, Inverters, transformers and other field equipments. Thus, the project activity is estimated to generate an average of 948,448 MWh/year electricity and displacing 883,908 tCO₂e/year. In the baseline scenario the equivalent amount of 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 into the grid. The main emission source in the baseline scenario is the power plants connected to the grid and main greenhouse gas involved is CO₂. The details of project activity are provided below,

Address and geodetic coordinates of the physical site of the Project Activity							
Physical address	SPV	Latitude	Longitude	Commissioning Date			
Rawra, Bap / Phalodi, Jodhpur, Rajasthan	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	17/04/2020			
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	23/10/2020 (66.75MW) 29/12/2020 (33.25 MW)			
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	25/11/2020 (43.75MW) 29/12/2020 (56.25 MW) 19/01/2021 (50 MW)			
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	03/11/2020 (12.5 MW) 26/12/2020 (18.75 MW) 28/01/2021 (18.75 MW)			

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Address and geodetic coordinates of the physical site of the Project Activity						
Physical address	SPV	Latitude	Longitude	Commissioning Date		
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	11/12/2020 (31.25MW) 29/01/2021 (18.75MW)		
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	06/01/2021(25 MW)		
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	06/01/2021 (18.75 MW) 09/04/2021 (31.25 MW)		

Scope of Verification:

The scope of the services provided by M/s. 4K Earth Science Private Limited (hereafter referred as 4KES) for the project is to perform Project Verification of concerned GCC Project Activity. The scope of verification is to assess the claims and assumptions made in the Project Submission Form (PSF) against the GCC criteria, including but not limited to, GCC PS, GCC VS, applied CDM methodology, Tools and other relevant rules and requirements established under Program process. The verification scope is given as a thorough independent and objective assessment of the project design including especially the correct application of the methodology, the project's baseline study, additionality justification, local stakeholder commenting process, environmental impacts and monitoring plan, which are included in the PSF and other relevant supporting documents, to ensure that the GCC project activity meets all relevant and applicable GCC criteria.

Verification Process and Methodology

The verification of the project consisted of the following steps:

- Publication of the project PSF (Project submission Form).
- Desk review of the PSF and supporting documents submitted by the project owner
- On-Site assessment, background investigation and follow-up interviews with personnel of the project owner and its representatives.
- Draft verification reporting based on the audit findings and desk review of the PSF.
- Resolution of corrective actions (if any)
- Final Verification reporting based on the closure of corrective actions
- Technical review of the final verification opinion along with other documents by the independent competent technical review team
- Final approval of the final verification opinion

Conclusion:

The review of the PSF, supporting documentation and the subsequent follow-up interviews have provided

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4KES with sufficient evidence to determine the project's fulfillment of all the stated criteria. In our opinion, the project activity "Bundled Solar Energy Project in Gujarat, Rajasthan and Uttar Pradesh" meets all applicable GCC requirements for the PSF and correctly applied methodology the ACM0002, Version 21.0.

The Project Activity complies with all the applicable requirement of the GCC Program and ICAO's requirements on CORSIA Emissions Unit Eligibility Criteria and CORSIA Eligible Emissions Units, as per Clarification No 1., v1.3 paragraph 23-25, and the ACCs expected to be issued during the crediting period is likely to be CORSIA eligible and can be used by International Airlines for offsetting their emissions during all phases of CORSIA and therefore requests GCC Steering Committee to append CORSIA Certification label (C+) to this project

The Project Activity is not likely to cause any net-harm to the environment and/or society and complies with the Environmental and Social Safeguards Standard and therefore requests GCC Steering Committee to append to this project Environmental No-net-harm Label (E+), Social No-net-harm Label (S+) to this project.

The Project Activity is likely to contribute to the achievement of United Nations Sustainable Development Goals (SDGs), complies with the Project Sustainability Standard and therefore requests GCC Steering Committee to append UN SDG Certification Labels (SDG+) to this project

☐ The Project activity is being recommended to GCC Steering Committee for request for registration	1.
☐ The Project activity is not recommended for request for registration.	

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Section B. Project Verification team, technical reviewer and approver

B.1. Project Verification team

No.	Role		Last name	First name	Affiliation	Involvement in		n	
		Type of resource			(e.g. name of central or other office of GCC Project Verifier or outsourced entity)	Desk/document review	On-site inspection	Interviews	Project Verification findings
1.	Team Leader, Technical Expert and Financial Expert	ÎR	Puratchikkanal	Ma Paa	Central Office	Х	Х	Х	X
2	Trainee	IR	Jithamanyu D V	Ganesh	Central Office	X	Х	Х	Х
3	Trainee	IR	Babu	Praveen	Central Office	Χ	Χ	Χ	Χ

B.2. Technical reviewer and approver of the Project Verification report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of
					central or other
					office of GCC
					Project Verifier or
					outsourced entity)
1.	Technical reviewer	ER	Alias	Syju	Central Office
2	Approver	IR	R	Chandrakala	Central Office

Section C. Means of Project Verification

C.1. Desk/document review

The report is based on the assessment of the PSF/27/ undertaken through stakeholder consultations, application of standard auditing techniques including but not limited to desk review, follow up actions (e.g., on site visit, electronic (telephone or e-mail) interviews) and also the review of the applicable approved methodological and relevant tools, guidance and GCC decisions. Additionally, the cross checks were performed for information provided in the PSF using information from sources other than the verification sources, the verification team's sectoral or local expertise and, if necessary, independent background investigations

All the documents used for arriving project verification conclusion are listed in Appendix 03 and referenced accordingly in project verification report

C.2. On-site inspection

	Duration of on-site inspection: 19/01/2023								
No.	Activity performed on-site	Site location	Date	Team member					

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1.	Opening Meeting	Project Location/Site Office	19/01/2023	Ma Paa Puratchikkanal, Ganesh Jithamanyu D V, Praveen Babu
2	Verification of Installation and monitoring procedure of the project activity. The local villagers and stakeholders were also interviewed to know on the process of implementation of the project. The name of the interviewed persons are provided in section C.3.		19/01/2023	Ma Paa Puratchikkanal, Ganesh Jithamanyu D V, Praveen Babu
3	Document Review & Closing Meeting		19/01/2023	Ma Paa Puratchikkanal, Ganesh Jithamanyu D V, Praveen Babu

C.3. Interviews

No.	Interview		Date	Team		
	Last name	First name	Affiliation			member
1	Birala	Sudarshan	Deputy Manager AGEL	19/01/2023	Project Implementation statusProject Boundary	Ma Paa Puratchikkana I, Ganesh Jithamanyu D
2	Khatri	Deepak	Senior Engineer AGEL		 Methodology Eligibility criteria Host country Requirements Monitoring Plan 	V, Praveen Babu
3	Sahu	Sumilan	Local Stakeholder		Project activity start date and Crediting	
4	Yadav	Manipal	Local Stakeholder		 Period Roles and responsibilities of the project owner Local Stake holder consultation Baseline assumptions Additionality Training to the Monitoring personnel Emission reduction calculations Legal Ownership of the project activity Doble counting of the carbon credits of the project activity E+, S+, SDG+ and CORSIA aspects as per the PSF and GCC requirements 	

C.4. Sampling approach

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Not applicable as no sampling has been used during the project verification.

C.5. Clarification request (CLs), corrective action request (CARs) and forward action request (FARs) raised

Areas of Project Verification findings	Applicable to	No. of CL	No. of	No. of FAR
Green House Ga	Project Types	CL	CAR	FAR
Identification and Eligibility of project type	A ₁ , A ₂ , B ₁ , B ₂	CL01,C		_
G , , , , , , , , , , , , , , , , , , ,		L02		-
General description of project activity	A ₁ , A ₂ , B ₁ , B ₂	CL03,C L04,CL1 0		•
Application and selection of methodologies and standardized baselines	A ₁ , A ₂ , B ₁ , B ₂	-	-	1
 Application of methodologies and standardized baselines 	A ₁ , A ₂ , B ₁ , B ₂	CL05,C L06,CL0 8	CAR02	1
 Deviation from methodology and/or methodological tool 	A ₁ , A ₂ , B ₁ , B ₂	-	-	-
 Clarification on applicability of methodology, tool and/or standardized baseline 	A ₁ , A ₂ , B ₁ , B ₂	-	-	-
- Project boundary, sources and GHGs	A ₁ , A ₂ , B ₁ , B ₂	CL07,C L09		-
- Baseline scenario	A ₁ , A ₂ , B ₁ , B ₂			-
 Demonstration of additionality including the Legal Requirements test 	A ₁ , A ₂ , B ₁ , B ₂	-	CAR04	-
 Estimation of emission reductions or net anthropogenic removals 	A ₁ , A ₂ , B ₁ , B ₂	-	CAR03, CAR05	-
 Monitoring plan 	A ₁ , A ₂ , B ₁ , B ₂	-	CAR06	ı
Start date, crediting period and duration	A ₁ , A ₂ , B ₁ , B ₂	-	-	ı
Environmental impacts	A ₁ , A ₂ , B ₁ , B ₂	-	-	-
Local stakeholder consultation	A ₁ , A ₂ , B ₁	-		-
Approval & Authorization- Host Country Clearance	A ₁ , A ₂ , B ₁ , B ₂	-		1
Project Owner- Identification and communication	A ₁ , A ₂ , B ₁ , B ₂	-		-
Global stakeholder consultation	A ₁ , A ₂ , B ₁	-	-	-
Others (please specify)	A ₁ , A ₂ , B ₁ , B ₂	-	-	-
VOLUNTARY CERTIFICATION OF THE PROPERTY OF THE				
Environmental Safeguards (E+)	A ₁ , A ₂ , B ₁	-	CAR01	-
Social Safeguards (S+)	A ₁ , A ₂ , B ₁	-		-
Sustainable development Goals (SDG+)	A ₁ , A ₂ , B ₁	-		-
Authorization on Double Counting from Host Country (only for CORSIA)	A ₁ , A ₂ , B ₁	-		-
CORSIA Eligibility (C+)		-	-	-
Total - 10 6 1				

Section D. Project Verification findings

D.1. Identification and eligibility of project type

Means of Project	The project is eligible under Type A2 (Sub-Type1) category as per GCC Project		
Verification	standard/2/ and GCC Clarification No 01/23/ which is acceptable since the project		
has not been registered under any GHG program/Non GHG program and the projection			

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operations started since 17/04/2020 which is the earliest commissioning date of the project activity. The commissioning documents/13/ of the project activity has been verified in this regard and found in order. Further following project meets the Type A2 (Sub-Type 1) project category as:

- It is not required by a legal mandate and it does not implement a legally enforced mandate as confirmed by the assessment team verification of the relevant policies pertaining to generation of energy in the host country i.e., Electricity Act 2003/31/, National Electricity Policy 2005/31/, Tariff Policy 2006/31/, The Factories Act 1948/31/.
- It complies with all the applicable host country legal requirements and it ensures compliance with legal requirements. The project is a renewable energy project activity and meets the host country requirements of sustainable development criteria. The project Owner has got Letter of Intent for all bundles from their respective authorities and and executed power purchase agreement with respective DISCOM provided below in the table below prior to start date of the commissioning date of the plants which is in line with the paragraph 16 (b) of Project Standard Version 3.1, the project owner has demonstrated that required approvals and authorizations are available or being processed prior to the start of commercial operations of the project activity which is acceptable to the verification team.

Project Name	LOA	PPA
Adani Solar Energy Four Private Limited (50 MW, Rajasthan)	27/07/2018-Issued by SECI with RFS No SECI/C&P/SPD/RFS/2 000MW/012018 and Tariff INR 2.54	Dated 30/11/2018 between Kilaj Solar (Maharashtra) Pvt. Ltd. (which is an Special Purpose Vehicle) owned Adani Solar Energy Four Private Limited by And Solar Energy Corporation of India Limited
Adani Solar Energy Kutchh Two Private Limited (100MW, Gujarat)	10/10/2018- Issued by Gujarat Urja Vikas Nigam Limited with RFS no GUVNL/500MW/Solar (Phase II R) and tariff of INR 2.44	Dated 12/11/2018 between Gujarat Urja Vikas Nigam Limited and Gaya Solar (Bihar) Private Limited (which is an Special Purpose Vehicle) owned Adani Solar Energy Kutchh Two Private Limited
Adani Solar Energy Kutchh One Limited (150MW, Gujarat)	21/02/2019- Issued by Gujarat Urja Vikas Nigam Limited with Rfs no GUVNL/500MW/Solar (Phase IV) and Tariff of INR 2.67	Dated 22/05/2019 between Adani Green Energy One Limited and Gujarat Urja Vikas Nigam Limited
Adani Solar Energy Four Private Limited (50 MW, Shawasn UP)	22/11/2018- Issued by Uttar Pradesh New and Renewable Energy Development Agency with RFS Number 02/UPNEDA/Grid Connect/Rfp/2018 and tariff of INR 3.22	Dated 03/09/2019 between Kilaj Solar (Maharashtra) Private Limited and Uttar Pradesh Power Corporation Ltd.

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	Adani Solar Energy Four Private Limited, Jalabad UP 50 MW Adani Solar Energy Chitrakoot one Limited, 25 MW Rajapur Chitrakoot UP Adani Solar Energy Chitrakoot one Limited, 50 MW Rajapur Chitrakoot UP	Uttar Pradesh New and Renewable Energy Development Agency with 02/UPNEDA/Grid Connect/Rfp/2018 and Tariff of INR 3.19 14/12/2018- with RFS no 03/UPNEDA/Grid Connect/Rfp/2018 Issued by Uttar Pradesh New and Renewable Energy Development Agency with Tariff no. INR 3.08 14/12/2018- Issued by Uttar Pradesh New and Renewable Energy Development Agency with Tariff no. INR 3.07 with RFS no	Dated 03/09/2019 between Kilaj Solar (Maharashtra) Private Limited and Uttar Pradesh Power Corporation Ltd. Dated- 03/09/2019 between Adani Wind Energy (TN) Limited and Noida Power Company Limited Dated- 03/09/2019 between Adani Wind Energy (TN) Limited and Uttar Pradesh Power Corporation Ltd.	
Findings Conclusion	883,908 tCO ₂ e annually to the baseline scenario • Project applies an app ACM0002 " Grid-connect Version 21.0/9/. CL01 and CL02 was raised at The project is eligible as per GCC project standard Version Version 1.3 which was veriff owner. Further verification tead Development Mechanism (CI (GS) Registry/36/, for the improject activity, GPS coord confirmed that the project was seen applied to the confirmed that the project was seen applied to the confirmed that the project was seen applied to the confirmed that the project was seen applied to the confirmed that the project was seen applied to the confirmed that the project was seen applied to the confirmed that the project was seen applied to the confirmed that the project was seen applied to the confirmed that the project was seen applied to the confirmed that the project was seen applied to the confirmed that the project was seen applied to the confirmed that the project was seen applied to the confirmed that the project was seen applied to the confirmed that the project was seen applied to the confirmed that the project was seen applied to the confirmed that the project was seen applied to the confirmed that the project was seen applied to the confirmed that the project was seen applied to the confirmed that the project was seen applied to the confirmed that the confir	03/UPNEDA/Grid Connect/Rfp/2018 The project also delivers real, measurable and additional emission reduction 883,908 tCO ₂ e annually (average value over the crediting period) as compute the baseline scenario Project applies an approved CDM monitoring and baseline method ACM0002 "Grid-connected electricity generation from renewable sources."		

D.2. General description of project activity

Means of Project Verification	75MW X 1)) Solar Photovoltaic (SPV) Panels in the states of Gujarat, Uttar Pradesh and Rajasthan. The electricity generated from project activity is exported to the Indian grid in India through power purchase agreement with their respective distribution companies., there by displacing electricity from the Indian grid generated by fossil fuel-based power plants. This project activity consists poly crystalline cells type of panels of and associated connection boxes, Inverters, transformers and other field equipments. Thus, the project activity is estimated to generate an average of 948,448
	MWh/year electricity and displacing 883,908 tCO ₂ e/year. In the baseline scenario the equivalent amount of electricity delivered to the grid by the project activity would have
	otherwise been generated by the operation of grid connected power plants and by

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the addition of new generation sources into the grid. The main emission source in the baseline scenario is the power plants connected to the grid and main greenhouse gas involved is CO₂. The project uses 1,860,666 poly crystalline cells type of panels of and associated connection boxes,2859 Inverters, other field equipments in all the project premises. The technical details/15/ has been verified during onsite visit and found in order.

The project owner declared in the PSF the lifetime of the project activity is 25 Years as guaranteed by the suppliers of PV panels of the project activity and same has been verified in the technical data sheet/15/ provided by the project owner and found acceptable. However, the Project owner have fixed crediting period 10 years which is accordance GCC project manual version 03.1 paragraph 51.

The project activity described as Type A2 (Sub-Type 1) and applied ACM0002.: Grid-connected electricity generation from renewable sources -- Version 21.0 falls into the Large-Scale category as per CDM methodology/9/.

In addition to generating emission reductions the project activity also qualifies for other voluntary certification labels,

Achieving the United Nations Sustainable Development Goals (SDG+) – Silver Environmental No-net harm - (E+)

Social No-net harm - (S+)

CORSIA - C+.

In the baseline scenario the main source of emission was found to be CO_2 as electricity was generated mainly through fossil-fuel based power plants whereas in project scenario the electricity is generated by the Solar Power plant thereby reducing the CO_2 emissions. Thus, non-application of GWP in this project activity was found to be acceptable as the project boundary does not include any of the GHG emissions in the project scenario as per the applied methodology.

The description in the PSF includes sufficient details and provides clarity on the project activity Further verification team cross checked the other GHG programmes like Clean Development Mechanism (CDM) Registry/34/, VERRA Registry/35/, Gold Standard (GS) Registry /36/ in India for the information regarding the consistency of the title of the project activity , GPS coordinates, Legal Ownership of the Project activity to determine if the project was part of any other GHG Program prior to commencement of this verification. It was confirmed that the involved project owners have not submitted the project under any other GHG/non GHG program apart from GCC.

Findings Conclusion

CL03,CL04 and CL10 raised in this context and closed successfully.

The project description was verified based on the review of documents/13//15/. Based on the review of documents and by means of onsite verification the details provided in the PSF/27/ is found acceptable and complete.

D.3. Application and selection of methodologies and standardized baselines

D.3.1 Application of methodology and standardized baselines

Means of		
Project Verification	Applicability criterion as per ACM0002 Version21.0.	Verifier Assessment.

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This methodology is applicable to gridconnected renewable energy power generation project activities that:

- Install a Greenfield power plant;
- Involve a capacity addition to (an) existing plant(s);
- Involve a retrofit of (an) existing operating plant(s)/unit(s);
- Involve a rehabilitation of (an) existing plant(s)/unit(s); or
- Involve a replacement of (an) existing plant(s)/unit(s).

The project activity is installation of a new grid connected renewable solar power plant/ unit at a site where no renewable power plant was operated prior to the implementation of the project activity (Greenfield plant) meeting the requirement of criteria (a) and hence this criterion is applicable for this project activity. This has been verified from the commissioning certificates/13/ cross checked during the On-site visit.

In case the project activity involves the The project activity does not involve integration of a BESS, the methodology is use of Battery Energy Storage System applicable to grid-connected renewable (BESS). Hence, this criterion is not energy power generation project activities applicable for this project activity. The

(a) Integrate BESS with a Greenfield powerBESS which has been verified during plant;

- (b) Integrate a BESS together with implementing a capacity addition to (an) existing solar photovoltaic1 or wind power plant(s)/unit(s);
- (c) Integrate a BESS to (an) existing solar photovoltaic or wind power plant(s)/unit(s) without implementing any other changes to the existing plant(s);
- Integrate a BESS together with implementing a retrofit of (an) existing solar photovoltaic or wind power plant(s)/unit(s).

project activity does not have any the on site visit conducted.

The methodology is applicable under the The project activity is the installation of following conditions:

(a) Hydro power plant/unit with or withoutland does not involve use of BESS plant/unit, wave plant/unit or tidal power plant/unit;

(b) In the case of capacity additions, during the on site visit. retrofits. rehabilitations 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;

new grid connected solar power plant reservoir, wind power plant/unit, Hence, this criterion is not applicable geothermal power plant/unit, solarfor this project activity. This has been powerverified from the commissioning certificates/13/ and cross checked

- (c) In case of Greenfield project activities applicable under paragraph 5 (a) above, the project participants shall demonstrate that the BESS was an integral part of the design of the renewable energy project activity (e.g. by referring to feasibility studies or investment decision documents);
- (d) The BESS should be charged with electricity generated from the associated renewable energy power plant(s). Only during exigencies 2 may the BESS be charged with electricity from the grid or a fossil fuel electricity generator. In such cases, the corresponding GHG emissions shall be accounted for as project emissions following the requirements under section 5.4.4 below. The charging using the grid or using fossil fuel electricity generator should not amount to more than 2 per cent of the electricity generated by the project renewable energy plant during a monitoring period. During the time periods (e.g. week(s), months(s)) when the BESS consumes more than 2 per cent of the electricity for charging, the project participant shall not be entitled to issuance of the certified emission reductions for the concerned periods of the monitoring period. (a)

In case of hydro power plants, one of the The proposed project activity is an following conditions shall apply6:

(a) The project activity is implemented in (solar) power plant/ unit and not Hydro existing single or multiple reservoirs, with power plant, therefore this criterion is no change in the volume of any of the not applicable for this project activity. reservoirs; or

(b) The project activity is implemented in commissioning certificates/13/ existing single or multiple reservoirs, where cross checked during the on site visit. the volume of the reservoir(s) is increased

and the power density, calculated using equation (3), is greater than 4 W/m²; or (c) The project activity results in new single

- or multiple reservoirs and the power density, calculated using equation (3), is greater than 4 W/m²; or
- (d) The project activity is an integrated hydro power project involving multiple reservoirs, where the power density for any of the reservoirs, calculated using equation (3), is lower than or equal to 4 W/m², all of

installation of a new grid connected This has been verified from the

⁶ 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.

the following conditions shall apply:

- (i) The power density calculated using the total installed capacity of the integrated project, as per equation (4), is greater than 4 W/m²;
- (ii) Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity;
- (iii) Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m² shall be:
- a. Lower than or equal to 15 MW; and
- b. Less than 10 per cent of the total installed capacity of integrated hydro power project. (a)

In the case of integrated hydro powerThe proposed project activity is an projects, project proponent shall:

installation of a new grid connected a) Demonstrate that water flow from (solar) power plant/ unit and not Hydro

upstream power plants/units spill power plant, therefore this criterion is downstream not applicable for this project activity. directly to the reservoir and that collectively This has been verified from the generation commissioning certificates/13/ constitute to the capacity of the integrated hydrocross checked during the on site visit. power project; or

b) Provide an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs. The purpose of water balance is to demonstrate the requirement of specific combination of reservoirs constructed under CDM project activity for the optimization of power output. This demonstration has to be carried out in the specific scenario of water availability in different seasons to optimize the water flow at the inlet of power units. Therefore, this water balance will take into account seasonal flows from river, tributaries (if any), and rainfall for minimum five years prior to implementation of CDM project activity. (a)

The methodology is not applicable to:

The project activity is installation of a

(b) Biomass fired power plants/units.

