



Project Verification Report

V3.1 - 2020

Project Verification Report

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COVER PAGE **Project Verification Report Form (PVR) BASIC INFORMATION** Name of approved GCC Project Carbon Check (India) Private Limited (CCIPL) (GCCV004/01) Verifier / Reference No. (http://globalcarboncouncil.com/wpcontent/uploads/2021/10/carbon-check-india-private-limited-(also provide weblink of approved GCC Certificate) ccipl.pdf) Individual Track1 Type of Accreditation CDM Accreditation (Active accreditation from United Nations Framework Convention on Climate Change valid till 01/06/2024; Ref no. CDM-E-0052; CDM: DOE: Carbon Check (India) Private Ltd. (unfccc.int)) ISO 14065 Accreditation https://nabcb.gci.org.in/wp-content/uploads/2023/06/004.html Valid from 28/06/2021 until 27/06/2024 Approved GCC scopes for project verification: **Approved GCC Scopes and GHG** Greenhouse Gas (GHG#-ACR) Sectoral scopes for Project Environmental No-harm (E+) Verification Social No-harm (S+) Sustainable Development Goals (SDG+) Approved GCC sectoral scopes for project verification: 1. Energy industries (renewable - / non-renewable sources) (CDM TA1.1, TA1.2) Validity of GCC approval of Verifier 08/03/2023 to 31/05/2024 Title, completion date, and Version Title: Dau Tieng 2 Solar Power Plant Project number of the PSF to which this Version 2.1, dated 09/11/2023 report applies Title of the project activity Dau Tieng 2 Solar Power Plant Project S00619 Project submission reference no. (as provided by GCC Program during GSC) Type A: Eligible GCC Project Type² as per the Project Standard Type A1

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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.

(Tick applicable project type)	☐ Type A2 – Subtype 1					
	│	B – De-re	egistered	CDI	M Projects	:
		ype B1				
	<u> </u>	ype³ B2				
Date of completion of Local stakeholder consultation	16/04/2018					
Date of completion and period of Global stakeholder consultation. Have the GSC comments been verified. Provide web-link.	GSC was conducted on 21/11/2022 – 05/12/2022 and no comments were received for this project, which can be viewed on the GSC page: https://www.globalcarboncouncil.com/global-stakeholders-					
Name of Entity requesting	consultation Monsoon C		I td			
verification service				nt Sto	ck Company	l
(can be Project Owners themselves or any Entity having authorization of Project Owners)	Dau Tieng Tay Ninh Energy Joint Stock Company					
Contact details of the	Email: amo	ewin@mor	nsooncarbo	on.co	<u>m</u>	
representative of the Entity, requesting verification service	Contact nu	mber: +84	96477040			
(Focal Point assigned for all	Address: 10 Kallang Avenue, #14-10 Aperia, Singapore 339510					
communications)						
	Vietnam					
communications) Country where project is located GPS coordinates of the Project	Vietnam Corners	La	atitude		Loi	ngitude
Country where project is located		La 11.4494	atitude 11°26'57.	.98"	Lor 106.2232	1 06°13'23.6"
communications) Country where project is located GPS coordinates of the Project	Corners					_
communications) Country where project is located GPS coordinates of the Project	Corners East	11.4494	11°26'57.	.65"	106.2232	106°13'23.6"
communications) Country where project is located GPS coordinates of the Project	Corners East North	11.4494 11.4532	11°26'57.	.65"	106.2232 106.2339	106°13'23.6" 106°14'2.09"
Country where project is located GPS coordinates of the Project site(s) Applied methodologies	Corners East North West South	11.4494 11.4532 11.4472 11.4366	11°26'57. 11°27'11. 11°26'50. 11°26'11.	.65" .09" .88"	106.2232 106.2339 106.2444 106.2518	106°13'23.6" 106°14'2.09" 106°14'40.0" 106°15'6.52"
Country where project is located GPS coordinates of the Project site(s)	Corners East North West South	11.4494 11.4532 11.4472 11.4366	11°26'57. 11°27'11. 11°26'50. 11°26'11.	.65" .09" .88"	106.2232 106.2339 106.2444 106.2518	106°13'23.6" 106°14'2.09" 106°14'40.0"
Country where project is located GPS coordinates of the Project site(s) Applied methodologies (approved methodologies of GCC or CDM can be used) GHG Sectoral scopes linked to the	Corners East North West South ACM0002 - sources (ve	11.4494 11.4532 11.4472 11.4366	11°26'57. 11°27'11. 11°26'50. 11°26'11. ected elect	.65" .09" .88" tricity	106.2232 106.2339 106.2444 106.2518	106°13'23.6" 106°14'2.09" 106°14'40.0" 106°15'6.52"
Country where project is located GPS coordinates of the Project site(s) Applied methodologies (approved methodologies of GCC or CDM can be used)	Corners East North West South ACM0002 - sources (ve	11.4494 11.4532 11.4472 11.4366 • Grid-connersion 21.0)	11°26'57. 11°27'11. 11°26'50. 11°26'11. ected elected	.65" .09" .88" tricity	106.2232 106.2339 106.2444 106.2518	106°13'23.6" 106°14'2.09" 106°14'40.0" 106°15'6.52" from renewable
Country where project is located GPS coordinates of the Project site(s) Applied methodologies (approved methodologies of GCC or CDM can be used) GHG Sectoral scopes linked to the	Corners East North West South ACM0002 - sources (ve	11.4494 11.4532 11.4472 11.4366 Grid-connersion 21.0)	11°26'57. 11°27'11. 11°26'50. 11°26'11. ected elector	.65" .09" .88" tricity	106.2232 106.2339 106.2444 106.2518 r generation GHG Sectoral	106°13'23.6" 106°14'2.09" 106°14'40.0" 106°15'6.52" from renewable
Country where project is located GPS coordinates of the Project site(s) Applied methodologies (approved methodologies of GCC or CDM can be used) GHG Sectoral scopes linked to the applied methodologies	Corners East North West South ACM0002 - sources (ve	11.4494 11.4532 11.4472 11.4366 • Grid-connersion 21.0) Sectoral S	11°26'57. 11°27'11. 11°26'50. 11°26'11. ected elector cope O 14064-3 Requireme	.65" .09" .88" tricity	106.2232 106.2339 106.2444 106.2518 generation GHG Sectoral Energy (renerence renewable	106°13'23.6" 106°14'2.09" 106°14'40.0" 106°15'6.52" from renewable

 $^{^3}$ GCC Project Verifier shall conduct Project Verification for all project types except $\mathsf{B}_2.$

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	 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)
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 and therefore confirms the following:	The GCC Project Verifier "Carbon Check (India) Private Limited", certifies the following with respect to the GCC Project Activity "Dau Tieng 2 Solar Power Plant Project". The Project Owner has correctly described the Project Activity in the Project Submission Form (version 2.1, dated 09/11/2023) including the applicability of 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 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 323,490 tCO _{2e} per year, 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:

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	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 Sustainability Development Goals (SDGs), complies with the Project Sustainability Standard, and contributes to achieving a total of 4 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 GCC rules ⁵ and therefore recommends GCC Program to register the Project activity with above mentioned labels.
	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.
Project Verification Report,	CCIPL1598/GCC/VAL/DTSP/20221007, Version 01
reference number and date of approval	Date of approval: 09/11/2023
Name of the authorised personnel of GCC Project Verifier and his/her signature with date	Vixash L. Sil
	Name: Vikash Kumar Singh, Compliance Officer
	Date: 09/11/2023
	ı

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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

1. PROJECT VERIFICATION REPORT

Section A. Executive summary

>>

Brief Summary of the Project Activity:

The project activity involves the installation of 240 MWp/ 200MWe Solar Power Plant (SPP) located along the western edge of Dau Tieng Reservoir (the Reservoir) in Duong Minh District, Tay Ninh Province. The aim of the project is to generate electricity from renewable sources of energy (solar) and lead to a reduction in GHG emissions. The energy generated is being supplied to the Vietnam National grid.

The project geodetic coordinates are as below table.

Corners	La	atitude	Loi	ngitude
East	11.4494	11°26'57.98"	106.2232	106°13'23.6"
North	11.4532	11°27'11.65"	106.2339	106°14'02.09"
West	11.4472	11°26'50.09"	106.2444	106°14'40.0"
South	11.4366	11°26'11.88"	106.2518	106°15'06.52"

The project is in operation since 13/06/2019 as per verified against the Commercial Operation Decision (COD) No. 2772/EPTC-KDMD issued by EVN /23/. The emission reductions (annual average) from the project activity are estimated to be 323,490 tCO₂e per year over the crediting period.

Scope of Verification:

Carbon Check (India) Private Limited (CCIPL) has been contracted by Monsoon Carbon Pte. Ltd. (Entity having authorization of Project Owners) as per contract no. CIPL1598/GCC/VAL/DTSP/20221007, dated 07/12/2022 to perform Project Verification of concerned GCC Project Activity and implemented safeguards aimed to achieve environmental and social impacts without causing any net harm. The contribution of the project activity towards the United Nations Sustainable Development Goals and CORSIA requirements would also be verified. 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, GCC E+, GCC Sh-, applied CDM approved methodology, tools and other relevant rules and requirements established under Program process. CCIPL is accredited for GCC Scopes (GHG, E+, S+, SDG+) and all 16 GHG sectoral scopes including sectoral scope 1. So, the CCIPL is eligible for conducting third-party independent external verification. CCIPL and its project verification team are independent of the proposed GCC project.

Verification Process and Methodology

The verification process was undertaken by a competent verification team and involved the following,

- the desk review of documents and evidence submitted by the project owner in context of the reference rules and guidelines issued by GCC,
- undertaking/conducting site visit, interview or interactions with the representative of the project owners/representatives,
- reporting audit findings with respect to clarifications and non-conformities and the closure of the findings, as appropriate and
- preparing a draft verification opinion based on the audit findings and conclusion.
- technical review of the draft and final verification opinion along with other documents as appropriate by an independent competent technical review team

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• finalization of the verification opinion (this report)

Conclusion

The review of the PSF /1/ /2/, supporting documentation and subsequent follow-up actions (onsite audit and interviews) have provided CCIPL with sufficient evidence to determine the fulfilment of stated criteria. CCIPL is of the opinion that the project activity "Dau Tieng 2 Solar Power Plant Project" as described in the final PSF /2/ meets all relevant requirements of GCC and host country (legal requirements for producing power) criteria and has correctly applied the methodology ACM0002, version 21.0. 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 E+ and S+ and 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 4 SDGs and therefore achieve Gold SDG certification label.

The Project Activity complies with all the applicable requirements 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.

Therefore, the project is being recommended to GCC Steering Committee for request for registration.

Section B. Project Verification team, technical reviewer and approver

>>

B.1. Project Verification team

No.	Role		Last name	First name	Affiliation	lı	nvolve	ment i	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 & Local expert	ĒR	Nguyen	H Ngoc Trang	Central office	Х	Х	Х	х

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

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No.	Role	Type of	Last name	First name	Affiliation
		resource			(e.g. name of
					central or other
					office of GCC
					Project Verifier or
					outsourced entity)
1.	Technical reviewer	IR	С	Indumathi	CCIPL
2.	Approver	IR	Singh	Vikash Kumar	CCIPL

Section C. Means of Project Verification

C.1. Desk/document review

>>

The project verification was performed primarily based on the review of the all the documents related to the PSF /1/ /2/, project details, eligibility criteria, baseline, additionality, monitoring practices adopted and followed for the operation of the project and environmental impact aspects and the supporting documentation. This process included review of data and information related to project design, project implementation, applicable conditions of the methodology, baseline, and additionality, estimated emission reductions, monitoring plan, environmental impacts and local stakeholder consultation, GHG emission reductions (ACCs), environmental no-net harm label (E+), social no net harm label (S+), Gold SDG label (SDG+), CORSIA+. The project verification team has applied standard auditing techniques during the entire project verification process. A desk review was done to assess the project details as per PSF template, Applicability and Appropriateness of methodology used, Compliance with relevance laws and regulation, correctness of application of baseline and monitoring methodology, demonstration of Additionality, Monitoring plan, Local stakeholders' comments, supporting documents mentioned in the PSF, local stakeholder consultation reports, documents to support E+, S+, SDG+ and CORSIA(C+).

The PSF v1.0 /1/ (hereinafter referred to as initial PSF) complying GCC was submitted by the project owner and additional background documents related to the emission reductions are reviewed as an initial step of the project verification process. The subsequent steps involved the identification of corrective action requests and clarification requests (CARs, CLs and FARs) which are presented in Appendix 4 of this report. As a result, project owner has submitted revised PSF /2/ (hereinafter referred to as final PSF). A complete list of all documents and records reviewed is as attached in Appendix 3 of this report.

C.2. On-site inspection

	Duration of on-site inspection: 15/12/2022									
No.	Activity performed on-site	Site location	Date	Team member						
1.	Project site inspection : including PO	Project's office at	15/12/2022	Nguyen H Ngoc						
	Office, project site (including solar farm,	Duong Minh		Trang						
	the central control room and data	District, Tay Ninh								
	acquisition and processing system	Province								
	Monitoring device and installed position.									
	Site visit to the substation where gateway									

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	meter and backup meter (if applicable) are installed.			
2.	Interview with the PO, plant operators, and local stakeholder, government sector etc.	Project's office at Duong Minh District, Tay Ninh Province	15/12/2022	Nguyen H Ngoc Trang
3.	Document Review: - Reference to available information relating to projects or technologies related to the proposed GCC project activity under verification Review, based on the selected methodology and, where applicable, the selected standardized baseline, of the appropriateness of formulae and accuracy of calculations.	Project's office at Duong Minh District, Tay Ninh Province	15/12/2022	Nguyen H Ngoc Trang

C.3. Interviews

No.		Interview		Date	Date Subject		
	Last name	First name	Affiliation			member	
1.	Nguyen	Thi Bich Loan	HSE Officer of Dau Tieng 2 Solar power plant	15/12/2022	 Monitoring of social and environmental impact of the project Monitoring of SDG contribution on Health Safety and Environment Employment contract & training Company HSE & HR policy 	Nguyen H Ngoc Trang	
2.	Vu	Hung Cuong	CSR Manager of Dau Tieng 2 Solar power plant	15/12/2022	 Monitoring of social and environmental impact of the project Monitoring of SDG contribution on Corporate Social Responsibility Company CSR policy Contribute to local welfare 	Nguyen H Ngoc Trang	
3.	Nguyen	Phuc Thinh	O&M Manager of Dau Tieng 2 Solar power plant	15/12/2022	 Project approval/ licenses/ permits Monitoring of electricity generation. Monitoring system & calibration Monitoring of SDG contribution on human resources Employment contract & training PPA 	Nguyen H Ngoc Trang	
4.	Lam	Hieu Thuan	Operator of Dau Tieng 2	15/12/2022		Nguyen H Ngoc Trang	

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			Solar power plant		Project technology, designing, operational	
5.	Nguyen	Ngoc Son	Operator of Dau Tieng 2 Solar power plant	15/12/2022	lifetime maintenance and operation capability. • Project monitoring and management plan.	Nguyen H Ngoc Trang
6.	Vo	Tan Phat	Operator of Dau Tieng 2 Solar power plant	15/12/2022	 Power connecting system and connecting measures Employment contract & training Company HR policy 	Nguyen H Ngoc Trang
7.	Vo	Thanh Hoa	PV Cleaning team/ Local stakeholder	15/12/2022	Panel cleaning processLocal stakeholder consultation process	Nguyen H Ngoc Trang
8.	Tran	Quoc Nhan	PV Cleaning team/ Local stakeholder	15/12/2022	 Project contribution for SDG, Social & Environment Grievance mechanism 	
7.	Но	Nhat Thanh	Consultant - Monsoon Carbon	15/12/2022	 Project Design Proposed Technology to be used. Investment analysis & decision making & project additionality Environmental Management Plan/ EIA Management structure 	Nguyen H Ngoc Trang
8.	Bairstow	James	Consultant - Monsoon Carbon	15/12/2022	with roles and responsibilities Socio-economic Impacts of the project activity Sustainability aspects of the project Baseline Scenarios and alternatives Regional/National government	
9.	Nguyen	Thi Thanh Hien	Consultant - Monsoon Carbon	15/12/2022	policies/sectoral policies related to solar power projects. Monitoring Plan and process to be adopted. Information and carbon project consideration.	

C.4. Sampling approach

>>

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

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Areas of Project Verification findings	Applicable to Project Types	No. of CL	No. of CAR	No. of FAR		
Green House Gas (GHG)						
Identification and Eligibility of project type	A ₁ , A ₂ , B ₁ , B ₂	-	-	-		
General description of project activity	A ₁ , A ₂ , B ₁ , B ₂	CL 01 CL 02	CAR 01	-		
Application and selection of methodologies and standardized baselines	A ₁ , A ₂ , B ₁ , B ₂	-	-	-		
 Application of methodologies and standardized baselines 	A ₁ , A ₂ , B ₁ , B ₂	-	-	-		
 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	CL 03	-	-		
 Project boundary, sources and GHGs 	A ₁ , A ₂ , B ₁ , B ₂	-	-	-		
- Baseline scenario	A ₁ , A ₂ , B ₁ , B ₂	CL 04	-	-		
 Demonstration of additionality including the Legal Requirements test 	A ₁ , A ₂ , B ₁ , B ₂	CL 05	CAR 05	-		
Estimation of emission reductions or net anthropogenic removals	A ₁ , A ₂ , B ₁ , B ₂	-	-	-		
- Monitoring plan	A ₁ , A ₂ , B ₁ , B ₂	CL 06 CL 08	CAR 02	-		
Start date, crediting period and duration	A ₁ , A ₂ , B ₁ , B ₂	-	-	-		
Environmental impacts	A ₁ , A ₂ , B ₁ , B ₂	-	-	-		
Local stakeholder consultation	A ₁ , A ₂ , B ₁	-	CAR 03	-		
Approval & Authorization- Host Country Clearance	A ₁ , A ₂ , B ₁ , B ₂	-	CAR 04	FAR 01		
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 CERTI	FICATION LABEL	. S				
Environmental Safeguards (E+)	A ₁ , A ₂ , B ₁	CL 07	-	-		
Social Safeguards (S+)	A ₁ , A ₂ , B ₁	CL 07	-	-		
Sustainable development Goals (SDG+)	A ₁ , A ₂ , B ₁	CL 08	-	-		
Authorization on Double Counting from Host Country (only for CORSIA)	A ₁ , A ₂ , B ₁	-	CAR 04	FAR 01		
CORSIA Eligibility (C+)		-	CAR 04	FAR 01		
Total		08 CLs	05 CARs	01 FAR		

Section D. Project Verification findings

D.1. Identification and eligibility of project type

Means of Verification	Project	Justification on the eligibility criteria for Project Type:		
		Type A: These include projects that are not registered under any GHG/ non-GHG Program, including the CDM		
		The project has not been registered or under validation or in process of registration under any GHG/ non-GHG program. The verifier has reviewed VERRA registry /B09/GS registry /B10/, CDM website /B08/ and can confirm that this project is not registered or in process of registration under VERRA, GS or CDM.		
		The verification team also cross-checked with other ETS (domestics and international) and non-GHG program (such as I-REC) (https://www.irecstandard.org/vietnam/) /B11/ and confirmed that the project is		

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currently not registered with any ETS and non-GHG program.

The project owner also provides their declaration /41/ that the ACC's generated from the project activity will not be double counted in any other mechanism. Thus, the verification confirmed that all the project has not been registered or under validation or in process of registration under any GHG/ non-GHG program or registered with any ETS.

Type A2 - subtype 1

The commercial operation of the project activity started since 13/06/2019. It was verified against the COD No. 2772/EPTC-KDMD issued by EVN /23/. Their start date of operation was after 01/01/2016 but before 05/07/2022. This project also made the initial submission to GCC Program on 01/07/2022 prior to 05/07/2022 as can be seen in on project web interface (https://projects.globalcarboncouncil.com/project/1067), this is in line with para 11 clause a, sub clause ii) of Project Standard v3.1. Therefore, the project activity has identified itself as A2 category - subtype 1 is corrected according to Clarification No 1., v1.3 table 1, section 6.

 Common Eligibility Criteria for All Project Types as per para 14-16 of GCC Project Standard /B01/

1) Complies with the eligibility requirements of one of the project's types

It has been justified above that project complied with Type A2 – subtype 1 category.

2) Has started operations, and begun generating emission reductions after 1 January 2016

The commercial operation of the project activity started since 13/06/2019. It was verified by reviewing the COD No.2722/EPTC-KDMD, issued by EVN /23/. So, project has begun generating emission reductions after 01/01/2026.

So, project complied with this requirement.

3) Complies with GCC rules related to contribution to the UN SDGs, E+ label, S+ label, submission of Host Country Attestation on Double Counting

The project activity also qualifies for other voluntary certification labels. (Please refer to Section D.10, D.11, D.12, D.14 for more detailed justification).

Voluntary Labels	Applied by the project
Achieving the United Nations Sustainable	Yes/ Gold
Development Goals (SDG+)	
Environmental No-net harm (E+)	Yes
Social No-net harm (S+)	Yes
CORSIA (C+)	Yes

4) Project is not required by a legal mandate and does not implement a legally enforced mandate

The project is not required by a legal mandate, and they do not implement as the legally enforced mandate as verified from all applicable legal and regulatory requirements includes the solar project related regulations and policies below:

 Electricity Law No.28/2004/QH11, ratified by National Assembly, dated 03/12/2004 and its amendment No 24/2012/QH13, ratified by National Assembly, dated 20/11/2012 /A03/

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- Decision No. 2068/QD-TTg, approving the development strategy of Renewable Energy of Vietnam by 2030 with a vision to 2050, ratified by Prime Minster, dated 25/11/2015 /A04/
- Decision No. 428/QD-TTg, the approval of revisions to the National Power Development Plan from 2011 to 2020 with vision extended to 2030, ratified by Prime Minister, dated 18/03/2016 /A05/
- Decision No.11/2017/QD-TTg on Mechanism for encouragement of Development of Solar Power in Vietnam, ratified by the Prime Minister, dated 11/04/2017 /A06/

Those do not restrict or empower any authority to restrict the fuel choice for power generation and the applicable environmental regulations Law on Environmental Protection No. 72/2020/QH14, ratified by National Assembly, dated 17/11/2020 /A02/ & Law on Investment No 61/2020/QH14, ratified by National Assembly, dated 17/06/2020 /A01/ do not restrict/ enforce the use of solar energy and there is no legal requirement on the choice of a particular technology.

Thus, the implementation of project activity is a voluntary initiative and is not mandatory or a legal requirement.

5) Complies with all applicable host country legal requirement

This project activity complies with all the applicable host country legal requirements includes:

- Law on Investment No 61/2020/QH14, ratified by National Assembly, dated 17/06/2020 /A01/
- Law on Environmental Protection No. 72/2020/QH14, ratified by National Assembly, dated 17/11/2020 /A02/
- Electricity Law No.28/2004/QH11, ratified by National Assembly, dated 03/12/2004 and its amendment No 24/2012/QH13, ratified by National Assembly, dated 20/11/2012 /A03/
- Decision No. 2068/QD-TTg, approving the development strategy of Renewable Energy of Vietnam by 2030 with a vision to 2050, ratified by Prime Minster, dated 25/11/2015 /A04/
- Decision No. 428/QD-TTg, the approval of revisions to the National Power Development Plan from 2011 to 2020 with vision extended to 2030, ratified by Prime Minister, dated 18/03/2016 /A05/
- Decision No.11/2017/QD-TTg on Mechanism for encouragement of Development of Solar Power in Vietnam, ratified by the Prime Minister, dated 11/04/2017 /A06/

The verifier has reviewed all the regulations above and confirmed that project has ensured compliance with legal requirements as it has acquired Investment License /5/, approved EIA report /10/ & EIA approval /12/, Approved FSR /7/ & FSR approval decision /8/ Construction permit /13/, COD /23/, PPA /9/ from the EVN prior to the start of the commercial operation of the project.

6) Delivers real, measurable and additional emission reductions compared to baseline.

The project activity also delivers real, measurable and additional emission reduction of $323,490 \text{ tCO}_2\text{e}$ annually (average value over the crediting period) as per verified ER sheet /3/ as compared to the baseline scenario. (Please refer to D.3.6 for the detailed justification on this).

7) Applies CDM or GCC baseline methodology

The project activity with total capacity of 240 MWp/ 200 MWe applies an approved CDM monitoring and baseline methodology ACM0002 Grid-connected electricity

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	generation from renewable sources, version 21.0 /B03/. (Please refer to section D.3.1 for the justification on applicability of this methodology).
Findings	No finding identified
Conclusion	In conclusion, the project activity was found eligible as per the requirements under section 4 & 5.2 of the GCC PS /B01/ & Clarification No.1., v1.3 table 1, section 6. These requirements were verified from the documents /23/ submitted by the project owner. Further verification team cross checked the other GHG Programme like Clean Development Mechanism (CDM) Registry /B08/, VERRA Registry /B09/, Gold Standard (GS) Registry /B10/ and voluntary non-GHG Programs like I-REC /B11/, for the information regarding the consistency of the title of the project activity, GPS coordinates, legal ownership of the Project activity and confirmed that the project was not submitted or registered under any other GHG programmes and voluntary /non-voluntary non-GHG Programs.

D.2. General description of project activity

Means	of	Project	
Verification			

The project activity is installation of a 240MWp / 200 MW SPP at a site where there was no renewable power plant operating prior to implementing the project activity (Greenfield plant). It has been verified by reviewing of Investment License of the project /5/ Approved FSR /7/, PPA /9/ COD /23/ signed between PO & EVN.

The project generated average 393,074 MWh/year and exported to the Vietnam National Grid through Grid Connection Agreement No. 1291/UBND-KTN /17/, issued by Tay Ninh Province, People's committee & PPA /9/ signed with EVN and therefore displacing 323,490 tCO₂e per year. In the absence of the same, the electricity requirement would have been met from fossil fuel intensive national grid and by the addition of new generation sources into the grid. Therefore, the grid connected power plants has been selected as the baseline appropriately. 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 activity is located in Dau Tieng Reservoir (the Reservoir) in Duong Minh District, Tay Ninh Province, Vietnam. The coordinates of the physical site of the project activity are mentioned in section A of this report. The location was checked with the help of satellite images and compass device during onsite visit and also found to be consistent with Investment License /5/ & Land Rental Decision No.1228/QD-UBND /20/ & Land Use Right Certificate No. 694647 /21/ issued by People's committee of Tay Ninh Province.

The solar power plant constitutes of 727,290 units of Jinko Solar PV panel, 330 Wp/each panel & 80 (eighty) 2,550 KWe TMEIC inverters. This technical detail has been verified by onsite visit & cross-check with EPC & supply agreement signed between PO and Power China Huadong Engineering Corporation Limited, dated 14/06/2018 /15/ with specification of technical details of equipment supply /26/. The power generated by SPP fed to the national grid via 1.4 km 220kV transmission line from the substation onsite to the national grid connection point Binh Long – Tay Ninh. This has been verified by reviewing the single line diagram /22/ and PPA /9/

The project has been licensed to operate for at least 20 years verified by the PPA /9/ signed between PO & EVN. The Project Owners have fixed the crediting period of 10 years which is in accordance with the GCC program manual and will generate an estimated 323,490 tCO₂e emission reductions annually.

The project activity is described as Type A2 - subtype 1 and has applied CDM methodology ACM0002, Version 21.0 /B03/ and falls into the large-scale category (as per the applied CDM methodology).

In addition to generating emission reductions the solar power plant also qualifies for

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	other voluntary certification labels		
	Voluntary Labels	Applied by the project	Score/ Label
	Achieving the United Nations Sustainable Development Goals (SDG+)	Yes	4/ Gold
	Environmental No-net harm (E+)	Yes	+5
	Social No-net harm (S+)	Yes	+4
	CORSIA (C+)	Yes	N/A
	electricity was generated mainly through for project scenario the electricity is generated the CO ₂ emissions. Thus, non-application to be acceptable as the project boundary do in the project scenario as per the applied m	by the solar power portion of GWP in this projues not include any	plant thereby reducing ect activity was found
	The description in the PSF /2/ includes sufthe project activity. Further verification programmes like Clean Development Med Registry /B09/, Gold Standard (GS) Registr GHG Programs like IREC, Renewable Ener Vietnam for the information regarding the activity, GPS coordinates, Legal Ownership project was part of any other GHG Proverification. It was confirmed that the involve project under any other GHG/non GHG pro	team cross checthanism (CDM) Responsible (CDM) R	ked the other GHG egistry /B08/, VERRA ary/non voluntary non-C) Mechanism /B11/ in the title of the project wity to determine if the mmencement of this have not submitted the CC.
Findings	CL01, CL02 were raised and satisfactorily of		
Conclusion	The project description was verified based of /15/ /26/. Based on the review of document details provided in the PSF /2/ is found according to the review of document details provided in the PSF /2/ is found according to the review of the re	s and by means of	onsite verification the

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

D.3.1 Application of methodology and standardized baselines

Weans of Project Verification ACM0002 Grid-connected electricity generation from renewable sources, version – 21.0			
	Applicability Criterion	Verifier Opinion	
	Para 4 of the applied methodology: This methodology is applicable to grid- connected renewable energy power generation project activities that: (a) Install a Greenfield power plant; (b) Involve a capacity addition to (an) existing plant(s); (c) Involve a retrofit of (an) existing operating plant(s)/unit(s); (d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or (e) Involve a replacement of (an) existing plant(s)/unit(s).	The project involves 240MWp / 200 MW SPP by Dau Tieng Tay Ninh Energy Joint Stock Company, at a site where there was no renewable power plant operating prior to implementing the project activity (Greenfield plant). The electricity generated from project activity is exported to the Vietnam National grid through Connection Agreement /27/ & PPA /9/ signed with EVN. 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	

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plants and by the addition of new generation sources.

Thus, the project activity is projected on an average to generate 393,074 MWh/year as per approved FSR /7/ electricity and is estimated to displacing 323,490 tCO₂e annually over the crediting period.

This was verified through the COD /23/ & PPA /9/ submitted by the PO and confirmed the requirement.

Para 5 of the applied methodology:

In case the project activity involves the integration of a BESS, the methodology is applicable to grid-connected renewable energy power generation project activities that:

- (a) Integrate BESS with a Greenfield power 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);
- (d) Integrate a BESS together with implementing a retrofit of (an) existing solar photovoltaic or wind power plant(s)/unit(s).

