

KEY PROJECT INFORMATION & PROJECT DESIGN DOCUMENT (PDD)

PUBLICATION DATE **29.06.2023**

VERSION **v.1.5**

RELATED SUPPORT

- [TEMPLATE GUIDE Key Project Information & Project Design Document](#)

This document contains the following Sections

SECTION A. DESCRIPTION OF PROJECT

SECTION B. APPLICATION OF APPROVED GOLD STANDARD METHODOLOGY (IES)
AND/OR DEMONSTRATION OF SDG CONTRIBUTIONS

SECTION C. DURATION AND CREDITING PERIOD

SECTION D. SUMMARY OF SAFEGUARDING PRINCIPLES AND GENDER SENSITIVE
ASSESSMENT

SECTION E. SUMMARY OF LOCAL STAKEHOLDER CONSULTATION

Appendix 1 - Safeguarding Principles Assessment (mandatory)

Appendix 2 - Contact information of project developer(s) (mandatory)

Appendix 3 - LUF Additional Information (project specific)

Appendix 4 - Design Changes

KEY PROJECT INFORMATION

GS ID of Project	GS 7525
Title of Project	BIM Solar Farm
Time of First Submission Date	17/06/2019
Date of Design Certification	02/03/2020 06/09/2021 (Design change)
Version number of the PDD	11
Completion date of version	12/09/2024
Project Developer	BIM Renewable Energy Joint Stock Company (BIMRE) – Vietnam BIM Energy Joint stock Company (BIME) – Vietnam
Project Representative	BIMRE & BIME (Vietnam)
Project Participants and any communities involved	BIMRE & BIME (Vietnam)
Host Country (ies)	Vietnam (Thuan Nam District, Ninh Thuan Province)
Activity Requirements applied	☐ Community Service Activity ☒ Renewable Energy ☐ Land-Use and Forests Activity Requirements/Risks & Capacities ☐ N/A
Scale of the project activity	☐ Micro scale ☐ Small Scale ☒ Large Scale
Other Requirements applied	GS4GG
Methodology (ies) applied and version number	ACM0002 - Grid-connected electricity generation from renewable sources (version 21.0)
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A
Project Cycle:	☐ Regular ☒ Retroactive

Table 1 – Estimated Sustainable Development Contributions

SUSTAINABLE DEVELOPMENT GOALS TARGETED	SDG IMPACT (DEFINED IN B.6)	ESTIMATED ANNUAL AVERAGE	UNITS OR PRODUCTS
13 – Climate Action	Emission Reduction	540,295	tCO ₂ /year or GS-VERs
8 – Decent Work and Economic Growth	Full and productive employment and decent work for all (All employees have access to training, healthcare, insurances and better income)	72	employees
7 – Affordable and Clean Energy	Ensure access to affordable, reliable, sustainable and modern energy for all (MWh of renewable energy generated)	671,195	MWh

SECTION A. DESCRIPTION OF PROJECT

A.1 Purpose and general description of project

>>

BIM Solar Farm (hereafter referred as the “Proposed Project” or “Project Activity”) is a green filed grid connected solar power plants with a total installed capacity of 405 MW, which comprises of three power plants as follows:

Plant Name	Location	Installed Capacity (MW)	Estimated Power Generation (MWh/yr)¹
18N +18NX	Phuoc Ninh Commune	250 + 75	414,450 + 127,582
18S	Highway 1A, Lac Tien Hamlet, Phuoc Minh Commune	50	80,156
18E	Highway 1A, Quan The Hamlet, Phuoc Minh Commune	30	49,007
	Total	405	671,195

All the above plants are located at Thuan Nam District, Ninh Thuan Province, Vietnam. The legal owner of 18N + 18NX & 18S is BIM Renewable Energy Joint Stock Company (BIMRE) and the 18E is BIM Energy Joint stock Company (BIME). Both BIMRE and BIME are the brands belonging to BIM Group (Vietnam). BIM Renewable Energy Joint Stock Company and BIM Energy Joint Stock Company are the project developer, whereas AC Energy is the appointed account manager for the Gold Standard registry. The entire electricity generated by the solar farm will be fed into the Vietnam national grid (hereafter referred as “the grid”) without any Greenhouse Gas (GHG) emissions. The operational lifetime of the project is 25 years.

Currently the electricity supplied by the grid is relatively carbon intensive, with a combined margin emission factor of 0.8050 tCO₂/MWh². Estimated electricity generation by three plants is 671,195 MWh per annum. The electricity generation will result in a total emission reduction of 540,295 tCO₂/year. The total emission reduction will be 2.70 million tCO₂ for the second crediting period for 5 years. Furthermore, project activity will contribute further dissemination of solar energy and extension of national power generation in Vietnam.