This is a (solar) power plant/ unit and not a biomass fired plant, therefore criterion described in point (b) is not applicable to the project activity.

(a) Project activities that involve switchingnew grid connected (solar) power from fossil fuels to renewable energy project/ unit and does not involve sources at the site of the project activity, switching from fossil fuel to renewable since in this case the baseline may be energy, therefore criterion described in the continued use of fossil fuels at the point (a) is not relevant to the project activity.

This has been verified from the commissioning certificates/13/ cross checked during the on site visit. In the case of retrofits, rehabilitations, The project activity is a new grid replacements, or capacity additions, this connected (solar) power plant/ unit and methodology is only applicable if the most not a retrofits, replacements or capacity plausible baseline scenario, as a result of additions and therefore this criterion is the identification of baseline scenario, is not applicable to the project activity. This has been verified from the "the continuation of the current situation, that is to use the power generation commissioning certificates/13/ and equipment that was already in use prior to cross checked during the on site visit. the implementation of the project activity and undertaking business as usual maintenance". In addition, the applicability conditions The applicability of the tools is outlined included in the tools referred to below below apply

Tool 07: Tool to calculate the emission factor for an electricity system

Applicability criterion

This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g., demand-side energy efficiency projects).

This project involves electricity generation from the solar PV modules that generate electricity subsequently export to grid. In the absence of the project activity, the equivalent amount of power would have been drawn from the Indian grid which is dominated by fossil fuel power plants. The baseline emissions are calculated from electricity supplied to the grid by the project activity multiplied with emission factor of the National grid. The emission factor calculated using OM, BM and CM using this tool and same was explained in section D.3.4 of this report. Thus, the applicability criterion is met.

Assessment

Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include offgrid power plants. In the latter case, the conditions specified in "Appendix 1: Procedures related to off-grid power generation" should be met. Namely, the total capacity of off-grid power plants (in MW) should be at least 10 per cent of

The project activity has chosen the emission factor based on calculation performed by CEA . The same has been confirmed from CEA CO₂ database User Guide Version 18.0/26/ further confirms that the only grid connected power plant has been considered for OM,BM and CM calculations The point has been assessed in detail under section D.3.4

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the total capacity of grid power plants in the electricity system; or the total electricity generation by off-grid power plants (in MWh) should be at least 10 per cent of the total electricity generation by grid power plants in the electricity system; and that factors which negatively affect the reliability and stability of the grid are primarily due to constraints in generation and not to other aspects such as transmission capacity

of the report. The criteria were found to be met.

In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country

The project is located on the host country India, which is not Annex I country, hence the criterion is not applicable.

Under this tool, the value applied to the CO₂ emission factor of biofuels is zero

There are no biofuel power plants in the Host country, hence the condition is not applicable.

Tool 01: Tool for the demonstration and assessment of additionality; Version 7.0.0

1. The use of the "Tool for the demonstration and assessment of additionality" is not mandatory for project participants when proposing new methodologies. Project propose participants mav alternative methods to demonstrate additionality for consideration by the Executive Board. They may also submit revisions to approved methodologies usina additionality tool.

The methodology is approved in CDM and the tool is included by the same approved methodology viz., ACM0002 version 21.0. Thus, the application of this tool was found to be acceptable, and the applicability criterion is met. The project owner does not propose any new methodologies to demonstrate additionality.

 Once the additionally tool is included in an approved methodology, its application by project participants using this methodology is mandatory The methodology is approved in CDM and the tool is included by the same approved methodology viz., ACM0002 version 21.0. Thus, the application of this tool was found to be acceptable, and the applicability criterion is met.

Tool-24-Common Practice Version 03.1

This methodological tool is applicable to project activities that apply the methodological tool "Tool for the demonstration and assessment of additionality", the methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality". or baseline and monitoring methodologies that use the common practice test for the demonstration of additionality.

Project activity applies "Tool for the demonstration and assessment of additionality". Hence this tool is applicable.

In case the applied approved baseline and monitoring methodology defines

The applied approved baseline and monitoring methodology does not

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approaches for the conduction of the common practice test that are different from those described in this methodological tool, the requirements contained in the methodology shall prevail.

Tool27: Investment analysis version 12.0

define any different approaches for the conduction of the common practice test from those described in this methodological tool. Hence, this criterion is not applicable for the project activity

This methodological tool is applicable to project activities that apply methodological tool "Tool for the demonstration and assessment of additionality", the methodological tool "Combined tool to identify the baseline demonstrate scenario and additionality", the guidelines "Nonbinding best practice examples to demonstrate additionality for SSC project activities", or baseline and monitoring methodologies that use the investment analysis for demonstration of additionality and/or the identification of the baseline scenario.

Project activity applies "Tool for the demonstration and assessment of additionality". Hence this tool is applicable.

In case the applied approved baseline and monitoring methodology contains requirements for the investment analysis that are different from those described in this methodological tool, the requirements contained in the methodology shall prevail.

The applied approved baseline and monitoring methodology does not contain requirements for the investment analysis that are different from those described in this methodological tool. Hence, this criterion is not applicable for the project activity.

Findings Conclusion

CL05,CL06 and CL08 were raised and closed successfully.

The project verification team confirms that approved methodology: ACM0002 "Grid-connected electricity generation from renewable sources" (Version 21.0). All applicability conditions of the applied methodology and applicable Tools are being met and the PSF/27/ are in line with all the requirements indicated in the methodology. Related eligibility criteria with respect to the applicability of the methodologies have been established and met by the PSF of the GCC Project activity.

D.3.2 Clarification on applicability of methodology, tool and/or standardized baseline

Means of Project	Since the applicability of methodology was found to be fulfilled, further		
Verification	clarification to the methodology were not required.		
Findings No finding was raised.			
Conclusion Since the applicability of methodology was found to be fulfilled			
clarification to the methodology were not required.			

D.3.3 Project boundary, sources and GHGs

Means of Project	As per the applied methodology ACM0002 version 21.0, the spatial extent of			
Verification	the project boundary includes the project power plant and all power plants			
	connected physically to the electricity system that the project power plant is			
	connected to. The components of the project boundary mentioned in the PSF			
	were found to be in compliance with the applied methodology.			

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	The verification team conducted desk review of the implemented project to confirm the appropriateness of the project boundary identified. The verification team confirmed that all GHG sources required by the methodology have been included within the project boundary. It was assessed that no emission sources related to project activity will cause any deviation from the applicability of the methodology or accuracy of the emission reductions. The project boundary is clearly depicted with the help of a pictorial depiction in section B.3 of the PSF and duly verified by the verification team via commissioning certificates/13/ of the project activity & power purchase agreement/16/ between project owner and state electricity utility which is found to be acceptable and appropriate.
Findings	CL07 and CL09 raised and closed successfully.
Conclusion	 The project verification team was able to assess that complete information regarding the project boundary has been provided in PSF/27/ and could be assured from the line diagram. The project verification team confirms that the identified boundary, selected emissions sources are justified for the project activity.

D.3.4 Baseline scenario

Means of Project Verification

As per applied methodology if the project activity is the installation of a greenfield renewable power plant/unit, the baseline scenario is that the 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 into the grid, as reflected in the combine margin(CM) calculations described in "TOOL07: Tool to calculate the emission factor for an electricity system". The project activity involved setting up of Solar plant to harness the power of sunlight to produce electricity and supply to the grid. In the absence of the project activity, the equivalent amount of power would have been supplied by the national grid, which is fed mainly by fossil fuel fired plants and by the addition of new generation sources. Hence, the baseline for the project activity is the equivalent amount of power from the Indian grid.

The baseline scenario selected is in compliance with all applicable legal and regulatory requirements as the implementation of project activity is a voluntary initiative and is not mandatory or a legal requirement. The regulations and policies referred in section B.5 of the PSF does not restrict or empower any authority to restrict the fuel choice for power generation and the applicable environmental regulations do not restrict the use of solar energy and there is no legal requirement on the choice of a particular technology. All the policies and regulations which gives comparative advantages to less emissionsintensive technologies over more emissions-intensive technologies. Hence as per CDM VVS paragraph 81(b) it can be concluded that the provincial and sectoral policies are E- policies that decrease GHG emissions. Hence the project owner has not considered them in developing the baseline scenario for the project activity. Instead, the baseline scenario is based on hypothetical situation without the provincial and sectoral polices being in place. Based on the sectoral expertise of the verification team, the selection of baseline scenario by the project owner is more appropriate and acceptable.

As per the applied methodology, baseline emissions include only CO_2 emissions from electricity generation in 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.

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The baseline emissions are the product of electrical energy produced by the renewable generating unit expressed in MWh multiplied by the grid emission factor in tCO₂/MWh.

Determination of Grid Emission Factor (EF_{grid,CM,y)}

The project owner used the "Tool to calculate the emission factor for an electricity system" Version 7.0 to determine the combined margin emission factor. The value of combined margin is sourced from CO₂ Baseline Database for the Indian Power Sector version 18.0, December 2022 published by Central Electricity Authority (CEA)/26/, Government of India which is latest version publicly available during the submission of PSF to verifier for verification.. In this case the Combined Margin emission factor (weighted average of Simple Operating Margin and Build Margin) is estimated based on three years average (2019-20, 2020-21,2021-22) of Simple Operating Margin which is in line with steps of "Tool to calculate the emission factor for an electricity system". Both the value of Simple Operating Margin and Build Margin are selected under ex-ante approach. The grid boundary w.r.t the connected grid is INDIAN grid.

For wind and solar projects, "Tool to calculate the emission factor for an electricity system" allows the usage of the default weights are as follows: w_{OM} =0.75 and w_{BM} = 0.25. Using the above values, the combined margin emission factor is estimated at 0.9310 tCO₂/MWh.

The calculation of $\mathsf{EF}_{\mathsf{grid},y}$ is current and publicly available and published by the Central Electricity Authority on its web-site. The verification team is convinced of the result of the emission factor calculation. It is deemed to be adequate and transparent.

The baseline scenario in the PSF is reported as the supply of electricity to Indian Grid by the project activity would have otherwise been generated by the operation of grid-connected power plants. The baseline scenario applied in the PSF was compared with the requirements of the baseline described in the applied methodology and found consistent.

Findings

No findings raised.

Conclusion

The project verification team confirms the following;

- All assumptions and data used by the project owner are listed in the PSF, including their references and sources;
- All documentation used by project owner as the basis for assumptions and source of data for establishing the baseline scenario is correctly quoted and interpreted in the PSF;
- The project verification team also concluded that the identified baseline scenario reasonably represents what would occur in the absence of the project activity.

D.3.5 Demonstration of additionality

Means of Project Verification

The demonstration of additionality under GCC the project activity is required to undergo the following two tests

1. Legal Requirement test: The relevant national acts and regulations pertaining to generation of energy in the host country i.e., India are Electricity Act 2003, National Electricity Policy 2005, Tariff Policy 2006 and The factories act verified by the assessment team. It was confirmed that there are no enforced laws, statutes, regulations, court orders, environmental-mitigation agreements, permitting conditions or other legally binding mandates requiring its implementation, or requiring the implementation of a similar technology/measure that would achieve equivalent levels of GHG emission reductions. The assessment team

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- assessed the relevant regulations of the host county to confirm the requirements and also confirmed based on the local expertise by the verification team the project is not implemented to meet any legal requirement.
- 2. An Additionality Test either based on a Positive List test or a projectsspecific additionality test.

As per the applied methodology ACM0002 (Version 21.0) additionality of the project activity demonstrated and assessed by the latest version of "Tool for the demonstration and assessment of additionality", Version 7.0.0.

The Project owner has adopted the stepwise approach for demonstrating and assessing the additionality of the project activity as follows

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

This step is optional and not used for this project as this is not a first of its kind project activity.

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

As per the applied methodology the project activity is the installation of a Greenfield power plant, and the baseline scenario is that the 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 into the grid." Thus, the baseline scenario is applied as per the methodology and no alternative selection is required as per the Project standard version 3.1.

Step 2: Investment Analysis

Under step 2, it is demonstrated that project activity is not economically or financially feasible, without the revenue from the sale of approved carbon credits. Further to conduct the investment analysis, Methodological tool: Investment analysis, version 12.0, EB 112 Annex 2 has been referred which is appropriate and acceptable to verification team also in line with the of VVS Version 3.0.

Sub-step 2a: Determine appropriate analysis method:

Revenue for the project is derived from the sale of electricity, making the application of a simple cost analysis under Option I impractical. Additionally, Option II investment comparison analysis is not applicable, given that the alternative to the project activity is the electricity generated by both new and existing grid-connected power plants. Consequently, the project owner has opted for Option III benchmark analysis to illustrate the project activity's additionality within the decision-making context, a method deemed acceptable by the project verification team.

The project's cost encompasses both equity and debt, with the project owner choosing Post-tax Equity Internal Rate of Return (IRR) as the financial indicator to highlight the project's financial unattractiveness. This choice is deemed appropriate as the tool allows flexibility, enabling the project owner to use either the project IRR or the equity IRR. The project owner has the discretion to select the most suitable indicator based on their preference for assessing IRR concerning equity or debt investment. Such flexibility is considered reasonable and acceptable to the verification team.

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Sub-step 2b: Option III. Apply benchmark analysis:

Benchmark selection and its appropriateness:

As per the investment analysis version 12.0 "The applied benchmark shall be appropriate to the type of IRR calculated. Local commercial lending rates or WACC are appropriate benchmarks for a project IRR. Required/expected returns on equity are appropriate benchmarks for an equity IRR. Benchmarks supplied by relevant national authorities are also appropriate. The DOE shall validate that the benchmarks used are applicable to the project activity and the type of IRR calculation presented".

The Project owner has chosen Post tax equity IRR is the financial indicator. based on the above the appropriate benchmark is required/expected returns on equity which is correctly chosen by the project owner and it is acceptable. As per the Investment Analysis tool, version 12.0" 'If the benchmark is based on parameters that are standard in the market, the cost of equity should be determined either by: (a) selecting the values provided in Appendix; or by (b) calculating the cost of equity using CAPM. The default value of expected return on equity was adopted by the CDM Board based on the long term historical returns available at the time of investment decision. However, the project owner has taken the default value for expected return on equity of 9.77 % as given in the table of Appendix of Tool 27- Investment Analysis (EB 112 Annex 2) Version 12.0 which was the latest version applicable at the time of submission of project activity for global stake holder consultation (GSC) for additionality demonstration. Hence the value considered in the benchmark estimation by the project owner is appropriate and acceptable to the verification team. The investment decision date of the project activity is provided in the table below for each of the bundle. This was evidenced by verifying the board resolution/59/ and by means of interviewing the project owner. Hence the value considered by the project owner is appropriate and acceptable to verification team.

The benchmark return on equity in the tool is expressed in real terms. The post tax equity IRR calculated is in nominal terms as escalation is considered in O&M cost. Accordingly, Project owner converted the default benchmark which is in real terms into nominal terms by using the following equation:

Nominal Benchmark = {(1+Real Benchmark) *(1+Inflation rate)}-1. Verification team referenced the book 'Corporate Finance" 2nd edition, by Aswath Damodaran /56/. In page 320 of the book, the same equation is mentioned for converting real into nominal values. Hence the assessment team considers the above equation as appropriate for converting real benchmark into nominal benchmark.

As per paragraph 16 of the tool state that the inflation rate shall be obtained from the inflation forecast of the central bank of the host country for the duration of the crediting period, accordingly project owner has chosen the Reserve Bank of India (RBI) is Central Bank of host country (India) and it is India's monetary authority which is acceptable to the verification team. The CPI inflation forecasted by RBI for next 10 years is expected to be 4.0% as per Results of Round of Survey of Professional Forecasters on Macroeconomic Indicators. Hence the nominal Benchmark estimated as = (1+9.77 %) *(1+4.0%)-1 = 14.16 %.The verification team has verified the sources and confirmed that the benchmark identified to compare the financial attractiveness of the project activity is appropriate.

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Sub-step 2c: Calculation and comparison of financial indicators (only applicable to Options II and III):

Input values used in the investment analysis for 50MW Rawra Project:

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

Particulars	Value	Unit	Assessment
Capacity of the project	50	MW _{AC}	This has been verified from the commissioning certificate issued by SECI dated 17/04/2020 and has been cross verified against the third party report prepared by TUV SUD Dated 15/07/2019 and also during the on site visit.
Investment	22-Oct-	Date	As per Board Resolution passed on
Decision	18		22/10/2018 for the project with Rfs no. SECI/C&P/SPD/RfS/2000MW/01201 8 which was signed by the respective authorities
Project Life Time	25	Years	This has been verified from the DPR and then cross verified against the third party report prepared by TUV SUD Dated 15/07/2019 and the technical specification sheet from manufacturers.
Plant Load Factor	26.59	%	This was verified from the DPR and then the verification team crosschecked the value from the third-party report prepared by TUV SUD Dated 15/07/2019. The PLF project for similar CDM registered Large scale solar projects in Rajasthan Project ID 9602, 10496,10521 having PLF of 18.6%,18.05% and 22.5% which gives an average PLF which is conservative thus this is found to be acceptable.
Annual Degradation	0.70	%	This value is sourced from Detailed Project Report which was available at the time of investment decision. Further, verification team has cross verified with the NERL report on Photovoltaic Degradation Rates - An Analytical Review ⁷ . The report covers nearly 2000 degradation rates all across the globe and degradation rates has a mean of 0.8% per year. Also, normally most of the PV panels manufacturer ⁸ guaranteed 2-3% degradation in first year and 0.7% on each year up to 10 years. So, the value considered in the investment analysis is conservative compared to the

⁷ https://www.nrel.gov/docs/fy12osti/51664.pdf

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⁸ https://www.solarquotes.com.au/blog/solar-panel-degradation/

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			referred values and acceptable to the verification team, even total removal of the value does not render the project non -additional.
Total cost	2,650	INR Million	This was verified against the DPR and has been cross verified against the CA certificate provided by Dharmesh Parikh & Co. Chartered Accountants dated 09/03/2021. Consequently it was found that the actual project cost incurred
Debt	70.0%	%	The debt equity ratio is based on the DPR which was available at the time of investment decision. The actual financing pattern yields a gearing of 70:30 which is based on actual loan sanctioned to the project activity by the bank. This applied value is in line with the Central Electricity Regulatory Commission (CERC) Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018. /48/ which is prevailing at the time of decision-making. Therefore, the debt: equity ratio of the project is considered to be in order. Hence the debt equity ratio considered is acceptable
Equity	30.0%	%	
Interest rate	10.0%	%	The interest rate is based DPR/46/ which was available at the time of investment decision. As per the loan sanction letters the actual cost of debt for the project activity loan is 10.65%. This applied value is in line with the Central Electricity Regulatory Commission (CERC) Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018. /48/ which is prevailing at the time of decision-making.
Debt Repayment tenure	12.0	Years	Loan Tenure is based on the Detailed Project Report which was available at the time of investment decision. The loan
Moratorium	0	Years	tenure suggested in the Central Electricity Regulatory Commission Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 12 years with 0 year moratorium and 12 years repayment. Verification team also verified the loan sanction letters and found that the actual repayment period and moratorium period is on par with the values considered in the DPR. Hence, the repayment period & moratorium period considered for post-tax equity IRR calculation is found to be appropriate and acceptable to the verification team.
Operation and Maintenance	0.5	INR Million /MW	The O&M cost and its escalation is based on the Detailed Project Report which was available at the time of investment
Escalation in O & M	5.72%	%	decision. The O&M cost suggested in the Central Electricity Regulatory Commission Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018/48/ is also in line with the values considered in the DPR The verification team crosschecked the actual

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			O&M cost from the balance sheets of the project activity which is on par with the values assumed in during the investment decision making time. Hence the assumption of O&M cost and its escalation is acceptable to verification team.
Tariff	2,54	Rs/kWh	This has been verified from the DPR and has been crosschecked against the Letter of Award dated 27/07/2018 Issued by SECI with RFS No SECI/C&P/SPD/RFS/2000MW/012018 and Tariff INR 2.54. Project ID 9602, 10496,10521 having 8.59,6.8,5.75 which is conservative thus its found to be acceptable.
Interest on Working Capital	12.0	%	The working capital requirements is based on the Detailed Project Report (DPR)/46/ which was available at the time
No of Days Receivables	60	Days	of investment decision. The working capital requirement for solar PV projects
O&M Expenses	30	Days	suggested in the Central Electricity Regulatory Commission Tariff order SM/004/2018 (Suo-Motu) dated 28/03/2018 and it is well below the benchmark. Hence values considered in the investment analysis is conservative and acceptable to the verification team.
Depreciation Rate	3.60	%	The project owner has considered straight-line method for book depreciation where 90% of the initial value of the project cost is depreciated for the life period of the project considering 10% salvage value. This is as per as per Schedule XIV of the Companies Act, 1956 for computing book profit which is as per accounting practices followed in the host country. The following link has been verified and found correct. https://taxguru.in/company-law/rates-depreciation-companies-act-2013.html
Residual Value	265	INR Million	The Residual Value is based DPR/46/ which was available at the time of investment decision. The residual value is taken as 10% of the Depreciable cost in the project cost + Cost of land, which is in conformity with the best international practices and local accounting principles Also the same is in line with Salvage value provided in the Central Electricity Regulatory Commission Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 which was available at the time of investment decision
IT Depreciation Rate	40.00	%	The IT depreciation is based on the DPR available at the time of investment decision. The project owner considered the IT depreciation rate 40.00% for power generating units. This is as per Income Tax Act 1961 stipulated for

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			income tax calculation which is as per accounting practices followed in the host country. As Per Income Tax, Depreciation rates for Solar power generating systems commissioned till 31-Mar-2017 @80% and commissioned from 01-Apr-2017 onwards @40% The following web link has been verified and found correct.
Effective Income tax rate	34.94%	%	The corporate tax payable is calculation based on the base corporate tax, Surcharge & educational cess given in the Union budget analysis for the year 2018-19 for the domestic companies which was available at the time of investment decision. The corporate tax value considered is correct and applicable to the project activity. The same has been verified in the following weblink and found to be correct. https://taxguru.in/income-tax/income-tax-slabs-ay-201819-fy-201718.html
Effective MAT rate	21.55%	%	The MAT payable based on the value given in the Union budget analysis for the year 2018-19 which was available at the time of investment decision. The calculation based on the following values Minimum Alternate- Tax - 18% Surcharge – 12% of corporate tax Educational Cess- 3% of corporate tax Hence the MAT value considered is correct and applicable to the project activity. https://taxguru.in/income-tax/income-tax-slabs-ay-201819-fy-201718.html

Considering the input values, Equity IRR is given below:

Equity IRR without GCC	Benchmark (Equity IRR)
4.33%	14.16%

The project activity cannot be considered as financially attractive as the equity IRR for the project activity is less than the Benchmark.