Para 6 of the applied methodology:

The methodology is applicable under the following conditions:

- (a) Hydro power plant/unit with or without reservoir, wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit;
- (b) In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power capacity addition projects) the existing plant/unit started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion, retrofit, or rehabilitation of the plant/unit has been undertaken between the start of this minimum historical reference period and the implementation of the project activity;
- (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

This condition is not applicable for the project activity. The project activity is the installation of a new grid connected renewable solar power project and does not involve the integration of a Battery Energy Storage System (BESS).

This was verified onsite observation and reviewing different documents includes Approved FSR /7/, FSR approval decision /8/, EPC & Supplying agreement /15/ and COD /23/.

This is not applicable as the project activity is the installation of solar panels to generate electricity.

This was verified onsite observation and reviewing different documents includes Approved FSR /7/, FSR approval decision /8/, EPC & supplement agreement /15/ and COD /23/

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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.

Para 7 of the applied methodology:

In case of hydro power plants, one of the following conditions shall apply:

- (a) The project activity is implemented in existing single or multiple reservoirs, with no change in the volume of any of the reservoirs; or
- (b) The project activity is implemented in existing single or multiple reservoirs, where the volume of the reservoir(s) is increased and the power density, calculated using equation (7), is greater than 4 W/m2; or
- (c) The project activity results in new single or multiple reservoirs and the power density, calculated using equation (7), 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 (7), is lower than or equal to 4 W/m2, all of the following conditions shall apply:
- (i) The power density calculated using the total installed capacity of the integrated project, as per equation (8), 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.

Para 8 of the applied methodology:

In the case of integrated hydro power projects, project participants shall:

- (a) Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project; or
- (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

This is not applicable as the project activity is the installation of solar panel to generate electricity and not a hydro power project.

This was verified onsite observation and reviewing different documents includes Approved FSR /7/, FSR approval decision /8/, EPC & supplement agreement /15/ and COD /23/.

This is not applicable as the project activity is the installation of a new solar power plants and is not an integrated hydropower project.

This was verified onsite observation and reviewing different documents includes Approved FSR /7/, FSR approval decision /8/, EPC & supplement agreement /15/ and COD /23/.

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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 of five years prior to the implementation of the CDM project activity.

Para 9 of the applied methodology:

The methodology is not applicable to:

- (a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site:
- (b) Biomass fired power plants/units.

This is not applicable as the project activity is the installation of a new solar power plants and does not involve switching from fossil fuels to renewable energy sources or biomass fired power plant.

This was verified by onsite observation and reviewing different documents includes Approved FSR /7/, FSR approval decision /8/, EPC & supplement agreement /15/ and COD /23/.

Para 10 of the applied methodology:

In the case of retrofits, rehabilitations, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is "the continuation of the current situation, that is to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance".

Para 11 of the applied methodology: In addition, the applicability conditions included in the tools referred to below apply. This is not applicable as the project activity is the installation of a new solar power plants and no retrofits, rehabilitations or capacity additions, etc.

This was verified by onsite observation and reviewing different documents includes Approved FSR /7/, FSR approval decision /8/, EPC & supplement agreement /15/ and COD /23/

Justification for applicability conditions included in the tools as tables below.

TOOL 07: Tool to calculate the emission factor for an electricity system, Version 7.0.

Paragraph 3 states "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 solar panels that generate electricity and subsequently export to National grid. In the absence of the project activity, the equivalent amount of power would have been drawn from the Vietnam national 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 factors OM, BM and CM, calculated using this tool and same was explained in section D.3.4 of this report. Thus, the applicability criterion is met.

Paragraph 4 states "Under this tool, the emission

The project activity has chosen the

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factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants. In the latter case, two sub-options under step 2 of the tool are available to the project participants, i.e. option Ila and option Ilb. If option Ila is chosen, 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 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."

Paragraph 5 states "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."

Paragraph 6 states "Under this tool, the value applied to the CO₂ emission factor of biofuels is zero"

emission factor based on calculation performed by MONRE. This has been confirmed from the most updated Emission factor of National grid calculation document /A14/ published by MONRE in their website, dated 31/12/2022.

By reviewing the document, the verification team can further confirm 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 of the report. The criteria were found to be met.

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

There are no biofuel power plants in the Host country as confirmed by reviewing **Emission factor of National grid calculation document** published /A14/ by MONRE in their website, dated 31/12/2022.

Hence the condition is not applicable.

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

Paragraph 9 states "The use of the "Tool for the demonstration and assessment of additionality" is not mandatory for project participants when proposing new methodologies. Project participants may propose alternative methods to demonstrate additionality for consideration by the Executive Board. They may also submit revisions to approved methodologies using the additionality tool."

Paragraph 10 states "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.

The project owner does not propose any new methodologies to demonstrate additionality.

The methodology is approved in CDM and the tool is included by the same approved methodology ACM0002 version 21.0. Thus, the application of this tool was found to be acceptable, and the applicability criterion is met.

TOOL 23: Additionality for first-of-its-kind project activities, Version 3

This methodological tool is applicable to project activities that wish to use the "first-of-its kind" approach to demonstrate additionality and that use versions of baseline and monitoring methodologies, or the "Tool for the demonstration"

Project activity wish to demonstrate its additionality by using the "first-ofits kind" approach. Hence this tool is applicable.

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	and assessment of additionality" or the "Combined tool to identify the baseline scenario and demonstrate additionality", which allow using the "first-of-its-kind" approach for demonstrating additionality. TOOL 10: Tool to determine the remaining life.	fetime of equipment, version 01	
	Project participants may use one of the following options to determine the remaining lifetime of the equipment: (a) Use manufacturer's information on the technical lifetime of equipment and compare to the date of first commissioning; (b) Obtain an expert evaluation; (c) Use default values.	As per the tool, option (a), the PO has consider using manufacturer's information on technical lifetime of equipment and compare to the date of first commissioning. Hence this tool is applicable.	
Findings	CL 03, CAR 01 were raised and satisfactorily cl details	osed. Refer to Appendix 4 for	
Conclusion	The verification team confirms that it has critically assessed each applicability condition listed in the selected methodology and the relevant information contained in the PSF /2/ against these criteria. The approved methodology: ACM0002 "Grid connected electricity generation from renewable sources" (Version 21.0) /B03/ is correctly quoted and is identical to the most updated version available on the UNFCCC website. The applied version of the baseline and monitoring methodology /B03/ is valid at the time of submission for stakeholder consultation and request for registration. All applicability conditions of the applied methodology and applicable Tools are being		
	met and the PSF /2/ 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	The project verification team has checked whether any clarification on applicability of
Verification	methodology, tool and/or standardized baseline to the proposed GCC project activity
	has been issued using the following means of verification such as review of GCC
	website. Since the applicability of methodology was found to be fulfilled, further
	clarification to the methodology were not required.
Findings	No finding identified
Conclusion	This is not applicable as there is no request for clarification sought by the project
	owner. The project complies with the requirements of the applied methodology.

D.3.3 Project boundary, sources and GHGs

Means of Project Verification	As per §22 of the applied methodology ACM0002 (version 21.0) /B03/, the boundary of project activity confines to "The spatial extent of the project boundary includes the project power plant/unit and all power plants/units connected physically to the electricity system that the CDM project power plant is connected to". Using a diagrammatic approach, the components of the project boundary mentioned in section B.3 of the PSF were found to be in compliance with para 22 of the applied methodology.
	Verification team also confirms that the project boundary for the project activity is based on the applied methodology /B03/ and the sources and gases within the

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	boundary have been considered appropriately. The verification team also cross-check if any diesel generators onsite during onsite interviews with operators and PO and find that there is a diesel generator which is used for emergency back-up only which can be neglected according to applied methodology. There is no other source of emission.
	The project boundary is clearly depicted with the help of a line diagram in section B.3 of the PSF /2/ and duly verified by the verification team via Approved FSR /7/, FSR approval decision /8/, Investment License /5/ PPA /9/, Test Run Report /24/, COD /23/, approved EIA report /10/, EIA approval /12/ and was found appropriate.
	The verification team was able to assess that complete information regarding the project boundary has been provided in PSF /2/ and could be assured from the line diagram.
Findings	No finding identified
Conclusion	 The project verification team was able to assess that complete information regarding the project boundary has been provided in PSF /2/ 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. This is in conformance with §44 of GCC PS (v3.1) /B01/.

D.3.4 Baseline scenario

Means of Project Verification

The procedure to identify the most plausible baseline scenario derived from the applied methodology has been applied correctly and is transparently and sufficiently documented in the PSF /2/.

As prescribed by §22 of the methodology ACM0002 (version 21.0) /B03/, the baseline scenario is generalised by the following statement:

"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 defined in the PSF /2/, the project activity will involve setting up of renewable energy technology to produce electricity and supply to the grid. In the absence of the project activity, the equivalent amount of electricity would have been supplied by the Vietnam national grid, which is fed majorly based on 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 Vietnam National 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 Decision No. 2068/QD-TTg /A04/; Decision No. 428/QD-TTg /A05/ & Decision No.11/2017/QD-TTg /A06/, etc 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 Law on Environmental Protection No. 72/2020/QH14, ratified by National Assembly, dated 17/11/2020 /A02/ & Law on Investment No 61/2020/QH14, ratified by National Assembly, dated 17/06/2020 /A01/ 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 emissions-intensive 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. Also, these policies have been implemented since the adoption by the COP of the CDM M & P (decision 17/CP.7, 11 November 2001). Hence the project owner has not

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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 paragraph 24 of 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. 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 tCO_2/MWh .

Determination of Grid Emission Factor (EFgrid,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 Emission factor of National grid calculation document No. 1278/BDKH-TTBVTOD, published by MONRE, dated 31/12/2022 /A13/ 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, 2020 and 2021) of Simple Operating Margin and Build Margin of current year (2021) 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 Vietnam national grid.

In accordance with "Tool to calculate the emission factor for an electricity system", 'Simple OM' is the methodological choice out of four options of calculating OM emission factor due to due to the current state of data collected in Vietnam and the percentage of electricity output from low operating cost or running marginal cost (LCMR) sources in the last 5 years on average is less than 50% of the total electricity output of the whole country.

Project Owner have rightly calculated simple OM emission factor calculation as the share of low cost / must run resources of the selected grid over the five most recent years (2017, 2018, 2019, 2020, 2021) which is less than 50% of the gross grid generation. 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 $0.8230 \ tCO_2/MWh$.

The calculation of EF_{CM,grid,y} is current and publicly available and published by MONRE its web-site /A14/. 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 /2/ is reported as the supply of electricity to Vietnam National 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 Conclusion

CL 04 was raised and satisfactorily closed. Refer to Appendix 4 for details

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;

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The project verification team also concluded that the identified baseline	9
scenario reasonably represents what would occur in the absence of the	€
project activity.	

D.3.5 Demonstration of additionality

Means of Project Verification

For demonstrating additionality under GCC the project activity is required to undergo the following two tests:

a) Legal Requirement Test:

Based on the available literature 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 assessed the relevant regulations to confirm that the project meets the legal requirement test:

- Law on Investment No 61/2020/QH14, ratified by National Assembly, dated 17/06/2020 /A01/
- Law on Environmental Protection No. 72/2020/QH14, ratified by National Assembly, dated 17/11/2020 /A02/
- Electricity Law No.28/2004/QH11, ratified by National Assembly, dated 03/12/2004 and its amendment No 24/2012/QH13, ratified by National Assembly, dated 20/11/2012 /A03/
- Decision No. 2068/QD-TTg, approving the development strategy of Renewable Energy of Vietnam by 2030 with a vision to 2050, ratified by Prime Minster, dated 25/11/2015 /A04/
- Decision No. 428/QD-TTg, the approval of revisions to the National Power Development Plan from 2011 to 2020 with vision extended to 2030, ratified by Prime Minister, dated 18/03/2016 /A05/
- Decision No.11/2017/QD-TTg on Mechanism for encouragement of Development of Solar Power in Vietnam, dated 11/04/2017 /A06/

In addition to the evidence assessment confirmed that the project is not implemented to meet any legal requirement /A01-A06/.

b) Additionality Tests:

As per the applied methodology ACM0002 Version 21.0 /B03/, additionality of the following project activity is demonstrated and assessed by the latest version of Tool 1 - Tool for the demonstration and assessment of additionality (Version 07.0.0) /B04/.

The tool provides a step-wise approach to demonstrate additionality which is displayed below:

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

The proposed project activity is the first-of-its-kind. The demonstration follows Tool23: Additionality of first-of-its-kind project activities, v3.0 as below:

Criterion	Mean of verification
As per para 8:	This project activity is complied with this criterion as the entire host

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Applicable geographical area - should be the entire host country. If the project participants opt to limit the applicable geographical area to a specific geographical area (such as province, region, etc.) within the host country, then they shall provide justification on the essential distinction between the identified specific geographical area and rest of the host country.

country Vietnam is considered as geographical area to assess the first-of-its-kind auto-additionality of the project.

As per para 9

Measure - (for emission reduction activities) is a broad class of greenhouse gas emission reduction activities possessing common features. Four types of measures are currently covered in the framework:

- (a) Fuel and feedstock switch (example: switch from naphtha to natural gas for energy generation, or switch from limestone to gypsum in cement clinker production);
- (b) Switch of technology with or without change of energy source including energy efficiency improvement as well as use of renewable energies (example: energy efficiency improvements, power generation based on renewable energy);
- (c) Methane destruction (example: landfill gas flaring):
- (d) Methane formation avoidance (example: use of biomass that would have been left to decay in a solid waste disposal site resulting in the formation and emission of methane, for energy generation).

The project involves generation and supplying electricity to the national grid from the solar power plant.

Hence, the project is complied with para 9 (b) of the tool 23, which is switch of technology with or without change of energy source including energy efficiency improvement as well as use of renewable energies (example: energy efficiency improvements, power generation based on renewable energy).

As per para 10:

Output - is goods/services produced by the project activity including, among other things, heat, steam, electricity, methane, and biogas unless otherwise specified in the applied methodology.

Output is electricity and the project activity applied ACM0002 - Grid-connected electricity generation from renewable sources (version 21.0).

Hence, the project activity complied with para. 10 of Tool 23.

As per para 11:

Different technologies - are technologies that deliver the same output and differ by at least one of the following (as appropriate in the context of the measure applied in the proposed clean development mechanism (CDM) project

In line with the para 11 (c) of the tool, the project falls under large scale as the installed capacity of the project is 240 MWp/ 200 MWe which is greater than the threshold output capacity of 15 MW set for small scale Type I project activity.

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activity and applicable geographical area):

- (a) Energy source/fuel (example: energy generation by different energy sources such as wind and hydro and different types of fuels such as biomass and natural gas):
- (b) Feed stock (example: production of fuel ethanol from different feed stocks such as sugar cane and starch, production of cement with varying percentage of alternative fuels or less carbon-intensive fuels);
- (c) Size of installation (power capacity)/energy savings:
- (i) Micro (as defined in paragraph 24 of decision 2/CMP.5 and paragraph 39 of decision 3/CMP.6);
- (ii) Small (as defined in paragraph 28 of decision 1/CMP.2);
- (iii) Large.

As per para 12, a proposed project activity is the first of its kind in the applicable geographical area if:

As per para 12a:

The project is the first in the applicable geographical area that applies a technology that is different from technologies that are implemented by any other project, which are able to deliver the same output and have started commercial operation in the applicable geographical area before the project design document (CDM-PDD) is published for global stakeholder consultation or before the start date of the proposed project activity, whichever is earlier;

The project involves generation of electricity from renewable sources of energy, solar power plant. The project is being implemented in Vietnam. The installed capacity of the solar power plant is 240 MWp/200MWe and the expected emission reductions from this project 323,490 tCO₂e/annum.

The start date of proposed project activity as per the CDM definitions is on 14/06/2018 as confirmed by EPC and supply agreement /15/.

independent review conducted by the verification team, and it was found out that the project is first-of-its-kind in nature in Vietnam. The verification team has conducted independent research on (credible public sources local newspapers, articles) and found that the first solar project in Viet Nam is Phong Dien started operation from 25/09/2018 as per publicly news: https://baodautu.vn/khanh-thanhnha-may-dien-mat-troi-35-mw-dautien-tai-viet-nam-d88820.html.

The verification team also crosschecked with the list of 87 SPPs in

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Viet Nam, which started COD before Jun 2019, was published in several local news⁶ in the links below includes:

https://baodautu.vn/mo-danh-tinh-87-nha-may-dien-mat-troi-da-van-hanh-truoc-ngay-3062019-d112210.html

https://img.vietnamfinance.vn/upload/news/hoanghung_btv/2019/12/6/danh-sach-du-an-dien-mat-troi-da-du-dieu-kien-hoat-dong-thuong-mai.pdf

The verification team based on that list can confirm that in Vietnam there was no project using solar technology to produce electricity which have started commercial operating before 14/06/2018, the start date (as per the CDM definition) of proposed project activity.

Therefore, this criterion has been fulfilled by the project.

Remark:

As Dau Tieng 1 & Dau Tieng 2 shared the same Project Owner at the beginning, the verification team has cross verified the information for both projects to confirm the consistency and the project development timeline.

Dau Tieng 1 is also claiming GCC credits ⁷. The verification team also cross-checked the PSF and found that it used "Investment analysis" to demonstrate its additionality. **CAR 05** has been raised to further clarify on this issue.

As per confirmed by reviewing investment licenses of both projects /5/ and first PPA of Dau Tieng 1&2 /9.1/. and 2nd PPA of Dau Tieng 2 /9.2/, the verification team can confirm that Dau Tieng 1 and Dau Tieng 2 were two separate projects, but both were developed and had the same project owner (Dau Tieng Tay

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⁶ https://baodautu.vn/mo-danh-tinh-87-nha-may-dien-mat-troi-da-van-hanh-truoc-ngay-3062019-d112210.html

https://img.vietnamfinance.vn/upload/news/hoanghung_btv/2019/12/6/danh-sach-du-an-dien-mat-troi-da-du-dieu-kien-hoat-dong-thuong-mai.pdf

⁷ https://projects.globalcarboncouncil.com/project/347

Ninh Energy Joint Stock Company (DTE)) until 04/2019.

Until that time, two projects were developed in parallel. And therefore, Dau Tieng 1 and Dau Tieng 2 shared a combined PPA at the beginning /9.1/ and shared the same start date before 05/10/2018.

However, from 2019, there was a change in the ownership of Dau Tieng 1 and Dau Tieng 2. At the beginning, DTE was the joint venture of B. Grimm (55%) and Xuan Cau Group (45%) as per written in Section A1 of PSF/2/. In 2019, there was a financial structuring, Xuan Cau Group withdrew all their contribution on DTE. So DTE now is solely owned by B. Grimm and DTE only managed and operated Dau Tieng 2 project while Dau Tieng 1 project is owned by Dau Tieng 1 Energy Joint Stock Company which is solely owned by Xuan Cau group. Thus, Dau Tieng 1 and Dau Tieng 2 are belonged to two different legal owners from 2019.

The verification team cross-verified two projects and confirmed that the restructuring of DTE & the separation of legal owners Dau Tieng 1 & Dau Tieng 2 did not impact the first-of-its-kind analysis as per Tool 23 guidance and definition. In theory, both Dau Tieng 1 & Dau Tieng 2 can be considered as 'first-of-its-kind' (FOK) as per Tool 23 guidance and definition.

However, Dau Tieng 1 has a different project owner now, the PSF was developed independently by its own PO. Therefore, it might result in differences between the selection of methodology to prove project additionality which DTE (project owner of Dau Tieng 2) have no responsibility and involvement.

As per para 12b:

The project implements one or more of the measures;

The solar photovoltaic (PV) plant is the utility-scale grid connected project in the country and implements one measure i.e., generation of renewable electricity from solar energy. This measure has been complied with para 9 (b) of tool

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		23 as verified above.		
		The real implementation of generation of renewable electricity from solar was also confirmed by observation during onsite visit and interviewed with different local stakeholders. The supportive evidence also included PPA /9/, Approved FSR /7/ & FSR approval decision /8/ and COD /23/.		
	As per para 12c: The project participants selected a crediting period for the project activity that is "a maximum of 10 years with no option of renewal".	The Crediting period for the project activity is of 10 years only as verified in section D4 of this report.		
		ct has demonstrated additionality using tool 23. In accordance with para 13 lied tool 23 /B05/ the project has been identified as a first-of-its-kind project had therefore was found deemed additional.		
Findings	CL 05 & CAR 05 were raised and satisfactorily closed. Refer to Appendix 4 for details			
Conclusion	The information mentioned in the PSF /2/ is duly supported by evidence quoted therein. The verification team has conducted independent desk review and found that the project claim to be fist-of-its-kind was found correct. The verification team determined that the evidence assessed is credible, where appropriate.			

D.3.6 Estimation of emission reductions or net anthropogenic removal

Means of Project Verification	 Equations and parameters applied to calculate GHG emission reductions o net anthropogenic GHG removals 		
	The equations and choices provided in the applied methodology, ACM0002, version 21 /B02/ are correctly quoted in the PSF /2/. The emission reductions of the project activity would be calculated using the formulae mentioned in the applied methodology.		
	Baseline Emissions:		
	The baseline emission calculation for the project activity is attributable to the CO ₂ Emission that could have been produced by the fossil fuel-based power plants in absence of the proposed project activity. Therefore, the amount electricity supplied to the Vietnam National grid will be multiplied by the grid emission factor of Vietnam national grid to calculate the baseline emissions reduced by the proposed project activity.		
	$BE_y = EG_{PJ,y} \times EF_{grid,CM,y}$		
	Where,		
	BE _y = Baseline Emissions in year y (tCO ₂) EG _{PJ,y} = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh)		
	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		

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to calculate the emission factor for an electricity system" (t CO_2/MWh)

As the project activity involves installation of greenfield power plants, in accordance with §41 of the applied methodology ACM0002, version 21:

EGPJ,y = EGfacility,y

Where.

EG_{PJ,y} = Quantity of net electricity generation that is produced and fed into

the grid as a result of the implementation of the project activity in

year y (MWh)

EG_{facility,y} = Quantity of net electricity generation supplied by the project

plant/unit to the grid in year y (MWh/yr)

As per the applied methodology, Combined margin approach (CM) has been chosen to calculate the grid emission factor as per the "Tool to calculate the emission factor for an electricity system" version 7 /B06/. The EF $_{\rm grid,CM,y}$ was sourced from the Emission Factor Calculation report published by MONRE, dated 31/12/2022, /A14/ which is the most updated one.

To confirm the EF_{grid,CM,y} was correctly calculated according to "Tool to calculate the emission factor for an electricity system" version 7 /B06/, the verification team has reviewed the document in details as below:

The baseline emission factor is calculated using the combined margin approach as described in the following steps:

STEP 1: Identify the relevant electricity systems.

For this project activity, the relevant electricity system is the Vietnam National grid (only grid in the nation). This was correctly identified.

STEP 2: Determine boundary of calculation in the project electricity system

The entire power source belongs to the national power system, including the existing power transmission and distribution lines of existing power plants, which are connected to the national grid system. Only grid power plants are included in the calculation.

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

In accordance with "Tool to calculate the emission factor for an electricity system", "Simple OM method" is the methodological choice out of four options of calculating OM emission factor due to due to the current state of data collected in Vietnam and the percentage of electricity output from low operating cost or running marginal cost (LCMR) sources in the last 5 years on average is less than 50% of the total electricity output of the whole country.

STEP 4: Calculate the operating margin emission factor according to the selected method:

Project Owner has rightly calculated simple OM emission factor calculation as the share of low cost / must run resources of the selected grid over the five most recent years (2017, 2018, 2019, 2020, 2021) which is less than 50% of the gross grid generation.

Ratio of power output from low-cost/must-run sources (% of Net Generation)						
Year	2017	2018	2019	2020	2021	Total (2017-2021)
Hydropower	71,056,945	69,485,682	54,411,106	59,387,446	69.606.845	323,948,025
Bagasse	78,000	456,400	280,996	331,319	347.560	1,494,275
Wind	-	-	721,189	946,157	3.243.227	4,910,574

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Solar	-	-	4,833,674	9,684,525	15.141.520	29,659,719
Import	2,361,000	3,124,000	3,316,000	3,067,000	1.401.463	13,269,463
Total power output	169,942,517	188,063,484	207,214,694	207,692,796	208,561,267	
Average 5-year low cost/must run percentage:			38,03%			

The simple OM emission factor is calculated as the generation-weighted average CO₂ emissions per unit net electricity generation (tCO₂/MWh) of all generating power plants serving the system, not including low-cost / must-run power plants / units.

Option B ("Calculation based on total fuel consumption and electricity generation of the system") is used to calculate simple OM emission factor. Where Option B is used, the simple OM emission factor is calculated based on the net electricity supplied to the grid by all power plants serving the system, not including low cost/must-run power plants/units, and based on the fuel type(s) and total fuel consumption of the project electricity system, as follows:

$$EF_{grid,OMsimple,y} = \frac{\sum_{i} FC_{i,y} \times NCV_{i,y} \times EF_{CO2,i,y}}{EG_{y}}$$

Where:

- EF_{grid,OMsimple,y} Simple operating margin CO₂ emission factor in year y (tCO₂/MWh)
- EG_{m,y} Net quantity of electricity generated and delivered to the grid by power unit m in year y (MWh)
- FC_{i,y}- Amount of fuel type i consumed in the project electricity system in year y (mass or volume unit)
- NCV_{i,y} Net calorific value (energy content) of fuel type i in year y (GJ/mass or volume unit)
- EF_{CO2,i,v} CO₂ emission factor of fuel type i in year y (tCO₂/GJ)
- EG_y Net electricity generated and delivered to the grid by all power sources serving the system, not including low-cost/must-run power plants/units, in year y (MWh)
- i All fuel types combusted in power sources in the project electricity system in year y
- y- the relevant year as per the data vintage chosen in STEP 3

As per the Emission Factor Calculation report published by MONRE, i weighted average operating margin is correctly calculated, and result is as below:

$$EF_{OM,y} = 0.9239 tCO_2/MWh$$

STEP 5: Calculate the build margin (BM) emission factor

The project owner has chosen Option I, i.e. fixing build margin emission factor ex ante based on the most recent information available on units already built for sample group m at the time of PSF submission to the DOE for verification or GSC to GCC. The build margin emissions factor is the generation-weighted average emission factor (tCO₂/MWh) of a sample group of power units, during the most recent year y for which power generation data is available. The Sample group of power units m used to calculate the build margin should be determined via the procedure summarized in the diagram of the Tool.

Following this procedure, the list of plants/units selected to calculate the marginal emission factor built in 2021. The total power output of the plants commissioned in 2021 is: 42,208,851.61 MWh, accounting for 20.24% of the total electricity output of Vietnam's electricity grid in 2021.

Using the equation given in the step 5 for the BM calculation, the Built margin is calculated for the year 2021 is as below:

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 $EF_{BM, y} = 0.5202 tCO_2/MWh$

STEP 6: Calculate the combined margin (CM) emission factor

The baseline emission factor $\mathbf{EF_y}$ is calculated as the weighted average of the Operating Margin emission factor $(\mathbf{EF_{OM,y}})$ and the Build Margin emission factor $(\mathbf{EF_{BM,y}})$:

Efy= W_{OM}* EF_{OM,y}+ W_{BM} * EF_{BM,y}

Where,

w_{oM} = 75% weight for wind/solar energy projects and 50% for Hydro projects
 w_{BM} = 25% weight for wind/solar energy projects and 50% for Hydro projects

EF_{DM,y} = calculated as described in Steps 3&4 above (tCO₂/MWh) **EF**_{BM,y} = calculated as described in Steps 5 above (tCO₂/MWh)

 \Rightarrow EF_{grid,CM,y} = EF_{grid,OM,y} × w_{OM} + EF_{grid,BM,y} × w_{BM}

 \Rightarrow EF_{grid,CM,y} = 0.75 x 0.9239 + 0.25 x 0.5202 = 0.8230 (tCO₂/MWh)

The verification team has reviewed the Emission Factor Calculation report published by MONRE, and confirm the EF_{grid,CM,y} was correctly calculated according to Tool to calculate the emission factor for an electricity system' version 7 /B06/, using the most updated data up to the time of the PSF /2/.

Project Emissions:

For most renewable energy project activities, $PE_y = 0$. However, for the following categories of project activities, project emissions have to be considered following the procedure described in the most recent version of "ACM0002: Grid-connected electricity generation from renewable sources", version 21.

In addition, there is only one diesel generator which is used for back-up and emergency purposes. The emissions due to this can be neglected as per para.33 of the applied ACM002, version 21.

Hence PEy= 0

Leakage Emissions:

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

Hence, LEy= 0

Emission reduction (ER_v):

The project activity mainly reduces carbon dioxide through substitution of grid electricity generation with fossil fuel fired power plant by renewable electricity. The emission reduction ER_y by the project activity during a given year y is the difference between Baseline emission and Project emission & Leakage emission.

Hence in accordance with §54 of the applied methodology:

$$ER_y = BE_y - PE_y - LE_y$$

Where.

ERy = Emission Reduction in year y (tCO₂/ year)
 BEy = Baseline emission in year y (tCO₂/ year)
 PEy = Project emission in year y (tCO₂/ year)
 LEv = Leakage emission in year y (tCO₂/ year)

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Ex ante calculation of GHG emission reductions or net anthropogenic GHG removals

The annual emission reductions are estimated to be $323,490 \text{ tCO}_2\text{e}$ per year. The total ex ante emission reduction resulting from project activity for the entire crediting period of 10 years is estimated to be $323,490 \text{ tCO}_2\text{e}$ per year. The ex-ante estimate of emission reductions is based on a value of 393,074 MWh/year according to approved FSR /7/, and FSR approval decision /8/ so in average 393,074 MWh/year of net electricity supplied to the grid as a result of the implementation of the project activity.

The basis for electricity generation from the project activity is calculated based on the Approved Feasibility study /7/ prepared by the credible third-party company (Energy Information and Technical Center) who are well-known for providing technical advisory and engineering services for power projects in Vietnam. In addition, the electricity generation was also validated by EREA - MOIT before approval for implementation. Hence the value considered by the project owner for determining the ex-ante emission reductions in the PSF /2/ is deemed acceptable to the verification team and also in line with paragraph 3 (b) of "Guidelines for the reporting and Validation of Plant Load Factors" (Annex 11 of EB 48).

The appropriateness of this value has been cross-checked through review of ER spreadsheet /3/ & approved FSR /7/.