The project activity contributes to the following goals:

- Reduce anthropogenic emissions of GHGs compared to the business-as-usual

¹ The power generations are estimated by the PVSyst software.

² [http://www.dcc.gov.vn/van-ban-phap-luat/1111/Nghien-cuu,-xay-dung-he-so-phat-thai-\(EF\)-cua-luoi-dien-Viet-Nam-nam-2021-\(k%C3%A8m-CV-327/BDKH-PTCPT\).html](http://www.dcc.gov.vn/van-ban-phap-luat/1111/Nghien-cuu,-xay-dung-he-so-phat-thai-(EF)-cua-luoi-dien-Viet-Nam-nam-2021-(k%C3%A8m-CV-327/BDKH-PTCPT).html)

- Employment opportunities for residents during construction and operation phase of the project
- Reduce other pollutants resulting from power generation industry in Vietnam and import dependency
- Attract foreign project owners and stimulate the growth of renewable energy sector in Vietnam

The project owners believe that the efficient utilization of natural resources with responsible environmental consideration is a driving force for sustainable development in Vietnam. Other than the objective of climate change mitigation through significant reduction of GHG emissions, the project activity creates positive environmental and economic benefits (sustainable development) through the following aspects in Vietnam:

- Environmentally: The project does not contribute to the carbon emissions, harmful pollutants and suspended airborne particulate matter associated with coal and fossil fuel fired power plants. Also, it does not involve any equipment with moving component and hence it is free of noise pollution and does not contaminate the soil and water.
- Socially : The project has provided/will provide job opportunities to local people and improve the local standard of living by frequent visits by engineers, professionals and industrialists to the sites. The project supports the “revised Power Development Plan VII (PDP VII)” in increasing the electricity generation by using renewable energy sources.
- Economically : The project will reduce the dependency of Vietnam on coal, fossil fuel and electricity importation as well as negative impact on the foreign exchange. It will contribute to strengthen the renewable energy sector, especially solar energy sector in Vietnam. The project will be the first to demonstrate the capacity of large-scale solar projects to meet power needs in Vietnam.

Chronology of Key Events of Project Implementation:

Key Event	Date			
	18E	18S	18N	18NX
Investment Decision Policy	19/01/2018	31/05/2018	27/06/2018	02/12/2020
Grid Connection Agreement	13/06/2018	30/07/2018	30/07/2018	03/06/2020
Environmental Impact Assessment (EIA)	19/04/2018	17/08/2018		
Project Loan Facility Agreement	03/07/2018	10/08/2018		08/04/2020
EPC Contract – start date of project	08/08/2018	08/08/2018	20/07/2018	19/03/2020
Power Purchase Agreement (PPA)	05/11/2018	19/12/2018		17/12/2020
Commencement of Construction	29/08/2018			
Commercial Operation Date	22/04/2019	07/05/2019	11/05/2019	28/12/2020
Submission to GS for project listing	17/06/2019			
1 st Performance Review Submission	15/11/2021			
2 nd Performance Review Submission	22/07/2023			

A.1.1. Eligibility of the project under Gold Standard

>>

The project meets the eligibility criteria as per section 3.1.1 of GS4GG Principles & Requirements document as described below:

(a) Types of Project As per section 4. Eligibility Principles and Requirements of GS4GG Principles & Requirements, version 1.2	
Eligibility Criteria	Compliance by Project Activity
A Project type is automatically eligible for Gold Standard Certification if there are approved Gold Standard Activity Requirements and/or Gold Standard Impact Quantification Methodologies associated with it or as referenced in Gold Standard Product Requirements. These are published to the Gold Standard website and shall be followed where provided for a given Project type	The project type is large-scale solar which is an eligible project type as it is in accordance with Section 2 of the Eligible Project Types & Scope under Renewable Energy Activity Requirements. The project applies methodology ACM0002, which is an approved methodology under Gold Standard.
For Project types that are not automatically eligible, a Project Developer may submit to Gold Standard for approval. This shall be done at minimum as part of the Preliminary Review, though it is recommended to engage with Gold Standard earlier to establish the criteria and requirements for approval	The project is automatically eligible as per "GS Activity Requirements".
Project types applying for Gold Standard approval are referred to the Gold Standard Vision and Mission. The Project Developer shall demonstrate how the Project would contribute to these and how the Gold Standard for the Global	Photovoltaic Solar project is an approved project type as per "GS Activity Requirements" and does not require approval from Gold Standard.