Input values used in the investment analysis for Bundle 2: Adani Solar Energy Kutchh Two Private Limited (100MW, Gujarat)

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

Particulars	Value	Unit	Assessment
Capacity of the project	100	MW _{AC}	This has been confirmed during the on site visit and has been cross checked against the commissioning certificate provided by Gujarat Energy Development

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			Agency dated 31/12/2020 for 33.25 MW and Gujarat Energy Development Agency for 66.25 MW dated 24/11/2020.
Project Life Time	25	Years	The operational life time of the project activity is sourced from DPR/46/ which was available at the time of investment decision and It is cross checked with the technical data sheet of the solar PV panels involved in the project activity and found in line with DPR value.
Plant Load Factor	26.2	%	The PLF is considered as 26.2 % which is sourced from Detailed Project Report (DPR) which was available at the time of investment decision. The same was prepared by the third-party company TUV SUD dated 27/02/2020. Hence the value considered by the project owner for demonstrating additionality of the project is deemed acceptable to the verification team and also in line with "Guidelines for the reporting and Validation of Plant Load Factors" (Annex 11 of EB 48). The public data has been reviewed and the registered CDM projects 6151,5928,7722 have been reviewed and found that the plf are 16.25%, 19.0% and 19.518% have been reviewed and found to be conservative and found to be appropriate.
Annual Degradation	0.70	%	This value is sourced from Detailed Project Report which was available at the time of investment decision. Further, verification team has cross verified with the NERL report on Photovoltaic Degradation Rates - An Analytical Review ⁹ . The report covers nearly 2000 degradation rates all across the globe and degradation rates has a mean of 0.8% per year. Also, normally most of the PV panels manufacturer ¹⁰ guaranteed 2-3% degradation in first year and 0.7% on each year up to 10 years. So, the value considered in the investment analysis is conservative compared to the above referred values and acceptable to the verification team, even total removal of the value does not render the project non -additional.
Project cost	5,300	INR Million	The project cost value was sourced from the DPR and was cross verifified against the total cost indicated in the CA certificate provided by Viral Darji and associates Chartered Accountant.which showed that the total cost amount was close to 4555.9 INR Million which is almost 14% less than value used. An independent analysis from verification team shows that the benchmark is not reached even with the actual value thus it was appropriate. The CDM registered

https://www.nrel.gov/docs/fy12osti/51664.pdf
 https://www.solarquotes.com.au/blog/solar-panel-degradation/

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			projects 6161-138Mn INR./MW and 5928-169 Mn INR/MW were compared and it was found to be conservative thus acceptable
Debt	70.0%	%	The debt equity ratio is based on the DPR which was available at the time of investment decision. This has been cross checked against the loan sanction letter
Equity	30.0%	%	issued by Power finance corporation Ltd. Dated- 31/12/2019. This applied value is in line with the Central Electricity Regulatory Commission (CERC) Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 which is prevailing at the time of decision-making. Thus its found acceptable by the verification team.
Interest rate	10.0%	%	The interest rate is based DPR which was available at the time of investment decision. This has been confirmed from the As per the loan sanction letters the actual cost of debt for the project activity loan is 10.4%. The interest rate determined in Central Electricity Regulatory Commission (CERC) Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 which is higher than the interest rate considered in the IRR sheet. Hence the consideration of the interest rate from the DPR and actual sanction letters are conservative and acceptable to the verification team.
Debt Repayment tenure	12.0	Years	Loan Tenure is based on the Detailed Project Report which was available at the time of investment decision. This has
Moratorium	0	Years	been cross verified against the Loan Sanction Letter provided for the project from Tata Cleantech Capital Limited. The loan tenure suggested in the Central Electricity Regulatory Commission Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 12 years with 0 year moratorium and 12 years repayment. Verification team also verified the loan sanction letters and found that the actual repayment period and moratorium period is on par with the values considered in the DPR.
Operation and Maintenance	0.5	INR Million /MW	The O&M cost and its escalation is based on the Detailed Project Report/46/ which was available at the time of investment
Escalation in O & M	5.72%	%	decision. The O&M cost suggested in the Central Electricity Regulatory Commission Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 is also in line with the values considered in the DPR.

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Tariff	3.22	Rs/kWh	The tariff rate has been verified from the DPR which was available at the time of investment decision and was cross verified against the Letter of award dated 10/10/2018 issued by Gujarat Urja Vikas Nigam Limited. Consequently the verification team checked CDM registered project 6151 and 5926 which both have 15 INR/Kwh and was found to be conservative thus found acceptable.
Interest on Working Capital	10.50	%	The working capital requirements is based on the Detailed Project Report (DPR)/46/ which was available at the time
No of Days Receivables	60	Days	of investment decision. The working capital requirement for solar PV projects
O&M Expenses	30	Days	suggested in the Central Electricity Regulatory Commission Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 is Interest on working Capital is 13.50 %, No of Days receivable is one month and O&M expenses for one month. Even with the interest rate of 13.50%, there is no major impact on IRR and it is well below the benchmark. Hence values considered in the investment analysis is conservative and acceptable to the verification team.
Depreciation Rate (Book)	3.60	%	The project owner has considered straight-line method for book depreciation where 90% of the initial value of the project cost is depreciated for the life period of the project considering 10% salvage value. This is as per as per Schedule XIV of the Companies Act, 1956 for computing book profit which is as per accounting practices followed in the host country. The following link has been verified and found correct. https://taxguru.in/company-law/rates-depreciation-companies-act-2013.html
Residual Value	510.88	INR Million	The Residual Value is based DPR/46/ which was available at the time of investment decision. The residual value is taken as 10% of the Depreciable cost in the project cost + Cost of land, which is in conformity with the best international practices and local accounting principles Also the same is in line with Salvage value provided in the Central Electricity Regulatory Commission Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 which was available at the time of investment decision
IT Depreciation Rate	7.69	%	The IT depreciation is based on the DPR available at the time of investment decision. The project owner considered the IT depreciation rate 40.00% for power generating units. This is as per Income Tax Act 1961 stipulated for income tax calculation which is as per accounting practices followed in the host

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			country. As Per Income Tax , Depreciation rates for Solar power generating systems commissioned till 31- Mar-2017 @80% and commissioned from 01-Apr-2017 onwards @40% The following web link has been verified and found correct.
Effective Income tax rate	34.94%	%	The corporate tax payable is calculation based on the base corporate tax, Surcharge & educational cess given in the Union budget analysis for the year 2018-19 for the domestic companies which was available at the time of investment decision. The corporate tax value considered is correct and applicable to the project activity. The same has been verified in the following weblink and found to be correct. https://taxguru.in/income-tax/income-tax-slabs-ay-201819-fy-201718.html
Effective MAT rate	21.55%	%	The MAT payable based on the value given in the Union budget analysis for the year 2018-19 which was available at the time of investment decision. The calculation based on the following values Minimum Alternate- Tax - 18% Surcharge – 12% of corporate tax Educational Cess- 3% of corporate tax Hence the MAT value considered is correct and applicable to the project activity. https://taxguru.in/income-tax/income-tax-slabs-ay-201819-fy-201718.html

Considering the input values, Equity IRR is given below:

Equity IRR without GCC	Benchmark (Equity IRR)			
3.46%	14.16%			

The project activity cannot be considered as financially attractive as the equity IRR for the project activity is less than the Benchmark.

Input values used in the investment analysis for Bundle 3, Adani Solar Energy Kutchh One Limited (150MW, Gujarat):

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

Particulars	Value	Unit	Assessment
Capacity of the project	150	MW _{AC}	This has been confirmed during the on site visit and has been cross checked against the commissioning certificate.
Project Life Time	25	Years	The operational life time of the project activity is sourced from DPR/46/ which

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Project cost	7,950	INR Million	investment analysis is conservative compared to the above referred values and acceptable to the verification team, even total removal of the value does not render the project non -additional. The project cost value was sourced from the DPR and was cross verifified against the total cost indicated in the CA certificate provided by Viral Darji and associates Chartered Accountant.which showed that the total cost amount was close to 6635.2 INR Million which is almost 16% less than value used. An independent analysis from verification team shows that the benchmark is not reached even with the actual value thus it was appropriate. The CDM registered projects 6161-138Mn INR./MW and 5928-169 Mn INR/MW were compared
Annual Degradation	0.70	%	This value is sourced from Detailed Project Report which was available at the time of investment decision. Further, verification team has cross verified with the NERL report on Photovoltaic Degradation Rates - An Analytical Review ¹¹ . The report covers nearly 2000 degradation rates all across the globe and degradation rates has a mean of 0.8% per year. Also, normally most of the PV panels manufacturer ¹² guaranteed 2-3% degradation in first year and 0.7% on each year up to 10 years. So, the value considered in the
Plant Load Factor	26.2	%	was available at the time of investment decision and It is cross checked with the technical data sheet of the solar PV panels involved in the project activity and found in line with DPR value. The PLF is considered as 26.2 % which is sourced from Detailed Project Report (DPR) which was available at the time of investment decision. The same was prepared by the third-party company TUV SUD dated 06/03/2020. Hence the value considered by the project owner for demonstrating additionality of the project is deemed acceptable to the verification team and also in line with "Guidelines for the reporting and Validation of Plant Load Factors" (Annex 11 of EB 48). The public data has been reviewed and the registered CDM projects 6151,5928,7722 have been reviewed and found that the plf are 16.25%, 19.0% and 19.518% have been reviewed and found to be conservative and found to be appropriate.

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https://www.nrel.gov/docs/fy12osti/51664.pdf
 https://www.solarquotes.com.au/blog/solar-panel-degradation/

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Debt	70.0%	%	The debt equity ratio is based on the DPR which was available at the time of investment decision. This has been cross checked against the loan sanction letter
Equity	30.0%	%	issued by Power finance corporation Ltd. Dated- 30/09/2020. This applied value is in line with the Central Electricity Regulatory Commission (CERC) Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 which is prevailing at the time of decision-making. Thus its found acceptable by the verification team.
Interest rate	10.0%	%	The interest rate is based DPR which was available at the time of investment decision. This has been confirmed from the As per the loan sanction letters the actual cost of debt for the project activity loan is 10.25%. The interest rate determined in Central Electricity Regulatory Commission (CERC) Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 which is higher than the interest rate considered in the IRR sheet. Hence the consideration of the interest rate from the DPR and actual sanction letters are conservative and acceptable to the verification team.
Debt Repayment	12.0	Years	Loan Tenure is based on the Detailed Project Report which was available at the
Moratorium	0	Years	time of investment decision. This has been cross verified against the Loan Sanction Letter provided for the project from Tata Cleantech Capital Limited. The loan tenure suggested in the Central Electricity Regulatory Commission Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 12 years with 0 year moratorium and 12 years repayment. Verification team also verified the loan sanction letters and found that the actual repayment period and moratorium period is on par with the values considered in the DPR.
Operation and Maintenance	0.5	INR Million /MW	The O&M cost and its escalation is based on the Detailed Project Report/46/ which was available at the time of investment
Escalation in O & M	5.72%	%	decision. The O&M cost suggested in the Central Electricity Regulatory Commission Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 is also in line with the values considered in the DPR.
Tariff	3.22	Rs/kWh	The tariff rate has been verified from the DPR which was available at the time of investment decision and was cross verified against the Letter of award dated 10/10/2018 issued by Gujarat Urja Vikas Nigam Limited. Consequently the verification team checked CDM registered project 6151 and 5926 which both have 15 INR/Kwh and was found to be conservative thus found acceptable.

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The following web link has been verified and found correct. Effective 34,94% % The corporate tax payable is calculation				
Effective and found correct. The corporate tax payable is calculation				
Effective 34.94% % The corporate tax payable is calculation				
	Effective			
Income tax rate		34.94%	%	
	moonie lax fale	l .		based on the base corporate tax,

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			Surcharge & educational cess given in the Union budget analysis for the year 2018-19 for the domestic companies which was available at the time of investment decision. The corporate tax value considered is correct and applicable to the project activity. The same has been verified in the following weblink and found to be correct. https://taxguru.in/income-tax/income-tax-slabs-ay-201819-fy-201718.html
Effective MAT rate	21.55%	%	The MAT payable based on the value given in the Union budget analysis for the year 2018-19 which was available at the time of investment decision. The calculation based on the following values Minimum Alternate- Tax - 18% Surcharge – 12% of corporate tax Educational Cess- 3% of corporate tax Hence the MAT value considered is correct and applicable to the project activity. https://taxguru.in/income-tax/income-tax-slabs-ay-201819-fy-201718.html

Considering the input values, Equity IRR is given below:

Equity IRR without GCC	Benchmark (Equity IRR)
4.78%	14.16%

The project activity cannot be considered as financially attractive as the equity IRR for the project activity is less than the Benchmark

Input values used in the investment analysis for Bundle 4, Adani Solar Energy Four Private Limited (50 MW, Shawasn UP) and Adani Solar Energy Four Private Limited, Jalabad UP 50 MW

Particulars	Value	Unit	Assessment
Capacity of the project	100	MW _{AC}	This has been confirmed during the on site visit and has been cross checked against the commissioning certificate.
Project Life Time	25	Years	The operational life time of the project activity is sourced from DPR which was available at the time of investment decision and It is cross checked with the technical data sheet of the solar PV panels involved in the project activity and found in line with DPR value.

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Plant Load Factor	23.03	%	The PLF is considered as 23.03 % which is sourced from Detailed Project Report (DPR) which was available at the time of investment decision. The same was prepared by the third-party company TUV SUD dated 01/05/2020. Hence the value considered by the project owner for demonstrating additionality of the project is deemed acceptable to the verification team and also in line with "Guidelines for the reporting and Validation of Plant Load Factors" (Annex 11 of EB 48) .The public data has been reviewed and the registered CDM project 10594 and GCC S00110 with PLF 23.25% and 19%.both of which are found appropriate.
Annual Degradation	0.70	%	This value is sourced from Detailed Project Report which was available at the time of investment decision. Further, verification team has cross verified with the NERL report on Photovoltaic Degradation Rates - An Analytical Review ¹³ . The report covers nearly 2000 degradation rates all across the globe and degradation rates has a mean of 0.8% per year. Also, normally most of the PV panels manufacturer ¹⁴ guaranteed 2-3% degradation in first year and 0.7% on each year up to 10 years. So, the value considered in the investment analysis is conservative compared to the above referred values and acceptable to the verification team, even total removal of the value does not render the project non -additional.
Project cost	5300	INR Million	The project cost value was sourced from the DPR and was cross verifified against the total cost indicated in the CA certificate provided by Viral Darji and associates Chartered Accountant.which showed that the total cost amount was close to 4696.9 INR Million which is almost 11% less than value used. An independent analysis from verification team shows that the benchmark is not reached even with the actual value thus it was appropriate. Consequently registered project CDM 10594, GCC S00110 had cost of 61.181/MW and 69.11/MW thus this value was found appropriate.
Debt	70.0%	%	The debt equity ratio is based on the DPR which was available at the time of investment decision. This has been cross checked against the loan sanction letter
Equity	30.0%	%	issued by Power finance corporation Ltd. Dated- 30/09/2020. This applied value is in line with the Central Electricity Regulatory Commission (CERC) Tariff

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https://www.nrel.gov/docs/fy12osti/51664.pdf
 https://www.solarquotes.com.au/blog/solar-panel-degradation/

Tariff Interest on Working Capital	3.22	Rs/kWh	The tariff rate has been verified from the DPR which was available at the time of investment decision and was cross verified against the Letter of award dated 22/11/2018 issued by Uttar Pradesh New and Renewable Energy Development Agency. Consequently the verification team checked CDM registered project 10594 and GCC S00110 which has 4.78 INR/Kwh and 8.38 INR/Kwh was found to be conservative thus found acceptable. The working capital requirements is based on the Detailed Project Report (DPR) which was available at the time of
Escalation in O & M	5.72%	%	decision. The O&M cost suggested in the Central Electricity Regulatory Commission Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 is also in line with the values considered in the DPR.
Operation and Maintenance	0.5	INR Million /MW	DPR. The O&M cost and its escalation is based on the Detailed Project Report/46/ which was available at the time of investment
Moratorium	0	Years	been cross verified against the Loan Sanction Letter provided for the project from Power Finance Corporation Ltd. Dated 31/12/2019. The loan tenure suggested in the Central Electricity Regulatory Commission Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 12 years with 0 year moratorium and 12 years repayment. Verification team also verified the loan sanction letters and found that the actual repayment period and moratorium period is on par with the values considered in the
Debt Repayment tenure	12.0	Years	Loan Tenure is based on the Detailed Project Report which was available at the time of investment decision. This has
Interest rate	10.0%	%	dated 28/03/2018 which is prevailing at the time of decision-making. Thus its found acceptable by the verification team. The interest rate is based DPR which was available at the time of investment decision. This has been confirmed from the As per the loan sanction letters the actual cost of debt for the project activity loan is 10.4%. The interest rate determined in Central Electricity Regulatory Commission (CERC) Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 which is higher than the interest rate considered in the IRR sheet. Hence the consideration of the interest rate from the DPR and actual sanction letters are conservative and acceptable to the verification team.
			order number SM/004/2018 (Suo-Motu)

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N (5	I	ı	I
No of Days Receivables	60	Days	investment decision. The working capital requirement for solar PV projects
O&M Expenses	30	Days	suggested in the Central Electricity Regulatory Commission Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 is Interest on working Capital is 13.50 %, No of Days receivable is one month and O&M expenses for one month. Even with the interest rate of 13.50%, there is no major impact on IRR and it is well below the benchmark. Hence values considered in the investment analysis is conservative and acceptable to the verification team.
Depreciation Rate (Book)	3.60	%	The project owner has considered straight-line method for book depreciation where 90% of the initial value of the project cost is depreciated for the life period of the project considering 10% salvage value. This is as per as per Schedule XIV of the Companies Act, 1956 for computing book profit which is as per accounting practices followed in the host country. The following link has been verified and found correct. https://taxguru.in/company-law/rates-depreciation-companies-act-2013.html
Residual Value	530	INR Million	The Residual Value is based DPR/46/ which was available at the time of investment decision. The residual value is taken as 10% of the Depreciable cost in the project cost + Cost of land, which is in conformity with the best international practices and local accounting principles Also the same is in line with Salvage value provided in the Central Electricity Regulatory Commission Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 which was available at the time of investment decision
IT Depreciation Rate	40	%	The IT depreciation is based on the DPR available at the time of investment decision. The project owner considered the IT depreciation rate 40.00% for power generating units. This is as per Income Tax Act 1961 stipulated for income tax calculation which is as per accounting practices followed in the host country. As Per Income Tax , Depreciation rates for Solar power generating systems commissioned till 31-Mar-2017 @80% and commissioned from 01-Apr-2017 onwards @40% The following web link has been verified and found correct.
Effective Income tax rate	34.94%	%	The corporate tax payable is calculation based on the base corporate tax, Surcharge & educational cess given in the Union budget analysis for the year 2018-19 for the domestic companies

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			which was available at the time of investment decision. The corporate tax value considered is correct and applicable to the project activity. The same has been verified in the following weblink and found to be correct. https://taxguru.in/income-tax/income-tax-slabs-ay-201819-fy-201718.html
Effective MAT rate	21.55%	%	The MAT payable based on the value given in the Union budget analysis for the year 2018-19 which was available at the time of investment decision. The calculation based on the following values Minimum Alternate- Tax - 18% Surcharge – 12% of corporate tax Educational Cess- 3% of corporate tax Hence the MAT value considered is correct and applicable to the project activity. https://taxguru.in/income-tax/income-tax-slabs-ay-201819-fy-201718.html

Considering the input values, Equity IRR is given below:

Equity IRR without GCC	Benchmark (Equity IRR)
5.74%	14.16%

The project activity cannot be considered as financially attractive as the equity IRR for the project activity is less than the Benchmark.