The validation team reviewed the ER spread-sheet calculations /3/ and confirms the same to be correct.

Based on the above equations and the parameter values, the annual emission reductions are calculated as:

 $ER_y = BE_y = EG_{PJ,facility,y} * EF_{CM,y}$

 $ER_v = 393,074 * 0.8230 = 323,490 tCO_2e$

So, $ER_y = 323,490 \text{ tCO}_2\text{e}$

Findings

Conclusion

No finding identified

Project verification team confirm that the algorithms and formulae proposed to calculate project emissions, baseline emissions, leakage and emission reductions in the PSF /2/ 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 /2/ 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 /2/;
- All values used in the PSF /2/ 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 /2/;
- All calculations are complete and without any omissions.

D.3.7 Monitoring plan

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Means of Project Verification

The monitoring plan described in the PSF /2/ 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-Standard-v3.1. 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 verification team through document review and interviews with the respective monitoring personnel. The information provided has allowed the verification 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
Build Margin Emission factor (EF _{grid,BM,y})	0.5202 tCO ₂ /MWh	Emission Factor
Operating Margin emission factor (EF _{grid,OM,y})	0.9239 tCO ₂ /MWh	Calculation report published by MONRE,
Combined Margin CO ₂ emission factor (EF _{grid,CM,y)} .	0.8230 tCO ₂ /MWh	dated 31/12/2022 /A14/.

The parameters that are to be monitored ex-post as per applied methodology & parameters identified as harmless and harmful under Environmental and Social Safeguard section in the PSF and the applicable SDG parameters are given below:

Parameters	Verifier assessment
	Based on the onsite observation, the verification team has found that the electricity generated from the project is supplied to the national grid (EVN maintain grid) at the 220kV voltage level. The point-of-sale electricity is at a 220kV level.
Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr) (EGPJ,grid,y)	The metering system includes one (01) main meter and one (01) back-up meter. The main metering system for measurement of electricity is installed at Tay Ninh Station after stepping up to 220kV level. All meters are bidirectional digital electricity meters hence both export and import of electricity would be measured. The accuracy class is 0.2s for main meter & 0.5s for back-up meter complied with international standard IEC-EN 62053-22 and 62053-23 and Circular No. 42/2015/TT-BCT, Regulations on Electrical Measurement in Electricity System, valid since 18th January 2016 /A17/. The calibration frequency follows Circular 23/2013/TTBKHCN (Regulation on the calibration of measurement equipment), issued by the MOST, dated 26/09/2013 /A16.1/ & Circular 07/2019/TT-BKHCN (amendment of Circular 23/2013/TT-BKHCN), issued by the MOST, effective from 26/07/2019 /A16.2/.

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Details of monito	ring equipment are as below:
Main meter:	
Technical details	Main meter (232M)
Serial number	18066372
Accuracy class	0.2s
	(Complied with Circular No. 42/2015/TT-BCT
	/A17/, and Circular 23/2013/TT-BKHCN /A16/ & IEC-EN 62053-22 and 62053-23)
Model	Elster A1700
Туре	PB3KAGGHT-5
Calibration	One in a year.
frequency	As per the Circular 07/2019/TT-BKHCN -
	Regulation on the calibration of measurement equipment, dated 26/07/2019
	/A16.2/, calibration certificate has 3 years of
	validity. However, main meter is calibrated
	yearly as per the PPA /9/ signed between PP
Calibration	and the buyer, EVN. Calibrated
status	1) <u>Year 2020:</u> at 1 st installation: 16/03/2020
	(validity until 28/02/2023).
	2) Year 2021: 1st periodic calibration: EVN
	has skipped this calibration due to Covid-
	19 situation in Vietnam during this period. The meter showed no sign of any
	measuring problem & and the previous
	calibration certification was still valid
	during this period as per Circular
	07/2019/TT-BKHCN /A16.2/. 3) <u>Year 2022</u> : 2 nd periodic calibration:
	29/03/2022 (validity until 31/03/2025)
	4) Year 2023: 3 rd periodic calibration:
	03/03/2023 (validity until 28/02/2026)
Calibration certificate	1) Year 2020: Certification of Verification No. 200301441/TNĐMN-ĐK, dated
Certificate	No. 200301441/TNĐMN-ĐK, dated 16/03/2020 by EVN Southern Electrical
	Testing Company /33.1/
	2) Year 2021: No certificate as explained
	above
	3) Year 2022: Certification of Verification No. 220300500/TNĐMN-ĐK, dated
	29/03/2022 by EVN Southern Electrical
	Testing Company /33.2/
	4) Year 2023: Certification of Verification
	No. 230300106/TNĐMN-ĐK, dated 03/03/2023 by EVN Southern Electrical
	Testing Company /33.3/
	1 /
Back-up meter	
Technical	Back-up meter (232B)
details Social number	19112097
Serial number Accuracy class	18112987 0.5s
/ Noodiacy Class	(Complied with Circular No. 42/2015/TT-
	BCT, and notably Document 01/2023/CV-
	DTE dated on 04/02/2023 /A16/ & IEC-EN
Model	62053-22 and 62053-23)
Model Type	Elster A1700 PB3KAGGHT-5
ון יאףט	1 2010 (00111 0

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Calibration frequency	Once in 3 years As per the Circular 07/2019/TT-BKHCN - Regulation on the calibration of measurement equipment, dated 26 July 2019 /A16/, calibration certificate has 3 years of validity.
Calibration status	Calibrated Year 2020: At 1 st installation: 16/03/2020 (validity until 28/02/2023) Year 2023: 1 st periodic calibration: 03/03/2023 (validity until 28/02/2026)
Calibration certificate	Year 2020: Certification of Verification No. 200301440/TNĐMN-ĐK, dated 16/03/2020 by EVN Southern Electrical Testing Company /33.4/ Year 2023: Certification of Verification No. 230300100/TNĐMN-ĐK, dated 03/03/2023 by EVN Southern Electrical Testing Company /33.5/

For the purpose of measurement, the readings of main meter will be accounted in normal scenario but in case of failure of main meter (232M), back up meter (232B) reading will be accounted.

The calibration of the meters will be maintained by EVN. The monitoring parameter will be recorded for emission reduction on a monthly basis. The data of electricity export and import will be measured continuously and print out monthly, in which this fulfills the methodology requirement. The net electricity generation will also be calculated using the exported number – import number.

An appropriate monitoring plan has been put in place to monitor the elements. The verification team deems that appropriate.

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

Monitoring of Environmental Safeguard Parameters:

EA03: CO ₂ Emission reduction	Reduction of CO ₂ emissions due to implementation of project activity that would otherwise be emitted by thermal power plants. The monitoring parameter will be continuously monitored by means of monthly calculated from joint reading for energy meters as mentioned above monitoring parameter EG _{PJ,facility,y} & multiply to the fixed ex-ante value of EF _{Grid,CM} = 0.8230 tCO ₂ e/MWh.
	The monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the verification team

Monitoring of Social Safeguard Parameters:

SJ01: Long-term	This parameter is monitored based on the number of jobs
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jobs created (> 1 year)	created by the project owner on a long-term basis and ensures that employment will be provided from the project activity.
	This will be verified using the HR employment records and payroll records of the employees who worked on the project activity. This was confirmed by interviewing the monitoring personnel of the project activity during on site visit and checking the employment record, labor contract, payrolls provided during verification /40.1//40.2/. During the registration, based on all the evidence provided, the verification team confirmed that the project has created 63 long-term jobs.
	The monitoring practices followed by the project owner are appropriate in relation to the project activity and its acceptable to the verification team
	This parameter is monitored based on the number of jobs created by the project owner on a short-term basis (< 1 year) and ensures that short-term employments will be provided from the project activity during its operation.
SJ02: Short-term jobs created (< 1 year)	This will be verified using the HR employment records of temporary staff and payroll records of the short-term employees who worked on the project activity during the operation. This was confirmed by interviewing the monitoring personnel of the project activity during onsite visits and checking the temporary employment record, provided during verification /40.3/. During the registration, based on all the evidence provided, the verification team confirmed that the project currently has created 20 short-term jobs.
	The monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the verification team
SE01: Specialized training/ education to local personnel	Specialized training/ education imparted to the local employees such as HSE (firefighting, first aid, electrical safety training, working at heights, etc.) helps reduce risk of accident at site and improve quality of employment. There is a linkage between SDG4 and SE01 as they shared a similar monitoring plan. However, the training topic which is claimed for SE01 is different from the training topic claimed for SDG4. As the training for SE01 are offered for employees in the proposed project activity to improve quality of employment and do well in their current job while the training for SDG 4 are offered voluntarily for any employees in the project disregarding their job description, duty and responsibility to improve their skillsets so they can have a better job in the future.
	The monitoring of this parameter by means of keeping all records of training which was provided to local employees. This was confirmed by interviewing HR personnel of the project activity during onsite visit and checking the training records and training certificates supplied by PO during the time of verification /32/. This parameter will be monitored continuously and will be maintained and archived till the end

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of the crediting period.

The monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the verification team

SDG Parameters Monitoring

At the normal project operation, project owner has designed basic training plan including Occupational safety, Electrical safety, First aid, and Firefighting, etc for the employees.

However, the Project Owner has gone beyond and also provides capacity building to its internal personnel by advance training services including additional technical skillset for employees using remotely monitoring systems, technical software, SCADA, solar panels maintenance, etc. for new solar technology and relevant E&S management training sustainable energy through its project lifetime. Those training courses are offered voluntarily for any employees in the projects disregarding their job description, duty and responsibility.

SDG 4 - Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

The monitoring parameter will be continuously monitored by means of HR training plan, training records, list of employees participate & certification of those advance trainings. This was confirmed by interviewing HR personnel of the project activity during onsite visit and checking the training records and training certificates supplied by PO during the time of verification /32/. There is a linkage between SDG4 and SE01 as they shared a similar monitoring plan. However, the training topic which is claimed for SDG4 is different from the training topic claimed for SE01 as mentioned above. As the training for SE01 are offered for employees in the proposed project activity to improve quality of employment and do well in their current job while the trainings for SDG 4 are offered voluntarily for any employees in the project disregarding their job description, duty and responsibility to improve their skillsets so they can have a better job in the future.

This parameter will be monitored continuously and will be maintained and archived till the end of the crediting period.

This parameter is suitable and feasible to monitor SDG Goal 4 as the parameter helps quantify number of people imparted relevant skills including modern technical skills and advanced vocational skills for employment and decent job. It would contribute to Indicator 4.4.1 - Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill.

The monitoring practices followed by the project owner is appropriate and deems acceptable to the verification team.

SDG 7 - Amount of renewable energy supplied to grid for consumption

The monitoring parameter will be continuously monitored by means of energy meters as mentioned above monitoring parameter EG_{PJ,facility,y}.

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	This parameter is suitable and feasible to monitor SDG Goal 7 as the parameter helps quantify the renewable electricity generated by the project annually. It would contribute to the increase of the renewable energy share in the total final energy consumption. The verification team deems that appropriate.
	The monitoring parameter will be continuously monitored by means of number of employments through HR employment records, salary payment records for each employee & company policy on equal pay for the work of equal value.
	es onsite visit and reviewing supportive documents include HK
segregated by a and persons w disabilities	ge This parameter is suitable and feasible to monitor SDG Goal
SDG 13 - Amount emissions reductions	of The monitoring parameter will be continuously monitored by means of monthly calculated monitoring parameter EG _{PJ,facility,y} & multiply to the fixed ex-ante value of EF _{Grid,CM} = 0.8230 tCO ₂ e/MWh as mentioned above.
achieved by proje under UNFCCO GCC mark mechanism	2s/ 13 as the parameter helps quantify the CO ₂ emission
Monitoring-progra	am of risk management actions
EL02: Solid was pollution from hazardous wastes	om
nazardous wastes	one of the second of the secon

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waste owner is obliged to manage their hazardous waste in accordance with the provisions specified in this Regulation including collecting, storing them properly, keep records for the wastes its produces, sending their wastes to waste processing facilities that have a permit/ treatment license in

accordance with the provisions of this Regulation.

The resource requirement is defined as hazardous waste management contract with licensed vendors. The monitoring of this parameter by means of keeping records of quantity of waste generated and transferred to licensed vendors. This was confirmed by interviewing PO checking the waste storage during onsite visit. The verification team also reviewed waste management contracts signed between PO and waste collector No. HDKT-2021 /31.1/ & No.39/HDHK-2022 /31.2/ and Sample of Waste transfer records No.48/2022/DTE-TBA /31.3/ during the time of verification. In the contract, it has been clearly stated that waste collector has to collect and do waste properly according to applicable regulation /31/.

This parameter will be monitored monthly and aggregated annually by an assigned employee at project site.

Based on applicable regulation /A02/ /A19/ /A20/ & supportive document /31/ technical expertise in this topic, the verification team deems that the monitoring is suitable and feasible to monitor and mitigate any negative impact in this aspect.

Depends on different type of E-waste from project activity, it will be categorized as ordinary industrial waste or hazardous waste depends on their composition and therefore, their disposal is regulated by Decree No. 38/2015/NĐ-CP dated 24/04/2015, issued by MONRE on Management of Waste and Discarded materials /A07/ or Decision 23/2006/QD-BTNMT on List of hazardous waste, issued by MONRE, dated 26/12/2006 /A19/. Therefore, their disposal is regulated either by Circular No.36/2015/TT-BTNMT dated 30/06/2015 of MONRE on Management of Hazardous Waste /A20/ or Circular 09/VBHN-BTNMT on Waste management /A21/.

EL04: Solid waste Pollution from Ewastes According to Circular 36/2015/TT-BTNMT /A20/ and Circular 09/VBHN-BTNMT /A21/, the waste owner is obliged to manage their waste in accordance with the provisions specified in this Regulation including collecting, storing them properly, keep records for the E-wastes its produces, sending their E-wastes to waste processing facilities that have a treatment permit/ license in accordance with the provisions of these Regulations.

The monitoring of this parameter by means of keeping records of quantity of waste generated and transferred to licensed vendors. This was confirmed by interviewing PO checking the waste storage during onsite visit. The verification team also reviewed waste management contracts signed between PO and waste collector No. HDKT-2021 /31.1/ & No.39/HDHK-2022 /31.2/ and Sample of Waste transfer records No.48/2022/DTE-TBA /31.3/ during the time of verification. In the contract, it has been clearly stated that waste collector has to collect and do waste properly according to applicable regulation /31/.

This parameter will be monitored monthly and aggregated

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		annually by an assigned employee at project site.
		Based on applicable regulation /A07/ /A19/ /A20/ /A21/ & supportive document /31/ & technical expertise in this topic, the verification team deems that the monitoring is suitable and feasible to monitor and mitigate any negative impact in this aspect.
	EL06: Solid waste Pollution from endof-life products/ equipment	Solid waste from end-of-life products/ equipment and their disposal is regulated by Circular No. 34/2017/TT-BTNMT on recall and treatment of discarded products /A09/ & Decree No. 38/2015/NĐ-CP dated 24/04/2015, issued by MONRE on Management of Waste and Discarded materials /A07/. If any hazardous waste/ component within the end-of-life products/ equipment, it will be regulated by Circular 36/2015/TT-BTNMT: Management of Hazardous Waste /A20/.
		According to Circular 36/2015/TT-BTNMT: Management of Hazardous Waste /A20/ & Circular 09/VBHN-BTNMT on Waste management /A19/, the waste owner is obliged to manage their waste in accordance with the provisions specified in this Regulation including collecting, storing them properly, keep records for the wastes its produces, sending their wastes to waste processing facilities that have a permit/ environmental license in accordance with the provisions of these Regulation.
		The lifetime of solar PV modules & other equipment/ product in this project activity is 25 years. Therefore, there will be unlikely that PV modules which can be finished their life during the 10-year fixed crediting period of the project activity. However, if any end-of-life equipment/ product during crediting period, it will be monitored.
		The resource requirement is defined as a proper storage of End-of-life products/ equipment waste & at least one employee at project site is assigned to keep track and report on this issue.
		The monitoring of this parameter by recording in a logbook and keep end-of-life waste transfer receipts/ returned-to-producer receipts. This parameter will be monitored continuously by an assigned employee at the project site and reviewed once per each monitoring period.
		Base on applicable regulation /A07/ /A09/ /A19/ /A20/ & technical expertise in this topic the verification team deems that the monitoring is suitable and feasible to monitor and mitigate any negative impact in this aspect.
	EW03: Generation of Wastewater	For solar panel cleaning, the project activity uses ground water and applied high pressure spray to clean off dust without using any detergent and therefore, no chemical contamination of water runoff. When possible, they also utilize rainwater for cleaning solar panels to reduce water consumption and additional surface runoff. So, there is no wastewater due to the operation of the solar power plant.
		The project generates only domestic wastewater caused by daily use of operators onsite. During the onsite visit, the

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verification team observed that the domestic wastewater uses the septic tanks system for primary treatment. When the septic tank is full, it will be transferred to a licensed company for wastewater collection and final treatment. This has been approved as an environmental protection activity in the project EIA report /10/ approved in Decision No. 1483/QD-UBND /12/ by People's committee of Tay Ninh province on 12/06/2018. This also complied with local regulation includes Law on Environmental Protection 72/2020/QH14 /A02/; QCVN 14:2008/BTNMT: National technical regulation on Domestic Wastewater /A22.1/ & QCVN 08-MT:2015/BTNMT: National technical regulation on Surface Water Quality /A22.2/.

This parameter is monitored continuously by keeping records of wastewater transferring to licensed company for wastewater collection and final treatment. Until the time of this report, there is no wastewater from the septic tank transfer to licensed company yet.

Base on applicable regulation /A02/ /A22.1/ /A22.2/ & supportive documents /10/ /12/ technical expertise in this topic the verification team deems that the monitoring is suitable and feasible to monitor and mitigate any negative impact in this aspect.

According to Law No.84/2015/QH13 on Occupational Safety and Hygiene /A23/, it is the responsibility of PO to provide regular HSE training to employees to prevent any Occupational Health Hazards and yearly health check-up records to detect any occupational health issues. According also to Law No.84/2015/QH13, the PO also needs to provide regular HSE training to prevent incident/ accident happened in project activity. So, the PO have to prepare an annual OHS report /46/ with clear records information on health check-up, occupational health issues, and incident/ accident to submit to MOLISA.

SHS02: Occupational Health Hazards The project owner has claimed under S+ section that regular training will be provided to the employees for their HSE once every year. There is a linkage between SH02 Occupational Health Hazards & SH03: Reducing/increasing accidents as explained above. So, the mitigation & monitoring plan is identical for both parameter SH02 & SHS03. Therefore, under S+ section, the PO is only claiming score for one social aspect.

There is a yearly OHS Training Plan prepared and implemented. During onsite visit, the verification team has interviewed the HSE Officer to confirm this. OHS Plan /27.4/ & training records /32/ & yearly health check-up /43/ is also provided by the project owner to cross-check and therefore, the verification team can confirm that the project activity does regular training to its employees to prevent any risk of occupational health hazards, incident/ accidents and there is a system in place to monitor the same.

This parameter will be continuously monitored by means of annual OHS plan /27.4/, training records /32/ & annual OHS

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	report /46/ and healthcare check-up records /43/.	
	Base on applicable regulation /A23/ & supportive documents /27.4/ /32/ 43/ & technical expertise in this topic the verification team deems that the monitoring is suitable and feasible to monitor and mitigate any negative impact in this aspect.	
Findings	CL 06, CL 08 and CAR 02 was raised and satisfactorily closed. Refer to Appendix 4 for details	
Conclusion	, , ,	

D.4. Start date, crediting period and duration

Means of Project Verification		The start date of the project activity is stated as 13/06/2019, which is also the start date of commercial operation for project activity /23/, which is the earliest date on which the project begins generating GHG emission reductions. This is complied with 38 of GCC Project Standard. The start date of operation has been checked against the COD /23/ issued by MOIT.
owners. The lifetime of project activity is expected to be at leavalidated from the manufacturer equipment technical specification.		A crediting period of a maximum length of 10 years has been selected by the project owners. The lifetime of project activity is expected to be at least 20 years which is validated from the manufacturer equipment technical specification /26/ and PPA /9/ of the project activity. Thus, this is in line with 39 of GCC Project Standard.
		The start date of the crediting period indicated as 13/06/2019, which is the start date of operation (13/06/2019) which has been verified from the COD /23/. This is complied with para 40(b) of GCC Project Standard.
Findings No finding identified		No finding identified
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 Verification	Project	Follow the Law on Environmental Protection of the Government of Vietnam, Government's Decree No. 40/2019/ND-CP, dated 13/05/2019 /A02/, the project owners have to conduct the environmental impact assessment and includes the environmental impact assessment & the mitigation and protection plan for any impact from the project activity during the construction and operation.
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Project Owner has contracted a qualified third-party company named Saigon Environmental Consulting JSC to prepare the EIA report, dated 06/2018 /10/. The verification team has reviewed and summarized all the environmental impacts which were identified and justified in the EIA report /10/ as below:

Environme ntal impacts	Justify in the report	Action plans
Wastewater	Mostly domestics wastewater from employee during construction & operation	This will be collected separately with rainwater. During construction, it will be transferred to licensed third party for treatment. During operation, a wastewater treatment system will be installed in place. The disposed water will meet standard A, QCVN 14:2008/BTNMT /A22/.
Solid waste	1) Hazardous waste (oil waste, oil contaminated rags, etc) is generated during machinery maintenance & operation process. 2) Construction waste includes broken brick, mortal, etc is also generated during construction activity. 3) Domestics waste is generated due to the ordinary activity of employees on site.	1. Hazardous waste will be collected separately & stored according to follow Circular 36/2015/TT-BTNMT, dated 30/06/2015 /A20/. Hazardous waste will be transferred to licensed third party for final treatment as per Circular 36/2015/TT-BTNMT, dated 30/06/2015 /A20/. 2. All other waste will also be stored properly and separately with hazardous waste to avoid crosscontaminated & will be collected by municipal domestic waste collector for final treatment and sanitary disposed. 3. Especially, all the end-of-life solar panels will also be treated follow the above applicable regulations.
Noise, dust, exhaust from vehicle	Noise and dust can be generated due to transportation vehicle, or the vibration noise of operating machinery during construction and create impact to the workers at site.	All vehicles transporting construction materials must be covered with tarpaulins. PO selects local suppliers to reduce the transportation distances. All the vehicle needs to have good maintenance and validated

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		During the operation, no impact on noise was foreseen.	certificates from Ministry of Transportation.
	Impact on plants, creatures	Impact on plants, creatures is very minimal since there are no nature protection areas, no special species, or any biodiversity protected area within the borders of Project Sites. The project activity was developed in a non-crop land majorly involving no forest land.	N/A
	The report was submitted to People's committee of Tay Ninh province and got final approval on 12/06/2018 as per Decision No. 1483/QD-UBND /12/. During the operation, People's committee of Tay Ninh province has assigned DONRE of Tay Ninh province periodically monitors if all the mitigation and protection plan in the report /10/ has been correctly implemented. In addition, the verification team has reviewed the periodic Environmental and Social Compliance Audit Report /11/ prepared by IBIS Environmental and Social Consulting Asia Pte to independently review and assess the Environmental, Social and Health & Safety (E&S) status and performance of the project, as well as to identify compliance gaps, issues, improvement opportunities. Those reports /11/ have confirmed that DT2 has so far complied with all local applicable regulations; World		
	Bank Group (WBG) General Environmental, Health & safety (EHS) Guidelines, 2007 & ADB Safeguard Policy Statement (SPS), 2009.		
Findings	No finding identified		
Conclusion	In conclusion, the verification team also confirm that the project owner has taken all the necessary legal approvals from the government and other parties to implement the project activity. All the mitigation & protection plans have been identified and implemented to minimize all the potential impacts. This has been reviewed, approved and supervised by local authority during construction and operation process. In the opinion of the assessment team, in the project activity there were no adverse environmental impacts revealed in the analysis. There are no transboundary environmental impacts associated with the project.		

D.6. Local stakeholder consultation

Means of Project Verification	A LSC was conducted for the project activity on 16/04/2018 in the office of people's committee of Suoi Da Commune, Duong Minh Chau District, Tay Ninh province. The consultation was performed before the construction of the project activity.
	The verification team has reviewed all LSC Minute of Meeting /35.1/ & photo of LSC meeting /35.5/ & invitation letters /35.2//35.3/ & list of participants /35.4/ interview with local stakeholder during onsite visit and confirms that the local stakeholder consultation process was performed by the project owner before the submission of the project activity for global stakeholder consultation. The objective of the local stakeholder consultation carried out to comply with local regulation requirements, GCC requirements, and identify the comments/concerns that might be required to be addressed by project owner.

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Village authorities and governmental officials were invited through official letters. In addition, the village authorities were assigned to inform local stakeholders within their area by phone calls or informed them verbally to join the meeting.

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 documented in the LSC Minute of meeting /35.1/ and provided to the verification team.

The verification team confirmed by review of the stakeholder responses that the summary of stakeholders' comments reported in PSF /2/ 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 /2/.

During post implementation, if the stakeholders have any complaint/ comment regarding E+ S+ and SDG+ features of project, they may contact their villages' authority and they will communicate with the PO for solution/ answers. There is a grievance redness mechanism has been established and implemented for this project activity. The project verification team has reviewed the mechanism and interviewed with different local stakeholders during onsite visit and therefore can confirmed that it could ensure all complaints/ comments would be addressed and solved reasonably. Therefore, we accept it.

Findings Conclusion

CAR 03 was raised and satisfactorily closed. Refer to Appendix 4 for details

The project verification team confirms that the summary of stakeholders' comments reported in PSF /2/ 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 /35/ are verified and found acceptable.

The verification team confirms that the local stakeholder consultation process performed for the project activity fulfils the requirements as per para 60, GCC Program Manual v3.1 and para 72-74 of Instructions for completing PSF /2/.

D.7. Approval and Authorization- Host Country Clearance

Means of Project Verification	The project verification team has determined whether the approval and clearance from the host-country was in accordance with the applicable Project Verification requirements related to the approval in the GCC PS & VS /B01/
Findings	CAR 04 was raised and satisfactorily closed. Refer to Appendix 4 for details. FAR 01 was raised on this for subsequent verification & issuance.
Conclusion	There is no host country approval or authorisation required for the GCC project. As per the guideline available in this regard, submission of Host Country Attestation (HCA) on Double Counting as and when required by CORSIA. For carbon credits issued during 1st Jan 2016 to 31st Dec 2020, HCA is not required for CORSIA labelled credits. The HCA will provide 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	The	information	and	contact	details	of	the	project	owner	and	project	owners
Verificat	tion		them	nselves has b	een a	appropria	itely inco	orpo	orate	d in App	endix 1	of the	PSF wh	nich was

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	checked. The Authorization letters /45/ signed by the project owners has been verified and also the company business license /4/ and investment license /5/ and project owner valid passports /44/ have been checked. The legal owner of the project is Dau Tieng Tay Ninh Energy (DTE) Joint Stock Company and same to be demonstrated by the project owner through the COD /23/ PPA /9/ signed between project owner with EVN and EPC & supply agreement /14/ placed to the equipment suppliers. 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"/41/ for further process which is acceptable to the verification team.
	All information were consistent in these documents /41/ /45/ /2/ and acceptable to the project verification team All information were consistent between in these documents and acceptable to the verification team.
Findings	No finding identified
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 /2/ LoA /45/ were found to be consistent.

D.9. Global stakeholder consultation

Means of Project Verification	The project verification team has determined whether the global stakeholder consultation process was in accordance with the applicable Project Verification requirements related to the global stakeholder consultation in the GCC PS & VS /B01/ by checking the GCC website.
Findings	No finding identified
Conclusion	The PSF was made available through the dedicated interface on the GCC website. The duration of the period for submission of comments for the global stakeholder consultation was from 21/11/2022 – 05/12/2022. There were no comments received during this period https://www.globalcarboncouncil.com/global-stakeholders-consultation/

D.10. Environmental Safeguards (E+)

Means of F Verification	Project	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 – CO₂ emissions.
		Project owner has provided monitoring plan to monitor those positive impact in section n B.7.1 of the PSF & the verification team has provided positive assessment opinions of those monitoring plan in section D.3.7 of this report.
		Few risks identified includes:
		 Solid waste pollution (include hazardous waste, E-waste, end-of-life products/ equipment generated during construction, operation and at the end of life of the project activity) Generation of wastewater

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	Project owner has provided mitigation plan to reduce and mitigate the risks so those are not likely to cause any harm in section B.7.2 of the PSF & the verification team has provided positive assessment opinions of those monitoring plan in section D.3.7 of this report. The detailed matrix has been included in appendix 5 of the report.
Findings	CL 07 was raised and satisfactorily closed. Refer to Appendix 4 for details
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 Verification	Project	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.
		The following have been identified as positive impacts of the project activity:
		 Long-term jobs (> 1 year) created/ lost. Short-term jobs created (< 1 year) Specialized training/ education to local personnel
		Project owner has provided monitoring plan to monitor those positive impact in section B.7.1 of the PSF & the verification team has provided positive assessment opinions of those monitoring plan in section D.3.7 of this report.
		Out of all the safeguards, there are several risks were identified to the society due to the project implementation and operation includes:
		Occupational health hazards
		Project owner has provided mitigation plan to reduce and mitigate the risks so those are not likely to cause any harm in section B.7.2 of the PSF & the verification team has provided positive assessment opinions of those monitoring plan in section D.3.7 of this report. The detailed matrix has been included in appendix 6 of the report.
Findings		CL 07 was raised and satisfactorily closed. Refer to Appendix 4 for details
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 4 SDGs:
	 SDG Goal 4 - Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. SDG Goal 7 - Ensure access to affordable, reliable, sustainable and modern energy for all. SDG Goal 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. SDG Goal 13 - Take urgent action to combat climate change and its impacts.
	The detailed matrix has been included in appendix 7 of the report.
	Project owner has provided monitoring plan to monitor those SDG contribution in section B.7.1 of the PSF & the verification team has provided positive assessment

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	opinions of those monitoring plan in section D.3.7 of this report. The detailed matrix has been included in appendix 7 of the report.
Findings	CL 08 was raised and satisfactorily closed. Refer to Appendix 4 for details
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)

Means of Project Verification	The project verification team has determined whether the Project Owner has chosen to apply for CORSIA (section A.6 of PSF) and has obtained and provided, a written attestation from the host country's national focal point or the focal point's designee, as required by CORSIA Emissions Unit Eligibility Criteria as required by Verification Standard and Project Standard and whether the Project Activity will not lead to double counting of ACCs as per Verification Standard and Project Standard using interview with the project owner, review of CDM website /B08/, GS website /B10/, Verra website /B09/ and declaration from the project owner /41/.
Findings	CAR 04 was raised and satisfactorily closed. Refer to Appendix 4 for details. FAR 01 was raised on this for subsequent verification & issuance.
Conclusion	The project owner has provided a declaration /41/ that there is no Double Issuance by the GCC Program, Double Issuance by other GHG programs, Double Use and Double Sell. The project sites are not applied under Verra Program or GS or any other scheme.
	The proposed GCC project is not included or covered in the information provided on public EU-ETS website: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02003L0087-20180408&from=EN The project owner also 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.
Findings	CAR 04 was raised and satisfactorily closed. Refer to Appendix 4 for details. FAR 01 was raised on this for subsequent verification & issuance.
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 31 December 2020; FAR 01 were raised on this for subsequent verification & issuance. c) The project meets all the requirement of the Emission Unit Criteria of CORSIA required for projects under GCC and therefore can be issued a CORSIA Label (C+) certification.