Goals Requirements would be met in their application for approval	
In reviewing a new Project type for approval, Gold Standard may establish new Requirements to be met by the Project in order to achieve Gold Standard Design Certification and ongoing Gold Standard Certified Project status. Where required, Gold Standard shall engage expert peer reviewers to establish these Requirements, at the Project Developer's expense	Photovoltaic Solar project is an approved project type as per "GS Activity Requirements" and does not require approval from Gold Standard.
Gold Standard does not support Project types associated with geo-engineering or energy generated from fossil fuel or nuclear, fossil fuel switch, or any project that supports, enhances or prolongs such energy generation. In certain cases, concerning energy efficiency involving fossil fuels (for example, LPG stoves), an exception is made. This is captured in the relevant Activity Requirements, Gold Standard Approved Methodologies and/or Product Requirements	This project activity is not associated with geo-engineering or energy generated from fossil fuel or nuclear, fossil fuel switch. Also, the project activity does not support, enhance or prolong such energy generation.
As per section 2. Eligible Project Types & 3. General Eligibility Criteria of "Renewable Energy Activity Requirements", version 1.4	
New Gold Standard Verified Emission Reductions (GS VER) or Gold Standard labels for Certified Emission Reductions (GS CER), Renewable Energy projects connected to national, or a regional electricity grid must be located in a; a. Least Developed Country (LDC), Small Island Developing State (SIDS)	a. Not applicable b. The proposed project is located at Vietnam which is categorized as Low

or a Land Locked Developing Country (LLDC). b. Low Income and Low Middle-income country where the penetration level of the proposed Renewable Energy Technology type is less than 5% of the total grid installed capacity, at the time of the first submission to preliminary review	Middle-Income Country as per the “The World Bank”³ data. The penetration level of solar energy technology is 0%⁴ (i.e. 0 MW) of the total installed capacity (i.e.,42,263 MW) of Vietnam in 2016. This is less than 5% as per the requirement.
Certain Impact Quantification methodologies allow projects to account for a Suppressed Demand scenario when establishing a baseline. In such cases, the application of the Suppressed Demand baseline is limited to small scale and microscale projects.	The proposed project doesn’t use Suppressed Demand Baseline.
A single Renewable Energy project may potentially pursue any number and combination of Certified Impact Statements or Products. However, certain Product Requirements, which supersede the generic requirements stated in this document can set restrictions on co-issuance of Certified Impact statements or Products. For instance, GS VERs or GS CERs with REC labels cannot be claimed for the same MWh	The proposed project will claim only GS-VER for the MWh supplied to the national grid.
(b) Location of Project	

³ <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519>

⁴ Vietnam Energy Statistics 2020 (<http://vepg.vn/wp-content/uploads/2022/09/English-Energy-statistics-2020-Dec-2021.pdf>)

The project activity is located at Vietnam	
(c) Project Area, Project Boundary and Scale	
Refer to Section A.2 for the major corner GPS coordinates of project boundary.	
As per chosen CDM methodology ACM0002 (version 21.0), The spatial extent of the project boundary includes the project activity and all power plants connected physically to the electricity system that the proposed project is also connected. The detailed on the project boundary is presented in Section B.3 of this PDD. The installed capacity of the project activity is 405 MW so it's a large-scale project.	
(d) Host Country Requirements	
The proposed project activity meets all the legal, environmental, ecological and social regulations through obtaining various approvals & license from authorities such as EPP approval before implementation, Land use, construction & grid connection approvals, Investment related license and so on.	
Also, the project activity contributes to the national and local level sustainable development as defined under section A.1.	
(e) Contact Details	
The contact details of the Project Participants are included under Appendix 2 of this GS PDD.	
(f) Legal Ownership	
The legal owner of 18N + 18NX & 18S is BIM Renewable Energy Joint Stock Company (BIMRE) and the 18E is BIM Energy Joint stock Company (BIME). Both BIMRE and BIME are the brands belonging to BIM Group (Vietnam).	
(g) Other Rights	
None.	
(h) Official Development Assistance (ODA) Declaration	
No public funds or ODA is involved in this project activity.	

Eligibility criteria defined under PDD guide	
Eligibility Criteria	Compliance by Project Activity
Confirm that the project is not registered with any other voluntary or compliance schemes.	The proposed project activity is not registered with any other voluntary or compliance schemes.

Demonstrate the activity is NOT located in a host country, region, locality or state that has an emission reduction cap enforced OR has the possibility to trade emissions that include the scope of the proposed project	The host country of proposed project activity is Vietnam which is a non-annex country ⁵ . Hence, no emission reduction cap enforced as well as no emission trading system implemented in the host country.
Demonstrate that no potential for double counting of impacts if the Project Area overlaps with that of another Gold Standard or other voluntary or compliance standard programme of a similar nature.	Since project owner keeps confidential and secured all the project related documents, the same nature of project will be unlikely pursue with any other voluntary or compliance standard programme. Also, project owner will continuously monitor through searching in international registries (such as CDM, VERRA, GCC, GS-VER, etc.) and local registry (such as Green Certificate Company for the Renewable Energy Certificates) for similar scope of project registered from same location.
Demonstrate that the project is in compliance with applicable Host Country's legal, environmental, ecological and social regulations	The proposed project activity is obtaining all the authorities' approvals to comply with legal, environmental, ecological and social regulations before commencing the implementation.