Input values used in the investment analysis for Bundle 5, Adani Solar Energy Chitrakoot one Limited, 25 MW and Adani Solar Energy Chitrakoot one Limited, 50 MW

Particulars	Value	Unit	Assessment
Capacity of the project	100	MW _{AC}	This has been confirmed during the on site visit and has been cross checked against the commissioning certificate.
Project Life Time	25	Years	The operational life time of the project activity is sourced from DPR which was available at the time of investment decision and It is cross checked with the technical data sheet of the solar PV panels involved in the project activity and found in line with DPR value.

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Plant Load Factor	23.03	%	The PLF is considered as 23.03 % which is sourced from Detailed Project Report (DPR) which was available at the time of investment decision. The same was prepared by the third-party company Ecofav Services Private Limited dated 18/10/2019. Hence the value considered by the project owner for demonstrating additionality of the project is deemed acceptable to the verification team and also in line with "Guidelines for the reporting and Validation of Plant Load Factors" (Annex 11 of EB 48) .The public data has been reviewed and the registered CDM project 10594 and GCC S00110 with PLF 23.25% and 19%.both of which are found appropriate.
Annual Degradation	0.70	%	This value is sourced from Detailed Project Report which was available at the time of investment decision. Further, verification team has cross verified with the NERL report on Photovoltaic Degradation Rates - An Analytical Review ¹⁵ . The report covers nearly 2000 degradation rates all across the globe and degradation rates has a mean of 0.8% per year. Also, normally most of the PV panels manufacturer ¹⁶ guaranteed 2-3% degradation in first year and 0.7% on each year up to 10 years. So, the value considered in the investment analysis is conservative compared to the above referred values and acceptable to the verification team, even total removal of the value does not render the project non -additional.
Project cost	3975	INR Million	The project cost value was sourced from the DPR and was cross verifified against the total cost indicated in the CA certificate provided by Hemangi & Associates Chartered Accountant.which showed that the total cost amount was close to 3579.4 INR Million which is almost 10% less than value used. An independent analysis from verification team shows that the benchmark is not reached even with the actual value thus it was appropriate. Consequently registered project CDM 10594, GCC S00110 had cost of 61.181/MW and 69.11/MW thus this value was found appropriate.
Debt	70.0%	%	The debt equity ratio is based on the DPR which was available at the time of investment decision. This has been cross checked against the loan sanction letter
Equity	30.0%	%	issued by Power finance corporation Ltd. Dated- 30/09/2020. This applied value is in line with the Central Electricity

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https://www.nrel.gov/docs/fy12osti/51664.pdf
 https://www.solarquotes.com.au/blog/solar-panel-degradation/

Т	Т		
			Regulatory Commission (CERC) Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 which is prevailing at the time of decision-making. Thus its found acceptable by the verification team. The interest rate is based DPR which was a substitute of the street of the
Interest rate	10.0%	%	available at the time of investment decision. This has been confirmed from the As per the loan sanction letters the actual cost of debt for the project activity loan is 10.65%. The interest rate determined in Central Electricity Regulatory Commission (CERC) Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 which is higher than the interest rate considered in the IRR sheet. Hence the consideration of the interest rate from the DPR and actual sanction letters are conservative and acceptable to the verification team.
Debt Repayment tenure	12.0	Years	Loan Tenure is based on the Detailed Project Report which was available at the time of investment decision. This has
Moratorium	0	Years	been cross verified against the Loan Sanction Letter provided for the project from Power Finance Corporation Ltd. Dated 02/01/2020. The loan tenure suggested in the Central Electricity Regulatory Commission Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 12 years with 0 year moratorium and 12 years repayment. Verification team also verified the loan sanction letters and found that the actual repayment period and moratorium period is on par with the values considered in the DPR.
Operation and Maintenance	0.5	INR Million /MW	The O&M cost and its escalation is based on the Detailed Project Report which was available at the time of investment
Escalation in O & M	5.72%	%	decision. The O&M cost suggested in the Central Electricity Regulatory Commission Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 is also in line with the values considered in the DPR.
Tariff	3.22	Rs/kWh	The tariff rate has been verified from the DPR which was available at the time of investment decision and was cross verified against the Letter of award dated 14/12/2018 issued by Uttar Pradesh New and Renewable Energy Development Agency. Consequently the verification team checked CDM registered project 10594 and GCC S00110 which has 4.78 INR/Kwh and 8.38 INR/Kwh was found to be conservative thus found acceptable.
Interest on Working Capital	12.0	%	The working capital requirements is based on the Detailed Project Report (DPR) which was available at the time of investment decision. The working capital
No of Days Receivables	60	Days	investment decision. The working capital requirement for solar PV projects

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O&M Expenses	30	Days	suggested in the Central Electricity Regulatory Commission Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 is Interest on working Capital is 13.50 %, No of Days receivable is one month and O&M expenses for one month. Even with the interest rate of 13.50%, there is no major impact on IRR and it is well below the benchmark. Hence values considered in the investment analysis is conservative and acceptable to the verification team.
Depreciation Rate (Book)	3.60	%	The project owner has considered straight-line method for book depreciation where 90% of the initial value of the project cost is depreciated for the life period of the project considering 10% salvage value. This is as per as per Schedule XIV of the Companies Act, 1956 for computing book profit which is as per accounting practices followed in the host country. The following link has been verified and found correct. https://taxguru.in/company-law/rates-depreciation-companies-act-2013.html
Residual Value	397.5	INR Million	The Residual Value is based DPR/46/ which was available at the time of investment decision. The residual value is taken as 10% of the Depreciable cost in the project cost + Cost of land, which is in conformity with the best international practices and local accounting principles Also the same is in line with Salvage value provided in the Central Electricity Regulatory Commission Tariff order number SM/004/2018 (Suo-Motu) dated 28/03/2018 which was available at the time of investment decision
IT Depreciation Rate	40	%	The IT depreciation is based on the DPR available at the time of investment decision. The project owner considered the IT depreciation rate 40.00% for power generating units. This is as per Income Tax Act 1961 stipulated for income tax calculation which is as per accounting practices followed in the host country. As Per Income Tax , Depreciation rates for Solar power generating systems commissioned till 31-Mar-2017 @80% and commissioned from 01-Apr-2017 onwards @40% The following web link has been verified and found correct.
Effective Income tax rate	34.94%	%	The corporate tax payable is calculation based on the base corporate tax, Surcharge & educational cess given in the Union budget analysis for the year 2018-19 for the domestic companies which was available at the time of investment decision.

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			The corporate tax value considered is correct and applicable to the project activity. The same has been verified in the following weblink and found to be correct. https://taxguru.in/income-tax/income-tax-slabs-ay-201819-fy-201718.html
Effective MAT rate	21.55%	%	The MAT payable based on the value given in the Union budget analysis for the year 2018-19 which was available at the time of investment decision. The calculation based on the following values Minimum Alternate- Tax - 18% Surcharge – 12% of corporate tax Educational Cess- 3% of corporate tax Hence the MAT value considered is correct and applicable to the project activity. https://taxguru.in/income-tax/income-tax-slabs-ay-201819-fy-201718.html

Considering the input values, Equity IRR is given below:

Equity IRR without GCC	Benchmark (Equity IRR)
5.26%	14.16%

The project activity cannot be considered as financially attractive as the equity IRR for the project activity is less than the Benchmark.

Sub-step 2d: Sensitivity Analysis

Addressing Guidance 27 & 28 of EB116, Annex 02, following factors has been subjected to sensitivity analysis:

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

The rationale of sensitivity is, "The ultimate objective of the sensitivity analysis is to determine the likelihood of the occurrence of a scenario other than the scenario presented, in order to provide a cross-check on the suitability of the assumptions used in the development of the investment analysis."

The results of sensitivity analysis are as follows:

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.

For Bundle 1

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Sensitivity Analysis								
Variation %	-10%	Normal	10%	Variation required to reach benchmark				
PLF	2.77%	4.33%	5.90%	58.79%				
O&M	4.60%	4.33%	4.10%	-424.23%				
Project Cost	5.78%	4.33%	3.16%	-40.58%				
Tariff Rate	2.77%	4.33%	5.90%	58.79%				

For Bundle 2

Sensitivity Analysis								
Variation %	-10%	Normal	10%	Variation required to reach benchmark				
PLF	1.97%	3.46%	4.97%	68.41%				
O&M	3.73%	3.46%	3.18%	-465.92%				
Project Cost	4.82%	3.46%	2.39%	-44.50%				
Tariff Rate	1.97%	3.46%	4.97%	68.41%				

For Bundle 3

Sensitivity Analysis								
Variation %	-10%	Normal	10%	Variation required to reach benchmark				
PLF	3.18%	4.78%	6.44%	55.05%				
O&M	5.04%	4.78%	4.54%	-404.26%				
Project Cost	6.32%	4.78%	3.57%	-38.84%				
Tariff Rate	3.18%	4.78%	6.44%	55.05%				

For Bundle 4

Sensitivity Analysis							
Variation %	-10%	Normal	10%	Variation required to reach benchmark			
PLF	4.04%	5.74%	7.52	46.26%			
PLF	4.04%	5.74%	%				
0&M	6.00%	5.74%	5.48	-363.58%			
Odivi	6.00%	5.74%	%				
Braiast Cast	7.43%	5.74%	4.44	-34.60%			
Project Cost	7.45%	5.74%	%				
Tariff Rate	riff Rate 4.04% 5.7		7.52	46.26%			
railli Nate	4.04%	5.74%	%				

For Bundle 5

Sensitivity Analysis					
Variation %	-10%	Normal	10%	Variation required to reach benchmark	

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PLF	3.60%	5.26%	6.91 %	50.58%
O&M	5.57%	5.26%	4.98 %	-382.26%
Project Cost	6.81%	5.26%	3.99 %	-36.79%
Tariff Rate	3.60%	5.26%	6.91 %	50.58%

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.

Step 3: Barrier analysis

Barrier analysis has not been used as the project does not face any technical barrier that prevents the project implementation and investment barrier is demonstrated via investment analysis

Step 4: Common practice analysis

For the concerned project activity, Common Practice Analysis has been carried out.

For Adani Solar Energy Four Private Ltd project in Rajasthan.

The project is 50 MW Solar power plant in Rajasthan state of India; Thus, common practice analysis has been carried out for the large-scale project activity for the Geographical Area Rajasthan.

The project activity is located in the state Rajasthan in India and the policy applicable for the Solar projects is regulated by respective state policy. Also the bidding was specifically for Rajasthan location as per RFS SECI/C&P/SPD/RFS/2000MW/012018.

Hence, the list of Solar power projects (with in the capacity range 25 MW to 75 MW) commissioned in Rajasthan.

Name of Plant	Inst alle d Cap acit y (MW p)	Ty pe	Sta te	Date of Commi ssionin g	Mech anis m	Reference
Dahanu Solar Power Pvt. Ltd.	40	Sol ar	Raj ast han	31-Mar- 2012	CDM	https://cdm.unfccc.int/ Projects/DB/TUEV- RHEIN1346121477.8 5/view

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SB Energy Three Pvt	50	Sol ar	Raj ast han	19-Jun- 2013	GS	https://registry.goldst andard.org/projects/d etails/1705
SEI Suryalabh Private Limited	30	Sol ar	Raj ast han	25-Mar- 2015		
Azure Clean Energy Private Limited (Part-I)	30	Sol ar	Raj ast han	24-Apr- 2015		
Azure GreenTech Private Limited	40	Sol ar	Raj ast han	28-Apr- 2015		
Roha Dyechem Pvt. Ltd.	25	Sol ar	Raj ast han	30-Sep- 2015	GS	https://registry.goldst andard.org/projects/d etails/2057
Today Green Energy Pvt. Ltd.(5X10)- Part-II	30	Sol ar	Raj ast han	5-Oct- 2015		
Fortum FinnSurya Energy Private Limited	70	Sol ar	Raj ast han	31-Mar- 2017	GS	https://registry.goldst andard.org/projects/d etails/1371
Yarrow Infrastructu re Limited	50	Sol ar	Raj ast han	31-Mar- 2017	GCC	https://registry.goldst andard.org/projects/d etails/1372
Solar Direct Energy India Private Limited Part-I	50	Sol ar	Raj ast han	1-Jun- 2017		
Solar Direct Energy India Private Limited Part-II	40	Sol ar	Raj ast han	11-Jun- 2017		
Rising Bhadla 1 Private Limited	40	Sol ar	Raj ast han	18-Jul- 2017	VCS	https://registry.verra.o rg/app/projectDetail/V CS/1709
Solar Direct Energy India Private Limited	30	Sol ar	Raj ast han	11-Aug- 2017		

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Rising Bhadla 2 Private Limited	40	Sol ar	Raj ast han	29-Aug- 2017	VCS	https://registry.verra.o rg/app/projectDetail/V CS/1709
Shapoorji Palonji Infrastructu re Capital	50	Sol ar	Raj ast han	26-Sep- 2017		
Rising Bhadla 1 Private Limited	30	Sol ar	Raj ast han	29-Sep- 2017	VCS	https://registry.verra.o rg/app/projectDetail/V CS/1709
Rising Bhadla 2 Private Limited	30	Sol ar	Raj ast han	1-Nov- 2017	VCS	https://registry.verra.o rg/app/projectDetail/V CS/1709
SB Energy Three Pvt Limited	30	Sol ar	Raj ast han	18-Sep- 2018	VCS	https://registry.verra.o rg/app/projectDetail/V CS/1805
Clean Sustainable Energy Private Limited (Project-I)	30	Sol ar	Raj ast han	16-Sep- 2019		
Clean Sustainable Energy Private Limited (Project-I)	30	Sol ar	Raj ast han	16-Sep- 2018		
M/s Phelan Energy India RJ Pvt. Ltd.	30	Sol ar	Raj ast han	6-Nov- 2018	GCC	https://projects.global carboncouncil.com/pr oject/1440
SB Energy Three Pvt Limited	30	Sol ar	Raj ast han	18-Sep- 2019	VCS	https://registry.verra.o rg/app/projectDetail/V CS/1805
RENEW SOLAR POWER PVT	50	Sol ar	Raj ast han	27-Apr- 2019	GCC	https://registry.goldst andard.org/projects/d etails/1986

Here, Nall identified = 10. Ndiff=8

F=1-(Ndiff/Nall)

F=1-(8/10)

Therefore, F= 0.2 and Nall-Ndff = 2.

Thus the project activity does not satisfy the condition of "Nall - Ndiff > 3" therefore the project is not a common practive.

For Adani Solar Energy Kutchh Two Pvt Ltd in Gujarat.

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The project is 100 MW Solar power plant in Gujrat state of India; Thus, common practice analysis has been carried out for the large-scale project activity. For this GUVNL (State Agency) has issued a RFS GUVNL/500MW/Solar (Phase II R) for Gujarat location Project.

Hence, the list of Solar power projects (with in the capacity range 50 MW to 150 MW) commissioned in Gujarat.

	Installed Capacity	T y p	Date of Commissi	Mec hani	Ref eren ce
Name of Plant	(MWp)	e	oning	sm	
					http s://r
					egist
					<u>ry.v</u>
					erra. org/
					app/
					<u>proj</u> ectD
					etail/
		s			<u>VCS</u> /141
		ol	30-Mar-		0
Astra Solren Pvt. Ltd.	52	ar	2017	VCS	
					http s://r
					egis
					try.g
					<u>olds</u>
					tand ard.
					org/
					<u>proj</u>
					<u>ects</u> /det
		s			ails/
Orange Charanka Solar		ol			137
Energy Pvt. Ltd.	53.45	ar	4-Aug-2017	GS	<u>7</u>
Gujarat State Electricity Corporation		S			
Ltd.(GSECL)	76.04	ar	4-Jan-2019		
					http s://r
					egist
					ry.v
					erra. org/
					app/
Azuro Dowor Thirty		6			proj
Azure Power Thirty Three Pvt.		S	22-Feb-		ectD etail/
Ltd.	60	ar	2019	VCS	VCS

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<u> </u>					/400
					/193 1
Azure Power Thirty Three Pvt. Ltd.	60	S ol ar	7-Mar-2019	VCS	http s://r egist ry.v erra. org/ app/ proj ectD etail/ VCS /193 2
Azure Power Thirty Three Pvt. Ltd.	75.09	S ol ar	17-Mar- 2019	VCS	http s://r egist ry.v erra. org/ app/ proj ectD etail/ VCS /193
Aditya Birla Renewables		Sol			http s://w ww. eqm agpr o.co m/a ditya - birla - rene wabl es- com miss ione d- 52- 5- mw- dc- jaloy a- gujr
SPV1 Ltd.	52.54	ar	3-Dec-2019		at/

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Here, Nall identified = 2. Ndiff=0

F=1-(Ndiff/Nall)

F=1-(0/2)

Therefore, F = 1.0 and Nall-Ndff = 2.

Thus the project activity does not satisfy the condition of "Nall - Ndiff > 3" therefore the project is not a common practice.

For Adani Solar Energy Kutchh One Ltd in Gujarat.

The project is 150 MW Solar power plant in Rajasthan state of India; Thus, common practice analysis has been carried out for the large-scale project activity. For this GUVNL (State Agency) has issued a RFS GUVNL/500MW/Solar (Phase IV) for Gujarat location Project.

Hence, the list of Solar power projects (with in the capacity range - 75 MW to 225 MW) commissioned in Gujarat.

Name of Plant	Installed Capacity (MWp)	T y p	Date of Commiss ioning	Me cha nis m	Reference	Differenti ating Factor
		S				
Gujarat State		О				plant by
Electricity		1				state
Corporation		а	4-Jan-			discom to
Ltd.(GSECL)	76.04	r	2019			meet RPO
		S				
		О				
Azure Power Thirty		-1			https://regi	stry.verra.o
Three Pvt.		а	17-Mar-		rg/app/proj	jectDetail/V
Ltd.	75.09	r	2019	VCS	CS/1931	

Here, Nall identified = 1. Ndiff=0

F=1-(Ndiff/Nall)

F=1-(0/1)

Therefore, F = 1.0 and Nall-Ndff = 1.

Thus the project activity does not satisfy the condition of "Nall - Ndiff > 3" therefore the project is not a common practive.

For Adani Solar Energy Four Private Ltd project in Uttar Pradesh.

The project is 100 MW Solar power plant in Uttar Pradesh state of India; Thus, common practice analysis has been carried out for the large-scale project activity. For this UPNEDA (State Agency) has issued a RFS 02/UPNEDA/Grid Connect/Rfp/2018 for Uttar Pradesh location Project.

Hence, the list of Solar power projects (with in the capacity range 50 MW to 150 MW) commissioned in Uttar Pradesh.

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Name of Plant	Install ed Capaci ty (MWp)	Date of Com missi onin g	Mech anism	Reference	Differ entiat ing Facto r
				https://www.power- technology.com/market	PPA
	50	13-		data/essel-infra-	with
Essel Infra Projects		Oct-		upneda-solar-pv-park-	UPPC
Ltd		2015		india/	L
M/s. Paryatana		07-			
Develpoers	50	Jun-		https://cdm.unfccc.int/Pr	ojects/
Pvt Ltd		2017	CDM	DB/Applus1597925806.04	1/view
		25-		https://projects.globalc	
M/s. T.N Urja Pvt	50	Aug-		arboncouncil.com/proje	
Ltd		2017	GCC	<u>ct/551</u>	
		08-			
M/s. Rattan India	50	Feb-	in	https://projects.globalcar	boncou
2Pvt Ltd		2018	GCC	ncil.com/project/229	
		11-			
M/s. Enviro Solaire		Mar-	In	https://projects.globalcar	boncou
Pvt Ltd	75	2018	GCC	ncil.com/project/298	

Here, Nall identified = 1. Ndiff=0

F=1-(Ndiff/Nall)

F=1-(0/1)

Therefore, F = 1.0 and Nall-Ndff = 1.

Thus the project activity does not satisfy the condition of "Nall - Ndiff > 3" therefore the project is not a common practice.

For Adani Solar Energy Chitrakoot One Ltd in Uttar Pradesh.

The project is 75 MW Solar power plant in Rajasthan state of India; Thus, common practice analysis has been carried out for the large-scale project activity. For this UPNEDA (State Agency) has issued a RFS 03/UPNEDA/Grid Connect/Rfp/2018 for Uttar Pradesh location Project.

Hence, the list of Solar power projects (with in the capacity range 37.5 MW to 112.5 MW) commissioned in India.

N	ome of Blowt	Inst alle d Cap acit y (M Wp	Ту	Date of Com missi onin g	M ec ha ni s	Reference
I I	ame of Plant	,	pe		m	Keierence

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						٠
					https://www.power-	l
			13-		technology.com/marketdata/es	
Essel Infra Projects		Sol	Oct-		sel-infra-upneda-solar-pv-park-	
Ltd	50	ar	2015		india/	
M/s. Paryatana			07-		https://cdm.unfccc.int/Projects	
Develpoers		Sol	Jun-	CD	/DB/Applus1597925806.04/vie	
Pvt Ltd	50	ar	2017	М	w	
			25-			
		Sol	Aug-	GC	https://projects.globalcarbonco	l
M/s. T.N Urja Pvt Ltd	50	ar	2017	С	uncil.com/project/551	
			08-	in		
M/s. Rattan India		Sol	Feb-	GC	https://projects.globalcarbonco	
2Pvt Ltd	50	ar	2018	С	uncil.com/project/229	
			11-	In		
M/s. Enviro Solaire		Sol	Mar-	GC	https://projects.globalcarbonco	
Pvt Ltd	75	ar	2018	С	uncil.com/project/298	
			15			
M/s. Azure Venus		Sol	April	VC	https://registry.verra.org/app/p	
Pvt Ltd	40	ar	2018	S	rojectDetail/VCS/1931	
			27			
M/s. Karaon Urjra		Sol	July			
Pvt Ltd	40	ar	2018			١
			14			١
			Octo			١
M/s. Mehrauni I Ujra		Sol	ber			١
Pvt Ltd	40	ar	2018			١

Here, Nall identified = 3. Ndiff=0

F=1-(Ndiff/Nall)

F=1-(0/3)

Therefore, F = 1.0 and Nall-Ndff = 3.