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- 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 No-net-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 (Gold SDG+ Label) for this project activity.

Section E. Internal quality control

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The Final project verification report prepared by the verification team was reviewed by an independent technical review team to confirm if the internal procedures established and implemented by CCIPL were duly complied with and such opinion/conclusion is reached in an objective manner that complies with the applicable GCC rules/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 were independent of the verification team.

The technical review process may accept or reject the verification opinion or raise additional findings in which case these must be resolved before requesting for registration. The technical review process is recorded in the internal documents of CCIPL, and the additional findings gets included in the report. The final report passed by technical reviewer is approved by the authorized personal of CCIPL and issued to PO and/or submitted for request for registration, as appropriate on behalf of CCIPL.

Section F. Project Verification opinion

Carbon Check (India) Private Limited (CCIPL) has been contracted by Monsoon Carbon Pte. Ltd. **Project** (Entity having authorization of Owners) as per contract No. CIPL1598/GCC/VAL/DTSP/20221007, dated 07/12/2022 to undertake the independent project verification of the GCC project activity titled "Dau Tieng 2 Solar Power Plant Project" (hereafter the project). The objectives of this project verification is to verify that the GCC project meets the requirements of GCC project framework v2.1, GCC program manual v3.1, GCC program processes v4.0, GCC project standard v3.1, GCC project sustainability standard v3.1, GCC verification standard v3.1, GCC Environment & Social safeguards standard v3.0, ISO 14064-2 & ISO 14064-3, applicable approved CDM Methodology ACM0002: Grid-connected electricity generation from renewable sources, version 21.0, Applicable Legal requirements/rules of host country, National Sustainable Development Criteria and CORSIA requirements and other GCC requirements related to aspects such as project design, applicable conditions, project boundary, baseline scenarios, additionality, emission reduction, monitoring plan, local stakeholder consultation, global stakeholder consultation, GHG emission reductions (ACCs), environmental no-net harm label (E+), social no net harm label (S+), Gold SDG label (SDG+), CORSIA(C+). This report summarizes the final project verification opinion which is based on final PSF /2/.

The GCC project activity involved the construction and operation of Greenfield 240 MWp/ 200

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MWe solar power plant in Vietnam. The expected net annual electricity generation of the project activity is approximately 393,074 MWh/year. The electricity thus generated will be sold to the Vietnam National Grid. In the absence of the project activity, the equivalent amount of electricity would be supplied from GHG intensive national grid. The emission reduction will be based on the amount of baseline electricity avoided due to the project and is calculated using the applied CDM Methodology for "Grid-connected electricity generation from renewable sources" ACM0002 v21.0.

The project verification team has verified that the information submitted by the project owner is correct and that the emission reduction achieved has been determined correctly. Based on the information seen and evaluated, the project verification team has requested for registration of the GCC by confirming the following:

Project title:	Dau Tieng 2 Solar Power Plant Project (project submission reference no: S00619)
Sector and Methodology used	Sectoral Scope 1: Energy Industries (renewable/non-renewable sources) Approved CDM Methodology for "Grid-connected electricity generation from renewable sources" ACM0002 v21.0
	The Project Owner has correctly described the Project Activity in the Project Submission Form (version 2.1, dated 09/11/2023) including the applicability of the approved CDM methodology ACM0002, v21.0 and meets the methodology applicability conditions and is expected to achieve the forecasted real 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.
Estimated Emissions reductions	The Project Activity is likely to generate GHG emission reductions amounting to the estimated 323,490 tCO ₂ e per year, 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.
Voluntary labels	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 Environmental No-net-harm Label (E+) and 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 4 SDGs, with the Gold SDG certification label (SDG+).
CORSIA	The Project Activity complies with all the applicable requirements 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.

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Appendix 1. Abbreviations

Abbreviations	Full texts		
ACC	Approved Carbon Credits		
ACM	Approved Consolidated Methodology		
ADB	Asian Development Bank		
AM	Approved Methodology		
AMS	Approved Methodology for SSC Projects		
BE	Baseline Emission		
BM	Build Margin		
CAR	Corrective Action Request		
CCIPL	Carbon Check (India) Private Ltd		
CDM	Clean Development Mechanism		
CH4	Methane		
CER	Certified Emission Reduction		
CL	Clarification Request		
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation		
CO ₂	Carbon Dioxide		
CO ₂ e	Carbon Dioxide Equivalent		
COD	Commercial Operation Decision		
COP/MOP	Conference of Parties/ Meeting of Parties		
CSR	Corporate Social Responsibility		
DNA	Designated National Authority		
DOE	Designated Operational Entity		
DOLISA	Provincial Department of Labor, War Invalids and Social Affairs		
DOIP	Provincial Department of Investment and Planning		
DONRE	Provincial Department of Natural Resources and Environment		
DR	Document Review		
DT1	Dau Tieng 1 Solar Power Plant		
DT2	Dau Tieng 2 Solar Power Plant		
DTE	Dau Tieng Tay Ninh Energy (DTE) Joint Stock Company		
EB	Executive Board		
EIA	Environmental Impact Assessment		
EPP	Environmental Protection Plan		
ER	Emission Reduction		
EREA	Electricity and Renewable Energy Authority		
EVN	Vietnam Electricity Corporation		
FAR	Forward Action Request		
FSR	Feasibility Study Report		
GCC	Global Carbon Council		
GHG	Greenhouse Gas		
GSC	Global Stakeholders Consultation		
GWh	Giga Watt Hours		
HR	Human Resources		
1	Interview		
IPCC	Intergovernmental Panel on Climate Change		
kW	Kilo Watt		
kWh	Kilo Watt Hours		
LEy	Leakage		
LoÁ	Letter of Approval		
LSC	Local Stakeholder Consultation		
MARD	Ministry of Agriculture and Rural Development		
MOIT	Vietnam Ministry of Industry and Trade		
<u> </u>	, , , , , , , , , , , , , , , , , , , ,		

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MOLISA	Vietnam Ministry of Labor, War Invalids and Social Affairs
MONRE	Vietnam Ministry of Natural Resources and Environment
MOST	Vietnam Ministry of Science and Technology
MoV	Means of Verification
MW	Mega Watt
MWh	Mega Watt Hours
NA	Not applicable
NCV	Net Calorific Value
NGO	Non-Government Organization
N2O	Nitrous Oxide
ODA	Official Development Assistance
OSV	On Site Visit
PPA	Power Purchase Agreement
PE	Project Emission
PECC5	Power Engineering Consulting Joint Stock Company 5
PLF	Plant Load Factor
PO	Project Owner
PS	Project Standard
RFR	Request for Registration
SDG	Sustainable Development Goal
SPP	Solar Power Plant
SPV	Special Purpose Vehicle
tCO ₂ e	Tonnes of Carbon dioxide equivalent
TPH	Tonnes Per Hour
UNFCCC	United Nations Framework Convention on Climate Change
V	Version
VS	Verification Standard

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Appendix 2. Competence of team members and technical reviewers

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		Carb — CHEC	on ĸ—	
Carbo	on Check	(India) l	Private	Limited
	Certificat	e of Con	npetenc	y
	Ms. Nguyer	1 Hong N	lgoc Trar	ng
				ance with the requirement pplicable GHG programs:
	for the followi	ng functions and re	equirements:	
⊠ Validator	⊠ Verifier		der	□ Technical Expert
☐ Technical Reviewer	☐ Health Expert	☐ Gender E	xpert	☐ Plastic Waste Expert
□ SDG+	☐ Social no-harm(S	6+) 🗆 Environm	nent no-harm(E+)	☐ CCB Expert
☐ Financial Expert	☑ Local Expert for '	Vietnam		
	in the fo	ollowing Technical i	Areas:	
□ TA 1.1	⊠ TA 1.2	□ TA 2.1	□ TA 3.1	□ TA 4.1
□ TA 4. n	☐ TA 5.1	☐ TA 5.2	□ TA 7.1	□ TA 8.1
□ TA 9.1	☐ TA 9.2	☐ TA 10.1	☐ TA 13.1	☐ TA 13.2
☐ TA 14.1	☐ TA 15.1			
Issue	Date		Ехрі	ry Date
1 st Janua	ary 2023		31st Dece	ember 2023
Vinash L	S.S			مراشه
	Kumar Singh ance Officer			nit Anand CEO

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CCIPL_FM 7.9 Certificate of Competency_V2.1_012023



Carbon Check (India) Private Limited

Certificate of Competency

Ms. Indumathi C

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements

of CDM AS (V7.0), ISO/IEC14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs: for the following functions and requirements: **⊠** Validator **⊠** Verifier □ Technical Expert ☐ Health Expert ☐ Gender Expert ☐ Plastic Waste Expert ⊠ SDG+ □ Local Expert for India and Sri Lanka in the following Technical Areas: ☑ TA 1.1 ☑ TA 1.2 ☐ TA 2.1 ☐ TA 4.1 ☑ TA 3.1 ☐ TA 4. n ☐ TA 5.1 ☐ TA 7.1 □ TA 5.2 ☐ TA 8.1 ☐ TA 9.1 ☐ TA 9.2 ☑ TA 13.1 **⊠** TA 13.2 ☐ TA 10.1 ☐ TA 14.1 ☐ TA 15.1 Issue Date **Expiry Date** 1st January 2023 31st December 2023 Mr. Vikash Kumar Singh Mr. Amit Anand **Compliance Officer** CEO

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Appendix 3. Document reviewed or referenced

No.	Author	Title	References to the document	Provider
1	PO	Webhosted PSF	Version 2.0, dated 17/11/2022	РО
		Interim version PSF	Version 2.1, dated 30/07/2023	
2	PO	Final PSF Version 2.1, dated 09/11/2023		PO
3	PO	Dau Tieng 2 Solar Power Plant Project_ER_V2_31Jul23.xls	Version 2, dated 31/07/2023	PO
4	DOIP	Business License No.3901261281 of Dau Tieng Tay Ninh Energy (DTE) Joint Stock Company	Dated 11/04/2018 & updated version dated 22/02/2022	PO
5	DOIP	Investment License of Dau Tieng 2 Solar Power Plant, No. 0201017856	Dated 08/11/2018 1st updated on 22/04/0219	PO
6	DTE Board of Director	Investment decision of management board	Dated 04/05/2018	PO
7	Energy Information and Technical Center - EREA (MOIT)	Approved FSR	Dated 06/2018	PO
8	EREA (MOIT)	Decision to approve FSR report of DT2 Solar power plant	Dated 13/07/2018	PO
9	EVN	1/ Power Purchase Agreement No. 09/2018/HD-NMDMT-Dau tieng 1&2 2/ Power Purchase Agreement, No. 02/2021/HD-NMDMT-Dau Tieng 2.TN		PO
10	Sai Gon Environment Consulting JSC	Approved EIA report Dated 06/2018		PO
11	IBIS Environmental and Social Consulting Asia Pte	1/ Environment and Social compliance Audit report 2/ Environmental and Social monitoring Report 3/ Environmental and Social	Dated 05/2021 Dated 10/2021 Dated 11/2022	PO
		monitoring Report 4/ Resettlement Plan – Livelihood restoration Report	Dated 02/2023	
12	People's Committee of Tay Ninh Province	EIA approval decision, No. 1483/QD- UBND Dated 12/06/2018		РО
13	Department of Construction, Tay Ninh Province	Construction Permit, No. 143/GPXD Dated 13/09/2018		PO
14	PO & Sinohydro Corporation Limited contractor	Construction Agreement, No. DT2-2- 01, signed between Dau Tieng Tay Ninh Energy JSC & Sinohydro Corporation Limited Contractor		PO
15	PO & Powerchina Huadong Engineering Corporation Limited	EPC & Supply Agreement, No. DT2- 1-01, signed between Dau Tieng Tay Ninh Energy JSC & Powerchina Huadong Engineering Corporation	Dated 14/06/2018	PO

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	Contractor	Limited Contractor		
16	PO & Powerchina Huadong Engineering Corporation Limited PO & Powerchina Operation and maintenance services agreement, signed between Dau Tieng Tay Ninh Energy JSC & Powerchina Huadong Engineering		Dated 01/06/2019	РО
	Contractor	Corporation Limited Contractor		
17	Tay Ninh Province, People's commitee	Connection Agreement, no. 1291/UBND-KTN	Dated 30/05/2018	
18	PO	Consultancy Services Contract, No.01/2018/HD/DTE-PCC	Dated 29/08/2018	PO
19	ERAV	Electricity Operating License, No. 108/GP-DTDL	Dated 08/05/2020	PO
20	People's Committee of Tay Ninh Province	1/ Land Rental Decision, No 1228/QD-UBND 2/ Approval of Land Use Plan No. 3189/QD-UBND 3/ Land lease contract, No 02/09-HDTD	Dated 07/05/2018 Dated 26/12/2017 Dated 10/09/2019	PO
21	DONRE of Tay Ninh Province	Land Use Right Certificate No 694647	Dated 07/06/2021	РО
22	PO	Single Line Diagram, No 18118.DTG2-nM.D01	Dated 06/2018	PO
23	EVN	Commercial Operation Decision, No. 2722/EPTC-KDMD	Dated 20/06/2019	РО
24	PO	Project test run report, signed between PO, Consultant firm & Sinohydro Corporation Limited China	&	
25	Prime Minister	Decision to include Dau Tieng 2 to National Master Plan VII, No 1228/TTg-CN	Dated 18/08/2017	PO
26	PO	Technical Specification of Main Equipments. 1. Specification of Jinko PV module DT2 - JKM330PP-72-V 2. TMEIC@5.1MW inverter station	Undated	PO
27	People's committee of Tay Ninh Province	Grid connection agreement, No. 1291/UBND-KTN	Dated 30/05/2018	РО
28	EVN	Commissioning Decision of Electricity Monitoring System, No.2460/EPTC- KT&CNTT-KDBD	Dated 11/07/2018 PO	
29	MARD – Department of irrigation	Groundwater exploitation permit, No.607/GP-TCTL-PCTTr	Dated 26/12/2019	РО
30	DONRE	Waste registration book, No. 72000639.T	Dated 27/04/2021	РО
31	PO	1/ Waste collection & treatment contract No. HDKT-2021 2/ Waste collection & treatment contract No.39/HDHK-2022 3/ Sample of Waste transfer records No.48/2022/DTE-TBA	Dated 15/12/2021 Dated 04/07/2022 Dated 11 & 12/2022	PO
32	PO	Training records & certification	Dated 2021, 2022	PO

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33	EVN Southern	Colibration partificate of Main motor		РО
33		Calibration certificate of Main meter 1/ Certification of Verification No.		PO
	Electrical Testing Company	200301441/TNĐMN-ĐK, dated	Dated 16/03/2020	
	Company	16/03/2020 by EVN Southern	Dated 10/03/2020	
		Electrical Testing Company 2/ Certification of Verification No.		
			Data d 20/02/2022	
		220300500/TNĐMN-ĐK, dated	Dated 29/03/2022	
		29/03/2022 by EVN Southern		
		Electrical Testing Company		
		3/ Certification of Verification No.	D - 1 - 1 00/00/0000	
		230300106/TNĐMN-ĐK, dated	Dated 29/03/2023	
		03/03/2023 by EVN Southern		
		Electrical Testing Company		
		Calibration certificates of back-up		
		meter	D - 1 - 1 4 0 /00 /0000	
		4/ Certification of Verification No.	Dated 16/03/2020	
		200301440/TNĐMN-ĐK, dated		
		03/03/2023 by EVN Southern		
		Electrical Testing Company		
		5/ Certification of Verification No.	D-+ 1 00/00/0000	
		230300100/TNĐMN-ĐK, dated	Dated 03/03/2023	
		03/03/2023 by EVN Southern		
24	E) /NI	Electrical Testing Company	0040 0000	DO
34	EVN	Monthly Electricity Invoices/	2019 - 2022	PO
35	PO	Generation Local Stakeholder Consultation		+
აა	۲۰	Evidence		
			Dated 16/04/2019	BO
		1/ Minute of Meeting of LSC	Dated 16/04/2018	PO
		2/ Consultation opinion of Fatherland Front Committee	Dated 18/04/2018	
			Dated 19/05/2019	
		3/ Consultation opinion of Suoi Da District People's Committee	Dated 18/05/2018	
		4/ List of participant on LSC meeting	Dated 16/04/2018	
		on 16/04/2018	Daleu 10/04/2010	
		5/ Photos of LSC meeting on		
		16/04/2018		
36	PO	1/ Stakeholder Engagement Plan	Undated	
		2/ Grievance Mechanism Procedure	Undated	PO
		& photo of grievance box	Jildatou	1, ~
37	PO	Social Environmental Management		
"	1.0	Plan		PO
		1/ EHS Policy	Undated	1.
		2/ Hazard Identification, Risk	Undated	
		Assessment and Control Procedure	- C.Idatoa	
		3/ Waste Management Procedure		
		4/ EHS Training and Capacity	Undated	
		Development Plan	2020-2022	
38	PO	1/ Company Code of Conduct	Undated	PO
		2/ Human right policy No.22/2021	2021	-
39	PO	Evidence of Corporate social		1
		responsibility activity		PO
		1/ Photos	Undated	
		2/ Thank you letters from beneficiary	2018-2022	
		3/ News/ Articles on Magazines	2020-2022	
40	PO	Employment evidence		PO
	1	1/ Employment list	Dated 15/12/2022	-
	1	1 1 - 7		1

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		2/ Salary payment records	Dated 06/2022	
		2/ Salary payment records	Dated 06/2022	
11	DO.	3/ List of temporary staff	Dated 16/04/2023	DO.
41	PO	GCC Project Declaration at Initial Submission and Request for Registration	Dated 16/08/2023	PO
42	PECC5	Project Planning Report, No. 18118.DTG2	Dated 08/2018	
43	PO	Yearly healthcare check-up records	Undated	PO
44	PO	Project owners' passports	Undated	PO
45	PO	Letter of authorization	Dated 14/08/2023	PO
46	PO	Annual OHS report 2020 - 2022	Yearly	PO
47	PO	List of households receive	Dated 28/02/2019	PO
.,		compensation	Dated 20/02/2010	'
48	PO	Gender Action Plan - 2021	Dated 2021	PO
			2000 202 :	
/A01/	The National Assembly	Law on Investment No 61/2020/QH14	Dated 17/06/2020	РО
/A02/	The National Assembly	Law on Environmental Protection No. 72/2020/QH14	Dated 17/11/2020	PO
/A03/	The National Assembly	Electricity Law No.28/2004/QH11, dated 03/12/2004 and its amendment No 24/2012/QH13	Dated 03/12/2004 Amended on 20/11/2012	РО
/A04/	The Prime Minster	Decision No. 2068/QD-TTg, approving the development strategy of Renewable Energy of Vietnam by 2030 with a vision to 2050		PO
/A05/	The Prime Minster	Decision No. 428/QD-TTg, the approval of revisions to the National Power Development Plan from 2011 to 2020 with vision extended to 2030		PO
/A06/	The Prime Minster	Decision No.11/2017/QD-TTg on Dated 11/04/ Mechanism for encouragement of Development of Solar Power in Vietnam		PO
/A07/	The Government	Decree on Management of Waste and Dated 24/04/2015 Discarded Materials, No. 38/2015/ND-CP		РО
/A08/	The National Assembly	Land Law 2013, No. 45/2013/QH13 Dated 29/11/2013		PO
/A09/	The Prime Minster	Circular No. 34/2017/TT-BTNMT on recall and treatment of discarded products		PO
/A10/	MONRE	National Technical Regulation on Ambient Air Quality (QCVN 05:2013/BT NMT)		PO
/A11/	The National Assembly	Law on Water Resources (No. 17/2012/QH13	Dated 21/06/2012	PO
/A12/	The National Assembly	Law on Occupational Safety and Health (Law No. 84/2015/QH13)	Dated 25/06/2015	РО
/A13/	The National Assembly	Vietnam Labour Code 2019, No. 45/2019/QH14	Dated 20/11/2019	РО
/A14/	MONRE	Emission factor of National grid calculation document, No. 1278/BDKH-TTBVTOD http://dcc.gov.vn/van-ban-phap-luat/1102/Nghien-cuu,-xay-dung-he-	Dated 31/12/2022	PO

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		so-phat-thai-(EF)-cua-luoi-dien-Viet-		
		Nam-nam-2021-(k%C3%A8m-CV-1278/BDKH-TTBVTOD).html.		
/A15/	MONRE	List of Power Plants commissioning	2018 – 2023	PO
/A16/	MOST	1/ Circular 23/2013/TT-BKHCN (Regulation on the calibration of measurement equipment), issued by the MOST 2/ Circular 07/2019/TT-BKHCN (amendment of Circular 23/2013/TT-		PO
/A17/	MOIT	BKHCN), issued by the MOST Circular No. 42/2015/TT-BCT, Regulations on Electrical Measurement in Electricity System, valid since 18th January 2016	Dated 18/01/2016	РО
/A18/	MOST	1/ QCVN 24:2016/BYT: Permissible Exposure Levels of Noise in the Workplace 2/ QCVN 27:2010/BTNMT: National Technical Regulation on Vibration.	Dated 30/06/2016 Dated 16/12/2010	PO
/A19/	MONRE	Decision 23/2006/QD-BTNMT on List of hazardous waste, issued by MONRE, dated 26/12/2006	Dated 26/12/2006	PO
/A20/	MONRE	Circular No.36/2015/TT-BTNMT dated 30/06/2015 of MONRE on Management of Hazardous Waste	Circular No.36/2015/TT-BTNMT Dated 30/06/2015 dated 30/06/2015 of MONRE on	
/A21/	MONRE	Circular 09/VBHN-BTNMT on Waste management	Dated 25/10/2019	PO
/A22/	MOST	QCVN 14:2008/BTNMT: National technical regulation on Domestic Wastewater QCVN 08-MT:2015/BTNMT: National technical regulation on Surface Water Quality.	Dated 2008 Dated 2015	PO
/A23/	The National Assembly	Law No.84/2015/QH13 on Occupational Safety and Hygiene	Law No.84/2015/QH13 on Dated 25/06/2015	
/A24/	Prime Minister	Decree 38/2022/ND-CP on Region- based minimum wages		PO
/A25/	Prime Minister	Decree 47/2014/ND-CP on Compensation, support, and resettlement upon land expropriation		PO
/B01/	GCC	 a) GCC Project Standard, V3.1 b) GCC verification Standard, version 3.1 c) GCC Program Manual, V3.1 d) GCC Program Definition, V3.1 e) GCC Project Sustainability Standard, V3.1 	https://www.globalcar boncouncil.com/	GCC

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		T	I	
		f) GCC Environment and Social		
		Standard, V3.0		
		g) Clarification No.1, V1.3		
		h) Clarification No.2, V1.0		
		i) Standard on avoidance of double		
		counting, V1.0		
/B02/	GCC	Instructions in Project Submission Form (PSF) - template, V4.0	https://www.globalcar boncouncil.com/	GCC
/B03/	UNFCCC	ACM0002 Grid-connected electricity generation from renewable sources Version 21.0	http://cdm.unfccc.int/	UNFCCC
/B04/	UNFCCC	Methodological Tool: Tool for the demonstration and assessment of additionality, Version 7.0	http://cdm.unfccc.int/	UNFCCC
/B05/	UNFCCC	Methodological Tool: Additionality of first-of-its-kind project activities, version 3.0	http://cdm.unfccc.int/	UNFCCC
/B06/	UNFCCC	Methodological Tool: Tool to calculate the emission factor for an electricity system, Version 07.0	http://cdm.unfccc.int/	UNFCCC
/B07/	UNFCCC	Methodological Tool: Tool to determine the remaining lifetime of equipment, V1.0	http://cdm.unfccc.int/	
/B08/	UNFCCC	CDM Website https://cdm.unfccc.int/Projects/projse arch.html https://cdm.unfccc.int/Projects/Validat ion/index.html	Publicly Available	UNFCCC
/B09/	VERRA	Verra Registry https://registry.verra.org/app/search/ VCS/All%20Projects	Publicly Available	VERRA
/B10/	Gold Standard	GS Website https://registry.goldstandard.org/proje cts?q=&page=1	andard.org/proje Publicly Available Gold Stand	
/B11/	i.REC Standard	International REC Standard (I-REC) https://www.irecstandard.org/vietnam /		i.REC

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

Table 1. CLs from this Project Verification

D2 of PVR Date: 30/01/2023 CL ID 01 Section no.

Description of CL

In Section A1 of the PSF

- 1) Please add the total emission reduction for the chosen crediting period.
- 2) Please briefly describe all SDG goals the project is expected to contribute to.
- 3) Please include the exhaustive list of events during project development.

Project Owner's response

In Section A1 of the revised PSF version 2.1:

- 1) The total emission reduction for the chosen crediting period is now added.
- 2) The Project contributes to SDG goals 4, 7, 8, 13, which are now summed up and elaborated in
- 3) The exhaustive list of key events during project development is now provided in the PSF, based on the suggestion.

Date: 05/09/2023

Date: 08/09/2023

Documentation provided by Project Owner

Revised PSF

GCC Project Verifier assessment

- 1) Section A1, of the PSF has been revised and included the emission reduction for the chosen crediting period. The verification team has checked and confirmed that this has been correctly added.
- 2) All the SDG goal of this project include SDG 4, 7, 8, 13 has been briefly mentioned in section A1 of the PSF.
- 3) All the key events of the project developing has been included in section A1 of the PSF. The verification team has reviewed and cross-checked with supportive documents to confirm them.

CAR 01 is resolved & closed.

CL ID Section no. D2 of PVR Date: 30/07/2022

Description of CL

In Section A3 of the PSF

- 1) Please add the name of the connection point (name of substation, length of transmission line, voltage of it).
- 2) Please include the technical specification for the transformers, clearly indicate the name of the transformers, serial numbers, etc.
- 3) Please also include the information of the monitoring equipment and their location in the systems as per requirement of para 6(c) of Instructions for completing PSF
- 4) Provide a short summary of facilities, systems and equipment in the baseline scenario as per requirement of para 9 of Instructions for completing PSF.
- 5) Please describe how the technologies/measures and know-how for their use are transferred to the host country as per requirement of para 11 of Instructions for completing PSF.
- 6) Please clarify to the verification team how did TOOL 10 was used to determine the operational lifetime of the plant?

Date: 05/09/2023 **Project Owner's response**

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In Section A.3 of the revised PSF version 2.1:

- 1) The name of connection point (name of substation, length of transmission line, voltage of it) from the starting point at the Project to the national electric grid is provided.
- 2) The technical specification for the transformers including its name, model number, etc is speculated in Table 4 of the PSF.
- 3) The information and locations of the monitoring equipment and their location in the systems are provided.
- 4) A short summary of facilities, systems and equipment in the baseline scenario, as per requirement of para 9 of Instructions for completing PSF, is added.
- 5) Details of how the technologies/measures and know-how for their use are transferred to the host country, as per requirement of para 11 of Instructions for completing PSF, is added to the Section.
- 6) The additional assessment for TOOL 10 is presented in the Section A.3. As per the Tool, the remaining lifetime (RL) is determined as a difference between the technical lifetime and the operational time.

The option (a) under the Tool 'Use manufacturer's information on the technical lifetime of equipment and compare to the date of first commissioning' has been chosen to determine the operational lifetime of the Project Activity. The technical lifetime of the Project equipment is designed of 25 years from its first commissioning (e.g., Specifications of Jinko Solar PV modules). Hence, the difference between the technical lifetime (i.e., 25 years) and the operational time (i.e., since its first commissioning) is equal 25 years (i.e., from June 2019 to May 2044).

Given the Project Activity is a First-of-its-kind project as per Tool 23: Additionality of first-of-its-kind project activities v3.0, there is no Investment Analysis is required hence no operational lifetime of 25 years is considered.

Documentation provided by Project Owner

CL 01:

Request 2:

1) The specification of Transformers

Request 6:

1) The specification of Jinko Solar PV modules

GCC Project Verifier assessment

1) The name of connection point (name of substation, length of transmission line, voltage of it) from the starting point at the Project to the national grid has been detailed in section A.3 of the PSF. The verification team has cross-checked with supportive documents (e.g, single line diagram & PPA) and confirmed that that information is correctly added.

Date: 08/09/2023

- 2) The technical specification for the transformers including its name, model number, etc has been included correctly in Section A.3 of the PSF. It has been verified during onsite visit and supportive document.
- 3) The information and locations of the monitoring equipment and their location in the systems are correctly provided in section A.3 of the PSF. It was verified during an onsite visit and supportive documents.
- 4) As per the requirement of para 9, of Instruction for completing PSF, a short summary of facilities, systems and equipment in the baseline scenario has been correctly included in Section A.3 of the PSF.
- 5) As per the para 11 of Instructions for completing PSF, details of how the technologies/measures and know-how for their use are transferred to the host country has been correctly added.
- 6) The option (a) under the Tool 10 'Use manufacturer's information on the technical lifetime of equipment and compare to the date of first commissioning' has been chosen to determine the

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operational lifetime of the Project Activity. The information has been included in the Section for better understanding.

CL 02 is resolved & closed.

 CL ID
 03
 Section no.
 D.3.1 of PVR
 Date: 30/01/2023

Description of CL

In section B2 of the PSF

- 1) Please update the applicability conditions of ACM0002 as per the most updated version.
- 2) Please include the assessment for TOOL 10.

Project Owner's response

In Section B2 of the revised PSF version 2.1:

1) The applicability conditions of ACM0002 are updated to the most recent version 21.0 listed on CDM UNFCCC website.