Thus the project activity does not satisfy the condition of "Nall - Ndiff > 3" therefore the project is not a common practice.

Conclusion:

As described above, the project fulfils all necessary requirements of additionality specified in the 'Tool for the demonstration and assessment of additionality' v7.0.0. Hence, the project is additional

Findings

Conclusion

CL09 and CAR04 were raised in this context and closed successfully.

- The benchmark used in the project activity is found appropriate and all the sources used to arrive the benchmark have been thoroughly assessed by the verification team and found to be correct.
- All the parameters and assumptions used in the financial analysis were verified and found appropriate. The input parameters were verified and crosschecked with authentic resources as referenced in the relevant parameters and found to be correct
- The results of the investment analysis along with sensitivity analysis (variables being the PLF, O&M cost, Project cost and Tariff) confirms that

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- the project activity (without ACCs benefits) generates returns less than the benchmark value.
- Based on the information provided in the PSF and guidance by GCC Project Standard version 03.1, Tool for demonstration and assessment of additionality version 7.0, Investment Analysis Tool Version 12.0 verification team confirmed the project activity is deemed additional.

D.3.6 Estimation of emission reductions or net anthropogenic removal

Means of Project Verification

The verification team checked whether the equations and parameters used to calculate GHG emission reductions or net anthropogenic GHG removals for PSF is in accordance with applied methodology. Verification team checked section B.6 of the PSF to confirm whether all formulae to calculate baseline emissions, project emission and leakage have been applied in line with the underlying methodology.

Baseline Emissions:

The baseline emissions as discussed in B.6.1 mentioned that the emission would have occurred in the absence of the project activity. The emission reduction calculation has been done as per the Large-scale Consolidated Methodology ACM0002., Version 21.0

The baseline emissions of the project activity according to the paragraph 39 of the applied methodology is,

$$BE_y = EG_{PJ,y} \times EF_{grid,CM,y}$$

Where,

BE_y = Baseline Emissions in year y; tCO₂

EG_{PJy=} Quantity of net electricity displaced as a result of the implementation of the GCC project activity in year y (MWh/year)

 $EF_{grid,CM,y}$ = Combined margin CO_2 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 Version 7.0" (t CO_2 /MWh)

As per the applied methodology, If the project activity is the installation of a greenfield power plant $EG_{PJ,y} = EG_{facility,y}$

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

As per PSF the estimated net electricity generation from the project activity is 948,448 MWh(annual average over the crediting period) and calculated combined margin emission factor based on the Tool is 0.9310 tCO₂e/MWh. Hence the baseline emission value will be 883,908tCO_{2e}.(annual average over the crediting period).

Project emissions:

As per the applied methodology, For most renewable energy project activities, $PE_y = 0$. Since Solar power is a GHG emission free source of energy project emission considered as Zero for the project activity.

Leakage Emissions:

As per the applied methodology, there are no emissions related to leakage in this project.

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	$\frac{Emission\ reductions}{As\ per\ the\ applied\ methodology,\ emission\ reductions\ are\ calculated\ as\ follows}$ $ER_y = BE_y - PE_y\ - LE_y$
	Where: ER _y = Emission reductions in year y (tCO ₂ e/y) BE _y = Baseline Emissions in year y (t CO ₂ /y) PE _y = Project emissions in year y (t CO ₂ /y) LE _y = Leakage emissions in year y (t CO ₂ /y)
	Based on the above estimation $ER_y = BE_y$, Hence the annual emission reductions based on the ex-ante parameters is 883,908tCO ₂ e (Annual Average over the crediting period).
Findings	CAR 05 is raised and closed successfully
Conclusion	 Project verification team confirm that the algorithms and formulae proposed to calculate project emissions, baseline emissions, leakage and emission reductions in the PSF is in line with the requirements of the selected methodology ACM0002 Version 21.0, For ex-ante calculation, the assessment team confirms that All assumptions and data used by the project owner are listed in the PSF including their references and sources. All documentation used by project owner as the basis for assumptions and source of data is correctly quoted and interpreted in the PSF All values used in the PSF are considered reasonable in the context of the proposed project activity The baseline methodology and the applicable tool(s) have been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions; All estimates of the emissions can be replicated using the data and parameter values provided in the PSF. All calculations are complete and without any omissions.

D.3.7 Monitoring plan

Means of Project Verification

The monitoring plan described in the PSF is in compliance with the applied methodology ACM0002 Version 21.0. The monitoring plan has been found to be in compliance with the requirements of the applied methodology for calculation of GHG emission reductions, GCC Environment and-Social-Safeguards-Standard-v3.0 and Project-Sustainability-Standardv3.1. The assessment team has reviewed all the parameters in the monitoring plan against the requirements of the applied methodology and confirmed that monitoring parameters are applied in line with the requirement of the methodology and relevant in the context of the program. The procedures have been reviewed by the assessment team through document review and interviews with the respective monitoring personnel. The information provided has allowed the assessment team to confirm that the proposed monitoring plan is feasible within the project design. The relevant points of monitoring plan have been discussed with the project owner. Specifically, these points include the monitoring methodology, data management, and the quality assurance and quality control procedures to be implemented in the context of the project. Therefore, the project owner will be able to implement the monitoring plan and the achieved emission reductions can be reported ex-post and verified

The parameters that are fixed ex-ante are:

	Parameter	Value	Source
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	Build Margin Emission factor	0.8687 tCO ₂ /MWh	Calculated as the weighted
ı	(EFgrid, BM, y)		average of the operating
	Operating Margin emission	0.9518 tCO ₂ /MWh	margin (0.75) & build
	factor		margin(0.25) values,
	(EF _{grid, OM, y})		sourced from Baseline CO2
		0.9310 tCO ₂ /MWh	Emission Database,
	emission factor		Version 18.0 , September
	$(EF_{grid,CM,y})$		2022 published by Central
	g. (a)(3.1.), /		Electricity Authority (CEA),
			Government of India

The parameters that are to be monitored ex-post as per applied methodology &

1	EGpJfacility,y (SDG-7)	The monitoring para bi-directional tri-vect accuracy class which the project units at t	or energy meters(Mair n is located interconne he power plant premi	year y in MWh/y usly monitored by means of and Check Meters) of 0.2 ection/substation of each of ses. The meter details are the onsite visit of the project
		Details	Main Meter	Check Meter
			Four Private Limited	
		Sr. No	NS1200A	NR-3808-A
				Limited (100MW, Gujarat)
		Sr. No	GJ4491A	GJ4429A
				imited (150MW, Gujarat)
		Sr. No	GJ4491A	GJ4429A
				Jalalabad (50MW, UP)
		Sr. No	UPP68467	UPP68466
		 		– Sahaswan (50MW,
		Sr. No	UP-4033A	UP-4034A
		Adani Solar Energy	Chitrakoot one Limite	ed (25+50MW, UP)
		Sr. No	UPGE4036A	UP-6222A
		and the Electricity However, for the calc is converted in MWI project activity will be to the grid, electricit Meter reading repo Gujarat and Uttar Pr EGfacility,y = EGExp Cross Checking: Qu	exported and import culation purpose electron. The Net electricity is exalculated as a differ y imported from the curts provided by Res adesh) as per below export, y - EGImport, y antity of net electricity	s but is measured month ted to the grid is in kW ricity exported and imported supplied to the grid by the ence of electricity exported grid obtained from Month expective State (Rajasthatequation: supplied to the grid will be all as Invoices raised by the
2	CO ₂ Emissions Reduction (SDG 13)	from the project acti emissions due to	vity and grid emission implementation of p	e net electricity generation factor. Reduction of CC roject activity that wou per plants. The monitoring

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		1			
			parameter will be continuously monitored by means of energy meters		
		Danlasina	as mentioned above monitoring parameter EG _{PJ,facility,y} .		
	3	Replacing Fossil	The parameter is calculated based on the net electricity generation		
	Ш	Fuels with	from the project activity. The monitoring parameter will be continuously monitored by means of energy meters as mentioned		
	Ш	renewable	above monitoring parameter EGPJ,facility,y.		
	Ш	sources of	above mornioring parameter LGPJ, raciity, y.		
	Ш	energy			
	4	Long-term	This parameter is monitored based on the number of jobs created by		
	Ш	jobs (> 1	the project owner in the long-term basis and ensures that at least five		
	Ш	year)	employments will be provided from the project activity. This will be		
	Ш	created/	verified using the HR and payroll records of the employees who		
	Ш	lost	worked on the project activity. This was confirmed by interviewing the		
	Ш		monitoring personnel of the project activity during on site visit and the		
	Ш		monitoring practices followed by the project owner is appropriate in		
	Ш		relation to the project activity and its acceptable to the assessment		
	I⊢_	0	team		
	5	Short Term Jobs	This parameter is included in the monitoring plan so that the impact of		
	Ш	JODS	the Short term jobs that are created during the operational phase of the project activity. These jobs are like cleaning, grasscutting etc		
	Ш		based on the requirement at site. There is no legal requirement from		
			local authority to create permanent employment from the project		
	Ш		activity. Employment generation is the voluntary initiative by the		
	Ш		PO.The number of people employed is measured annually and was		
			cross checked with attendance sheet during the on-site visit.		
	6	Solid waste	This parameter is included in the monitoring plan to measure the		
	Ш	Pollution	impact of The defunct / damaged PV modules may be generated		
	Ш	from end-	and storage/ disposal can lead to contamination of soil. The disposal		
	Ш	of-life	has been given to Fourth Partner Energy Private Limited and the		
	Ш	products/	contract has been reviewed and verified.		
	 7	equipment Specialized	This parameter is included in the monitoring plan to measure the		
	II ′	training /	impact of the Contribution to the quality of the employment by		
	Ш	education	ensuring that the staff is trained and certified for the required		
	Ш	to local	positions. The parameter monitored is number of trainings conducted		
	Ш	personnel	annually and has been verified during the doc review of the Project		
			Activity.		
Findings			ed and closed successfully.		
Conclusion	The		eation team confirms that,		
	•		erification team confirms that the monitoring plan based on the approved		
			ethodology is correctly applied to the PSF.		
	•		g plan will give opportunity for real measurements of achieved emission		
		reductions. The verification team considers that monitoring arrangements described in the monitoring plan is feasible within the project design.			
	١.				
	The means of implementation of the monitoring plan are sufficient to ensure that the emission reduction and other voluntary labels achieved from the project activity is				
	verifiable and thereby satisfying the requirement of Verification Standard.				
			ng plan will give opportunity for real measurements of achieved emission		
			here are no host country requirements pertaining to monitoring of any		
			development indicators. Therefore, there are no such parameters		
		identified in th	ne PSF.		

D.4. Start date, crediting period and duration

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Means of Project Verification	The Start date of the project activity is 17/04/2020 which is the earliest commercial operation date of one of the unit involved in the project activity. The Commissioning certificates of the installation of the project activity has been verified and confirmed start date as per PSF is found correct and acceptable to verification team. A crediting period of a maximum length of 10 years has been selected by project owner. The start date of the crediting period is stated as 17/04/2020, which is appropriate as per paragraph 40(b) of the Project Standard version 03.1. The expected lifetime of the project activity is 25 years which is verified by the technical details of the PV panels and confirmed based on the sectoral expertise.
Findings	No finding raised in this context.
Conclusion	The start dates and the crediting period type & length have been verified and found to be in accordance with GCC project standard version 03.1.

D.5. Environmental impacts

Means of Project Verification	by Ministry of Environment, Forests and Climate Change (MoEF&CC), Government of India (GOI) under Environmental Impact Assessment notification 14/09/2006/45/. Further amendments to the notification have been done on 14/08/2018/45/, the Solar power projects are not listed in any of the categories of the schedule, hence the NO EIA required as per host country legislation. The project activity is implemented on the barren lands and there is no forest land or any protected land involved in the project activity. Also, necessary approvals have been obtained by the project owner before implementation and of the project activity. This has been evident from the verification of the documents and during onsite site by the verification team. The project was already implemented and there is no possibility of any negative impact during operation phase of the project activity.
Findings	No findings raised in this context.
Conclusion	In the opinion of the assessment team, in the project activity environmental impacts is not significant as per host country legislation. Further analysis not required in this context.

D.6. Local stakeholder consultation

Means of Project Verification	In the host country, there are no mandatory regulations or definitive rules requiring a local stakeholder consultation for solar power projects in India. The local stakeholder consultation for the project took place at the project site, and the details are outlined below. The project owner extended invitations to local stakeholders through a public notice, disseminating information about the consultation through public announcements in the vicinity of the project site.
	Additionally, the project owner published notices in government buildings, schools, etc. Questionnaires were distributed to gather feedback from government officials, social organizations, and local residents, and all collected questionnaires were accounted for.Representatives from the project owner facilitated the meeting, commencing by welcoming all stakeholders. The project owner provided information about the project activity and other projects in the area, detailing the benefits the area has experienced from the operation of power projects. The project owner further elaborated on the specific benefits derived by
	stakeholders from the implementation of the project. In a project-specific context, the entire process, from the project's inception to its current execution levels, was explained. The project owner shared the company's long-term vision, outlining

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various activities planned in parallel with the project implementation. The project owner detailed how solar energy projects contribute to providing clean energy and mitigating the impacts of global warming. Additionally, the positive effects of these projects were explained, including the creation of long-term and short-term employment opportunities, increased income, and an enhancement in the living standards of the local population. Furthermore, the project owner outlined the proposal to establish a grievance procedure, allowing stakeholders to provide comments and suggestions. The stakeholders expressed full support for the establishment of such projects in the region.

The dates have been included in the table below:-

Project	SPV Name	Location, State	Date
Project 1	Adani Solar Energy Four Limited	Rajasthan	15.7.2019
Project 2	Adani Solar Energy Kutchh Two Pvt Limited	Gujarat	27.2.2020
Project 3	Adani Solar Energy Kutchh One Limited	Gujarat	6-3-2020
Project 4	Adani Solar Energy Four Limited	UP	14-09-2019
Project 5	Adani Solar Energy Four Limited	UP	14-09-2019
Project 6	Adani Solar Energy Chitrakoot One Limited	UP	18.10.2019
Project 7	Adani Solar Energy Chitrakoot One Limited	UP	18.10.2019

As detailed in the stakeholder consultation report, the representative of GCC project owner explained technical aspects and GCC mechanism & its requirement of project to stakeholders, also explained about Social, Environmental benefits and UN sustainable development goal impacts of the project. Furthermore, the project owner was asked to provide feedback on the project activity, including whether the project will have a positive, negative, or no impacts. The stakeholder consultation responses were received by the assessment team. The verification team confirmed by review of the stakeholder responses that the summary of stakeholders' comments reported in PSF was accurate. There was no negative feedback received. The list of the relevant stakeholders who were requested for feedback is also provided in the PSF.

Findings Conclusion

No findings raised.

The project verification team confirms that the summary of stakeholders' comments reported in PSF is complete. In the opinion of the team, the local stakeholder consultation process was adequately conducted by the project participant considering the ongoing pandemic to receive unbiased comments from the all the stakeholders. The project verification team confirms that the local stakeholder consultation process performed for the project activity fulfils the requirements and all the LSC documents /19/ are verified and found acceptable.

D.7. Approval and Authorization- Host Country Clearance

Werification As per the GCC program guidelines the submission of HCA on double counting is required by CORSIA labelled project after 31/12/2020 as verified under section D.13 of this report. For carbon credits issued during 01/01/2016 to 31/12/2020 the host country approval is not required. Thus, for this project activity Host country clearance is not required at the time of project verification.

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Findings	FAR 01 raised.
Conclusion	The project verification team confirms that no Host Country approval is required by the CORSIA labelled project activity and the HCA will be required during the first or subsequent verification, when the issuance of carbon credit is considered beyond 1st Jan 2021.

D.8. Project Owner- Identification and communication

Means of Project Verification	The information and contact details of the project owner and project owners themselves has been appropriately incorporated in Appendix 1 of the PSF which was checked. The Authorization letters signed by the project owners has been verified and also the company registration documents/31/ and project owner valid passports/31/ have been checked. Also, it was evident that there is no clear statement regarding the ownership of the carbon credits generated from the project activity Hence as per GCC requirement the project owner has filled and submitted the "Declaration by Authorized Project Owner and Focal Point at Initial Submission and Request for Registration of GCC Project activity" for further process which is acceptable to the verification team. All information were consistent in these documents and acceptable to the project verification team All information were consistent between in these documents and acceptable to the verification team.
Findings	No findings raised.
Conclusion	The project verification team confirms that the information of the project owners has been appended as per the template and the information regarding the project owners stated in the PSF and authorization letter were found to be consistent

D.9. Global stakeholder consultation

Means of Project	The PSF was made available through the dedicated interface on the GCC
Verification	website.
	The duration of the period for submission of comments for the global
	stakeholder consultation was from 22/12/2022-05/01/2023
	There were no comments received during this period
Findings	No findings raised.
Conclusion	The PSF had been made public for receiving stakeholder feedback and no
	comments were raised during the GSC process

D.10. Environmental Safeguards (E+)

Means of Provention	oject	The Project owner has chosen to apply for the Environmental No-net-harm Label (E+). The assessment of the impact of the project activity on the environmental safeguards has been carried out in section E.1 of the PSF. Out of all the safeguards no risks were identified to the environment due to the project implementation and operation. and the following have been indicated as positive impacts
		Environment – Air- CO ₂ emissions- The solar power project does not cause any CO ₂ emissions in the project scenario. However, in the baseline scenario (grid) some of the fossil fuel power plants may have emitted CO ₂ emissions, which has been calculated by the combined margin emission factor as mentioned in the PSF.
		Environment - Natural Resources - Replacing fossil fuels with renewable sources of energy- The project utilizes renewable solar resource to generate electricity which will replace the electricity generated by fossil fuel plants. (Impact as positive)
		Few risks identified regarding Solid waste Pollution from PV module waste generated at the end of life or damaged/defunct module generation during

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	operational life of the project activity and project owner provided mitigation plan to reduce the risk is not likely to cause any harm in section B.7.2 of the PSF. The appropriate monitoring plan has been put in place to monitor the elements marked positive and risks identified due to implementation of the project activity and the parameter compliance with local regulations/laws i.e., Solid waste like disposal of Transformer oil and other hazardous, E-Waste generated from the project activity, water consumption of the project activity for the solar panels cleaning purpose will be also monitored to ensure the compliance of the laws during the crediting period has been provided in Section B.7.1 of the PSF. The detailed matrix has been included in appendix 5 of the report.
Findings	CAR 01 were raised and closed successfully
Conclusion	Based on the documentation review the project verification team can confirm that Project Activity is not likely to cause any negative harm to the environment but would have a positive impact, hence, is eligible to achieve additional E+certifications

D.11. Social Safeguards (S+)

Means of Project Verification	The Project owner has chosen to apply for the Social No-net-harm Label (S+). The assessment of the impact of the project activity on the social safeguards has been carried out in section E.2 of the PSF. Out of all the safeguards no risks were identified to the society due to the project implementation and operation. Only positive impacts identified by the Project owner which is not likely to cause any harm. The following have been identified as positive impacts of the project activity. Social – Jobs - Long-term jobs (> 1 year) created/ lost- The project creates long term job opportunities during operation. Social – Jobs – New short-term jobs- The project creates short term job opportunities during construction. Social-Education- specialized training / education to local personnel- The project owner provides job related training according to the positions
Findings	No findings raised.
Conclusion	Based on the documentation review the verification team can confirm that Project Activity is not likely to cause any negative harm to the society but would have a positive impact, hence, is eligible to achieve additional S+ certifications

D.12. Sustainable development Goals (SDG+)

Means of Project Verification	The assessment of the contribution of the project activity on United Nations Sustainable Development Goals has been carried out in section F of the PSF. Out of the 17 Goals project activity has no adverse effect on any of the goal and contribute to 3 SDGs: Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all Goal 13. Take urgent action to combat climate change and its impacts The detailed matrix has been included in appendix 7 of the report.
Findings	No findings raised.
Conclusion	Based on the documentation review the verification team can confirm that Project Activity is likely to contribute to the United Nations Sustainable Development Goals and would have a positive impact, hence, is eligible to achieve additional SDG+ certifications

D.13. Authorization on Double Counting from Host Country (for CORSIA)

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Means of Project Verification	A declaration under section A.5 of the PSF has been included for offsetting the approved carbon credits (ACCs) for the entire crediting period from 17/04/2020 to 16/04/2030.			
Findings	FAR 01 was raised for future verification.			
Conclusion	The project owner has clarified the intent of use of carbon credits for CORSIA hence no double counting will take place. The project owner declared that no host country attestation is required for the pilot phase of 2021-23 (accepting credits issued for monitoring periods between 2016 and 2020), which is appropriate and acceptable according to paragraph 16 of the Standard on Avoidance of Double Counting, V1.0. Also, the verification team raised to Forward Action request to project owner to submit Host Country Authorization beyond the issuance period 31/12/2020 and also the host country must ensure that no emission reductions from the corresponding monitoring period of project are claimed under NDC during issuance of HCLOA for the project activity as per the guidance.			

D.14. CORSIA Eligibility (C+)

Means of Project Verification	The project activity meets the CORSIA Eligibility since the crediting period is after 01/01/2016 and the project is applying for registration under GCC which is one of the approved programmes for eligibility. It was also confirmed that the project activity does not fall under the excluded unit types, methodologies, programme elements, and/or procedural classes. The Project Activity does not cause any net harm to the environment and/or society and therefore achieves Environmental No-net-harm Label (E+) and Social No-net-harm Label (S+) as per the Environmental and Social Safeguards Standard also make contributions for achieving United Nations Sustainable Development Goals (SDGs) to achieving at least three SDGs as per Project Sustainability Standard to achieve SDG+Label
Findings	No findings raised.
Conclusion	 The project activity meets the CORSIA Label (C+) eligibility: a) The Project Activity complies with all the requirements for the Emission Unit Criteria of CORSIA b) A written attestation from the host country's national focal point on double counting is not required for Emission units till 31st December 2020; c) The Project Activity complies with all the applicable requirement of the GCC Program and ICAO's requirements on CORSIA Emissions Unit Eligibility Criteria and CORSIA Eligible Emissions Units, as per Clarification No 1., v1.3 paragraph 23-25, and the ACCs expected to be issued during the crediting period is likely to be CORSIA eligible and can be used by International Airlines for offsetting their emissions during all phases of CORSIA and therefore requests GCC Steering Committee to append CORSIA Certification label (C+) to this project. d) The Project Activity is not likely to cause any net-harm to the environment and/or society and complies with the Environmental and Social Safeguards Standard and will achieve Environmental No-net-harm Label (E+), Social Nonet-harm Label (S+) for this project activity e) The Project Activity is likely to contribute to the achievement of United Nations Sustainable Development Goals (SDGs), complies with the Project Sustainability Standard and will achieve UN SDG Certification Labels (Silver SDG+ Label) for this project activity

Section E. Internal quality control

The project verification report prepared by team leader is reviewed by an independent technical reviewer

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(having competence of relevant technical area himself/herself or through an independent technical area expert) to confirm the internal procedures established by 4KES are duly followed and the Verification report/opinion is reached in an objective manner and complies with the applicable GCC requirements.

The technical review team is collectively required to possess the technical expertise of all the technical area/sectoral scope the project activity relates to. All team members of technical review team are independent of the verification team. The independent technical reviewer(s) may approve or reject the draft verification report. The findings may be identified even at this stage, which needs to be satisfactorily resolved, before submit final report to GCC. The final approval decision is taken by the Head of the DOE/Director

Section F. Project Verification opinion

4K Earth Science Private Limited has been contracted by 'Adani Green Energy Limited' to undertake verification of the project activity "Bundled Solar Energy Project in Gujarat, Rajasthan and Uttar Pradesh" in India. The verification was performed based on rules and requirements defined by GCC for the project activity.

The project involves installation of 475MW_{AC} (50MW X 1, 100MW X 2, 150MW X 1,75MW X 1)) Solar Photovoltaic (SPV) Panels in the states of Gujarat, Uttar Pradesh and Rajasthan. The electricity generated from project activity is exported to the Indian grid in India through power purchase agreement with their respective distribution companies., there by displacing electricity from the Indian grid generated by fossil fuel-based power plants. This project activity consists poly crystalline cells type of panels of and associated connection boxes, Inverters, transformers and other field equipments. Thus, the project activity is estimated to generate an average of 948,448 MWh/year electricity and displacing 883,908 tCO₂e/year. In the baseline scenario the equivalent amount of 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 into the grid. The main emission source in the baseline scenario is the power plants connected to the grid and main greenhouse gas involved is CO₂.

4K Earth Science Private Limited has verified and hereby certifies that the GCC Project Activity "Bundled Solar Energy Project in Gujarat, Rajasthan and Uttar Pradesh":

- has correctly described the Project Activity in the Project Submission Form (version 3, dated 21/12/2023) including the applicability of the approved methodology ACM0002, version 21.0 and meets the methodology applicability conditions, is additional and is expected to achieve the forecasted real measurable and additional GHG emission reductions, complies with the monitoring methodology, has appropriately conducted local and global stakeholder consultation processes and has calculated emission reduction estimates correctly and conservatively;
- is likely to generate GHG emission reductions amounting to the estimated 8,839,087 tCO_{2eq} over the
 fixed crediting period of ten years, as indicated in the PSF, which are additional to the reductions that
 are likely to occur in absence of the Project Activity and complies with all applicable GCC rules,
 including ISO 14064-2 and ISO 14064-3, and therefore requests the GCC Program to register the
 Project Activity
- is not likely to cause any net-harm to the environment and/or society and complies with the Environmental and Social Safeguards Standard, and therefore requests the GCC Program to register the Project Activity, which is likely to achieve the requirements of the Environmental No-net-harm Label (E+) and the Social No-net-harm Label (S+); and
- is likely to contribute to the achievement of United Nations Sustainable Development Goals (SDGs), comply with the Project Sustainability Standard, and contribute to achieving a total of 3 SDGs, which is likely to achieve the Silver SDG certification label (SDG+).
- The Project Activity complies with all the applicable requirement of the GCC Program and ICAO's requirements on CORSIA Emissions Unit Eligibility Criteria and CORSIA Eligible Emissions Units, as

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- per Clarification No 1., v1.3 paragraph 23-25, and the ACCs expected to be issued during the crediting period is likely to be CORSIA eligible and can be used by International Airlines for offsetting their emissions during all phases of CORSIA and therefore requests GCC Steering Committee to append CORSIA Certification label (C+) to this project
- is likely to contribute to CORSIA Eligible Emission Units and has CORSIA Label (C+) certification valid till 31 December 2020. A written attestation from the Host country on double counting is not required until 31 December 2020 and the project was found meeting the applicable requirements prescribed by ICAO.

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Appendix 1. Abbreviations

Abbreviations	Full texts				
ACC	Approved Carbon Credits				
ACM	Approved Large Scale Consolidated Methodologies				
BE	Baseline Emission				
BM	Build Margin				
CAR	Corrective Action Request				
CDM	Clean Development Mechanism				
CL	Clarification Request				
CM	Combined Margin				
СРСВ	Central Pollution Control Board				
CO ₂	Carbon dioxide				
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation				
CP	Crediting Period				
EIA	Environmental Impact Assessment				
FAR	Forward Action Request				
GHG	Green House Gas				
GW	Giga Watt				
GWh	Giga Watt hour				
IPCC	Intergovernmental Panel on Climate Change				
kW	kilo Watt				
kWh	kilo Watt hour				
LSC	Local Stakeholder Consultation				
MoV	Means of Verification				
MP	Monitoring Plan				
MW	Mega Watt				
MWh	Mega Watt hour				
OM	Operating Margin				
PA	Project Activity.				
PSF	Project Submission Form				
PS	Project Standard				
PE	Project Emission				
PLF/CUF	Plant Load Factor/Capacity utilization factor				
PO	Project Owner				
PS	Project Standard				
SDG	Sustainable Development Goal				
tCO ₂ e	Tonnes of Carbon dioxide equivalent				
UNFCCC	United Nations Framework Convention on Climate Change				
VS	Verification Standard				
VVS	Validation and Verification Standard (CDM)				

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Appendix 2. Competence of team members and technical reviewers

Certificate of Competence							
Name Mr. Ms.	Ma Paa Puratchikkanal						
Qualification	Fulfils the requireme					of 4KES	
Procedure	for Validation and V	erification o	f CDM/VCS/	GS/GCC/GH	G Projects.		
Appointed to work							
	CDM	Team	Team	Technical	Technical	Financial	
	Validator/Verifier	Leader	Member	Expert	Reviewer	Expert	
Appointed	Yes	Yes	Yes	Yes	Yes	Yes	
Appointed Date	15-07-2023						
	k as Technical Exper						
Authorized	Sectoral Sco	•	TA Code		l Area within		
Technical Area	Energy industries (r - / non-renewable		1.1	Therm	Thermal energy generation		
	Energy industries (renewable - / non-renewable sources)		1.2	Renewables			
	Energy demand		3.1	Е	Energy demand		
	Construction		6.1	Construction			
	Waste handling and disposal		13.1	Solid waste and wastewater		stewater	
	Waste handling and disposal		13.2	Manure			
	Agriculture		15.1	Agriculture			
	GHG+				<u> </u>		
	E+						
	S+						
	SDG+						
Authorized to work	k as Local Expert for	:					
Country/Countries	India, Sri Lanka, Ind	onesia, Viet	nam, Turkey	y, Thailan <mark>d, B</mark>	Brazil, Myanm	ar	
Compliance check	<i>by:</i> Anand S. R.						

Certificate of Competence							
Name Mr. Ms.							
Qualification	Fulfils the requireme	ent as per t	he appointm	ent of persoi	nnel procedui	re of 4KES	
Procedure	for Validation and V	'erification d	of CDM/VCS	S/GS/GCC/G	HG Projects.		
Appointed to work	as:						
	CDM	Team	Team	Technical	Technical	Financial	
	Validator/Verifier	Leader	Member	Expert	Reviewer	Expert	
Appointed	Yes	No	Yes	Yes	No	No	
Appointed Date	15-07-2023	15-07-2023					
• •							
Authorized to work	as Technical Experi	t for:					
Authorized	Sectoral Sco	ре	TA Code	Technica	Area within	the scope	
Technical Area	Energy industries (renewable 1.2 Renewables		<u> </u>				
	- / non-renewable						

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Authorized to work	as Local Expert for:		
Country/Countries	India		
Compliance check	<i>by:</i> Anand S. R.		

	<u>Cert</u>	ificate of C	<u>ompetence</u>			
Moreo N.	Drawaan Bahar					
Name 🔀 Mr.	Praveen Babu					
Ms.						
Qualification	Fulfils the requireme	ent as per tl	he appointm	ent of person	nel procedure	e of 4KES
Procedure	for Validation and V	erification o	of CDM/VCS	/GS/GCC/GF	IG Projects.	
Appointed to work a	as:					
• •	CDM	Team	Team	Technical	Technical	Financial
	Validator/Verifier	Leader	Member	Expert	Reviewer	Expert
Appointed	Yes	No	Yes	Yes	No	No
Appointed Date	15-07-2023					
Authorized to work	as Technical Expert	for:				
Authorized	Sectoral Sco	ре	TA Code	Technical	Area within	the scope
Technical Area	Energy industries (r	enewable	1.2		Renewables	;
	- / non-renewable	sources)				
		,		•		
Authorized to work	as Local Expert for:					
Country/Countries	India					
Compliance check l	by: Anand S. R.					

	<u>Cert</u>	ificate of C	ompetence	ı		
Name Mr.	Syju Alias					
Qualification Procedure		Fulfils the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of CDM/VCS/GS/GCC/GHG Projects.				
Appointed to work a			T	ı	T	T
	CDM Validator/Verifier	Team Leader	Team Member	Technical Expert	Technical Reviewer	Financial Expert
Appointed	Yes	Yes	Yes	Yes	Yes	No
Appointed Date	05-04-2023					
Authorized to work	as Technical Expert	for:				
Authorized	Sectoral Sco	рре	TA Code	Technical	l Area within	the scope
Technical Area	Energy industries (r		1.2		Renewables	3
	- / non-renewable	sources)				
	Energy Dema	and	3.1	E	nergy Dema	nd
	GHG					
	E+					
	S+					
	SDG					
Authorized to work	as Local Expert for:					

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Country/Countries	India
Compliance check be	py: Anand S. R.

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Appendix 3. Document reviewed or referenced

No.	Author	Title	References to the document	Provider
1	GCC	GCC Program Manual	Version 03.1	Publically
Į.	000	GCC i Togram Mandai	<u>version 05.1</u>	available
2	GCC	Project Standard	Version 03.1	Publically
_			<u></u>	available
3	GCC	Verification Standard	Version 03.1	Publically
				available
4	GCC	Environment-and-Social -	Version 2.0	Publically
		Safeguards-Standard		available
5	GCC	Project-Sustainability-Standard	Version 2.1	Publically
	000	Tanantata fant attan af Austraniantian	Manaian Od 4	available
6	GCC	Template for Letter of Authorization	Version 01.1	Publically available
		of Project Owners and Project Representatives		avallable
7	GCC	Project Submission Form (PSF)-	Version 3.2	Publically
,	000	Template	<u>version 5.2</u>	available
	Project Owner	ER Sheet	Version 3.0	Project
8				Owner
9	UNFCCC	Methodology: ACM0002 Grid	Version 21.0	Publically
		connected electricity generation		available
		from renewable sources Version		
		21.0		
10	UNFCCC	Tool to calculate the emission	TOOL 07	Publically
4.4	LINECCO	factor Version 7.0	Varaian 42.0	available
11	UNFCCC	Tool 27- Methodological Tool Investment Analysis	Version 12.0	Publically available
12	UNFCCC	Tool for the demonstration and	TOOL 01	Publically
12	0141 000	assessment of additionality Version	100201	available
		7.0		
13	Project Owner	Commissioning Certificate	Issued Commi	Project
		_	By ssionin	Owner
			g Date	
			SECI 17/04/20	
			20	
			Gujarat 23/10/20	
			Energy 20	
			Develop (66.75M	
			ment W)	
			Agency 29/12/20	
			20 (33.25	
			MW)	
			Gujarat 25/11/20	
			Energy 20	
			Develop (43.75M	
			ment W)	
			Agency 29/12/20	
			20 (56.25	
			MW)	
			19/01/20	
			21 (50	
			MW)	

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No.	Author	Title	References to the	Provider
			document	
			O3/11/20	
14	Project Owner	Authorization Letter	14/12/2023	Project Owner
15	Project Owner	Technical Details & Data sheets of Major Equipments involved in the project activity.	-	Project Owner
16	Project Owner	Power Purchase Agreement	Bund Date le Bund 30/11 le 1 /2018 Bund 12/11 le 2 /2018 Bund 22/05 le 3 /2019 Bund 24/12 le 4 /2018 Bund 14/02 le 5 /2019	Project Owner
17	Project Owner	Letter of Award Project Name LOA		Project Owner

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No.	Author	Title		References to t	he Provider
		Adam' Od	07/07/0040	document	
		Adani Solar Energy Four Private Limited (50 MW, Rajasthan)		ssued by SECI RFS No PD/RFS/2000MW Tariff INR 2.54	
		Adani Solar Energy Kutchh Two Private Limited (100MW, Gujarat)	Urja Vikas N RFS no GU	Issued by Gujarat igam Limited with VNL/500MW/Solar and tariff of INR	
		Adani Solar Energy Kutchh One Limited (150MW, Gujarat) Adani Solar Energy Four Private Limited (50 MW, Shawasn UP)	Urja Vikas N Rfs no GU' (Phase IV) 2 2.67 22/11/2018- Pradesh Nev Energy Dev with R 02/UPNEDA/	Issued by Gujarat ligam Limited with VNL/500MW/Solar and Tariff of INR Issued by Uttar w and Renewable elopment Agency FS Number (Grid	
		Adani Solar Energy Four Private Limited, Jalabad UP 50 MW	22/11/2018- Pradesh Nev Energy Dev with	Issued by Uttar w and Renewable elopment Agency 02/UPNEDA/Grid /2018 and Tariff of	
		Adani Solar Energy Chitrakoot one Limited, 25 MW Rajapur Chitrakoot UP	14/12/2018- 03/UPNEDA/ Connect/Rfp/ Uttar Prad Renewable Development Tariff no. INF	Grid 2018 Issued by esh New and Energy t Agency with	
		Adani Solar Energy Chitrakoot one Limited, 50 MW Rajapur Chitrakoot UP	14/12/2018- Pradesh Nev Energy Dev	Issued by Uttar wand Renewable elopment Agency o. INR 3.07 with 03/UPNEDA/Grid	
18	Project Owner	Solid Waste Records/Register	handling	-	Project Owner
19	Project Owner		·	-	Project Owner
20	Project Owner	Employee Records / H Grievance Register m Site. Log sheets of tankers entered at the	R Records naintained at the water	-	Project Owner

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No.	Author	Title	References to the document	Provider
21	Project Owner	Project Owner Recruitment & Selection Policy & Records	-	Project Owner
22	Project Owner	ODA Declaration	06/12/2023	Project Owner
23	GCC	Clarification 01	Version 1.3	Publically available
24	GCC	Clarification 02	Version 01.0	Publically available
25	GCC	Project Verification Report Template	Version 03.1	Publically available
26	CEA	Baseline CO ₂ Emission Database,	Version 18.0 December	Publically available
27	Project Owner	PSF Version 03 (Final Version)	Dated 21/12/2023	Publically available
28	Project Owner	Sample JMR Statement issued by UPPCL & Invoice raised to UPPCL by the Project Owner.	-	Project Owner
29	Project Owner	Declaration for Intended use of ACCs		Project Owner
30	Project Owner	Company Registration certificates and Passport Details of the Project Owners.	-	Project Owner
31	Govt of India	Electricity Act 2003 National Electricity Policy 2005 Tariff Policy 2006, The Factories Act 1948	Dated 26/05/2003 Dated 12/02/2005	Publicly available
32	Govt of India	Renewable Energy Certificates (RECs), 2011	-	Publically available
33	4KES	Site Installations Check Photos of monitoring equipments.	-	4KES.
34	CDM	CDM Website https://cdm.unfccc.int/Projects/proj search.html https://cdm.unfccc.int/Projects/Vali dation/index.html	-	Publically Available.
35	VERRA	Verra Registry https://registry.verra.org/app/searc h/VCS/All%20Projects	-	Publically Available.
36	Gold Standard	GS Website https://registry.goldstandard.org/pr ojects?q=&page=1	-	Publically Available
37	Indian REC	Renewable Energy Certificate Registry https://www.recregistryindia.nic.in/i ndex.php/publics/registered_regen s	-	Publically Available
38	I.REC Standard	International REC Standard (I-REC) https://www.irecstandard.org/regist ries/	-	Publically Available.
39	Ministry of Environment, Forest and Climate	Environmental Impact Assessment notification	Dated 14/09/2006	Publically Available.

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No.	Author	Title	References to the document	Provider
	Change Govt of	Environmental Impact Assessment		
40	India Project Owner	notification Amendment Detailed Project Report	Dated 14/07/2018	Project
40	Project Owner	Detailed Project Report	Bund Date	Project Owner
			Bund 1/10/	
			le 1 2018	
			Bund 1/10/ le 2 2018	
			Bund 1/04	
			le 3 /2019	
			Bund 1/11/	
			le 4 2018 Bund 1/12/	
			le 5 2018	
41	CERC	Central Electricity Regulatory	Dated 28/03/2018	Publically
		Commission Terms and		Available
		Conditions for Tariff determination from Renewable Energy Sources)		
		Regulations Order No		
		SM/004/2018(Suo- Motu)		
42	UNFCCC	CDM validation and verification	. <u>Version 3.0</u>	Publically
		standard for project activities Version 3.0		Available
43	UNFCCC	Methodological Tool 24: Common	TOOL 24	Publically
		Practice		Available
44	Project Owner	Chartered Accountant Certificate		Project Owner
		Related to Actual Project Cost incurred by the Project Owner		Owner
45	Project Owner	Actual Generation details of the	-	Project
		project activity during the Operation Years 2020-21 to 2022-23 (Up to		Owner
		Jan 2023)		
46	Project Owner	Loan Sanction Letter		Project
47	UNFCCC	CDM Glossary Terms	Version 11.0	Owner Publically
47	UNFCCC	CDM Glossary Terms	version 11.0	Available
48	UNFCCC	Guidelines for the reporting and	Version 1.0	Publically
		validation of plant load factors EB		Available
49	Project Owner	48 Annex 11 IRR sheet	Bund Date	Project
73	1 TOJECT OWNER	HAIX SHEET	l le	Owner
			Bund 21/12	
			le 1 /2023	
			Bund 21/12 le 2 /2023	
			Bund 21/12	
			le 3 /2023	
			Bund 21/12	
			le 4 /2023 Bund 21/12	
			le 5 /2023	
50	Project Owner	Board Resolution	Bund Date	Project

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No.	Author	Title		rences to	Provider
			le		Owner
			Bund	22/10	
			le 1	/2018	
			Bund	27/10	
			le 2	/2018	
			Bund	18/04	
			le 3	/2019	
			Bund	26/11	
			le 4	/2018	
			Bund	14/12	
			le 5	/2019	

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Appendix 4. Clarification request, corrective action request and forward action request

Table 1. CLs from this Project Verification

 CL ID
 01
 Section no.
 Date: 08/03/2023

Description of CL

Project Owner's (PO) is requested to submit the following documents / supporting's:

- 1. Commissioning Certificates of all the Installations.
- 2. Details of Sanctioned Connected Load / Contract Demand of all installations.
- 3. Power Purchase Agreements.
- 4. Proof for Start date of project.
- 5. Declaration of intended use of Approved Carbon Credits (ACCs).
- 6. EIA decision proof.
- 7. Local Stakeholder Invitations, Photographs and Minutes of Meeting.
- 8. Company HR Policy to support the claims made in PSF.
- 9. Waste management practices and record keeping process.
- 10. ODA declaration
- 11. Details of workers employed during construction stages (both temporary & permanent) and no. of women employed.
- 12. Details of employees employed for the operation of project activity (both temporary & permanent) and no. of women employed.

Date: 06/12/2023

- 13. Details of Balance of Plant (BOP).
- 14. Calibration certificates for the energy meters.
- 15. Records of training.

Project Owner's response

PP is submitting all the documents mentioned above.

Documentation provided by Project Owner's

Commissioning certificate

JMR and invoices along with daily generations sheet.

Power purchase agreement

First purchase order

Declaration of intended use of Approved Carbon Credits (ACCs).

ESIA report for all activities

HR policy

Waste management SOP

No ODA declaration

Details of workers employed during construction stages.

Details of employees employed for the operation of project activity.

Calibration certificates

Training records

GCC Verifier assessment Date: 20/12/2023

All documents received and confirmed. CL01 is closed.

CL ID02Section no.Cover PageDate: 08/03/2023Description of CL

The Standard on avoidance of double counting is not checked. In declaration by 'Authorized Project

Owner and Focal Point' Type A1 is not checked. Clarification needed.

Project Owner's response Date: 06/12/2023

Standard on avoidance of double counting along with Type A1 has been checked by PO.

Documentation provided by Project Owner's

Revised PSF

GCC Verifier assessment Date:20/12/2023

The revisions made has been reviewed and confirmed.

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CL ID	03	Section no.	A.1	Date : 08/03/2023		
Description	Description of CL					
Proper subtext is to be used for denoting carbon dioxide formulae throughout the PSF.						
Project Owi	Project Owner's response Date: 06/12/2023					
The entire P	SF has been correcte	ed using the pro	per subtext for denoting carl	oon dioxide formula.		
Documentation provided by Project Owner's						
Revised PSF						
GCC Verifier assessment Date:20/12/2023						
The revisions made has been reviewed and confirmed.						