Date: 05/09/2023

Date: 08/09/2023

Date: 08/09/2023

2) The additional assessment for TOOL 10 is added in the Section.

Documentation provided by Project Owner

Revised PSF

GCC Project Verifier assessment

- 1) It has been updated to ACM0002, version 21, the most updated version of applied methodology ACM0002.
- 2) The justification for the applicability of TOOL 10 has been included in Section B.2 of the PSF.

CL 03 is resolved & closed.

CL ID 04 **Section no.** D.3.4 of PVR **Date**: 30/01/2023

Description of CL

In section B4 of the PSF, please include the most updated EF_{Grid,OM}, EF_{Grid,BM}, EF_{Grid,CM} figures of National Grid to justify the fossil fuel dependent characteristics of Vietnam electricity grid.

Project Owner's response Date: 05/09/2023

The most updated 2021 EF_{Grid,OM}, EF_{Grid,BM}, EF_{Grid,CM} figures of National Grid is now updated in Section B4 of the revised PSF version 2.1.

Documentation provided by Project Owner

CL 04:

1) Final report of Research and Develop emission factor (EF) of Vietnam's electricity grid in 2021. Available at http://dcc.gov.vn/van-ban-phap-luat/1102/Nghien-cuu,-xay-dung-he-so-phat-thai-(EF)-cua-luoi-dien-Viet-Nam-nam-2021-(k%C3%A8m-CV-1278/BDKH-TTBVTOD).html

GCC Project Verifier assessment

The EFGrid,OM, EFGrid,BM, EFGrid,CM figures of Vietnam National Grid has been updated to the most recent. The verification team has reviewed the Emission factor of National grid calculation document No. 1278/BDKH-TTBVTOD, published by MONRE, dated 12/2022 which is latest version publicly available during the submission of PSF to verifier and confirmed that all values are correct.

CL 04 is resolved & closed

CL ID	05	Section no.	D.3.5 of PVR	Date: 30/01/2023
Description	of CL			

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In section B5 of the PSF, please demonstrate the additionality follow GCC approach as per para 49-54 of GCC Project Standard consisting of two components (a) A legal requirement test (b) Additionality test.

Date: 05/09/2023

Date: 08/09/2023

Project Owner's response

The additionality follows GCC approach, as per para 49-54 of GCC Project Standard consisting of two components (a) A legal requirement test (b) Additionality test, are presented in Section B5 of the revised PSF version 2.1.

Documentation provided by Project Owner

Revised PSF

GCC Project Verifier assessment

In Section B5 of the PSF, the legal requirement test has been added. The verification team has reviewed the section, and relevant legal documents and confirmed that it has been correctly justified.

CL 05 is resolved & closed.

CL ID 06 Section no.	D.3.7 of PVR	Date: 30/01/2023
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Description of CL

In section B7.1 of the PSF

Parameter EG_{facility,y}

- 1) Please include all the version of applied methodology
- 2) Please clarify if the net electricity will be measured directly or be calculated.
- 3) Please elaborate on the national standards & requirement, include the name of document, author and date of issuance for those
- 4) Please elaborate on responsible entity for the calibration, which entity is entitled to conduct the calibration. What is the procedure in case of difference between main meter and back-up meter

ENR07: Replacing Fossil Fuels with Renewable

1) The verification team did not see the proposed monitoring method could monitor the fossil fuels replaced by the project activity.

SDG 3. Ensure healthy lives and promote well-being for all at all ages

1) Household and ambient air pollution is not linked with CO₂ emission. Ambient air quality linked to Sulphur dioxide (SO₂), carbon dioxide (CO), nitrogen oxide (NO_x), ozone (O₃), suspended dust, dust PM10 (dust ≤ 10µm) and lead (Pb) in the ambient air. The emission of CO₂ alone is not impacting the air quality, if not considering the concentration.

Project Owner's response Date: 05/09/2023

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In Section B.7.1 of the revised PSF version 2.10:

Parameter EGfacility.v

- 1) Version 21.0 of applied methodology ACM0002 is now added and applied.
- 2) The net electricity will be calculated by the formula "Net electricity = Export Import'. The electricity metering data for export and import shall be recorded by the bi-directional meters.
- 3) The national standards & requirement, including the name of document, author and date of issuance are now elaborated.
- 4) The responsible entity to conduct the calibration is elaborated. The procedures in case of difference between main meter and back-up meter are also detailed in the revised PSF.

ENR07: Replacing Fossil Fuels with Renewable

1) This parameter is eliminated from Environmental Safeguards assessment.

SDG 3. Ensure healthy lives and promote well-being for all at all ages

1) SDG 3 is eliminated out of SDG goals contributed by the Project, and the SDG 4 has been added and monitoring parameters specified.

Date: 08/09/2023

Documentation provided by Project Owner

Revised PSF.

GCC Project Verifier assessment

In Section B.7.1.

Parameter EGfacility,y

- 1) Applied methodology is correctly updated to ACM0002 version 21.
- 2) The calculation of net electricity is clearly documented as "Net electricity = Export Import". All the details on metering data have been correctly added. It has been verified during onsite visit and relevant supportive document.
- 3) All the national standards & requirements have been documented. All the supportive documents has been provided to the verification team. The verification team has reviewed and confirmed that those information in the PSF is correct.
- 4) The responsible entity to conduct the calibration is correctly mentioned as Vietnam Electricity corporation. The procedures in case of difference between main meter and back-up meter are also detailed in the revised PSF. This was also verified during onsite visit and confirmed that it is correct.

ENR07: Replacing Fossil Fuels with Renewable

- 1) This has been removed.
- SDG 3. Ensure healthy lives and promote well-being for all at all ages
 - 1) SDG 3 has been removed.

CL 06 is resolved & closed.

CL ID	07	Section no.	Appendix 1 & 2 of PVR	Date: 30/01/2023		
Description of CL						

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In section E.1

- 1) Please clearly write the limit & applicable requirement in relevant regulation for the environmental impact that you identified.
- 2) During the onsite visit, the verification team found that there was a land use change. Please explain the impact.

In section E.2

- 1) Please write the applicable requirement in relevant regulation for the social impact that you identified.
- 2) In section E.2 of PSF, For Employment opportunities and thus income generation have been created for local people from monitoring parameter or justification, it is not clear what specific policy measures or steps taken by project owners to ensure that project creates Employment opportunities and thus income generation for local people

Date: 05/09/2023

Project Owner's response

In section E.1

- 1) The limit & applicable requirement in relevant regulation for the environmental impacts are elaborated.
- 2) The area of Dau Tieng 2 Solar Power Plant is about 270.2 hectares, in Suoi Da commune, Duong Minh Chau district, Vietnam. The total land area acquired includes the Plant Area (262 ha) and the land for the Transmission line and towers 1.4km (73 ha).

Plant Area:

The Plant Area was originally owned by the Government as public land and managed by Dau Tieng Reservoir Authority. Then the Province has assigned to Dau Tieng – Phuoc Hoa Irrigation Works Management and Exploitation Company to manage the Reservoir area, which comprises 85.5% of short-term crops concentrated in the West and South of the Project site while the rest is vacant land, semi-flooded, and not yet exploited. The Project thereafter has been granted the land use right by the Tay Ninh Province (refer Doc #4 & 5 below).

The location of the proposed Project is located in a semi-submerged land area of Dau Tieng Lake area, the area of the Project is mostly in a place with seasonal natural flooding, far from the area with dikes and dams, so it will not affect to the safety of dams and waterways. In addition, the site of the proposed Project is located on relatively flat terrain, mainly bare land with portions of land previously used for growing short-term crops.

In detail, the seasonally flooded land was mainly used for cultivation of cassava in the dry season by informal land users. Some of the land was also used by informal land users for cultivation of sugar cane, rubber trees, and sugar apples. Due to the nature of the seasonally submerged land, the land was generally considered unfavorable for agriculture and the agricultural production was low. While the land lease was transferred to the Project, and the land is now used for a solar farm, the land is still part of the reservoir land and is still seasonally flooded. Therefore, the change in land use is only partial and did not have negative environmental impacts.

Transmission line area (TL):

The land use rights for the small areas of land required for each TL tower were acquired from the local people. These small areas of land were changed from agricultural use to use for electricity transmission towers (e.g., five out of six TL towers are situated within the Project site boundary). However, each transmission tower has only 0.25ha footprint each hence the impacts were limited to the land and were able to continue the cultivation activities on the affected land (e.g., rubber, custard apple trees).

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In addition, the land under the TL wires (in the "TL corridor") was also affected because Vietnamese regulations place some restrictions on the use of land in a TL corridor (i.e. limit on growing tall trees or constructing buildings). However, the land was originally used for agriculture and so the land users were able to continue the current land use (i.e., there was no change in land use for the land in the TL corridor). Given the short length of the transmission line, only 11 land users were affected by the TL corridor including 4 households were affected by loss of crops (e.g., 55 trees of sugar apple and rubber, refer to Doc #1 below). The entire land acquisition and compensation process was undertaken in accordance with Vietnam's laws and procedures, and with reference to the Grid operator's policies, and was approved by the local regulatory agencies.

No further environmental impacts are anticipated during the operational lifetime of the Project due to land use changes.

In section E.2

- 1) The applicable requirements in relevant regulation for the social impacts are elaborated.
- 2) In section E.2 of PSF, for Employment opportunities, the Project is already commissioned and in operation, therefore, the Project has already provided employment opportunities for people (e.g., short-term jobs such as construction workers and long-term jobs such as full-time staff during the Project operational time). The Project applied a policy of non-discriminatory recruitment procedures and fair remuneration in compliance with national regulations including minimum wage protection for employees via the internal Code of Conduct and Human Rights Policy. Hence, this contribution has been already achieved and ensured its impact on local people. Further assessment to monitor this impact has been presented in the Table of Section E.2.

Documentation provided by Project Owner

CL 07:

In section E.1, Request 2:

- 1) ADB Environment and Social Compliance Audit Report October 2021
- 2) ADB Semi-annual Monitoring E&S Report April-September 2022
- 3) ADB Livelihood Restoration Plan January 2023
- 4) Land Lease Decision, Decision No 1228/QD-UBND issued by Tay Ninh People's Committee dated 07 May 2018 regarding the lease of land to Xuan Cau Tay Ninh Co., Ltd for the development of Dau Tieng 1,2 and 3 Solar Power Projects. Original of land area: Public land managed by Dau Tieng Phuoc Hoa Irrigation Works Management and Exploitation Company
- 5) Land Lease Agreement No 02/09-HDTD, dated 10 September 2018 issued by Natural Resources and Environment Department of Tay Ninh Province

In section E.2, Request 2:

- 1) Internal Code of Conduct
- 2) Human Rights Policy
- 3) List of Employees

GCC Project Verifier assessment Date: 08/09/2023

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In section E.1

- 1) The limit & applicable requirement in relevant regulation for the environmental impact that PO has identified were all included. It has been reviewed by the verification team & justify in Appendix 1 of this PVR.
- 2) Before the project construction, the project area is comprising 85.5% of short-term crops concentrated in the West and South of the Project site while the rest is vacant land, semi-flooded, and not yet exploited. The Project thereafter has been granted the land use right by the Tay Ninh Province. The location of the proposed Project is located in a semi-submerged land area of Dau Tieng Lake area, the area of the Project is mostly in a place with seasonal natural flooding, far from the area with dikes and dams, so it will not affect to the safety of dams and waterways. In addition, the site of the proposed Project is located on relatively flat terrain, mainly bare land with portions of land previously used for growing short-term crops. So before the implementation of the project activity, the land has very little value regarding economics, ecological or agriculture, etc. While the land lease was transferred to the Project, and the land is now used for a solar farm, the land is still part of the reservoir land and is still seasonally flooded. Therefore, the change in land use is only partial and did not have negative environmental impacts.

Other land use changes for transmission line and corridor is also very small, and there is very minimal impact. It has been clearly explained in the relevant section.

In section E.2

- 1) Applicable requirement in relevant regulation for the social impact that PO has identified were all included. It has been reviewed by the verification team & justify in Appendix 2 of this PVR.
- 2) The project activity has provided supportive documents on the total employee number, HR policy & company code of conduct. The verification team has reviewed all the document and confirmed that the project activity has create many long-term and short-term jobs for local people and contribute to the income generation.

CL 07 is resolved & closed.

CL ID	08	Section no.	D.3.7 of PVR	Date: 30/01/2023		
Description of CI						

Description of CL

In section F & section B.7.1 of PSF,

- 1) In UN-level Target, please describe the UN-level target(s) and corresponding indicator no(s) also
- 2) For SDG#3, the verification team didn't see the clear connection of project level indicator, action & monitoring parameters with the UN targets & indicator. Please clarify to verification team how project level indicator, monitoring parameter and actions are determined for following UN targets:
 - Indicator 3.9.1 Mortality rate attributed to household and ambient air pollution.
 - Target 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.
- 3) Please clarify for the verification team how the project's contribution to SDG#9 is additional to what is already accounted under SDG#7 and SDG#13.

Project Owner's response Date: 05/09/2023

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In section F & section B.7.1 of the revised PSF version 2.1,

- 1) In UN-level Target, the UN-level target(s) and corresponding indicator no(s) are described in detail.
- 2) The SDG 3 is now eliminated from the assessment. The new SDG 4 has been added to the assessment. Further detail is presented in the Section and supporting documents are provided.
- 3) SDG9 has been removed

Documentation provided by Project Owner

CL 08:

Request 2:

- 1) Training materials and certificates
- 2) Feasibility Study Report, Volume 2.1 Project Description of Technical Design (including Flood Study Page 17).
- 3) The Civil structure design of mounting system for Dau Tieng 2 Solar Power Plant, DTTN-DT2-PC-CHS-DC-0006-1 B Civil structure calculation of mounting system

Date: 08/09/2023

Date: 08/09/2023

GCC Project Verifier assessment

- 1) In UN-level Target, the UN-level target(s) and corresponding indicator no(s) was included correctly and also inline with project-level target and monitoring parameters.
- 2) SGD 3 has been removed.
- 3) SDG 9 has been removed.

CL 8 is resolved & closed.

Table 2. CARs from this Project Verification

CAR ID	01	Section no.	D.3.1 of PVR	Date: 30/01/2023			
Description of CAR							
In cover page of the PSF							

- 1) Please use the most updated methodology ACM0002. Please also update throughout the document.
- 2) In the section: GCC Rules and Requirements & CDM Rules, please remove all the unused rows.

Project Owner's response Date: 05/09/2023

In cover page of the revised PSF version 2.1

- 1) The most updated methodology ACM0002 Version 21.0 is now used on the cover page and updated throughout the document.
- 2) In the section: GCC Rules and Requirements & CDM Rules, all the unused rows are now removed.

Documentation provided by Project Owner

Revised PSF

GCC Project Verifier assessment

- 1) Through out the PSF, the version of applied methodology has been revised and updated to the most recent version.
- 2) All the unnecessary rows has been removed.

CAR 01 is resolved & closed.

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CAR ID 02 Section no. D.3.7 of PVR Date: 30/01/2023

Description of CAR

In section B.6.1 of the PSF, please clearly add the calculation of Grid emission factor (OM, BM, CM) or the source for it in the PSF. Please also clarify in the PSF which version of "Tool to calculate the emission factor for an electricity system" was used to calculated EF_{Grid,OM}, EF_{Grid,BM}, EF_{Grid,CM}. What weighted numbers were applied to calculate CM?

Project Owner's response

The calculation of Grid emission factor (OM, BM, CM) and the source for it are included in Section B.6.1 of the revised PSF. In the PSF, Version 07.0 of TOOL 07 "Tool to calculate the emission factor for an electricity system" was used to calculated EF_{Grid,OM}, EF_{Grid,EM}, EF_{Grid,CM}; and the weighted numbers were applied to calculate CM are also provided in the PSF. Refer the document provided under CL 04 - the Final report of Research and Develop emission factor (EF) of Vietnam's electricity grid in 2021.

Date: 05/09/2023

Date: 08/09/2023

Documentation provided by Project Owner

GCC Project Verifier assessment

The EF_{Grid,OM}, EF_{Grid,BM}, EF_{Grid,CM} figures of Vietnam National Grid has been updated to the most recent and also include the step-wise explanation on the calculation methodology. The verification team has reviewed and confirmed that the calculation methodology is complied with TOOL 07 "Tool to calculate the emission factor for an electricity system", version 07.0. The verification team has reviewed the Emission factor of National grid calculation document No. 1278/BDKH-TTBVTOD, published by MONRE, dated 12/2022 which is latest version publicly available during the submission of PSF to verifier and confirmed that all values are correct.

CAR 02 is resolved & closed

CAR ID 03 Section no. D.6 of PVR **Date:** 30/01/2023

Description of CAR

- In Section G, it is not clear how the local stakeholders were briefed on the environmental and social impacts of the Project and the effect of the Project on SDG so that they could provide their opinion on the same. Please improve description.
- Under section G3 of PSF (page 62), please indicate the system the project owners have for stakeholders to express their grievance in future and how this is proposed to be addressed.

Project Owner's response

Date: 05/09/2023 1) In Section G, the required description of the local stakeholder consultation is now elaborated.

2) Under section G3 of the revised PSF version 2.1, the Continuous Grievance Mechanism for stakeholders to express their grievances in the future and how this is proposed to be addressed are now added.

Documentation provided by Project Owner

CAR 03, Request 2:

1) Continuous Grievance Mechanism

GCC Project Verifier assessment Date: 08/09/2023

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- 1) In Section G, it has been clearly explained the process and information provided during the local stakeholder consultation workshop. All the environmental, social impacts as well as SDG goal that the project activity expected to be contributed has been clearly explained so the local stakeholder can provide their opinion on that. The verification team has cross-checked by interviewing some local people during onsite visit and reviewed supportive documents (e.g, minute of meeting of LSC, invitation letters, etc) and therefore can confirm that all information has been correctly reported.
- 2) Under section G3 of PSF, the grievance mechanism has been included. This has been verified by interviewing with PO, local stakeholder, etc during onsite visit and checking the grievance mechanism procedure provided by the PO.

CAR 03 is resolved & closed.

CAR ID 04 Section	no. D.7, D.13, D14 of PVR	Date: 30/01/2023
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Description of CAR

According to para 14(c)(v) of GCC PS (v3.1) submission of Host Country Attestation on Double Counting as and when required by CORSIA is mandatory requirement for projects that intend to use ACCs for CORSIA. As declaration in Section A5, this project intent to use ACCs for CORSIA, so please provide the Host Country Attestation on Double Counting.

Date: 05/09/2023

Date: 08/09/2023

Project Owner's response

To ensure that there is no double counting for Emission units generated from the Project, a written attestation from the host country (e.g., Vietnam) will be provided at the earliest opportunity for the eligible units generated beyond 31st December 2020 in the subsequent issuances to the GCC Program. The statement is already declared in Section A.5 of the revised PSF.

Documentation provided by Project Owner

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GCC Project Verifier assessment

The Project Activity complies with all the applicable requirements for the Emission Unit Criteria of CORSIA and is issued a CORSIA Label (C+) certification valid till 31 December 2020. A written attestation from the host country's national focal point is not required till 31 December 2020.

The Verifier certifies CORSIA Label (C+) till 31 Dec 2020. Once the Host Country Authorization is provided later, this can be verified in first or subsequent verifications. (FAR 01)

CAR 04 is resolved & closed

CAR ID 05 **Section no.** D.3.5 of PVR **Date**: 25/09/2023

Description of CAR

- 1) In line with tool 23, please provide publicly available information, for example from government departments, showing that the Dau Tieng 2 Solar Power Plant Project is first of its kind in Vietnam.
- 2) The other project DT1 also had the same start date 14/06/2018 and there was a combined PPA (DT1 and DT2) dated 05/09/2018. DT1 is also claiming GCC credits, but they have proved additionality by investment analysis. Whereas DT2 has claimed to be the first of its kind. Need to Justify with proof how DT2 is considered as first of its kind when both the projects have same start date and combined PPA?
- 3) There is no publicly available information/ domain to check that the DT2's solar project start date (EPC contract) is the first issued one in Vietnam. What if any other project had placed the EPC contract before this date? Is there any domain to verify?

Project Owner's response Date: 02/11/2023

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- 1) As per the Tool 23, the publicly available information of the first solar power plant commissioned in Vietnam was provided at Footnote 43 and 44 in the PSF. The publicly information demonstrated that there no other similar projects that had started commercial operation in Vietnam at the time of DT2's Project Start Date. The news was already provided. Note that the first solar project in Vietnam had COD on 05 October 2018. Before this time, there were no other similar projects operated in the country.
- 2) DT1 and DT2 shared the same Start Date and both have the Project Start Date before 05 October 2018 mentioned above. Hence, they can be both considered as 'first-of-its-kind' (FOK) as per Tool 23 guidance and definition. The combined PPA (DT1 and DT2) has no impacts to the Start Date of DT2 and no violation to the FOK identification in Tool 23. Moreover, DT2 subsequently achieved a separate signed PPA as described in Section A.1 of the PSF.
- 3) As per the FOK guidelines in Tool 23, a project qualifies for FOK if at the time of the investment decision there were no other projects of this kind already in operation in the country. Therefore, actually, there could be many projects that could qualify for FOK if they are being developed with a similar timeframe. Note that it does not matter if other projects had signed an EPC contract before our project, or if they reach COD before our project the guideline clearly states that what matters is if there were any other projects that were already operational at the time of the investment decision.

Reference Tool 23, version 3.0:

- "A proposed project activity is the first of its kind in the applicable geographical area if:
- (a) The project is the first in the applicable geographical area that applies a technology that is different from technologies that are implemented by any other project, which are able to deliver the same output and have started commercial operation in the applicable geographical area before the project design document (CDM-PDD) is published for global stakeholder consultation or before the start date (date of investment decision) of the proposed project activity, whichever is earlier;
- (b) The project implements one or more of the measures;
- (c) The project participants selected a crediting period for the project activity that is "a maximum of 10 years with no option of renewal".

Date: 04/11/2023

Documentation provided by Project Owner

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GCC Project Verifier assessment

1) The start date of proposed project activity as per the CDM definitions is on 14/06/2018 as confirmed by EPC and supply agreement /15/. The independent review was conducted by the verification team, and it was found out that the project is first-of-its-kind in nature in Vietnam. The verification team has conducted independent research on public sources (credible local newspapers, articles) and found that the first solar project in Viet Nam is Phong Dien started operation from 25/09/2018 as per publicly news: https://baodautu.vn/khanh-thanh-nha-may-dien-mat-troi-35-mw-dau-tien-tai-viet-nam-d88820.html.

The verification team also cross-checked with the list of 87 SPPs in Viet Nam, which started COD before Jun 2019, was published in several local news⁸ in the links below includes: https://baodautu.vn/mo-danh-tinh-87-nha-may-dien-mat-troi-da-van-hanh-truoc-ngay-3062019-

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⁸ https://baodautu.vn/mo-danh-tinh-87-nha-may-dien-mat-troi-da-van-hanh-truoc-ngay-3062019-d112210.html

https://img.vietnamfinance.vn/upload/news/hoanghung_btv/2019/12/6/danh-sach-du-an-dien-mat-troi-dadu-dieu-kien-hoat-dong-thuong-mai.pdf

<u>d112210.html</u> & <u>https://img.vietnamfinance.vn/upload/news/hoanghung_btv/2019/12/6/danh-sachdu-an-dien-mat-troi-da-du-dieu-kien-hoat-dong-thuong-mai.pdf</u>.

The verification team based on that list can confirm that the first SPP is Phong Dien SPP which is consistent with the news above. The official COD is a bit later as indicated in the list is on 06/11/2018. Compared two published information from 2 credible sources, they verification team accepted that Phong Dien solar power plant is considered as the first solar power project in Vietnam and its start date is after the start date of proposed project activity (Dau Tieng 2 SPP) as per the CDM definitions.

Hence the verification team can confirm that in Vietnam there was no SPP started commercial operating before 14/06/2018, the start date of proposed project activity as per the CDM definitions. And therefore, this criterion has been fulfilled by the project.

2) Dau Tieng 1 and Dau Tieng 2 were two separate projects, both were developed and had the same project owner which is Dau Tieng Tay Ninh Energy Joint Stock Company (DTE) until 04/2019. DTE was the joint venture between B. Grimm (55%) and Xuan Cau Group (45%) as per written in the PSF. There was a financial structuring in 2019, Xuan Cau Group has been withdrawing their contribution to DTE. So DTE now is solely owned by B. Grimm and DTE only managed and operated Dau Tieng 2 project while Dau Tieng 1 project is owned and operated only by Xuan Cau group. Thus, Dau Tieng 1 and Dau Tieng 2 are belonged to two different legal owners from 2019.

Until 2019, two projects were developed independently but in parallel. Both Dau Tieng 1 and Dau Tieng 2 shared a combined PPA at the beginning and shared the same start date before 05/10/2018 mentioned above. Hence, they both can be considered as 'first-of-its-kind' (FOK) as per Tool 23 guidance and definition. This was confirmed by reviewing investment licenses of both projects /5/ and first PPA of Dau Tieng 1&2 /9.1/. and 2nd PPA of Dau Tieng 2 /9.2/.

The verification team cross-verified two projects and confirmed that the restructuring of DTE & the separation of legal owners Dau Tieng 1 & Dau Tieng 2 did not impact the first-of-its-kind analysis as per Tool 23 guidance and definition. Dau Tieng 1 is also claiming GCC credits, but it has a different project owner now, the PSF was developed independently by its PO. Therefore, it might result in differences between the selection of methodology to prove project additionality which DTE (project owner of Dau Tieng 2) have no responsibility and involvement.

3) As per the FOK guidelines in Tool 23, a project qualifies for FOK if at the time of the investment decision there were no other projects of this kind (which applied solar technology to produce electricity) already starting commercial operation in the country. Therefore, actually, there could be many projects that could qualify for FOK if they are being developed with a similar timeframe according to Tool 23. The guideline clearly states that what matters is if there were no other projects that were already operational at the start date (as per CDM definition) of the project activity. The verification team found that is reasonable and totally complied with the Tool, so we accepted it.

CAR 05 is resolved & closed

Table 3. FARs from this Project Verification

FAR ID	01	Section no.	D.7, D.13, D14 of PVR	Date: 08/09/2023
Description	of FAR			

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Project Owners shall demonstrate the compliance to CORSIA requirements for the credits claimed beyond 31 December 2020 with respect to double counting and HCLOA requirements and also future CORSIA requirements applicable time to time for the project activity.									
Project Owner's response	Date: DD/MM/YYYY								
Documentation provided by Project Owner									
GCC Project Verifier assessment	Date: DD/MM/YYYY								

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Appendix 1. Environmental Safeguards assessment

Impact of Projection	ct Activity	Information on I	mpacts, Do-No	o-Harm Risk	Assessment	and Establish	ning Safeguard	Project Conclu	t Owner's Ision	GCC Project Verifier's Conclusion (to be included in Project Verification Report only)		
	Description of Impact (positive or negative)		Legal/ voluntary corporate requirement / regulatory/ voluntary corporate threshold Limits		m Risk Assessi ch ever is appli		Risk Mitigat Plans for asp as Ha	ects marked	Performan ce indicator for monitoring of impact	Ex- ante scori ng of envir onme ntal impac t	Explanation of the Conclusion	3 rd Party Audit
				Not Applicabl e	Harmless	Harmful	Operational Controls	Program of Risk Manageme nt Actions	Monitoring parameter and frequency of monitoring	Ex- Ante scori ng of the envir onme ntal impac t (as per scori ng matri x Appe ndix- 02)	Ex- Ante description and justification/ex planation of the scoring of the environmental impact	Verification Process
Environmental Aspects on the identified categories ⁹ 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 mobile) during normal and abnormal/emerge ncy conditions, that may result from the construction and operations of the Project Activity,	Describe the applicable national regulatory regulatory voluntary corporate limits related to the identified risks of environmenta I impacts.	If no environme ntal impacts are anticipated , then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as Not Applicabl e	If environment al impacts exist, but are expected to be in compliance with applicable national regulatory /stricter voluntary corporate requirement s and will be within legal/voluntary	If negative environment al impacts exist that will not be in compliance with the applicable national legal/ regulatory requirement s or are likely to exceed legal limits, then the Project Activity is likely to	Describe the operational controls and best practices, focusing on how to implement and operate the Project Activity, to reduce the risk of impacts that have been identified as 'Harmfu'l at least to a level that is in	Describe the Program of Risk Manageme nt Actions (refer to Table 3), focusing on additional actions (e.g., installation of pollution control equipment) that will be adopted to reduce or eliminate	Describe the monitoring approach and the parameters (KPI) to be monitored for each impact irrespective of whether it is harmless of harmful. The frequency of monitoring to be specified as	-1 0 +1	Confirm the score of environmental impact of the project with respect to the aspect and its monitored value in relation to legal /regulatory limits (if any) including basis of conclusion.	Describe how the GCC Verifier has assessed that the impact of the Project Activity against the particular aspect and in case of "harmful impacts" how has the project adopted Risk Mitigation Action Plans to mitigate the risks of negative environmental impacts to levels that are unlikely to cause any harm as well as the net positive impacts of the project with respect to the most likely baseline alternative.

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⁹ sourced from the CDM SD Tool and the sample reports are available (https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx)

		within and outside the project boundary, over which the Project Owner(s) has/have control.			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 //f the project has an positive impact on the environment mark it as "harmless" as well.	cause harm (may be un- safe) and shall be indicated as Harmful	compliance with applicable legal/regulato r requirements or industry best practice or stricter voluntary corporate requirements	the risk of impacts that have been identified as Harmful .	well including the data source.			
Reference To paragraphs of Environmental and Social Safeguards Standard		Paragraph 12 (a)	Paragraph 13 (c)	Paragrap h 13 (d) (i)	Paragraph 13 (d) (ii)	Paragrap h 13 (d) (iii)	Paragraph 13 (e) (i)	Paragraph 13 (e) (ii)	Paragraph 12 (c) and Paragraph 13 (f)	Paragr aph 22		Paragraph 24 and Paragraph 26 (a) (i)
Environmen	ital Safeg	uards										
Environme nt - Air	SO _x emissions (EA01)	Not Applicable. The Project activity does not emit SO _x	Law on Environmental Protection (72/2020/QH1 4) ¹⁰ National Technical Regulation on Ambient Air Quality (QCVN 05:2013/BT NMT) ¹¹	Not Applicable	-	-	N/A	N/A	N/A	N/A	EIA has also been approved for this proposed project activity with no effect of ambient air pollution.	There will be no SO _x emissions or risk from the project being it a solar power project. This verified by observation during onsite visits and reviewed the approved EIA report /10/ EIA approval decision /12/ and annual E&S compliance audit report /11/. However, the verification team find that project activity does have an unquantifiable positive impact on SO _x emissions as otherwise same amount of electricity would have been generated in baseline thermal power plants and that would have emitted some amount of SO _x emissions. The Project Owner has not wished to identify the same and being it an overall positive impact, this is accepted by the verification team.