CL ID	04	Section no.	A.3	Date : 08/03/2023	
Description of CL					
Lifetime of the project activity is to be included in this section as per Project Submission Form Template.					
Project Ov	vner's respons	se		Date: 06/12/2023	
Lifetime of	the project has	been added to section	A.3 of the PSF.		
Document	Documentation provided by Project Owner's				
Revised P	SF				
GCC Verif	ier assessmer	nt		Date:20/12/2023	
The revision	ns made has b	een reviewed and conf	irmed.		

CL ID	05	Section no.	B.2	Date: 08/03/2023		
Description	Description of CL					
Methodology title is mentioned as ACM002. The installed capacity mentioned in the first applicability condition is 487 MW. Clarification requested.						
Project Owner's response Date: 06/12/2023						
The typo has been corrected now it mention the methodology as ACM0002. The installed capacity mentioned in first applicability condition has also been corrected.						
Documentation provided by Project Owner's						
Revised PSF.						
GCC Verifie	er assessment			Date:20/12/2023		
The revision	s made have been re	viewed and cor	nfirmed.			

CL ID	06	Section no.	B.3	Date : 08/03/2023		
Description	Description of CL					
The picture i	ndicates that all power	er plants in India	a are under the project boun	dary. Please clarify.		
Project Own	ner's response			Date: 06/12/2023		
Now PSF ha	s been revised and lo	ocation has bee	n updated and the power plant	ant installed at Rajasthan,		
Gujrat and U	Ittar Pradesh					
Documenta	Documentation provided by Project Owner's					
Revised PSF						
GCC Verifier assessment Date:20/12/2023						
The revisions made has been reviewed and confirmed.						

CL ID	07	Section no.	B.4	Date : 08/03/2023		
Description	Description of CL					
In this section the project activity is indicated as a CDM project activity. This is to be rectified throughout the PSF.						
Project Owner's response Date: 06/12/2023						
PSF has been corrected, unless it has been directly quoted from applied methodology, the mention of CDM activity has been removed.						

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Documentation provided by Project Owner's	
Revised PSF.	
GCC Verifier assessment	Date:20/12/2023
The revisions made has been reviewed and confirmed.	

CL ID	08	Section no.	B.3	Date : 08/03/2023	
Description	n of CL				
The picture	indicates that	all power plants in India	a are under the project boun	dary. Please clarify.	
Project Ow	ner's respons	se		Date: 06/12/2023	
Now PSF h	as been revise	d and location has bee	n updated and the power pla	ant installed at Rajasthan,	
Gujrat and	Uttar Pradesh			-	
Documentation provided by Project Owner's					
Revised PSF					
GCC Verifier assessment Date:20/12/2023					
The revisions made has been reviewed and confirmed.					

CL ID	09	Section no.	B.4,B.5	Date : 08/03/2023		
Description	Description of CL					
References	are to be included in	the PSF for B	aseline CO ₂ Emission Datal	pase, Version 17.0, CEA,		
GOI, relevan	t national laws and re	gulations & Ste	ep 0 table is to be properly fo	ormatted.		
Project Own	ner's response			Date: 06/12/2023		
PO has upda	ated section B.4 and s	section B.5. The	e updated description now in	cludes references to CO ₂		
Emission Da	tabase, Version 17.0	and all relevan	t laws and regulations.			
Documenta	tion provided by Pro	ject Owner's				
Revised PSf	Revised PSf					
GCC Verifier assessment Date:20/12/2023						
The revisions made has been reviewed and confirmed.						

CL ID	10	Section no.	A.5	Date : 08/03/2023
Description of CL				
All the Name	of Entities involved	are to be includ	led in the Project Activities a	nd quantity of ACC's is to
be included.				
Project Own	ner's response			Date: 06/12/2023
The names of	of all entities along wi	th quantity of A	CC's has been included in se	ection A.5 of the PSF.
Documenta	Documentation provided by Project Owner's			
Revised PSF				
GCC Verifier assessment Date:20/12/2023				
The revisions made have been reviewed and confirmed.				

Table 2. CARs from this Project Verification

CAR	01	Section no.	E.1,E.2 & F	Date: 08/03/2023			
Descri	Description of CAR						
Please	provide the following for	claims in the PSF	=				
•	Claims for environmental safeguard in section E.1						
Claims for social safeguard in the section E.2							
•	Proof for claims on SDG's in section F						

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Project Owner's response Date: 06/12/2023 PO is submitting, employee records, attendance sheet, training certificates, HR policies, ESIA report, Waste handling SOPs. **Documentation provided by Project Owner's** employee records, attendance sheet, training certificates, HR policies, ESIA report Date: 20/12/2023 **GCC Verifier assessment** The documents have been reviewed and confirmed.

CAR	02	Section no.	B.2	Date: 08/03/2023	
Description	of CAR				
The full sta	tements of the	applicability conditions	s and applicability condition	s for the tools are to be	
included.					
Project Ow	ner's respons	e		Date: 06/12/2023	
PO has rev	ised the secti	on B.2 now full staten	nents of the applicability co	enditions and applicability	
conditions for	or the tools are	included.			
Documentation provided by Project Owner's					
Revised PSF					
GCC Verifier assessment Date: 20/12/2023					
The revisions made have been reviewed and confirmed.					

CAR	03	Section no.	Date : 08/03/2023			
Description of CAR						
PO is to p	rovide proof for	r the PLF as per the CDM Annex 1	1 regulations.			
Project O	wner's respon	ise	Date: 06/12/2023			
PO submit	tted the proof fo	or the PLF as per the CDM Annex	11 regulations along with this submission.			
Documen	Documentation provided by Project Owner's					
Revised PSF.						
GCC Verifier assessment Date: 20/12/2023						
The revisions made have been reviewed and confirmed						

CAR	04	Section no. IRR & B.5				Date :	08/03/2	023
Description	Description of CAR							
The following	data in the	PSF is ince	onsistent with t	he data in the	e respective IR	R.		
SN.	No		Bundle		Parame	eter		
		Adani So	lar Energy Fou	r Private	Insurance,	Total	Cost,	Equity
Limited (50)				Investment, I	₋oan Am	ount.		
2		Adani So	lar Energy Kuto	hh One	Degradation.			
		Limited (1	150 MW)					
3		Adani So	lar Energy Fou	r Private	Salvage Valu	ie		

Limited (50 MW) Project IRR 4 Adani Solar Energy Chitrakoot One Limited (25 MW)

Adani Solar Energy Chitrakoot One Limited installed capacity is to be rectified.

Project Owner's response	Date: 06/12/2023			
Now PO has revised the IRR sheet and submitted along with this submission.				
Documentation provided by Project Owner's				
Revised IRR Sheet				

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GCC Verifier assessment	Date: 20/12/2023
The revisions made have been reviewed and confirmed	

CAR	05	Section no.	ER sheet	Date: 08/03/2023			
Description	Description of CAR						
			dology in the ER sheet is to	be rectified in the PSF as			
they are not n	natching with the ER s	sheet.					
Project Own	Project Owner's response Date: 06/12/2023						
Now PSF has	been revised and bu	ild margin value	for 2020-21 value is consist	ent the ER sheet.			
Documentati	Documentation provided by Project Owner's						
Revised PSF.							
GCC Verifier assessment Date: 20/12/2023							
The revisions	The revisions made have been reviewed and confirmed						

CAR	06	Section no.	B.7.1	Date: 08/03/2023			
Description of CAR							
All the param	eters in the environm	ental and social	safeguard is to be included	in the monitoring plan like			
Replacing fos	sil fuel, CO ₂ emission	s, educational s	ervices, etc. Meter details are	e to be included as project			
is already con	nmissioned						
Project Own	Project Owner's response Date: 06/12/2023						
			details like monitoring plan				
	s, educational service	es, are included	and Meter details are also i	ncluded in the PSF under			
	section B.7.1						
Documentation provided by Project Owner's							
Revised PSF							
GCC Verifier assessment Date: 20/12/2023							
The revisions	The revisions made have been reviewed and confirmed						

Table 3.FARs from this Project Verification

FAR ID	01	Section no.		Date: 30/11/2022.			
Descripti	Description of FAR						
			ance to CORSIA requiremen				
			ible counting and HCLOA req	uirements and also future			
CORSIA I	requirements applicabl	le time to time fo	or the project activity.				
Project O	Project Owner's response Date:						
Documen	Documentation provided by Project Owner						
GCC Proj	GCC Project Verifier assessment Date:						

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Appendix 5. Matrix for Identifying Environmental Impacts, Establishing Safeguards and Performing Do-No-Harm Risk Assessments in the PSF and GCC Verifier's conclusion

Impact of Pr Activity on	roject	Info	rmation on In	npacts, Do-l	No-Harm Risk A	ssessment a	and Establish	ing Safeguards	S	Proje Co	ect Owner's enclusion	GCC Project Verifier's Conclusi on (To be included in Project Verificati on Report only)
Description of Impact (positive or negative) or negative) Legal/ voluntary corporate requirement / regulatory/ voluntary										Ex-ante scoring of environme ntal impact	Explanation of the Conclusion	3 rd Party Audit
			voluntary corporate threshold Limits	Not Applicabl e	Harmless	Harmful	Operational Controls	Program of Risk Management Actions	Monitoring parameter and frequency of monitoring	Ex- Ante scoring of the environme ntal impact (as per scoring matrix Appendix- 02)	Ex- Ante description and justification/explan ation of the scoring of the environmental impact	Verificatio n Process
Environment al Aspects on the identified categories ¹⁷ indicated below.	Indicators for environment al impacts	Describe and identify anticipated and actual significant environmental impacts, both positive and negative from all sources (stationary and	Describe the applicable national regulatory requirements /legal limits / voluntary corporate limits related to the identified	If no environmen tal impacts are anticipated, then the Project Activity is unlikely to cause any	If environmental impacts exist, but are expected to be in compliance with applicable national regulatory /stricter voluntary corporate requirements and will be within	If negative environment al impacts exist that will not be in compliance with the applicable national legal/	Describe the operational controls and best practices, focusing on how to implement and operate the Project Activity, to	Describe the Program of Risk Management Actions (refer to Table 3), focusing on additional actions (e.g., installation of pollution control	Describe the monitoring approach and the parameters (KPI) to be monitored for each impact irrespective of whether it	-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

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¹⁷ sourced from the CDM SD Tool and the sample reports are available (https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx)

Project V	erification	Report										
		mobile) during normal and abnormal/emerge ncy 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.	risks of environmental impacts.	harm (is safe) and shall be indicated as Not Applicable	legal/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 /If the project has an positive impact on the environment mark it as "harmless" as well.	regulatory requirement s or are likely to exceed legal limits, then the Project Activity is likely to cause harm (may be un- safe) and shall be indicated as Harmful	reduce the risk of impacts that have been identified as 'Harmfu'l at least to a level that is in compliance with applicable legal/regulator requirements or industry best practice or stricter voluntary corporate requirements	equipment) that will be adopted to reduce or eliminate the risk of impacts that have been identified as Harmful.	is harmless of harmful. The frequency of monitoring to be specified as well including the data source.			particular aspect and in case of "harmful impacts" how has the project adopted Risk Mitigation Action Plans to mitigate the risks of negative environment al 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.
Reference to paragraphs of Environment al 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)
Environm ent - Air	SO _x emissions (EA01)	The solar power project does not cause any SOx emissions in the project scenario. However, in the baseline scenario (grid) some of the fossil fuel power plants may have emitted SOx emissions, on which data is not available and can't be quantified.	The Air (Prevention & Control of Pollution) Act 1981 stipulates thresholds for both ambient air quality as well as stack emissions.	Not Applicabl e expected to or does not cause any harm.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	With reference to the CPCB modified direction No. B29012/ESS(CP A)/2015-16; dated March 07,2016 (Appendix A) solar 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. However, the in the baseline scenario	Not Applicable

Project Verification Report (grid) some of the fossil fuel power

											fossil fuel power plants may have emitted SOx emissions, on which data is not available and can't be quantified and therefore the emission reductions cannot be quantified and therefore this parameter will not be scored.	
	NO _x emissions (EA02)	Not Applicable	The Air (Prevention & Control of Pollution) Act 1981	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	With reference to the CPCB modified B29012/ESS(CP A)/2015-16; dated March 07, 2016 (Appendix A) solar 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. However, the in the baseline scenario (grid) some of the fossil fuel power plants may have emitted NOx emissions, on which data is not available and can't be quantified and therefore the emission reductions cannot be quantified and therefore this parameter will not be scored.	Not Applicable
	CO ₂ emissions (EA03)	The solar power project does not cause any CO ₂	The Air (Prevention & Control of	Not Applicabl e as no	Harmless The overall impact is positive with	Not Applicable	Not Applicable	Not Applicable	The generated electricity by the	+1	With reference to the CPCB modified direction No.	This has been verified

Project V	erification	Report										
		emissions in the project scenario. However, in the baseline scenario (grid) some of the fossil fuel power plants may have emitted CO ₂ emissions, which has been calculated by the combined margin emission factor as mentioned in the PSF.	Pollution) Act 1981stipulat es thresholds for both ambient air quality as well as stack emissions.	emissions occur in the project scenario and therefore is not expected to or does not cause any harm.	respect to the baseline alternative.				project activity will be continuously measured and the related CO ₂ emission reduction will be calculated according to the underlying methodology ACM002 version-21.		B29012/ESS(CP A)/2015-16; dated March 07, 2016 (Appendix A) solar 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. However, in the baseline scenario (grid) some of the fossil fuel power plants may have emitted CO2 emissions, which has been calculated by the combined margin emission factor as mentioned in the PSF. Therefore, emission reductions are expected to be reduced which will be regularly monitored and verified ex-post and therefore is eligible to be scored.	during the on site visit and the doc review
	CO emissions (EA04)	Not Applicable	The Air (Prevention & Control of Pollution) Act 1981	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	With reference to the CPCB modified direction No. B29012/ESS(CP A)/2015-16; dated March 07, 2016 (Appendix A) solar 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	Not Applicable

Project Ve	erification I	Report										
											category of industries. However, in the baseline scenario (grid) some of the fossil fuel power plants may have emitted CO emissions, on which data is not available and can't be quantified and therefore the emission reductions cannot be quantified and therefore this parameter will not be scored.	
	Suspende d particulate matter (SPM) emissions (EA05)	Not Applicable	The Air (Prevention & Control of Pollution) Act 1981	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	With reference to the CPCB modified direction No. B29012/ESS(CP A)/2015-16; dated March 07, 2016 (Appendix A) solar 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 However, in the baseline scenario (grid) some of the fossil fuel power plants may have emitted SPM emissions, on which data is not available and can't be quantified and therefore the emission reductions cannot be quantified and therefore this parameter will not be scored.	Not Applicable

1 TOJCCL V	eniication	ιτοροιτ										
	Fly ash generation (EA06)	Not Applicable	The Air (Prevention & Control of Pollution) Act 1981	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	With reference to the CPCB modified direction No. B29012/ESS(CP A)/2015-16; dated March 07, 2016 (Appendix A) solar 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 However, in the baseline scenario (grid) some of the fossil fuel power plants may have emitted fly ash emissions, on which data is not available and can't be quantified and therefore the emission reductions cannot be quantified and therefore this parameter will not be scored.	Not Applicable
	Non- Methane Volatile Organic Compound s (NMVOCs) (EA07)	Not Applicable	The Air (Prevention & Control of Pollution) Act 1981	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	With reference to the CPCB modified direction No. B29012/ESS(CP A)/2015-16; dated March 07, 2016 (Appendix A) solar 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 However, in the baseline scenario	Not Applicable

Project Verification Report (grid) some of the fossil fuel power plants may have emitted NM/VOCs

											emitted NWVOCs emissions, on which data is not available and can't be quantified and therefore the emission reductions cannot be quantified and therefore this parameter will not be scored.	
	Odor (EA08)	Not Applicable	The Air (Prevention & Control of Pollution) Act 1981	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	With reference to the CPCB modified direction No. B29012/ESS(CP A)/2015-16; dated March 07, 2016 (Appendix A) solar 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 However, in the baseline scenario (grid) some of the fossil fuel power plants may have emitted Odor emissions, on which data is not available and can't be quantified and therefore the emission reductions cannot be quantified and therefore this parameter will not be scored	Not Applicable
	Noise Pollution (EA09)	Not Applicable	Noise (Regulation and Control)	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No significant noise emission is expected from	Not Applicable

Project V	erification	Report										
			Rules 2000 amended in 2010)								project activity during operational phase as there is no major equipment in solar project which generates noise. Therefore this parameter will not be scored.	
Environm ent - Land	Solid waste Pollution from Plastics (EL-01)	Not Applicable	Plastic Waste (Manageme nt and Handling) Rules, 2016	Not Applicabl e	Not Applicable	No Action Required	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No significant plastic waste is expected from the project activity during operational phase Hence, this parameter will not be scored.	Not Applicable
	Solid waste Pollution from Hazardous wastes (EL02)	Not Applicable	Hazardous and Other Wastes (Manageme nt and Transbound ary Movement) Amendment Rules¹8, 2016	-	Harmless	Solid waste managem ent is complianc e with National Law	Not Applicable	Not Applicable	Not Applicable	0	As per MoEF&CC notification dated 01.03.2019 (G.S.R. 178(E)) the Occupier (developer) is not required to obtain authorization under Hazardous and Other Wastes (Management and Transboundary Movement) Amendment, Rules, 2019 if they are exempted from obtaining consent under Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981. However, Project Owner should ensure (through ESMS) proper	The waste generated by the project activity is handed of to licesnsed third party for safe disposal. The contract with the third party has been verified during the Doc review

¹⁸ https://cpcb.nic.in/uploads/hwmd/March_Amendment_HOWM.pdf

Project Verification Report disposal Hazardous Waste (DG oil, if DG is installed) through actual user, waste collector operator of the disposal facility, in accordance with the Central Pollution Control Board guidelines. Moreover, though not covered under the rule, the broken part of the solar plant recommended to be sent back to the manufacture or an authorized recycler. Therefore, monitoring will be challenging after finish crediting period (life of the plant is 25 years) parameter will not be scored. Solid Not Applicable Bio-medical Not Not Applicable. Not Not Not No significant bio-NA Not Not medical waste will waste Waste Applicabl Applicable. Applicable. Applicable. Applicable. Applicable. Pollution Managemen be generated from from Biot Rules, 2016 the project activity. medical Hence, this parameter will not wastes (EL03) be scored. Solid Not Harmless Records all Project Owner Quantity of 0 Project Owner is e-waste E-waste Not The waste waste pollution is (Manageme Applicabl Applicable. electrical & is responsible E-waste responsible to generated maintain records of Pollution anticipated nt and electronics to maintain discarded by the Handling) from Ethrough the waste of records and at the end returned project filling wastes operation of the Rules projects of of life time equipment's as per activity is (EL04) project. sites and returns as per will be applicable law and handed of applicable law have no significant filling monitored to and as stated impact.Therefore licesnsed return. and Adani recorded. this parameter will third party by Green Energy not be scored for safe Limited Scrap disposal. Disposal The Policy. contract with the

Project v	erification	Кероп										third party has been verified during the Doc review
	Solid waste Pollution from Batteries (EL05)	Not Applicable	Batteries (Manageme nt and Handling) Rules	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	No significant Batteries waste will be generated from the project activity. Hence, this parameter will not be scored.	NA
	Solid waste Pollution from end of life products/ equipment (EL06)	Not Applicable	Solid Waste Managemen t Rules, 2016	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Project Owner is responsible to maintain records and dispose all products after ending lifecycle as per applicable law. A self-attested declaration mentioning that the equipment waste from the end of project life will be disposed as per Solid Waste Management Rules, 2016 will be submitted. Therefore this parameter will not be scored	NA
	Soil Pollution from Chemicals (including Pesticides, heavy metals, lead, mercury) (EL07)	Not Applicable	In India, there are no comprehensi ve soil quality regulations and standards to ascertain the seriousness of contaminatio n	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	No significant soil pollution from chemicals during operation phase of the project activity However, in the baseline scenario (grid) some of the fossil fuel power plants may have emitted soil emissions, on which data is not available and can't be quantified and therefore the emission reductions cannot be quantified and	NA

Project v	erification	Report										
											therefore this parameter will not be scored.	
	land use change (change from cropland /forest land to project land) (EL08)	Land use change of the project site may have negative impact if the land was a forestry or agricultural land previously.	Right to fair compensatio n and transparenc y in land acquisition Rehabilitatio n and resettlement act 2013.	Not Applicabl e	Harmless	No Action Required	Not Applicable	Not Applicable	The project activity is implemente d in a barren land. No record is maintained for the same.	0	The project does not involve diversion of any forest or any agricultural land. Therefore, ensuring no impact on ecology during the construction and operation phase of the project. Therefore this parameter will not be scored.	The land lease has been reviewed and verified and it has been confirmed from Google Earth Pro that the land of the Project activity was not farm land.
Environm ent - Water	Reliability/ accessibilit y of water supply (EW01)	Not Applicable	The Water (Prevention & Control of Pollution) Act 1974	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Supply water from local body will be used and necessary approval to be obtained. However, the in the baseline scenario (grid) some of the fossil fuel power plants may have emitted accessibility of water emissions, on which data is not available and can't be quantified and therefore the emission reductions cannot be quantified and therefore this parameter will not be scored.	NA
	Water Consumpti on from ground and other sources (EW02)	Solar power projects use a modest amount of water for cleaning solar collection and reflection	Permission for abstraction of Ground water under Environment al	Not Applicabl e	Harmless	No Action Required	Not Applicable	The lifetime of the project activity is 25 years. The project Owner will not such a	No record is being maintained for the use of ground water, although	0	No ground water will be consumed in all sites of the project activity & necessary permission to be obtained from	0