Available at https://vanban.chinhphu.vn/?pageid=27160&docid=202613&classid=1&typegroupid=3
 Available at https://www.env.go.jp/air/tech/ine/asia/vietnam/files/law/QCVN%2005-2013.pdf

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NO _x emissions (EA02)	Not Applicable. The Project activity does not emit NOx	Law on Environmental Protection (72/2020/QH1 4). National Technical Regulation on Ambient Air Quality (QCVN 05:2013/BT NMT).	Not Applicable			N/A	N/A	N/A	N/A	In the baseline scenario (grid) the fossil fuel power plants emit NO _x emissions. Therefore, NO _x emissions are expected to be reduced by the Project. This will not be calculated so will not be scored.	There will be no NO _x emissions or risk from the project being it solar power project. This verified by observation during onsite visits and reviewed the approved EIA report /10/ EIA approval decision /12/ and annual E&S compliance audit report /11/. However, the verification team find that project activity does have an unquantifiable positive impact on NO _x emissions as otherwise same amount of electricity would have been generated in baseline thermal power plants and that would have emitted some amount of NO _x emissions. The Project Owner has not wished to identify the same and being it an overall positive impact, it is accepted by the verification team.
CO ₂ emissions (EA03)	Positive impacts. No CO ₂ emissions are emitted from the project activity, except during the construction phase due to operation of vehicles. However, it is a short-term impact only hence the impact is negligible. In addition, the Project activity reduces greenhouses gases by replacing electricity that would otherwise have been generated from fossil fuel-fired power plants with zero emissions electricity from solar power plants.	Law on Environmental Protection (72/2020/QH1 4)	-	Harmless (Since the impact is positive and cause no harm to the environment, further action is not required.)	-	N/A	N/A	The generated electricity by the project activity will be monthly measured and the related CO ₂ emission reduction will be calculated according to the applied methodology ACM0002 version 21.0. Refer to B.7.1 for the details on monitoring plan for this parameter.	+1	In the baseline scenario (grid) the fossil fuel power plants have emitted CO ₂ 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.	The project activity reduces CO ₂ emissions by displacement of same amount of electricity generation through fossil fuel -based plants in baseline. No legal requirement for this indicator. The verification team has reviewed Law on Environmental Protection (72/2020/QH14) /A02/ and QCVN 05:2023/BTNMT /A10/, on National technical regulation on Air Quality, which is the only regulation for industry-based air pollution and confirmed that there is no legal requirement in CO ₂ emission reduction. As there is no environmental impact anticipated, it is termed as "harmless". Since impact is confirmed as "harmless", Risk Mitigation Action Plan are required. The CO ₂ emission reductions are being monitored as monitoring plan in section B.7.1 in the PSF & has been verified in section D.3.7 in this report. Based on the monitoring approach adopted by the project owner, the scoring is +1. This is accepted by the project verification team
CO emissions (EA04)	Not Applicable. The Project activity does not emit CO	Law on Environmental Protection (72/2020/QH1 4). National Technical Regulation on Ambient Air Quality (QCVN	Not Applicable	-	-	N/A	N/A	N/A	N/A	In the baseline scenario (grid) the fossil fuel power plants emit CO emissions. Therefore, CO emissions are expected to be reduced by the Project. This will not be calculated	There will be no CO emissions or risk from the project being it solar power project. This verified by observation during onsite visits and reviewed the approved EIA report /10/, EIA approval decision /12/ and annual E&S compliance audit report /11/. However, the verification team find that project activity does have an unquantifiable positive impact on CO emissions as otherwise same amount of electricity would have been generated in baseline thermal

	verilleatio	птороп										
			05:2013/BT NMT)								so will not be scored.	power plants and that would have emitted some amount of CO emissions. The Project Owner has not wished to identify the same and being it an overall positive impact, it is accepted by the verification team.
pa m (S ei	Suspended particulate matter (SPM) emissions (EA05)	Not Applicable The Project activity does not discharge the SPM	Law on Environmental Protection (72/2020/QH1 4). National Technical Regulation on Ambient Air Quality (QCVN 05:2013/BT NMT)	Not Applicable	-	-	N/A	N/A	N/A	N/A	In the baseline scenario (grid) the fossil fuel power plants emit SPM. Therefore, SPM emissions are expected to be reduced by the Project. This parameter is not monitored and quantified, Therefore, it will not be scored.	There will be no SPM emissions or risk from the project being solar power project. This verified by observation during onsite visits and reviewed the approved EIA report /10/, EIA approval decision /12/ and annual E&S compliance audit report /11/. However, the verification team find that project activity does have an unquantifiable positive impact on SPM emissions as otherwise some amount of electricity would have been generated in baseline thermal power plants and that would have emitted some amount of SPM emissions. The Project Owner has not wished to identify the same and being it an overall positive impact, it is accepted by the verification team.
ge	Fly ash generation (EA06)	Not Applicable. The Project activity does not discharge fly ash generation	Law on Environmental Protection (72/2020/Q H14). National Technical Regulation on Ambient Air Quality (QCVN 05:2013/BT NMT)	Not Applicable		-	N/A	N/A	N/A	N/A	Not applicable for Solar Power Plants	There will be no Fly Ash emissions or risk from the project being a solar power project. This verified by observation during onsite visits and reviewed the approved EIA report /10/ EIA approval decision /12/ and annual E&S compliance audit report /11/. However, the verification team find that project activity does have an unquantifiable positive impact on Fly ash emissions as otherwise some amount of electricity would have been generated in baseline from coal based thermal power plants and that would have emitted some amount of Fly Ash emissions. The Project Owner has not wished to identify the same and being it an overall positive impact, thus this is accepted by the verification team.
M V O C (/)	Non- Methane Volatile Organic Compounds (NMVOCs) (EA07)	Not Applicable. The Project activity does not discharge Non-Methane Volatile Organic Compounds	Law on Environment al Protection (72/2020/Q H14). National Technical Regulation on Ambient Air Quality	Not Applicable	-	-	N/A	N/A	N/A	N/A	Not applicable for Solar Power Plants	There will be no NMVOC emissions or risk from the project being a Solar power project. This verified by observation during onsite visits and reviewed the approved EIA report /10/ EIA approval decision /12/ and annual E&S compliance audit report /11/. However, the verification team see that project activity does have an unquantifiable positive impact on

Fioject verilica		(QCVN 05:2013/BT NMT)									NMVOC emissions as otherwise same amount of electricity would have been generated in baseline thermal power plants and that would have emitted some amount of NMVOC emissions. (The NMVOC is generally emitted from the Solid fossil fuel powerplant). The Project Owner has not wished to identify the same and being it an overall positive impact, it is accepted by the verification team.
Odor emissions (EA08)	Not Applicable The Project activity does not cause Odor	Law on Environment al Protection (72/2020/Q H14). National Technical Regulation on Ambient Air Quality (QCVN 05:2013/BT NMT)	Not Applicable	-	-	N/A	N/A	N/A	N/A	Not applicable for Solar Power Plants	There is no risk of odor emission as project activity is a solar power plant. This verified by observation during onsite visits and reviewed the approved EIA report /10/, EIA approval decision /12/, and annual E&S compliance audit report /11/.
Noise Pollution (EA09)	Not Applicable During construction phase, the noise can be caused by transportation means and machinery. However, most of the construction locations are located far from residential region and the intensity of noise is not high. This was also a temporary impacts and no further construction activities at the Site. During the operation phase, there is no noise impacts from a Solar Power Plant. In addition, the Project has been developed an Environment and Social Management Plan	Law on Environment al Protection (72/2020/Q H14). The National Technical Regulation on Noise - Permissible Exposure Levels of Noise in the Workplace (QCVN 24:2016/BYT) ¹² The permitted noise level is under 85 dB(A)	Not Applicable	-	-	-	N/A	N/A	N/A	The noise pollution impacts are eliminated as this is the Solar Power Plant; therefore, this parameter will not be scored.	Noise pollution can occur during the construction of the project activity from equipment/ material transportation, heavy machinery operation. As defined in Law on Environmental Protection (72/2020/Q H14) /A02/, the noise level is regulated as per QCVN 24:2016/BYT: Permissible Exposure Levels of Noise in the Workplace /A18.1/ & QCVN 27:2010/BTNMT: National Technical Regulation on Vibration /A18.2/. The verification team has reviewed the identified regulations, cross-checked with local expert and thus confirmed that those were identified correctly. According to the QCVN 24:2016/BYT, the permitted noise level is under 85 dB(A). As verified by reviewing approved EIA reports /10/ & Annual E&S Compliance Audit Report /11/, the noise level of the project activity during the construction phase was managed under the permissible limit. Furthermore, this was just a temporary impact. During the operation phase of solar power plants, there is no noise pollution.

¹² Table 1-2, page 2-3, The National Technical Regulation on Noise - Permissible Exposure Levels of Noise in the Workplace. Available at https://chinhphu.vn/default.aspx?pageid=27160&docid=186574

Fioje	ct verilication	Jii Kepoit										
		(ESMP) to compliance with national laws and regulations including a subplan for Hazard Identification, Risk Assessment and Control Procedure to manage and mitigate any relevant potential impacts from Noise. Hence, this impact is not anticipated.										It has been verified during onsite observation & review the EIA reports /10/ & Annual E&S Compliance Audit Report /11/. Therefore, the verification team can conclude that that there is no risk on this impact.
Environme nt - Land	Solid waste Pollution from Plastics (EL01)	Not Applicable The Project activity is not likely to generate plastic wastes	Law on Environmental Protection (72/2020/QH1 4).	Not Applicable	-	-	N/A	N/A	N/A	N/A	No significant plastic waste is expected from the project activity during operational phase Hence, this parameter will not be scored.	There is no major envisaged plastic waste generation from the project activity and the verification team do not foresee any such impacts. This verified by observation during onsite visits and reviewed the approved EIA report /10/, EIA approval decision /12/, and annual E&S compliance audit report /11/.
	Solid waste Pollution from Hazardous wastes (EL02)	Negative impact. In the process of construction and operation of the Project Activity, there is a possibility of Hazardous waste generated from equipment or machineries. However, the waste volume is low and is managed and monitored to demonstrate the impact is negligible.	Law on Environmental Protection (72/2020/QH1 4). Circular 36/2015/TT-BTNMT: Management of Hazardous Waste 13			Harmful	Project anticipate generating hazardous waste (transformer oil) and it would be disposed by the Project Owner as per the host country regulation through a licensed hazardous waste handler.	Refer to B.7.2 for the details on monitoring plan for this parameter.	Maintain waste collection contracts and records with licensed companies. Allocate separate containers for waste. E&S Compliance Monitoring Report regarding Hazardous wastes.	+1	Only small amounts of hazardous waste will be generated from the project, and this will be managed in accordance with national regulations. This indicator is unlikely to cause any harm to the environment. Hence, this parameter is scored as +1.	Waste oil, contaminated rags, some parts of equipment might be categorized as hazardous waste as per Decision 23/2006/QD-BTNMT on List of hazardous waste, issued by MONRE, dated 26/12/2006 /A23/. Hazardous waste has to be managed as per Circular 36/2015/TT-BTNMT: Management of Hazardous Waste /A20/. The verification team has reviewed the identified regulations, cross-checked with local expert and thus confirmed that those were identified correctly. There is no prevailing threshold limit value in the regulation for Hazardous waste specifically. Therefore, the impact is termed as harmful and requires a Risk Mitigation Action Plan. Thus, as per para13e, the project owner has identified a monitoring program for this mitigation action and is listed in section B.7.2. The opinion on adequacy of monitoring, recording and reporting system for this parameter has been provided & verified in section D.3.7 of this PVR. The verification team has reviewed the EIA report/10/, EIA approval/12/ and applicable local regulations listed above and confirms that if the hazardous waste is managed according to the regulation & mitigation action plan, there is no adverse impact on

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¹³ Available at https://vanban.chinhphu.vn/default.aspx?pageid=27160&docid=181103

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Solid waste Pollution from Bio- medical wastes (EL03)	Not Applicable The Project Activity is not likely to discharge Bio- medical wastes.	Law on Environmental Protection (72/2020/QH1 4).	Not Applicable	-	N/A	N/A	N/A	N/A	No significant bio- medical waste will be generated from the project activity.	environment due to the implementation of project activity. Therefore, the project verification team confirmed that Risk Management Action Plan can eliminate or reduce the anticipated adverse impacts to the Harmless level. Therefore, the scoring is "+1". This is accepted by the project verification team. Solar power plants do not produce any biomedical waste (such as tissues, organs, and body parts, animal waste, etc) during their operation. Thus, there is no impact on this environmental aspect. This verified by observation during onsite visits and reviewed the approved EIA report /10/, EIA approval decision /12/, and annual E&S
Solid waste Pollution from E-wastes (EL04)	Potentially negative impact. The E-waste pollution is not anticipated from the Project Activity. For such the case, it would be handled by the Project Owner as per the national regulations.	Law on Environmental Protection (72/2020/QH1 4). 09/VBHN-BTNMT on Waste management Decree No 38/2015/ND-CP: Government Management of Wastes and Scraps Circular 36/2015/TT-BTNMT on hazardous waste management Circular No. 34/2017/TT-BTNMT on recall and treatment of discarded products		Harmful	E-waste is not anticipated (e.g., broken solar modules, waste electric and electronic equipment, etc), however, for such the case, it would be handled by the PO through the licensed companies and as per the national regulations.	Storage of the E-waste in a separate place at the Site, then will be managed and monitored properly and frequently. The Project also has been developed an Environment and Social Management Plan (ESMP) to including supporting supporting supporting supporting supporting and Mitigation Monitoring and Management Measures to manage and mitigate any relevant potential impacts from E-wastes. Please refer to section B.7.2 for more details of the mitigation &	If any e-waste is generated, disposal records will be present. Separate place for E-wastes at the Site E&S Compliance Monitoring Report regarding E-wastes	+1	Although E-waste is not anticipated, the solar panels' waste will be processed and stored then returned to the manufacturer and further handling of the wastes are done by the manufacturer. Hence, this parameter will be scored.	E-waste such as broken solar modules, waste electric and electronic equipment might be categorized as ordinary industrial waste or hazardous waste depends on their composition and therefore, their disposal is regulated by Decree No. 38/2015/NĐ-CP dated 24/04/2015, issued by MONRE on Management of Waste and Discarded materials /A07/ or Decision 23/2006/QD-BTNMT on List of hazardous waste, issued by MONRE, dated 26/12/2006 /A19/. Their disposal is regulated also by Circular 09/VBHN-BTNMT on Waste management /A21/ & Circular No.36/2015/TT-BTNMT dated 30/06/2015 of MONRE on Management of Hazardous Waste /A20/. The verification team has reviewed the identified regulations, cross-checked with local expert and thus confirmed that those were identified correctly. There is no prevailing threshold limit value in the regulation for E-waste specifically. Therefore, the impact is termed as harmful and requires a Risk Mitigation Action Plan. Thus, as per para13e, the project owner has identified a monitoring program for this mitigation action and is listed in section B.7.2. The opinion on adequacy of monitoring, recording and reporting system for this parameter has been provided & verified in section D.3.7 of this PVR. The verification team has reviewed the EIA report /10/, EIA approval /12/, annual E&S compliance audit report /11/ and applicable local regulations listed above and confirms that if the E-waste is managed according to the regulation & mitigation action plan, there is no adverse impact on environment due to the implementation of project activity.

110,0	ct vernicatio	Птероп						monitoring plan.				Therefore, the project verification team confirmed that Risk Management Action Plan can eliminate or reduce the anticipated adverse impacts to the Harmless level. Therefore, the scoring is "+1". This is accepted by the project verification team.
	Solid waste Pollution from Batteries (EL05)	Not Applicable The Project Activity does not generate solid waste pollution from batteries.	Law on Environment al Protection (72/2020/Q H14). 09/VBHN- BTNMT on Waste management 14 Circular 36/2015/TT- BTNMT on hazardous waste management Circular No. 34/2017/TT- BTNMT on recall and treatment of discarded products 15	Not Applicable		-	N/A	N/A	N/A	N/A	Not applicable for Solar Power Plants.	Solid waste from batteries & accumulator are categorized as hazardous waste as per Decision 23/2006/QD-BTNMT on List of hazardous waste, issued by MONRE, dated 26/12/2006 /A19/. Hazardous waste has to be managed as per Circular 36/2015/TT-BTNMT: Management of Hazardous Waste /A20/. The verification team has reviewed the identified regulations, cross-checked with local expert and thus confirmed that those were identified correctly. Hazardous waste has been managed & properly disposed as monitored and evaluated under EL02, thus PO has not identified this as a separate impact and therefore no score for this impact. The verification team deems that reasonable and therefore accept it.
	Solid waste Pollution from end-of- life products/ equipment (EL06)	Negative impact. The Project Activity has a lifetime of 20 years and the project owner will manage their end- of-life in an appropriate manner and in compliance to the prevailing laws and regulations.	Law on Environment al Protection (72/2020/Q H14). Circular No. 34/2017/TT-BTNMT on recall and treatment of discarded products Decree No 38/2015/ND-CP: Government Management of Wastes and Scraps	-	-	Harmful	The project owner manages solid-waste from end-of-life products/ equipment in an appropriate manner and in compliance to the prevailing laws and regulations.	Maintain waste collection contracts with licensed companies (e.g., solar panel suppliers).	Quantity of solid waste from end-of-life products to be collected and managed as per national regulations. All records will be maintained. E&S Compliance Monitoring Report	+1	No significant harm to the environment as the Project activity will maintain records and compliance with applicable laws. Therefore, this parameter will be scored.	End-of-life products/ equipment such as end-of-life/ discarded solar modules, inverter, transformers is regulated by Circular No. 34/2017/TT-BTNMT on recall and treatment of discarded products /A09/ & Decree No. 38/2015/ND-CP dated 24/04/2015, issued by MONRE on Management of Waste and Discarded materials /A07/. If any hazardous waste/ component within the end-of-life products/ equipment, it will be regulated by Circular 36/2015/TT-BTNMT: Management of Hazardous Waste /A20/. Their disposal is regulated also by Circular 09/VBHN-BTNMT on Waste management & Circular No.36/2015/TT-BTNMT dated 30/06/2015 of MONRE on Management of Hazardous Waste /A20/. The verification team has reviewed the identified regulations, cross-checked with local expert and thus confirmed that those were identified correctly.

¹⁴ Available at https://luatvietnam.vn/tai-nguyen/van-ban-hop-nhat-09-vbhn-btnmt-bo-tai-nguyen-va-moi-truong-178285-d5.html
¹⁵ Circular No. 34/2017/TT-BTNMT dated October 04, 2017 of the Ministry of Natural Resources on recall and treatment of discarded products. Available at https://vanban.chinhphu.vn/default.aspx?pageid=27160&docid=191763

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											There is no prevailing threshold limit value in the regulation for End-of-life product/ equipment specifically. Therefore, the impact is termed as harmful and requires a Risk Mitigation Action Plan. Thus, as per para13e, the project owner has identified a monitoring program for this mitigation action and is listed in section B.7.2. The opinion on adequacy of monitoring, recording and reporting system for this parameter has been provided & verified in section D.3.7 of this PVR. The verification team has reviewed the EIA report /10/, EIA approval /12/ & annual E&S compliance audit report /11/ & relevant local regulation listed above and confirms that if the End-of-life products/ equipment is managed according to those regulation & mitigation action plan, there is no adverse impact on environment due to the implementation of project activity. Therefore, the project verification team confirmed that Risk Management Action
											Plan can eliminate or reduce the anticipated adverse impacts to the Harmless level. Therefore, the scoring is "+1". This is accepted by the project verification team.
Soil Pollution from Chemicals (including Pesticides, heavy metals, lead, mercury) (EL07)	Not Applicable The Project Activity does not generate soil pollution from chemicals. Groundwater is used to supply non- potable fresh water used for cleaning of solar panels and does not use any detergent which could contaminate soil during cleaning process. Hence, no impact is anticipated.	Law on Environmental Protection (72/2020/QH1 4).	Not Applicable			N/A	N/A	N/A	N/A	No significant soil pollution from chemicals during operation phase of the project activity. Therefore, this parameter will not be scored.	Solar power plants do not produce/ use any chemicals (such as pesticides, heavy metals, lead, mercury, etc.) which can create soil pollution. Thus, there is no impact on this environmental aspect. Furthermore, for the cleaning of solar panels, fresh groundwater/ rainwater was used without adding any chemical substances (detergent, etc.). This has been verified by onsite observation, reviewing EIA report /10/ & approved EIA decision /11/, and annual E&S compliance report /12/. therefore, the verification team can confirm that there is no impact is anticipated.
land use change (change from cropland /forest land to project land) (EL08)	Not Applicable The land use acquired area includes Project area (262ha) and Transmission line 1.4km (0.25ha). No land use change is required for Project area due to the vast majority of the area is legally	Law on Environment al Protection (72/2020/Q H14). Circular No. 30/2014/TT- BTNMT on applications for Land allocation, lease	Not Applicable	-	-	N/A	N/A	N/A	0	There is negligible impact from land use change. These results were monitored and reported periodically to ADB through the Environment and Social Compliance Audit Report in May-Oct 2021, the Semiannual Monitoring	80-90% of the project area is typically inundated with water during the flood season each year (i.e., October to March). Before the implementation of the project activity, the land had very little economic, ecological or agriculture value. This has been verified by reviewing the EIA report /10/ and EIA approval decision /12/. The land use change did not create any adverse impact on the environment. This has been evaluated and concluded in the annual E&S compliance audit report /11/ &

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land use						
restrictions for						
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the land situated						
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no change in land						
use was required.						
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The land lease						
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		lifetime of the Project by land use change.									
Environme nt - Water	Reliability/ accessibility of water supply (EW01)	Not Applicable The Site is next to a reservoir and the Site itself is flooded for part of the year. The vast majority of the Project area is originally state-owned land under the management of Dau Tieng Reservoir Authority with restrictions of accessibility to local people. The local people is only granted to access the remaining reservoir area outside the Dau Tieng Reservoir. Hence, there is no changes in the accessibility of local people for the water supply by the Project Activity.	Law on Environment al Protection (72/2020/QH 14). Law on Water Resources (No. 17/2012/QH1 3)	Not Applicable			N/A	N/A	N/A	The Project does not use and does not impede the use of water from the reservoir.	Project area is originally state-owned land under the management of Dau Tieng Reservoir Authority with restrictions of accessibility to local people. This was verified during onsite observation & interview with different stakeholders. It has been confirmed further by reviewing the EIA report /10/ and EIA approval decision /12/ & annual E&S compliance audit report /11/. There is no change in water accessibility from the water reservoir. Therefore, there is no impact on this environmental aspect.
	Water Consumptio n from ground and other sources (EW02)	Not Applicable Limited water consumption from groundwater is required for the Project. Groundwater is used to supply non-potable fresh water used for cleaning of solar panels and does not use any detergent which could contaminate soil during cleaning process. In addition, water is sprayed at high pressure and introduced as mist	Law on Environment al Protection (72/2020/QH 14). Law on Water Resources (No. 17/2012/QH1 3)	Not Applicable	-	Not Applicable	Not Applicable	Not Applicable	Not Applic able	Not applicable for Solar Power Plants.	Groundwater is used to supply non-potable fresh water for the cleaning process of solar panels. The groundwater used was permitted under No. 607/GP-TCTL-PCTTr, issued by MARD – Department of irrigation dated 26/12/2019 /29/. This permit allowed the PO to extract & use groundwater at a limit which does not create any adverse impact to the groundwater basin. During the operation, the PO also implements water saving measures by utilizing rainwater (when possible) for the cleaning process. They apply high pressure spray and mist which reduces the amount of water used and allows most of the water to be retained on the surface to the PV panels. The water is removed via manual wiping hence surface runoff is minimized and reduces water consumption. No chemical substance is used during the cleaning process to avoid contaminating the

Project Verifica	ation Report									
	which are reduces the amount of water used and most of the water is retained on the surface to the PV panels. The water is removed via manual wiping hence surface runoff is minimized. When possible, cleaning of the PV panels will be completed when it is raining to reduce water consumption and avoid any additional surface runoff.									groundwater basin. This has been verified during onsite observation and interviewed with the operator who conducts cleaning tasks. After reviewing the EIA report /10/, EIA approval decision /12/ & No. 607/GP-TCTL-PCTTr, issued by MARD – Department of irrigation dated 26/12/2019 /29/, the verification team confirmed that the using groundwater from this project creates no adverse impact to the environment.
Generatio of wastewate (EW03)	Project generates	Law on Environment al Protection (72/2020/Q H14). QCVN 14:2008/BTN MT National technical regulation on Domestic Wastewater 17 QCVN 08-MT:2015/BTN MT, Column A2 on Surface Water Quality 18	N/A	Harmful	Project activity generates wastewater during operation of the project through domestic and sanitary usage. This wastewater shall be treated through by means of septic tank constructed at project site and collected via sewage trucks periodically.	Please refer to section B.7.2 for more details of the mitigation & monitoring plan.	Maintain wastewater collection contracts with licensed companies. Wastewater septic tanks E&S Compliance Audit Report and/or ESMP report regarding waste water.	+1	The domestic wastewater generated at the Site will be discharged as per local regulations. Hence, this parameter will be scored.	For solar panel cleaning, the project activity uses ground water and applied high pressure spray to clean off dust without using any detergent and therefore, no chemical contamination of water runoff. When possible, they also utilize rainwater for cleaning solar panels to reduce water consumption and additional surface runoff. So, there is no wastewater due to the operation of the solar power plant. The project generates only domestic wastewater caused by daily use of operators onsite. During the onsite visit, the verification team observed that the domestic wastewater uses the septic tanks system for primary treatment. When the septic tank is full, it will be transferred to a licensed company for wastewater collection and final treatment. This has been approved as an environmental protection activity in the project EIA report /10/ approved in Decision No. 1483/QD-UBND /12/ by People's committee of Tay Ninh province on 12/06/2018. This also complied with local regulation includes Law on Environmental Protection 72/2020/QH14 /A02/; QCVN 14:2008/BTNMT: National technical regulation on Domestic Wastewater /A22.1/& QCVN 08-MT:2015/BTNMT: National

 ¹⁷ QCVN 14:2008/BTNMT National technical regulation on Domestic Wastewater. Available at http://vea.gov.vn/Quy%20chun%20Vit%20Nam/QCVN%2014-2008-BTNMT.pdf
 18 Available at https://cem.gov.vn/storage/documents/5d6f3ecb26484qcvn-08-mt2015btnmt.pdf

1 Tojočí vermed	the amount of water used and most of the water is retained on the surface to the PV panels. The water is removed via manual wiping									technical regulation on Surface Water Quality /A22.2/. The verification team has reviewed the identified regulations, cross-checked with local expert and thus confirmed that those were identified correctly.
	hence surface runoff is minimized. When possible, cleaning of the PV panels will be completed when it is raining to reduce water consumption and avoid any additional surface runoff ¹⁶ .									Wastewater disposal is inherently harmful to nature. Therefore, the impact is termed as harmful and requires a Risk Mitigation Action Plan. Thus, as per para13e, the project owner has identified a monitoring program for this mitigation action and is listed in section B.7.2. The opinion on adequacy of monitoring, recording and reporting system for this parameter has been provided & verified in section D.3.7 of this PVR.
	Therefore, this impact is negligible.									The verification team has reviewed the EIA report /10/, EIA approval /12/ & annual E&S compliance audit report /11/ & relevant local regulation listed above and confirms that if the wastewater is managed according to those regulation & mitigation action plan, there is no adverse impact on environment due to the implementation of project activity. Therefore, the project verification team confirmed that Risk Management Action Plan can eliminate or reduce the anticipated adverse impacts to the Harmless level.
Wastewate discharge without/with insufficient treatment (EW04)	The Project does	Law on Environmental Protection (72/2020/QH1 4) Law on Water Resources (No. 17/2012/QH13) QCVN 14:2008/BTN MT National technical regulation on Domestic Wastewater ¹⁹ QCVN 08- MT:2015/BTN MT, Column	Not Applicable	-	N/A	N/A	N/A	N/A	The Project does not cause water pollution since it is a Solar Power Plant. In addition, the Project does not discharge wastewater into the environment without treatment as the Project applied the mitigation measures (e.g., septic tank) for wastewater generation at the Site (refer to parameter EW01,02,03 above).	For solar panel cleaning, the project activity uses ground water and applied high pressure spray to clean off dust without using any detergent and therefore, no chemical contamination of water runoff. When possible, they also utilize rainwater for cleaning solar panels to reduce water consumption and additional surface runoff. So, there is no wastewater due to the operation of the solar power plant. The project generates only domestic wastewater caused by daily use of operators onsite. During the onsite visit, the verification team observed that the domestic wastewater uses the septic tanks system for primary treatment. When the septic tank is full, it will be transferred to a licensed company for wastewater collection and final treatment. This has been approved as an environmental protection activity in

ADB Environment and Social Compliance Audit Report October 2021; and Mitigation, Monitoring and Management Measures Plan, page 1.
 QCVN 14:2008/BTNMT National technical regulation on Domestic Wastewater. Available at http://vea.gov.vn/Quy%20chun%20Vit%20Nam/QCVN%2014-2008-BTNMT.pdf

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		A2 on Surface Water Quality									the project EIA report /10/ approved in Decision No. 1483/QD-UBND /12/ by People's committee of Tay Ninh province on 12/06/2018. This also complied with local regulation includes Law on Environmental Protection 72/2020/QH14 /A02/; QCVN 14:2008/BTNMT: National technical regulation on Domestic Wastewater /A22.1/ & QCVN 08-MT:2015/BTNMT: National technical regulation on Surface Water Quality /A22.2/. The project owner has identified a monitoring program for wastewater treatment and evaluate under EW03 - Generation of wastewater. Therefore, the project verification team confirmed that there is no Wastewater discharge without/with insufficient treatment.
Pollution of Surface, Ground and/or Bodies of water (EW05)	Not Applicable The Project only uses clean and treated groundwater to wash off dust on solar panels, without using any detergent. The process of cleaning utilizes a water spray system to minimize water consumption. Any excess water spilling into the reservoir is negligible (see parameter EW02, 03, 04 above).	Law on Environment al Protection (72/2020/Q H14). Law on Water Resources (No. 17/2012/QH1 3)	Not Applicable			N/A	N/A	N/A	N/A	The Project does not cause water pollution of surface and groundwater and water bodies since it is a Solar Power Plant.	Solar power plants do not produce/ use any chemicals (such as pesticides, heavy metals, lead, mercury, etc.) which can create pollution of surface, ground, and/ or bodies of water. All solid waste has been managed & properly disposed as monitored and evaluated under EL02, EL04, EL06. Furthermore, for the cleaning of solar panels, fresh groundwater/ rainwater was used without adding any chemical substances (detergent, etc.). This has been verified by onsite observation, reviewing EIA report /10/ & approved EIA decision /11/, and annual E&S compliance report /12/. Therefore, the verification team can confirm that there is no impact is anticipated.
Discharge of harmful chemicals like marine pollutants / toxic waste (EW06)	Not Applicable During washing of the solar panels, only groundwater is used thereby eliminating any chemical contamination of runoff. No soap or cleaning reagents are used for the cleaning process. In addition, water is sprayed at high pressure and introduced as mist which are reduces the amount of	N/A	Not Applicable	-	-	N/A	N/A	N/A	N/A	The project does not cause water pollution of harmful chemicals like marine pollutants/ toxic wastes since it is a Solar Power Plant.	Solar power plants do not discharge any harmful chemicals. Furthermore, for the cleaning of solar panels, fresh groundwater/ rainwater was used without adding any chemical substances (detergent, etc.). This has been verified by onsite observation, reviewing EIA report /10/ & approved EIA decision /11/, and annual E&S compliance report /12/ All solid waste has been managed & properly disposed as monitored and evaluated under EL02, EL04, EL06. Thus, there is no impact on this environmental aspect.

		water used and most of the water is retained on the surface to the PV panels. The water is removed via manual wiping hence surface runoff is minimized. When possible, cleaning of the PV panels will be completed when it is raining to reduce water consumption and avoid any additional surface runoff. Hence, no impact is anticipated.										
Environme nt – Natural Resources	Conserving mineral resources (ENR01)	Not Applicable	Law on Environment al Protection (72/2020/Q H14).	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applic able	This is Solar power project activity and it is not using any natural minerals. therefore, this parameter will not be scored.	Solar power plants do not conserve mineral resources in comparison with the baseline scenarios. Therefore, there is no impact on this environmental aspect. It has been confirmed further by reviewing the EIA report /10/ and EIA approval decision /12/ & annual E&S compliance audit report /11/.
	Protecting/ enhancing plant life (ENR02)	Not Applicable The Solar Power Project is not located in an area of known high biodiversity values	Law on Environment al Protection (72/2020/Q H14).	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applic able	The Solar Power Project are not located in an area of known high biodiversity values.	There are no nature protection areas within the borders of Project Sites as verified by reviewing the EIA report /10/ EIA approval decision /12/ & annual E&S compliance audit report /11/. Thus, project activity does not have any impact on this matter in comparison with the baseline scenarios. No risk identified.
	Protecting/ enhancing species diversity (ENR03)	Not Applicable The Solar Power Project is not located in an area of known high biodiversity values	Law on Environment al Protection (72/2020/Q H14).	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applic able	The Solar Power Project are not located in an area of known high biodiversity values.	There are no special species, or any biodiversity protected area within the borders of Project Sites as verified by reviewing the EIA report /10/, EIA approval decision /12/ & annual E&S compliance audit report /11/. Thus, project activity does not have any impact on this matter in comparison with the baseline scenarios. No risk identified.
	Protecting/ enhancing forests (ENR04)	Not Applicable	Law on Environment al Protection (72/2020/Q H14).	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applic able	No Natural Forest was cleared to make way for the Solar Power Project.	80-90% of the project area is typically inundated with water during the flood season each year (i.e., October to March). Before the implementation of the project activity, the land had very little economic, ecological or agriculture value. There is no forestland within the project border. This has been verified by reviewing the EIA report /10/, EIA approval decision /12/ & annual E&S compliance audit report /11/.

•												Thus, project activity has no impact on this matter in comparison with the baseline scenarios. No risk identified.		
	Protecting/ enhancing other depletable natural resources (ENR05)	Not Applicable	Law on Environment al Protection (72/2020/Q H14).	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applic able	No other significant amounts of natural resources have been used to construct or operate the project activity therefore this parameter will not be scored.	Solar power plants do not protect or enhance other depletable natural resources except the fossil fuels consume to produce electricity at thermal power plants in the baseline scenarios (which will be assessed in <i>ENR07 of this table</i>). Thus, this environmental impact is not applicable for this project activity.		
	Conserving energy (ENR06)	Not Applicable	Law on Environment al Protection (72/2020/Q H14).	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applic able	Not Applicable for the Project Activity	Solar power plants do not conserve any other energy except the fossil fuels consumed to produce electricity at thermal power plants in the baseline scenarios (which will be assess in <i>ENR07 of this table</i>). Thus, environmental impact is not applicable for this project activity.		
	Replacing fossil fuels with renewable sources of energy (ENR07)	Positive impact. The project replaces fossil fuels with renewable sources of energy since it is a solar power plant.	N/A	Not Applicable	Harmless The overall impact is positive compared to the baseline alternative	Not Applicable	Not Applicable	Not Applicable	N/A	Not Applic able	This parameter is not monitored and quantified, Therefore, it will not be scored.	Project activity creates a positive impact for environment since electricity is generated from renewable source of energy (wind) and feed to National Grid, this will lead to reduction in fossil fuels consumption to generate electricity by thermal power plan. However, since project owner do not wish to monitor this impact, and therefore will not claim positive score for this impact for more conservative.		
	Replacing ODS with non-ODS refrigerants (ENR08)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applic able	Not Applicable for Solar Power Plant	Solar power plants do not replace ODS with no-ODS refrigerants. This can be confirmed based on sector knowledge and review EIA report /10/ and EIA approval /12/ & annual E&S compliance audit report /11/. This environmental impact is not applicable for this project activity.		
Note: If the score is: (a) zero or greater, the overall impact is neutral or positive and there is no net harm; and (b) less than zero, the overall impact is negative and there is net harm to Environment. Score is obtained after adding the individual scores in each of the rows in the last column of the above table.														
Net Score:			+5	+5										
Project Owner	's Conclusio	on in PSF:	The Pro	The Project Owner confirms that the Project Activity will not cause any net harm to the environment.										
GCC Project V	erifier's Opi	inion:	The GC	CC Verifier o	certifies that	the Project A	ctivity is not l	likely to caus	e any net ha	rm to the	e environment.			

Appendix 2. Social Safeguards assessment

Impact of Project	t Activity on	Inf	ormation on Impacts	, Do-No-Harm Ri	isk Assessmen	t and Establis	hing Safeguards	S	Project	Owner's Conclusion	GCC project Verifier's Conclusion (to be included in Project Verification Report only)
			Legal requirement /Limit, Corporate policies / Industry best practice		No-Harm Risk Assessment se which ever is applicable)		Risk Mitigation Action Plans (for aspects marked as Harmful)	Performance indicator for monitoring of impact.	Ex- ante scorin g of enviro nmenta I impact	Explanation of the Conclusion	3 rd Party Audit
				Not Applicable	Harmless	Harmful	Operational / Managemen t Controls	Monitoring parameter and frequency of monitoring (as per scoring matrix Appendix-02)	Ex- Ante scorin g of social impact of the project	Ex- Ante description and justification/explan ation of the scoring of social impact of the project	Verification Process Will the Project Activity cause any harm?
Social Aspects on the identified categories ²⁰ 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/emergen cy conditions that may result from constructing and operating of the Project Activity within or outside the project boundary, over	Describe the applicable national regulatory requirements / legal limits or organizational policies or industry best practices related to the identified risks of social impacts	If no social impacts are anticipated, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as Not Applicable	If social impacts exist, but are expected to be in compliance with applicable national regulatory requirement s/ stricter voluntary corporate limits by way of plant design and	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 management controls that can be implemented as well as best practices, focusing on how to implement and operate the Project Activity, to reduce the risk of	Describe the monitoring approach and the parameters (KPI) to be monitored for each impact irrespective of whether it is harmless of harmful. The frequency of monitoring to be specified as well. Monitoring parameters can be quantitative in	-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.

²⁰ sourced from the CDM SD Tool and the sample reports are available (https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx)

		which the project Owner(s) has/have control			operating principles then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as Harmless), project having positive impact on society 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	impacts that have been identified as Harmful .	nature along with the data source			
Reference to paragraphs of Environmental and Social Safeguards Standard		Paragraph 12 (a)	Paragraph 13 (c)	Paragraph 13 (d) (i)	Paragraph 13 (d) (ii)	Paragraph 13 (d) (iii)	Paragraph 13 (e) (i)	Paragraph 12 (c) and Paragraph 13 (f)	Paragra ph 23		Paragraph 24 and Paragraph 26 (a) (ii)
Social - Jobs	Long-term jobs (> 10 year) created/ lost (SJ01)	Positive impact. The project activity created long-term jobs during its operational life time.	None	-	Harmless		N/A	The Project applied a policy of non-discriminatory recruitment procedures and fair remuneration in compliance with national regulations including minimum wage protection for employees via the internal Code of Conduct and Human Rights Policy. Number of people employed by the project will be monitored through checking payroll records or	+1	There is no mandatory law to generate permanent employment from the project activity, however, project proponent has been decided to provide employment opportunities to the local people & generate permanent employment for local people. Therefore, this parameter will be scored.	Being a commercial solar power plant, the project activity is expected to create direct and indirect jobs for both skilled and unskilled people. After reviewing the list of long-term employees /40.1/ & salary payment records in 2021, 2022 /40.2/, the verification team found that there were more than 50 employees. As this is a positive impact, it is termed as "harmless". Since impact is confirmed as "harmless", no Risk Mitigation Action Plan is required. The number of long-term jobs created by the project activity are being monitored as monitoring plan in section B.7.1 in the PSF & has been verified in section D.3.7 in this report. Based on the monitoring approach adopted by the project owner, the scoring is +1. This is accepted by the project verification team.

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	New short- term jobs (< 1 year) created/ lost (SJ02)	Positive impact. The project activity created short-term jobs during its operational lifetime.	None	-	Harmless	-	N/A	The local labor force has been employed temporary employees during operational lifetime. They are short-term employees (i.e., less than one year contract). The Project applied a policy of non-discriminatory recruitment procedures and fair remuneration in compliance with national regulations including minimum wage protection for employees via the internal Code of Conduct and Human Rights Policy. Data on worker numbers is also recorded.	+1	There is no mandatory law to generate temporary employment from the project activity, however, project proponent has been decided to provide opportunities to the local people & generate short-term employment for local people Therefore this parameter will be scored.	Being a commercial solar power plant, the project activity is expected to create direct and indirect jobs for both skilled and unskilled people. After reviewing the most updated list of temporary employees with the contract signed for the period from 17/10/2022 - 16/04/2023 /40.3/, the verification team found that there were 20 short-term employees during operation. As this is a positive impact, it is termed as "harmless". Since impact is confirmed as "harmless", no Risk Mitigation Action Plan is required. The number of short-term jobs created by the project activity are being monitored as monitoring plan in section B.7.1 in the PSF & has been verified in section D.3.7 in this report. Based on the monitoring approach adopted by the project owner, the scoring is +1. This is accepted by the project verification team.
	Sources of income generation increased / reduced (SJ03)	Positive impact. There is a positive impact of the project activity in creating new sources of income due to increased job opportunities in the area. In addition, some other additional income generation activities have been developed at the locality due to the Project Activity	None	-	Harmless	-	N/A	N/A	0	This parameter is not monitored and quantified, therefore, will not be scored.	The project area has received an influx of population during the project construction and operation phase and new sources of income generation have occurred such as grocery shops and house renting. Also due to the implementation of project activity, many unskilled job opportunities are being created for local people such as watchmen, drivers, sweepers, etc. In general, this has a positive impact on society, however, it is difficult to monitor the performance indicator compared with the baseline scenarios, so no score was claimed for this impact. The verification team deem it acceptable.

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		(e.g., groceries, food services, etc) which results in a greater source of income to local people.									
	Avoiding discrimination when hiring people from different race, gender, ethnics, religion, marginalized groups, people with disabilities (SJ04) (human rights)	Positive impact. The Project apply nondiscrimination recruitment and remuneration in compliance with national regulations via the internal Code of Conduct and Human Rights Policy.	Company Code of Conduct and HR policy Vietnam Labour Code 2019	-	Harmless Project Owner establishes the policy to ensure that there is no discriminati on based on gender, racism, religion etc. during the recruitment process.	-	N/A	N/A	0	The Project Activity creates positive impacts on society. However, this parameter is not monitored and quantified, therefore, will not be scored.	The project activity has voluntarily established a company HR policy on non-discrimination. This company policy applied during recruitment and employment to ensure equal and fair chance to access opportunities. The has been verified by reviewing HR policy /38.2/ and the company Code of Conduct /38.1/. There is no local requirement on this issue as verified by reviewing Vietnam Labour Code 2019 /A13/. As this is a positive impact, it is termed as "harmless". Since impact is confirmed as "harmless", no Risk Mitigation Action Plan is required. In general, this has a positive impact on society, however, PO did not wish to monitor this impact, therefore it scored as "0". This is accepted by the project verification team.
Social - Health & Safety	Disease prevention (SHS01)	Not Applicable.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applica ble	It will be ensured that proper and adequate number of toilets is constructed for the Labor's so that hygienic conditions prevail in the site area. Therefore, this parameter will not be scored.	There is no requirement from local regulation for solar power plants to implement any activity for disease prevention. During the onsite visit, the verification team found that the workplaces in the project activity are generally clean and have good nature ventilation. This is maintained by a housekeeping team. The office is also spacious. So, there is no high risk of disease infection/ spreading between employees. So, this impact is considered as low and therefore not applicable.
	Occupation al health hazards (SHS02)	Potentially negative impact. The Project Activity is possibly create occupational health hazards. They are categorized into five types: Physical (noise, radiation,	Law on Occupational Safety and Health (Law No. 84/2015/QH13) ²¹	-	-	Potentially harmful	The Project has been developed the Occupational Health and Safety Plan including Hazard Identification,	Training records/ calendar or OHS plan or List of Training Attendances or Photos will be maintained Yearly health check-up	+1	Operation of the project does present safety risks (i.e. compared to the baseline). However, these risks will be managed carefully.	According to Law No.84/2015/QH13 on Occupational Safety and Hygiene /A23/, it is the responsibility of PO to provide regular HSE training & protections to employees to prevent any risk of occupational health hazards and prepare annual OHS Report /46/ with records of employees' health check-up /43/ & submit to MOLISA. The verification team has reviewed the identified regulations, cross-checked with local expert and thus

²¹ Available at https://vanban.chinhphu.vn/default.aspx?pageid=27160&docid=180606

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	temperature, pressure, light degree, etc); Chemical (explosives, flammable subtances, corrosive, toxic, solvents,); Biological (unclean working environment, exposure to biochemicals and fauna); Natural (rain, storm/ tropical surge, heat,); and Human Physical (medicines use, health conditions, physical shortcomings to perform tasks). This impact will be managed and mitigated in compliance with national regulations through an Occupational Health and Safety Plan and its supporting subplans.					Risk Assessment, and Control Procedure with Occupational Hazard Identification Register ²² and implemented in according to the national regulations to manage and mitigate any potential OHS related- risks. The mitigation & monitoring plan has been identified in section B.7.2, please refer to that Section for more details.	records for employees OHS reports		Therefore, this parameter will be scored.	confirmed that those were identified correctly. By inherent nature this parameter creates an adverse impact on society if not managed well. The impact is termed as "harmful" if there is no proper control mechanism to reduce the risk. Thus, as per para13e, the project owner has identified a monitoring program & mitigation action for this mitigation and is listed in section B.7.2. The opinion on adequacy of monitoring, recording and reporting system for this parameter has been provided & verified in section D.3.7 of this PVR. The verification team has reviewed the annual OHS report /46/ & relevant local regulation listed above and confirms that if the impact is managed according to those regulation & mitigation action plan, there will no occupational health issues due to the implementation of the project activity. Therefore, the project verification team confirmed that Risk Management Action Plan can eliminate or reduce the anticipated adverse impacts to the Harmless level. Therefore, the scoring is "+1". This is accepted by the project verification team.
Reducing / increasing accidents/ln cidents/fatal ty (SHS03)		None	-	-	Potentially harmful	The Project has been developed the Occupational Health and Safety Plan including Hazard Identification, Risk Assessment, and Control Procedure with Occupational Hazard	N/A	0	The project proponent 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 as per monitoring plan for Parameter SHS02 above.	According to Law No.84/2015/QH13 on Occupational Safety and Hygiene /A23/, it is the responsibility of PO to provide regular HSE training to employees prevent any risk of accident/ incidents and prepare annual OHS Report /46/ with records of accidents/ incidents & submit to MOLISA. The verification team has reviewed the identified regulations, cross-checked with local expert and thus confirmed that those were identified correctly. By inherent nature this parameter creates an adverse impact on society if not managed well. The impact is termed as "harmful" if there is no proper control mechanism to reduce the risk.

²² The Occupational Hazard Identification Register is produced to compliment Dau Tieng 2 Solar Power Plant's Hazard Identification, Risk Assessment and Control Procedure published in August 2020.

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	accidents occurring during the construction phase. During the Project operation, the impacts will be managed and mitigated in compliance with national regulations through an Occupational Health and Safety Plan and its supporting subplans as described in Parameter SHS02 above. Hence, the impact is negligible.					Identification Register ²³ and implemented in according to the national regulations to manage and mitigate any potential OHS related- risks. The mitigation & monitoring plan is identical to parameter SHS02 above. It has been included Section B.7.2			For conservative, this parameter wil not be scored.	However, the monitoring program and mitigation action for this parameter is identical with SHS02 and that was listed in section B.7.2. The opinion on adequacy of monitoring, recording and reporting system for this parameter has been provided & verified in section D.3.7 of this PVR. The verification team has reviewed the annual OHS report /46/ & relevant local regulation listed above and confirms that if the impact is managed according to those regulation & mitigation action plan, this would help reduce the risk of accidents/ incidents due to the implementation of the project activity. Therefore, the project verification team confirmed that Risk Management Action Plan of SHS02 can also eliminate or reduce the anticipated adverse impacts to the Harmless level. Since SHS02 & SHS03 shared the same monitoring and mitigation plan, the score is only claimed for SHS02, no score is claimed for SHS03 for conservative. This is accepted by the project verification team.
Reducing / increasing crime (SHS04)	Not Applicable The Project Activity is not likely to increase criminal in the region.	None	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Project activity does have any potential to contribute to reducing / increasing crime compared with baseline scenarios therefore not applicable. It was also verified by reviewing annual E&S compliance audit report /11/ & annual OHS report /46/. So, this impact is considered as not applicable.
Reducing / increasing food wastage (SHS05)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Project activity does not contribute to Reducing / increasing food wastage compared with baseline scenarios. It was also verified by reviewing annual E&S compliance audit report /11/ & annual OHS report /46/. So, this impact is considered as not applicable.
Reducing / increasing indoor air	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applica ble	Solar power plant does not cause to any kind of Indoor Air	During the onsite visit, the verification team found that the workplaces in the project activity are generally clean and have good

²³ The Occupational Hazard Identification Register is produced to compliment Dau Tieng 2 Solar Power Plant's Hazard Identification, Risk Assessment and Control Procedure published in August 2020.

p (s	Efficiency of nealth	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applica ble	Pollution. Hence it can be assumed that no chance of increasing IAP from project activity. Therefore, this parameter will not be scored.	nature ventilation. This is maintained by a housekeeping team. The office is also spacious. There is no indoor air pollution source. It was also verified by reviewing annual E&S compliance audit report /11/ & annual OHS report /46/. So, this impact is considered as not applicable. Project activity does not contribute or have any impact to the efficiency of health services; therefore, this is not applicable. It
	SHS07)								bie		was also verified by reviewing annual E&S compliance audit report /11/ & annual OHS report /46/. So, this impact is considered as not applicable.
a. m	Sanitation and waste managemen t (SHS08)	Project generates waste caused by the domestic use and sanitary activity but it is disposed according to the national regulations. There were a proper and adequate sanitation facilities at the Site. In addition, a regular inspection of wastewater management practices within the Project are ensured through septic tanks, then treated in a wastewater treatment system. Hence, no impacts are anticipated from this parameter.	None	Not Applicable	-	-	N/A	N/A	N/A	The Project's sanitary disposal activity is negligible at the Site and this is managed properly according to the national regulations. In addition, the Project has a Waste Management Procedure to monitor the management process carefully to ensure no impacts to the local people. The impacts cannot be quantified, therefore, no score under this parameter.	Project activity manages waste as per requirements of Circular 09/VBHN-BTNMT on Waste management /A21/ & Circular No.36/2015/TT-BTNMT dated 30/06/2015 of MONRE on Management of Hazardous Waste /A20/. The project activity has waste management procedure in place. This has been evaluated in EL02, EL04, EL06 of Appendix 1 — Environmental Safeguard Assessment of this. PVR. The domestic wastewater is also managed properly. This has been evaluated in EW03 of Appendix 1 - Environmental Safeguard Assessment of this. PVR There is no special issue for solar power plants regarding sanitation. In general, there is no social impact due to waste and sanitation management of this project activity in comparison with baseline scenario. It was also verified by reviewing annual E&S compliance audit report /11/ & annual OHS report /46/. Therefore, no score was claimed for this impact.
a. is	Other health and safety ssues (SHS09)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applica ble	All health & safety issues at project sites to be mitigate as per EHS/ OHS policy of project	All health & safety issues at project sites have been addressed under SHS02 & SHS03 in this table (Appendix 2 – Social safeguard assessment). There are no other health & safety issues that could be identified.

,	Vermeat									developer company and local regulation. Therefore, this parameter will not be scored.	It was also verified by reviewing annual E&S compliance audit report /11/ & annual OHS report /46/. Therefore, this is not applicable.
Social – Education	specialized training / education to local personnel (SE01)	Project involves training of new people on Project technology (e.g., solar power). As per guidance from Project Sustainability Standard v3.0, paragraph 27(b), there are relationships, linkages between the chosen SDG goals and E/S impacts. Therefore, it is worth noting that the SDG 4 has the linkage to this parameter SE01. While this parameter SE01 is likely to create positive impacts to local personnel on basic vocational training to do well in current job, SDG 4 will contribute to local personnel with advance capacity building and knowledge to achieve sustainable and decent jobs in future regarding renewable energy industry.	None	Not Applicable	Harmless It is a positive impact.	Not Applicable	Not Applicable	Training records/ calendar or HR plan or List of Training Attendances or Photos will be maintained.	+1	There is no mandatory regulation about education to local personnel. However, Project Owner confirms that by training the people on new technology will upgrade their skills and create positive impact. Hence this parameter will be scored.	Specialized training/ education imparted to the local employees such as HSE (firefighting, first aid, electrical safety training, working at heights, etc.) helps reduce risk of accident at site and improve quality of employment. There is a linkage between SDG4 and SE01 as they shared a similar monitoring plan. However, the training topic which is claimed for SDG4 is different from the training topic claimed for SE01. As the training for SE01 are offered for employees in the proposed project activity to improve quality of employment and do well in their current job while the trainings for SDG 4 are offered voluntarily for any employees in the project disregarding their job description, duty and responsibility to improve their skillsets so they can have a better job in the future. It has been verified by interviewing different operators/ project staff during onsite visits and cross-checking with EHS Training and Capacity Development Plan /37.4/ training records /32/ provided by PO. As this is a positive impact, it is termed as "harmless". Since impact, it is termed as "harmless", no Risk Mitigation Action Plan is required. The training/ education created by the project activity are being monitored as monitoring plan in section B.7.1 in the PSF & has been verified in section D.3.7 in this report. Based on the monitoring approach adopted by the project owner, the scoring is +1. This is accepted by the project verification team.
	Educational services	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Project activity does not involve educational services therefore not applicable

		ion respon								I	
	improved or not (SE02)										
	Project- related knowledge disseminatio n effective or not (SE03)	Not Applicable	None	Not Applicable	-	-	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Project activity does not plan any Project- related knowledge dissemination, therefore not applicable.
	Other educational issues (SE03)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Project activity does not involve educational services therefore not applicable
Social – Welfare	Improving/ deteriorating working conditions (SW01)	Not Applicable	Vietnam Labour Code	Not Applicable	-	-	N/A	N/A	N/A	There is no chance to deteriorating working conditions as Project Owner will maintain high working culture for their employee with complying EHS/OHS guideline & local regulation.	Project activity does not contribute to improving/ deteriorating working conditions compared with baseline scenario. This has been verified during onsite observation. It was also verified by reviewing annual E&S compliance audit report /11/ & annual OHS report /46/. Therefore, this is not applicable.
	Community and rural welfare (indigenous people and communitie s) (SW02)	Not Applicable	None	Not Applicable	-	-	N/A	N/A	N/A	Project Owner will support local rural people through a community support policy. This parameter cannot be quantified hence will not be scored.	Local people have benefited from the employment opportunities therewith income generation in this project activity. It might help improve community and rural welfare. In addition, during the operation, the PO has conducted different CSR activities to support the community (e.g. provide scholarships for poor children, support poor households with gifts, etc). This has been verified by reviewing supportive documents including photos /39.1/, thank-you letters from local authority /39.2/, articles on local newspaper /39.3/. However, it is difficult to quantify the impact, therefore the PO did not consider this as positive impact.
	Poverty alleviation (more people above poverty level) (SW03)	Not Applicable. There is positive impact of the project activity in creating new sources of income due to increasing some additional	None	Not Applicable	-	-	N/A	N/A	N/A	This parameter is not monitored and quantified, therefore, will not be scored.	Project activity generates income for local people who work at project activity. It might help poverty alleviating. In addition, during the operation, the PO has conducted different CSR activities to support the community (e.g., provide scholarships for poor children, support poor households with gifts, etc.). This has been verified by reviewing supportive documents supportive

T reject vermeat	income generation activities at the locality (e.g., groceries, food services, etc) which helps people reduce the poverty alleviation status. However, the impact cannot be quantified toward this parameter.									documents including photos /39.1/, thank-you letters from local authority /39.2/, articles on local newspaper /39.3/. However, cannot monitor/ prove if poverty was alleviated or not compare with baseline scenario; therefore, this is not applicable.
Improving / deteriorating wealth distribution/ generation of income and assets (SW04)	Not Applicable The Project Activity provides local employment in the local area. However, the impact cannot be quantified toward this parameter.	None	Not Applicable	-	-	N/A	N/A	N/A	Local community might choose to work during the construction of access roads and other project components and as security guards for the plant. There is also a likelihood of reduced dependence on agriculture for income. The parameter cannot be monitored and quantified. Therefore, this parameter will not be score.	There is no impact in wealth distribution/ generation of income and assets. Therefore, this is not applicable.
Increased or / deteriorating municipal revenues (SW05)	N/A	None	Not Applicable	-	-	N/A	N/A	N/A	Project is not falling under municipal areas; hence this parameter will not be scored.	Project activity generates income for local people and contributes tax for municipality. It generally a positive impact, however, those cannot monitor/ prove if this project help increasing or deteriorating compare with baseline scenario; therefore, this is not applicable.
Women's empowerme nt (SW06) (human rights)	Not Applicable. A Gender Action Plan has been prepared and is being implemented. An internal grievance redress mechanism has also been prepared to provide access for reporting sexual	None	Not Applicable	-	-	N/A	N/A	N/A	Project Owner will take initiative for promoting gender equality, empowering women. However, the parameter is not monitored and cannot be quantified. Therefore, this	The project activity has voluntarily established a company HR policy on non-discrimination. This company policy applied during recruitment and employment to ensure equal and fair chance to access opportunities. The has been verified by reviewing HR policy /38.2/ and the company Code of Conduct /38.1/. A Gender Action Plan /48/ also prepared, and an internal grievance redness mechanism was deployed to avoid any sexual harassment for women. This has been

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		harassment related incidents. However, the impact cannot be quantified and monitored toward this parameter.								parameter will not be scored.	verified by interviewing with different female employees during onsite visit. In general, this has a positive impact on society, however, PO did not wish to monitor this impact, therefore it scored as "0". This is accepted by the project verification team.
	Reduced / increased traffic congestion (SW07)	Not Applicable	None	Not Applicable		-	N/A	N/A	Not Applica ble	Not Applicable	Project activity doesn't have any impact on reduced/ increased traffic congestion since project located in rural area where traffic is very light.
	Exploitation of Child labour (human rights) (SW08)	Not Applicable. The Project Activity is not likely to exploitation of Child Labour and complies with national regulations. The Project also complies the internal Code of Conduct and Human Rights Policy to eliminate the exploitation of Child Labour. However, the impact cannot be quantified.	Vietnam Labour Code 2019 (e.g., Chapter XI, Regulations on Child Labour) ²⁴	Not Applicable		-	N/A	N/A	Not Applica ble	Not Applicable	There is no child labour allowed as per local regulation Vietnam Labour Code 2019 - Chapter XI, Regulations on Child Labour /A13/. During the onsite visit, the verification team also observed no sign of child labour. The verification team also reviewed the annual E&S Compliance Audit Report /11/, conducted and prepared by IBIS Environmental and Social Consulting Asia Pte every to independently review and assess the Environmental, Social and Health & Safety (E&S) status and performance of the project, as well as to identify compliance gaps, issues, improvement opportunities. There is no non-compliance in this issue. Therefore, it is not applicable.
	Minimum wage protection (human rights) (SW09)	Positive impact. The Project Activity complies with national regulations as well as the internal Code of Conduct and Human Rights	Decree 38/2022/ND-CP on Region-based minimum wages ²⁵	Not Applicable	-	-	N/A	N/A	Not Applica ble	Not Applicable	The minimum wages are defined in Decree 38/2022/ND-CP on Region-based minimum wages /A24/ and the government expected all the companies to comply with this legal requirement. All the long-term employees in this project have a legal labour contract & social insurance registration with DOLISA. This has been verified by reviewing the salary