Project Verification I	Report										
	surfaces like mirrors, heliostats, and photovoltaic (PV) panels.Howeve r, the quantity is water used is very insignificant, particularly when compared with the baseline power plants.	(Protection) Act 1986					Ground water compliance Ground water under Environmenta I (Protection) Act 1986	negligible amount of water is required for the project operation.		concerned local authority in case use ground water in future. However, in the baseline scenario (grid) some of the fossil fuel power plants may have emitted water consumption emissions, on which data is not available and can't be quantified and therefore the emission reductions cannot be quantified and therefore this parameter will not be scored	
Generation of wastewate r (EW03)	Not Applicable	The Water (Prevention & Control of Pollution) Act 1974	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	There is no significant effect as provisions of septic tank and soak pits will be provided onsite for treatment and disposal of sewage, thereby minimizing the impacts of wastewater discharge. Planning of toilets, soak pits and septic tanks, waste collection areas will be away from natural drainage channels However, in the baseline scenario (grid) some of the fossil fuel power plants may have generation of waste water on which data is not available and can't be quantified and therefore the emission reductions cannot be quantified and therefore this	NA

Project v	erification i	кероп	1					1		1		
											parameter will not be scored.	
	Wastewate r discharge without/wit h insufficient treatment (EW04)	Not Applicable	The Water (Prevention & Control of Pollution) Act 1974	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	There is no significant effect as provisions of septic tank and soak pits will be provided onsite for treatment and disposal of sewage, thereby minimizing the impacts of wastewater discharge. Planning of toilets, soak pits and septic tanks, waste collection areas should be away from natural drainage channels However, the in the baseline scenario (grid) some of the fossil fuel power plants may have generation of waste water or its treatment on which data is not available and can't be quantified and therefore the emission reductions cannot be quantified and therefore this parameter will not be scored.	NA
	Pollution of Surface, Ground and/or Bodies of water (EW05)	Not Applicable	The Water (Prevention & Control of Pollution) Act 1974	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	There is no significant effect as provisions of septic tank and soak pits will be provided onsite for treatment and disposal of sewage, thereby minimizing the impacts of wastewater discharge.	NA

Project Verification Report soak pits and septic tanks, waste collection areas should be away from natural drainage channels. However, in the baseline scenario (grid) some of the fossil fuel power plants may have emissions polluting the surface water on which data is not available and can't be quantified and therefore the emission reductions cannot be quantified and therefore this parameter will not be scored. The project is not located in the CRZ Discharge Not Applicable Costal Not Not Applicable. Not Not Not Not Not NA Applicable. Applicable. of harmful Regulation Applicabl Applicable. Applicable. Applicable. chemicals Zone boundary defined like marine pollutants / toxic waste CRZ (EW06) Notification 2019. So, there is no marine environment nearby the project site, hence data is not available and can't be quantified and therefore this parameter will not be scored Not Applicable Not Not Applicable. Not This is solar project NA **Environm** Conservin In India, Not Not Not Not g mineral there are no Applicabl Applicable. Applicable. Applicable. Applicable. Applicable. activity and does ent resources conserving not use any natural Natural mineral, therefore (ENR01) mineral Resource this parameter will resources s not be scored. regulations and standards to ascertain

Project verifica	шоп кероп										
Prote enhar plant i (ENR)	ncing life	In India, there are no comprehensi ve regulations and standards to ascertain for protecting plant life	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	The project activity has been implemented in barren land and no trees have been removed from the site due to project activity, therefore this parameter will not be scored.	NA
Protec enhar specie divers (ENR	ncing es sity	In India, there are no comprehensi ve regulations and standards to ascertain for protecting plant life	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	The project activity has been implemented in barren land and no trees have been removed from the site due to project activity, therefore this parameter will not be scored.	NA
Protect enhar forest (ENR)	ncing ts	The Forest (Conservatio n) Act 1980 & 1981	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	No forest land has been used for the project activity. Therefore this parameter will not be scored	NA
Protec enhar other deplei natura resoui (ENR	ncing table al Irces	National Forest Policy (Revised) 1988	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	The project activity has been implemented in barren land and no trees have been removed from the site due to project activity or no other natural resource has been used to operate project activity therefore this parameter will not be scored.	NA
Conse g ene (ENR	ergy	Energy Conservatio n Act 2001	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	All efficient products & instruments have been used in the project activity, hence no significant impact due to this. therefore, this	NA

Project ve	erification	Report												
											parameter will not be scored			
	Replacing fossil fuels with renewable sources of energy (ENR07)	The project utilizes renewable solar resource to generate electricity which will replace the electricity generated by fossil fuel plants. (Impact as positive)	Energy Conservatio n Act 2001	Not Applicabl e	Harmless	No Action Required	Not Applicable	Not Applicable	Continuous measuring for electricity generation will be done	+1	The project is expected to supply an average of 948,448 MWh per year renewable electricity to grid.	This has been verified during the on site visit.		
	Replacing ODS with non-ODS refrigerant s (ENR08)	Not Applicable	In India, there are no comprehensi ve regulations and standards to ODS & non ODS	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	No impact Therefore this parameter will not be scored.	NA		
	Others (ENR09)	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable	NA		
	Add more rows if required													
Net Score	e :							+2						
Project O	wner's Co	onclusion in F	PSF:	Th	The Project Owner confirms that the Project Activity will not cause any net harm to Environment.									
GCC Proj	ect Verifie	er's Opinion:			The GCC Verifier certifies that the Project Activity is not likely to cause any net harm to the environment									

Appendix 6. Matrix for Identifying Environmental Impacts, Establishing Safeguards and Performing Do-No-Harm Risk Assessments in the PSF and GCC Verifier's conclusion

Impact of on	Project Activity	Informat	ion on Impa		larm Risk A lfeguards	Assessmer	nt and Estab	olishing	GCC project Verifier's Conclusion (To be included in Project Verification Report only)		
		or negative) t /Limit, Corporate policies / Industry best		Impact (positive or negative) requiremen t/Limit, Corporate policies / Industry requiremen t/Limit, (choose which		ırm Risk Asse		Risk Mitigation Action Plans (for aspects marked as Harmful)	Mitigation indicator for Action monitoring environme Plans (for of impact. aspects marked as		3rd Party Audit
			practice		Harmless	Harmful	Operation al / Manageme nt Controls	Monitoring parameter and frequency of monitoring (as per scoring matrix	Ex- Ante scoring of social impact of the project	Ex- Ante description and justification/expla nation 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 source during normal and abnormal/emerge ncy conditions that may result from constructing and operating of the Project Activity within or outside the project boundary, over which the	Describe the applicable national regulatory requirements / legal limits or organizationa I 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 complianc e with applicable national regulatory requirements/ stricter voluntary corporate limits by way of plant design and operating	If negative social impacts exist that will not be in complianc e with the applicable national legal/regulatory requirements or are likely to exceed legal limits then the	Describe the operational or managemen t controls that can be implemente d as well as best practices, focusing on how to implement and operate the Project Activity, to reduce the risk of impacts that have been	Describe the monitoring approach and the parameters (KPI) to be monitored for each impact irrespective of whether it is harmful. The frequency of monitoring to be specified as well. Monitoring parameters can be quantitative or qualitative in nature along	-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.

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

Project ve	erification Report										
		project Owner(s) has/have control			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 wrt. To the BAU / baseline scenario must also mark their aspect as "harmless"	Project Activity is likely to cause harm and shall be indicated as Harmful	identified as Harmful .	with the data source			
Reference to paragraph s of Environme ntal and Social Safeguard s Standard		Paragraph 12 (a)	Paragraph 13 (c)	Paragraph 13 (d) (i)	Paragraph 13 (d) (ii)	Paragrap h 13 (d) (iii)	Paragraph 13 (e) (i)	Paragraph 12 (c) and Paragraph 13 (f)	Paragraph 23		Paragraph 24 and Paragraph 26 (a) (ii)
Social - Jobs	Long-term jobs (> 10 year) created/ lost (SJ01)	The project creates long term job opportunities during operation.	There is no legal requiremen t from local authority to create permanent employmen t from the project activity	Not Applicable	Harmless As the impact is positive in nature	Not Applicab le	Not Applicable	Number of people employed by the project will be monitored through checking payroll records or the social insurance	+1	There is no mandatory law to generate permanent employment from the project activity, However, project Owner has decided to provide training to the local people & generate employment for local people. Therefore, this parameter will be scored.	The documents like par slips employee reciords were reviewed and verified.
	New short-term jobs (< 1 year) created/ lost (SJ02)	The project creates short term job opportunities during construction.	There is no legal requiremen t from local authority to create	Not Applicable	As the impact is positive in nature	Not Applicab le	Not Applicable	Local labor force will be employed during construction period.	+1	There is no mandatory law to generate permanent employment from the project activity,	The documents like par slips employee reciords were reviewed and verified.

Project Verification Report However, project permanent employmen Owner has t from the decided to provide project training to the local activity people & generate employment for local people. Therefore, this parameter will be scored. Sources of income project There is no Not No Action Not Not 0 Employment will The documents like par slips The No job Applicable Required Applicable Applicable be provided to employee reciords generation creates legal Action were opportunities Require local increased / reduced requiremen people reviewed and verified. (SJ03) t from local d wherever possible, for people. authority to However, create parameter will not permanent be scored. employmen t from the project activity IFC Avoiding Avoiding Not No Action No Not Not 0 The project owner The HR policy of the plants was discrimination when discrimination Performanc Applicable Applicable will not make Applicable Required Action reviewed and strong hiring hiring people from e Standard-Require while employment countermeasures against different race, people results 2: Labour d decisions based discrimination were found. gender, ethnics, avoiding and on personal religion. conflicts Working characteristics marginalized conditions unrelated between to employees and job groups, people with inherent disabilities (SJ04) the requirements. The project will base employer. the employment (human rights) relationship on the principle of equal opportunity and fair treatment and will not discriminate with respect to any aspects of the employment relationship. The project will take measures to prevent and address harassment, intimidation. and/or exploitation, especially regarding women. Therefore,

Project vi	erification Report										
										parameter will not be scored.	
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.	In compliance with the EHS policy if require	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	At plant site no harmful gases or chemicals that would negatively affect the surrounding environment or livelihoods.	Not Applicable	The solar plant site does not release any harmful gases or chemicals that would negatively affect the surrounding environment or livelihoods. As a result, the project owner does not need to consider this parameter as it does not pose any impact. Therefore, this parameter will not be scored	NA
	Occupational health hazards (SHS02)	There is a possibility of physical hazards in project sites due to human intervention or technical failure or emergency	Not Applicable	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA
	Reducing / increasing accidents/Incidents/f atality (SHS03)	There is a possibility of accidents/incid ents/ near miss in project sites due to human intervention or technical failure or emergency.	The Factories Act, 1948 & EHS policy of Project Owner	Not Applicable	Harmless	Not Applicab le	Establishi ng EHS Guidelines Imparting Trainings, Keeping Sign boards Providing PPE Kits	Health & safety training to be provided to all the workers during both construction and operation phase and prior to start of work, workers will be informed about the related safety risks and precautions to be taken which may cause injury	0	The project owner will provide regular safety training to their workers about the accident hazards and risk related to specific works and preventive measures for avoiding accidents at site Therefore this parameter will not be scored.	The incident records has been reviewed and verified.

Project Ve	erification Report										
								to hand shall be provided suitable hand gloves Identificatio n and Risk Assessment (HIRA)			
	Reducing / increasing crime (SHS04)	The project activity is the installation of solar power plant. There is no possibility of crime due to the operation of the project activity.	Not Applicable	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA
	Reducing / increasing food wastage (SHS05)	The project activity is the installation of solar power plant. There is no possibility of food wastage due to the project activity	Not Applicable	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA
	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 Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA
	Efficiency of health services (SHS07)	The project activity is the installation of solar power plant. There is no involvement	Not Applicable	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA

Project Verification F	Report									
	of health services due to the project activity.									
Sanitation at waste manage (SHS08)		Hazardous and Other Wastes (Managem ent and Transboun dary Movement) Amendmen t Rules, 2016	Not Applicable	No Action Required	No Action Require d	Not Applicable	Sanitation and Waste management Facilities Provided by the Project Owner	0	As per MoEF&CC notification dated 01.03.2019 (G.S.R. 178(E)) the Occupier (developer) is not required to obtain authorization under Hazardous and Other Wastes (Management and Transboundary Movement) Amendment, Rules, 2019 if they are exempted from obtaining consent under Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981. However, Project Owner should ensure proper disposal of Hazardous Waste (DG oil, if DG is installed) through actual user, waste collector or operator of the disposal facility, in accordance with the Central Pollution Control Board guidelines. Septic tank and soak pits will be provided onsite for treatment and disposal of sewage, thereby minimizing the impacts of wastewater	The waste disposal measures were observed and verified during the on site visit.

Project Verification Report discharge. Planning of toilets, soak pits and tanks, septic waste collection areas should be away from natural drainage channels Therefore this parameter will not be scored. Other health and Not Not Not Not Applicable NA The project Not Not Not Not safetv issues activity is the Applicable Applicable Applicabl Applicab Applicable Applicable Applicable (SHS09) installation of le solar power plant. There is no involvement other health and safetv issues due to the project activity. specialized training / The project There is no Not Harmless Not Not Training +1 The project Owner The training records were Social education to local owner provides legal Applicable Applicab Applicable records/evid will provide regular reviewed and verified. Educati personnel (SE01) related requiremen safety training to job As the le ence for the on training t from local training their workers impact is according to authority to would be about the accident positive the positions hazards and risk provide maintained in nature related to specific training to by the project local people owner works preventive measures for avoiding accidents at site Therefore this parameter will be scored. Educational The project EHS policy Not No Action No Not Not 0 Project Owner The EHS policy implemented services improved of Project Required Applicable should take has been reviewed and verified. activity is the Applicable Action Applicable or not (SE02) installation of Owner Require initiative for solar d Promotion of power plant. There is education, no involvement including special educational education and services due to employment the enhancing project activity. vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement

Project ve	erification Report										
										projects. This parameter will not be scored.	
	Project-related knowledge dissemination effective or not (SE03)	Project activity transfers knowledge on new renewable energy technology.	Not Applicable	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA
	Other educational issues (SE03)	The project activity is the installation of solar power plant. There is no involvement other educational issues due to the project activity.	Not Applicable	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA
Social - Welfare	Improving/ deteriorating working conditions (SW01)	The project activity is the installation of solar power plant. There is no possibility of deteriorating working condition due to the project activity.	Not Applicable	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA
	Community and rural welfare (indigenous people and communities)	The project activity is the installation of solar power plant which creates positive impact on community and works for rural welfare.	Not Applicable	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA
	Poverty alleviation (more people above poverty level) (SW03)	The project activity involves the generation of employment which results in poverty alleviation.	Not Applicable	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA

i ioject ve	eniication Report										
	Improving / deteriorating wealth distribution/ generation of income and assets (SW04)	The project activity involves the generation of employment.	Not Applicable	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA
	Increased or / deteriorating municipal revenues (SW05)	The project activity is the installation of solar power plant. There is no involvement of municipal revenues due to the project activity.	Not Applicable	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA
	Women's empowerment (SW06) (human rights)	Project activity provides equal opportunity to women.	National Gender policy for women empowerm ent 2001	Not Applicable	No Action Required	No Action Require d	Not Applicable	Not Applicable	0	Project Owner will take initiative for Promoting gender equality, empowering women, and such other facilities for senior citizens and measures for reducing inequalities faced by socially and economically backward groups etc. Therefore, this parameter will not be scored.	The HR policy has been reviewed and verified.
	Reduced / increased traffic congestion (SW07)	The project activity is the installation of solar power plant. There is no involvement of traffic congestion due to the project activity.	Not Applicable	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA
	Exploitation of Child labour (human rights) (SW08)	The project activity is the installation of solar power plant. There is no involvement of child labour	The Child Labour (Prohibition and Regulation) Act, 1986	Not Applicable	No Action Required	No Action Require d	Not Applicable	Not Applicable	0	The project will not employ children in any manner that is economically exploitative or is likely to be hazardous or to	No child labour was observed during the on site visit.

Project Ve	erification Report										
		due to the project activity.								interfere with the child's education, or to be harmful to the child in any way. National laws related to employment of minors are to be followed. No person under the age of 14 is to be allowed to work on the site according to Indian Child Labour Therefore, this parameter will not be scored.	
	Minimum wage protection (human rights) (SW09)	The project activity is the installation of solar power plant. Employees are paid as per minimum wage rule during the construction and operation phase of the project activity.	Not Applicable	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA
	Abuse at work place (with specific reference to women and people with special disabilities / challenges) (human rights) (SW10)	Avoiding of abuse at workplace ensures safe working environment for all the workers.	Not Applicable	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA
	Other social welfare issues (SW11)	The project activity is the installation of solar power plant. There is no involvement of other social welfare issues due to the project activity.	Not Applicable	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA

Project ve	roject Verification Report										
	Avoidance of human trafficking and forced labour (human rights) (SW12)	Avoiding of human trafficking and forced labour at workplace ensures safe working environment for all the workers.	Not Applicable	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA
	Avoidance of forced eviction and/or partial physical or economic displacement of IPLCs (human rights) (CW13)	Avoidance of forced eviction results in community welfare.	Not Applicable	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA
	Provisions of resettlement and human settlement displacement (human rights)	Avoidance of resettlement and human displacement results in community welfare.	Not Applicable	Not Applicable	Not Applicabl e	Not Applicab le	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA
	Add more rows if required										
Net Sco	Net Score:		+3								
Project PSF:	Project Owner's Conclusion in PSF:			The Project Owner confirms that the Project Activity will not cause any net harm to society.							
GCC Pro	GCC Project Verifier's Opinion:			The GCC Verifier certifies that the Project Activity is not likely to cause any net harm to society.							

Appendix 7. Matrix for Demonstration of Contribution of Project to Sustainable Development

UN-level SDGs	UN-level Target	Declared Country- level		Defining Project-level SDGs					
		SDG	Project-level SDGs	Project-level Targ	gets/Actions	Contribution of Project- level Actions to SDG Targets	Monitoring	Verification 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 correspo- nding 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 ofr guidance.	Define project-leve targets/actions in a project level indicate Define the target of the project Activity achieve the project target(s).	ine with nee htors chosen. late by which is expected to	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 corresponding target, frequency of monitoring and data source	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)
Goal 1: End poverty in all its forms everywhere	NA	NA	NA	NA	NA	NA	NA	NA	NA

roject verification Report									
Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goal 3. Ensure healthy lives and promote well-being for all at all ages	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goal 5. Achieve gender equality and empower all women and girls	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goal 6. Ensure availability and sustainable management of water and sanitation for all	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all	7.2 By 2030, increase substanti ally the share of renewabl e energy in the global energy mix. 7.a By 2030, enhance	Yes	Quantity of net electricity supplied to the grid by project activity in year y	Net generation 948,448 MWh (average) Annually	7.2.1 Renewable energy share in the total energy consumption	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-	The monitoring measures for this has been confirmed during the site visit	+1

Project Verification Report			
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Project Verification Report developi ng countries particular least develope countries small island developi ng States. and landlocked developi ng countries accordan ce with their respectiv program mes of support 8.3: Project creates The records 8.3.1 Goal 8. Promote Promote Yes Project activity supports creation new At the end of for the The +1 job opportunities that will be employment and sustained, inclusive policies crediting Proportion of number of monitoring and sustainable created to help financially local generates period. informal employees measures to residents residing near to the economic growth, employment for this has support income for and financial full and productive project activity. Project protects Job sex grants to been minimum no of employment and creation labor rights and promotes safe Maintains enterprises confirmed people including decent work for all company HR will during the and and secure working minimum nos of be environments for all workers policy to create site visit growing provided long term and enterpris (including migrant worker, standard during each minimum Short women workers etc.). operating monitoring e. terms job procedures period. opportunity (SOPs) to follow and Quantity of maintain safe employment Through Project and secure will activity work monitored economic environment through development and by paying employment has been the wages as records. achieved in the per the project location

Project Verification F	кероп								
				by creating opportunities to the other allied services and indirect employment.		minimum wages act of the country.			
Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goal 10. Reduce inequality within and among countries	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goal 12. Ensure sustainable consumption and production patterns	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goal 13. Take urgent action to combat climate change and its impacts	Integrate climate change measure s into national policies, strategie s and planning Integrated in the policies of the planning in the plannin	Yes Same as describe d under goal 7	Emission reductions achieved per year	883,908 tCO ₂ e (Average) per year	13.2.2 Total greenhouse gas emission per year	Emission reduction achieved per year	Electricity produced by the renewable generating unit multiplied by an emission factor	The monitoring measures for this has been confirmed during the site visit	+1

Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development Goal 15. Protect, restore and promote	s per year	NA	NA						
and sustainably use the oceans, seas and marine resources for sustainable development Goal 15. Protect, restore and promote	NA	NA	NA	NA	NA	NA	NA	NA	NA
restore and promote									
sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	NA	NA	NA	NA	NA	NA	NA	NA	NA
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	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SUMMARY Targeted Likely to be Achieved							chieved	

Total Number of SDGs	3	3
Certification label (Bronze, Silver, Gold, Platinum, or Diamond) for the ACCs as defined in the PSF	Silver	Silver

Appendix 8. Project Monitoring Equipments Photographs



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DOCUMENT HISTORY

Version	Date	Comment
V 3.1	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 3.0	23/08/2020	 Revised version released on approval by the Steering Committee as per the GCC Program Process; Revised version contains the following changes: Change of name from Global Carbon Trust (GCT) to Global Carbon Council (GCC); Considered and addressed comments raised by the Steering Committee:
V 2.0	25/06/2019	 Revised version released for approval by the GCC Steering Committee. This version contains details and information to be provided, consequent to the latest worldwide developments (e.g., CORSIA EUC).
v1.0	01/11/2016	 Initial version released for approval by the GCC Steering Committee under GCC Program Version 1

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²⁰See ICAO recommendation for conditional approval of GCC at https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/Excerpt_TAB_Report_Jan_2020_final.pdf

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