Page 52, Chapter XI, Regulations on Child Labour, Labour Law No 45/2019/QH14 dated 01/01/2021. Available at https://vanban.chinhphu.vn/?pageid=27160&docid=198540&classid=1&typegroupid=3
 Clause 3, Decree 38/2022/ND-CP prescribing 'region-based minimum wage levels applicable to employees working under labor contracts' dated 12nd June 2022. Available at <a href="https://english.luatvietnam.vn/decree-no-38-2022-nd-cp-prescribing-region-based-minimum-wage-levels-applicable-nd-prescribing-region-based-minimum-wage-levels-nd-prescribing-region-based-minimum-wage-levels-nd-prescribing-region-based-minimum-wage-levels-nd-prescribing-region-based-minimum-wage-levels-nd-prescribing-nd-prescribing-region-based-minimum-wage-levels-nd-prescribing-nd-pr to-employees-working-under-labo-222505-doc1.html

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		Policy to ensure the protection of remuneration for employees. Hence, no further impact is anticipated.									payment records and labor contract /40/ provided by PO. Therefore, they are complied with the minimum wage.
	Abuse at work place. (with specific reference to women and people with special disabilities / challenges) (human rights) (SW10)	Not Applicable The Project Activity complies with national regulations as well as the internal Code of Conduct and Human Rights Policy. An internal grievance redress mechanism has also been prepared to provide access for reporting related to abuse at work. However, the impact cannot be quantified.	Vietnam Labour Code 2019 (e.g., Chapter X, Regulations for Female Labour and ensure Gender Equality) ²⁶	Not Applicable	-	-	N/A	N/A	Not Applica ble	Not Applicable	As per Chapter X, Regulations for Female Labour and ensure Gender Equality - Vietnam Labour Code 2019 /A23/, the PO is expected to prevent and address any abuse at workplace (specific reference to woman). A Gender Action Plan /48/ also prepared by PO, and an internal grievance redness mechanism was deployed to avoid any sexual harassment for women. This has been verified by interviewing with different female employees during onsite visit. There is no specific requirement on disability. However, the PO committed to addressing any abuse issue between employees. They also issued HR policy /38.2/ and internal Company Code of Conduct /38.1/ to prevent any discrimination. The verification team also reviewed the annual OHS report /46/ annual E&S Compliance Audit Report /11/, conducted and prepared by IBIS Environmental and Social Consulting Asia Pte to independently review and assess the Environmental, Social and Health & Safety status and performance of the project, as well as to identify compliance gaps, issues, improvement opportunities. There is no non-compliance in this issue.
	Other social welfare issues (SW11)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable. There are no other social welfare issues for this project activity. The verification team also reviewed the annual OHS report /46/ and annual E&S Compliance Audit Report /11/, conducted and prepared by IBIS Environmental and Social Consulting Asia Pte to independently review and assess the Environmental, Social and Health & Safety status and performance of the project, as well

²⁶ Page 49, Chapter X, Regulations for Female Labour and ensure Equality, Labour Law No 45/2019/QH14 dated 01/01/2021. Available at https://vanban.chinhphu.vn/?pageid=27160&docid=198540&classid=1&typegroupid=3

										as to identify compliance gaps, issues, improvement opportunities. Thus, the verification team can confirm that there are no other social welfare issues.
Avoidance of human trafficking and forced labour (human rights)	Not Applicable The Project Activity complies with national regulations as well as the internal Code of Conduct and Human Rights Policy and is not likely to occur human trafficking and forced labour. Hence, no further impact is anticipated.	Vietnam Labour Code 2019 (e.g., Clause 8, Chapter I, page 5) ²⁷	Not Applicable	-	-	N/A	N/A	N/A	N/A	As per Clause 8, Chapter I, page 5 - Vietnam Labour Code 2019 /A23/, the PO is not allowed for any human trafficking. However, the PO committed avoid any trafficking human, forced labor issues. They also issued HR policy /38.2/ and internal Company Code of Conduct /38.1/ on this. The verification team also reviewed the annual OHS report /46/ and E&S Compliance Audit Report /11/, conducted and prepared by IBIS Environmental and Social Consulting Asia Pte to independently review and assess the Environmental, Social and Health & Safety status and performance of the project, as well as to identify compliance gaps, issues, improvement opportunities. Thus, the verification team can confirm that the project activity has complied with this requirement and there is no risk on this issue.
Avoidance of forced eviction and/or partial physical or economic displaceme nt of IPLCs (human rights)	Not Apllicable The Project Activity complies with national regulations relating to forced eviction or partial physical or economic displacement of IPLCs. Hence, no further impact is anticipated.	Vietnam Land Law 2013 (e.g., Clause 12, Chapter I) ²⁸	Not Applicable	-	-	N/A	N/A	N/A	N/A	There is no forced eviction and/ or partial physical or economic displacement of IPLCs in this project activity. The project land was owned by the local authority. They transferred the land to the PO to develop the solar power plant following the Decision 1228/QD-UBND, issued by Tay Ninh Province People's committee, dated 07/05/2018 /20/. According to this Decision, the PC of Duong Minh Chau District & Tan Chau District to do the land clearance & compensation according to the regulation before transferring to the PO. There was only a very small land area which was used by local stakeholder to cultivate cassava. But they do not own the land, so they received compensate for the crops only. All the land clearance & compensation was conducted by the District's PC following Vietnam Land Law 2013 - Clause 12,

²⁷ Clause 8, Chapter I, General Regulations, Labour Law No 45/2019/QH14 dated 01/01/2021. Available at https://vanban.chinhphu.vn/?pageid=27160&docid=198540&classid=1&typegroupid=3

²⁸ Clause 12, Chapter I, Vietnam Land Law 2013 dated 29th November 2013. Available at https://thuvienphapluat.vn/van-ban/EN/Bat-dong-san/Land-law-No-45-2013-QH13-dated-November-29-2013/225109/tieng-anh.aspx

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										Chapter I /A08/ & Decree 47/2014/ND-CP on Compensation /A25/, support, and resettlement upon land expropriation by the State. The verification team has reviewed all the supportive documents includes Decision 1228/QD-UBND /20.1/, Land use right certificate /21/, approval of land use plan No. 3189/QD-UBND /20.2/ and list of households received compensation /47/ & confirmed that all impacted households has received the sufficient compensation and resettlement. Thus, the verification team can confirm there is no risk on this issue.
Provisions of resettlement and human settlement displaceme nt (human rights)	Regarding those affected households (AHs) by the Project land acquisition, seven households surrendered 10% or more of their total landholding and one household resulted in the physical displacement ²⁹ . Those seven people economically displaced mainly grew cassava during the dry season and they were all informal land users. The acquired crop land areas were considered as secondary source of households' income and	Vietnam Land Law 2013 ³¹ Decree 47/2014/ND-CP on Compensation, support, and resettlement upon land expropriation by the State ³²	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	There is no forced eviction and/ or partial physical or economic displacement of IPLCs in this project activity. The project land was owned by the local authority. They transferred the land to the PO to develop the solar power plant following the Decision 1228/QD-UBND /20/, issued by Tay Ninh Province People's committee, dated 07/05/2018. According to this Decision, the PC of Duong Minh Chau District & Tan Chau District to do the land clearance & compensation according to the regulation before transferring to the PO. There was only a very small land area which was used by local stakeholders to cultivate cassava. But they do not own the land. All the land clearance & compensation was conducted by the District's PC following Vietnam Land Law 2013 - Clause 12, Chapter I /A08/ & Decree 47/2014/ND-CP /A25/ on Compensation, support, and resettlement upon land expropriation by the State. The verification team has reviewed all the supportive documents includes Decision 1228/QD-UBND /20.1/, Land use right certificate /21/, approval of land use plan No. 3189/QD-UBND /20.2/ and list of households

ADB Environment and Social Compliance Audit Report Oct 2021, page 178-179; and ADB Semi-annual Monitoring E&S Report April 2022, page 24. Livelihood Restoration Plan January 2023, Section 4.4, page 29-30

31 Clause 12, Chapter I, Vietnam Land Law 2013 dated 29th November 2013. Available at https://thuvienphapluat.vn/van-ban/EN/Bat-dong-san/Land-law-No-45-2013-QH13-dated-November-29-2013/225109/tieng-anh.aspx

32 Chapter II, Decree 47/2014/ND-CP on Compensation, support, and resettlement upon land expropriation by the State, dated 15th May 2014. Available at https://thuvienphapluat.vn/van-ban/Bat-dong-san/Nghi-dinh-47-2014-ND-CP-boi-thuong-ho-tro-tai-dinh-cu-khi-Nha-nuoc-thu-hoi-dat-230624.aspx

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	remained at a low		received compensation /47/ & confirmed all
	rate. The		impacted households has received the
	household, who		sufficient compensation and resettlement.
	was relocated by		
	the Project footprint,		In addition, we have cross-checked with
	has lived in a temporary dwelling		Resettlement Plan – Livelihood restoration
	with a floor area of		Report /11.4/ which conducted by third-party
	under 30 m2 to		IBIS Environmental and Social Consulting Asia Pte to evaluate the resettlement plan of
	guard their		the project activity and confirmed that it was
	cultivation area and		sufficiently support the livelihood of any
	also have another		households impacted by project activity.
	permanent house at		, , , , , , , , , , , , , , , , , , , ,
	another location.		Thus, the verification team can confirm there
			is no risk on this issue.
	The household has		
	provided with new		
	house within the		
	locality in Suoi Da		
	Commune and		
	satisfied with the		
	replacement homes		
	provided to them as		
	they were considered to be of		
	better quality to		
	those they had		
	been displaced		
	from.		
	Degarding these		
	Regarding those affected		
	households by the		
	Transmission line		
	installation, they		
	can continue their		
	current land use on		
	the land beneath		
	the transmission		
	line uninterrupted		
	economic activity		
	with the exception of the small area of		
	the tower footprint		
	(approximately		
	0.25ha each).		
	1.2.1.7		
	All of the above AHs		
	were part of the		
	Project ['] s Livelihood Restoration Plan as		
	per ADB		
	requirements and		
	did not appear to be		
	impacted in terms of		
	lower living or		

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	income standards nor would they be considered as significantly affected or vulnerable. Compensation was completed and no grievances were raised relating to the Project land acquisition or land use change. No further anticipated impacts during operational lifetime of the Project. All of the AHs were also part of the Project's Livelihood Restoration Plan and did not appear to be impacted in terms of lower living or income standards nor would they be considered as significantly affected or vulnerable ³⁰ . No further anticipated impacts	
	during operational lifetime of the	
	Project.	
Net Score:		+4
Project Owner's Co	nclusion in PSF:	The Project Owner confirms that the Project Activity will not cause any net harm to society.
GCC Project Verifie	r's Opinion:	The GCC Verifier certifies that the Project Activity is not likely to cause any net harm to society.

Appendix 3. United Nations Sustainable Development Goals (SDG) assessment

UN-level SDGs	UN-level Target	Declared Country- level SDG		Defining Project-level SDGs					GCC Project Verifier's Conclusion (to be included in Project Verification Report only)		
			Project-level SDGs	Project-level Targets/Actions		Contribution of Project- level Actions to SDG Targets	Monitoring	Verification Process	Are Goal/ Targets Likely to be Achieved?		
Describe UN SDG targets and indicators See: https://unstats.u n.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 of guidance.	Define project-level targets/actions in line with nee project level indicators chosen. Define the target date by which the project Activity is expected to achieve the project-level SDG target(s).		Describe and justify how actions taken under the Project Activity are likely to result in a direct positive effect that contributes to achieving the defined project-level SDG targets	Describe the monitoring approach and the monitoring parameters to be applied for each project-level SDG indicator and its 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	Not Applicable	Not Applicable	Not Applicable	Not Applicable Not Applicable		Not Applicable	Not Applicable	Not Applicable	Not Applicable		
Goal 2: End hunger, achieve food security and improved nutrition and promote	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable		

sustainable agriculture									
Goal 3. Ensure healthy lives and promote well- being for all at all ages	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDG Target 4.4 - By 2030, substantially increase the number of workers who have relevant skills as required by labour markets, in order for them to have decent jobs and become business owners. SDG Indicator 4.4.1 - Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill	YES ³³	The Project aims to contribute to the SDG Target 4.4 and then Indicator 4.4.1 by directly achieving the Project-level indicator "Number of people imparted relevant skills including modern technical skills and advance vocational skills for employment and decent job". Under the Project scenario, the Project is a new solar power plant. Project Owner has designed fundamental training plan for the employees for normal business operation. In addition, the Project also provides advanced training services including modern technical skillset for employees using remotely monitoring systems, technical software, SCADA, solar panels maintenance, etc for new solar	In line with SDG Target 4 and Indicator 4.4.1 and the chosen Project-level indicator, the Project will undertake the below Targets: 1. Project Owner will design a fundamental training plan for 100% of their employees including Occupational safety, Electrical safety, First aid, and Firefighting, etc for the employees for normal business operation. Project also targets to provide capacity building to its internal personnel through advance training services	Project Owner ensures and undertake following actions to contribute to the Project-level indicator and targets in the previous columns (left columns). 1. Undertake periodically training program/ plan for relevant vocational skills for employees such as occupational safety training, electrical safety, first aid training, firefighting training. In addition, training the advanced technical	The Project aims to contribute to the SDG Target 4.4 and then Indicator 4.4.1 by directly achieving the Project-level indicator "Number of people imparted relevant skills including modern technical skills and advance vocational skills for employment and decent job". 1. The Project generated different training program for its employees periodically, therefore, increasing the	1. Project Owner will maintain and record the 'Number of people imparted relevant skills including modern technical skills and advance vocational skills for employment and decent job' by the Project through training records or internal training plans/material s or training certificates/ photos. The monitored data will be collected annually and provided once for each	At the normal project operation, project owner has designed basic training plan including Occupational safety, First aid, and Firefighting, etc for their employees. However, the Project Owner has gone beyond and also provides capacity building to its internal personnel by advance training services including additional technical skillset for employees using remotely monitoring systems, technical software, SCADA, solar panels maintenance, etc for new solar technology and relevant E&S management training sustainable energy through its project lifetime. There is a linkage between SDG4 and SEO1 as they shared a similar monitoring plan.	Yes

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³³ Vietnam's National Action Plan for the Implementation of the 2030 SDG Agenda, Prime Minister's Office, Decision 633/QD-TTg dated 10 May 2017. Available at https://vietnam.un.org/en/4123-national-action-plan-implementation-2030-sustainable-development-agenda

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		technology and	including	skillsets	number of	monitoring	However, the training	
		relevant E&S training	additional	including	people	period.	topic which is claimed for	
		for sustainable energy	technical skillset	manage	receiving	P 0	SDG4 is different from	
		through its project	for employees	remote	quality and	2. List of	the training topic claimed	
		, ,	using remotely					
				monitoring	advanced	Employees	for SE01. As the training	
		employees would not	data monitoring	system,	education,	who engaged	for SE01 are offered for	
		have obtained these	systems,	technical	including	in the Project's	employees in the	
		advanced knowledge	modern	software, O&M	modern	training	proposed project activity	
		and training in the	software,	for solar	technical and	services with	to improve quality of	
		baseline scenario	SCADA system,	panels,	advanced	details of	employment and do well	
		which only has basic	solar panels	SCADA	vocational	occupation,	in their current job while	
		vocational training	maintenance,	monitoring, etc	skills for future	location, etc	the trainings for SDG 4	
		program for electrical	etc for new solar	and advance	decent jobs	will be	are offered voluntarily for	
		employees.	technology, and	vocational	and	provided	any employees in the	
		Sp.09000.	E&S training for	skills relating to	employment.	annually.	project disregarding their	
		The Project therefore	sustainable	E&S	Simple yillicit.	armuuny.	job description, duty and	
		contributes to the SDG			2. The Project	2 Internable		
			energy through	management,		3. Internship	responsibility to improve	
		Target 4.4 and also	its project	etc.	had recruited	plan and	their skillsets so they can	
		Indicator 4.4.1 by	lifetime.		local people to	report will be	have a better job in the	
		providing the advance		2. Maintains	work in the	obtained.	future.	
		capacity building for	The Project	Company	Project and			
		employees and	will recruit the	Policy to	trained them	4. The	This was confirmed by	
		therefore increasing the	local labour force	employ the	practical skills	information	interviewing HR	
		quality of human	to work at the	local labour	regarding	can be cross-	personnel of the project	
		resources, mobilizing	Project and	force during	technical and	checked by	activity during onsite visit	
		Project's financial	provide training	the Project	vocational	interviews with	and checking the training	
		resources for human	services to	operation	skillset of	Project's staff.	records and training	
		resource development,	increase their	lifetime and	renewable	r rojouro otari.	certificates supplied by	
		and participating in	relevant capacity	provide them	energy	Refer to	PO during the time of	
				the Project's	technology,	Section B.7.1	verification /32/.	
		formulating and	required by	,	0,	for further	verilication /32/.	
		implementing training	labour market in	training	therefore,		A	
		programmes in order to	renewable	services in	already	details.	An appropriate	
		increase its practical	energy (e.g.,	order to	increased the		monitoring plan on the	
		value in accordance	solar power).	increasing the	local labour		contribution for this SDG	
		with the needs of		quality of local	force's		Goal has been provided	
		society and labour	As per guidance	labour force	capacity.		in Section B.7.1 of the	
		markets in the	from Project	which help			PSF and the verification	
		renewable energy	Sustainability	them achieve	3. The Project		opinion has been	
		industry. After the	Standard v3.0,	sustainable	expects to be		provided in Section D.3.7	
		Project Activity, its	paragraph 27(b),	and decent	able to		of this PVR.	
		labour force could	there are	jobs in the	accommodate			
		achieve a better	relationships,	future.	approximately		These monitoring	
				idiale.	'''		parameters are suitable	
		employment	linkages	2 The Drain-t	two interns per		•	
		background and	between the	3. The Project	year starting		and feasible to monitor	
		capacity to approach	chosen SDG	developed	2022 . Hence,		SDG Goal 4 as the	
		decent jobs in	goals and E/S	Internship	the Project		parameter helps quantify	
		sustainable energy.	impacts.	program for	also provided		the number of people	
				students or	quality		imparted relevant skills	
			Therefore, it is	recent	education and		including modern	
			worth noting that	graduates	lifelong		technical skills and	
		-	<u> </u>	5	- 3			

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				the SDG 4 has the linkage to this parameter SE01. While this parameter SE01 is likely to create positive impacts to local personnel on basic vocational training to do well in current job, SDG 4 will contribute to local personnel with advance capacity building and knowledge to achieve sustainable and decent jobs in future regarding renewable energy industry.	according to the ADB Gender Action Plan 2021 in order to providing them the quality employment experiences for decent jobs in the future. Hence, the Project is likely to create positive impacts under this scope to the local people who were employed by the Project through its training services. Project has started contributing to the Project-level indicator since its start date.	learning opportunities for all. Hence complied and contributed to the SDG Target 4.4, SDG Indicator 4.4.1, and Project-level Indicator.		advanced vocational skills for employment and decent job. It would contribute to Indicator 4.4.1 - Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill. The project verification team deems the contribution of the project activity on SDG Target 4.4, indicator 4.4.1 is real and measurable & therefore accept it.	
Goal 5. Achieve gender equality and empower all women and girls	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Goal 6. Ensure availability and sustainable management of water and sanitation for all	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Goal 7. Ensure access to affordable, reliable,	SDG Target 7.2 - By 2030, increase substantially the share of	YES	The Project aims to contribute to the SDG Target 7.2 and then Indicator 7.2.1 by	In line with SDG Target 7.2 and Indicator 7.2.1 and the chosen	Project Owner ensures and undertake following	The Project aims to contribute to the SDG	Project O&M team at project site continuously	The proposed project is installation of 240 MWe renewable solar power, and it generates	Yes

sustainable and	renewable energy	directly achieving the	Project-level	actions to	Target 7.2 and	monitors the	electricity of 393,074	
modern energy	in the global	Project-level indicator	indicator, the	contribute to	then Indicator	Quantity of net	MWh/year. It would	
for all	energy mix	'Quantity of net	Project will	the Project-	7.2.1 by	electricity	increase the renewable	
	Chorgy Time	electricity generation	undertake the	level indicator	directly	generation	energy share in the total	
	SDG Indicator	supplied to the grid by	below Targets:	and SDG	achieving the	supplied by	final energy	
	7.2.1 – Renewable	the Project'.	bolow rangeto.	target,	Project-level	the Project to	consumption. The	
	energy share in the	the ritoject.	Project target to	indicator in the	indicator	the grid with	construction &	
	U ,	The Project generates	generate and	previous	'Quantity of	daily and	installation of solar	
	total final energy	electricity from the		columns (left	net electricity	monthly		
	consumption.	sustainable and	feed an average of 393,074	,	•	•		
		renewable energy and	MWh/year	columns).	generation	recording.	voluntarily in nature. It	
			renewable	1 Signed	supplied to the	2 Tho	positively affects the	
		contributes to increase		1. Signed	grid by the	2. The	chosen SDG indicator. In	
		the share of renewable	based electricity	Power	Project'.	electricity will	the absence of the	
		energy mix in the	for entire lifetime	purchase	The Davis of	be monitored	project, the equivalent	
		national grid as well as	of the Project	agreement	The Project	by more than	amount of electricity	
		global energy mix. The	Activity into the	with off-taker to	generates	one meters.	would be generated from	
		Project therefore	national grid.	ensure the	electricity from	Meters shall	National Grid, which is	
		contributes to the		consumption of	the	be calibrated	GHG intensive.	
		above SDG Target and		generated	sustainable	by the		
		also SDG Indicator.		power by the	and	authorized		
		In addition the Design		end consumer.	renewable	third-party as	An appropriate	
		In addition, the Project		O. Dania di ban	energy (e.g.,	per the grid	monitoring plan for this	
		uses advanced		2. Project has	solar power)	operator	SDG Goal has been	
		environmentally sound		already	then exports	requirements,	provided in Section B.7.1	
		technology which is		connected and	to the national	and this	of the PSF and the	
		cleaner source of		started	grid, and	frequency of	verification opinion has	
		energy which also		supplying the	therefore	meter	been provided in Section	
		avoids the equivalent		renewable	contributes to	calibration is	D.3.7 of this PVR.	
		amount of fossil fuel		electricity to	increase the	not within the		
		consumption for the		national grid	share of	control of the	The project owner will	
		power generation in the		and monitoring	renewable	Project Owner	monitor the Quantity of	
		absence of the Project		the energy	energy mix in	(e.g., every	net electricity generation,	
		Activity.		quantity	the global	year for main	which will be used to	
				exporting to the	energy mix.	meter and	calculate the share of	
		Project Activity thus		grid.		once in three	renewable energy from	
		promotes investment				years for back-	the project in the total	
		into cleaner		Project has	Hence	up meter).	installed electricity	
		technology-based		already started	complied and		generation facilities in	
		power generation		contributing to	contributed to	3. The import	Vietnam.	
		projects. By installing		its Project-level	the SDG	and export	The project verification	
		advanced solar energy		indicator and	Target 7.2,	metering	team deems the	
		technology, the project		hence SDG	SDG Indicator	readings shall	monitoring parameter is	
		owner also promotes		Target and	7.2.1, and	be	suitable and feasible to	
		upgraded cleaner		corresponding	Project-level	crosschecked	monitor over the	
		technology solutions		indicator from	Indicator.	with the	monitoring period to	
		and infrastructure in the		its start date.		monthly	demonstrate project	
		power generation				Electricity	impact on SDG Goal 7.	
		sector in the host				Sales Invoice	impact on 3DG Goal 7.	
		country.				raised by the	It would contribute to the	
						Project Owner	increase of the	

Project verification	n Keport								
							and/or EVN accordingly. Refer to Section B.7.1 and B.7.4 for more details.	renewable energy share in the total final energy consumption which is in line also with Indicator 7.2.1.	
Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	Target 8.5 - By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value. Indicator 8.5.1 - Average hourly earnings of female and male employees, by occupation, age and persons with disabilities	NO	The Project aims to contribute to the SDG Target 8.5 and then Indicator 8.5.1 by directly achieving the Project-level indicator 'Number of people employed and then paid by the Project Activity with details of monthly wages, gender, occupation, age and persons with disabilities'. Project activity aims to support the creation of short-term and long-term job opportunities during the construction and operation of the Project Activity for all. Project protects labor rights, promotes safe and secure working environments through equal pay, non-discrimination, et for all with its internal Human Right Policy and Code of Conduct. Project supports a transition to a low-carbon society through employment training for former fossil fuel industry employees, which will promote a sustainable and	In line with SDG Target 8.5 and Indicator 8.5.1 and the chosen Project-level indicator, the Project will undertake the below Targets: 1. Project temporarily creates new employment and generated income for local people during the Project operational phase. Long-term employment and income will also be created during operational phase. 2. The Project develops and follows its internal policies such as Human Rights Policy and Code of Conduct to ensure the labour rights with equal treatment for work of equal value.	Project Owner ensures and undertake following actions to contribute to the Project-level indicator and SDG target, indicator in the previous columns (left columns). 1. Ensures the Labour rights in accordance with the national labour law as well as company policy. 2. Maintains Company policy including Human Rights Policy and Code of Conduct to create standard operating procedures to follow and maintain safe and secure work environment for all.	The Project aims to contribute to the SDG Target 8.5 and then Indicator 8.5.1 by directly achieving the Project-level indicator 'Number of people employed and then paid by the Project Activity with details of monthly wages, gender, occupation, age and persons with disabilities'. 1. Project Activity supports the creation of short-term and long-term job opportunities during operation of the project activity. Hence, local income who receives equal pay without discrimination	1. Project Owner annually monitors the implementation of the policies and employee grievances (if any) through the Human Resources manager and site in charge. 2. Number of people employed and then paid by the Project Activity segregated by monthly wages, gender, occupation, age and persons with disabilities will be monitored annually. Refer to Section B.7.1 for further details.	For the installation and operation of the project, the project owner has deployed 50 long termpermanent employees & 20 short-term employees at the time of registration. The project verification team has reviewed the salary payment records, labor contract with the segregation to age, gender and disability status. In addition, PO has HR Policy /38.2/ and Code of Conduct /38.1/ to ensure the labour rights with equal treatment for work of equal value. The created jobs will be registered in employee records by the HR department. The employees will receive specific documented job training. It would contribute to the positive GDP of the country every year. The project owner is committed to deploying the employees. In the absence of the project, those employed. An appropriate monitoring plan has been	YES

Project Verification Repo	ort
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				area. Hence complied and contributed to the SDG Target 8.5, SDG Indicator 8.5.1, and Project-level Indicator.		
	productive employment.	Apart from the above Project's targets, the local economic development has also been improved in the local area by the Project Activity with other allied services (e.g., grocery, foods services, etc) and indirect employment.	3. Paying the wages in compliance with the minimum wages act of the host-country ³⁴ .	for work has been increased due to the local employment generation. 2. There is also positive impact of the Project Activity in creating new sources of revenue and/or increased income of the old and new small enterprises established in the neighborhood of the Project due to increased economic activity in the	put in place to monitor the elements. Please refer to section D.3.7 for the detailed justification on the monitoring plan for this parameter. The project owner will monitor the number of long-term jobs. The project verification team deems the monitoring parameter is suitable and feasible to monitor to demonstrate project impact on SDG Goal 8. The long-term & short-term jobs created by this project activity will contribute to the reduction of the unemployment rate in general, which is in line also with Indicator 8.5.2.	

³⁴ Clause 3, Decree 38/2022/ND-CP prescribing 'region-based minimum wage levels applicable to employees working under labor contracts' dated 12nd June 2022. Available at https://english.luatvietnam.vn/decree-no-38-2022-nd-cp-prescribing-region-based-minimum-wage-levels-applicable-to-employees-working-under-labo-222505-doc1.html

roject vermeatic									
sustainable industrialization and foster innovation									
Goal 10. Reduce inequality within and among countries	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Goal 12. Ensure sustainable consumption and production patterns	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Goal 13. Take urgent action to combat climate change and its impacts	Target 13.2 - Integrate climate change measures into national policies, strategies grid planning. Indicator 13.2.2 - Total greenhouse gas emissions per year	NO	The Project aims to contribute to the SDG Target 13.2 and then Indicator 13.2.2 by directly achieving the Project-level indicator 'Total CO ₂ Emission Reduction per year'. The Project Activity generates renewable energy-based electricity and mitigates the CO ₂ emissions which would have been generated from the fossil fuel-based power plants.	In line with SDG Target 13.2 and Indicator 13.2.2 and the chosen Project-level indicator, the Project will undertake the below Target. Project Activity involves installation of new solar power project in Vietnam and then reduces/displaces an average of 323,490 tCO ₂ per annum and 3,234,901 tCO ₂ e during the crediting period.	Project Owner ensures and undertake following actions to contribute to the Project-level indicator and SDG target, indicator in the previous columns (left columns). 1. Ensure optimum energy generation from the power plant to the grid 2. Project has already commissioned and started	The project generates electricity from the sustainable and renewable energy. The project therefore contributes to SDG 13 by avoiding the climate change.	1. The Quantity of net electricity generation supplied by the project will be monthly measured by more than one electricity meters. Refer to the monitoring plan for Goal 7, Section B.7.1 and B.7.4 for more details. 2. The related CO ₂ emission reductions will be calculated according to the applied	Since the project uses solar energy, there is no GHG emissions related to the project activity. It eliminates 3,234,901 tCO ₂ e for the whole crediting period. In the absence of the project, the equivalent number of emissions would be sent to the atmosphere by the operation of National Grid. An appropriate monitoring plan has been put in place to monitor the elements. Please refer to section D.3.7 for the detailed justification on the monitoring plan for this parameter. The project owner will monitor CO ₂ emission reduction of this project.	YES

Troject vermoatie					and the state of		and the delega	The market week of	
					reducing the emissions.		methodology ACM0002 (version 21.0).	The project verification team deems the monitoring parameter is suitable and feasible to monitor to demonstrate project impact on SDG Goal 13. The CO ₂ emission reduction created by this project activity will contribute to the reduction of total greenhouse gas emission per year, which is in line also with Indicator 13.2.2.	
Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

| LOTTOCTIVO | Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, | Not Applicable | Not
Applicable | Not Applicable | Not
Applicable |
|------------|---|----------------|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------------|
| | Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development | Not Applicable | Not
Applicable | Not Applicable | Not
Applicable |

SUMMARY	Targeted	Likely to be Achieved
Total Number of SDGs	4	4
Certification label (Bronze, Silver, Gold, Platinum, or Diamond) for the ACCs as defined in the PSF	Gold	Gold

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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³⁵See 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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