A.1.2. Legal ownership of products generated by the project and legal rights to alter use of resources required to service the project

>>

⁵ <https://unfccc.int/process/parties-non-party-stakeholders/parties-convention-and-observer-states>

The legal owner of 18N + 18NX & 18S is BIM Renewable Energy Joint Stock Company (BIMRE) and the 18E is BIM Energy Joint stock Company (BIME). Both BIMRE and BIME are the brands belonging to BIM Group (Vietnam).

AC Energy Philippines has been changed to AC Energy, Inc.

BIM Renewable Energy Joint Stock Company and BIM Energy Join Stock Company are the project developer, whereas AC Energy is the appointed account manager for the Gold Standard registry. The appointment letter is also uploaded to substantiate.

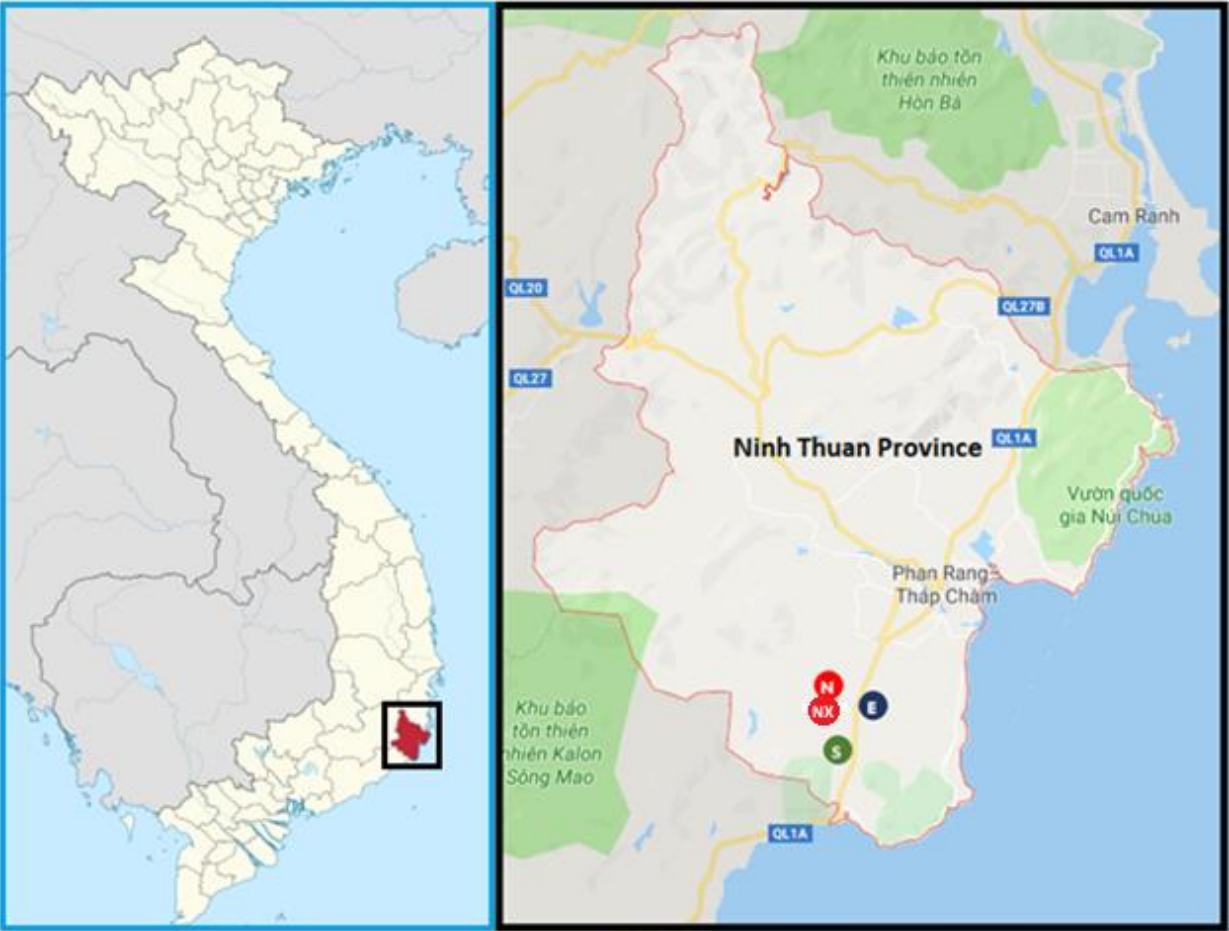
A.2 Location of project

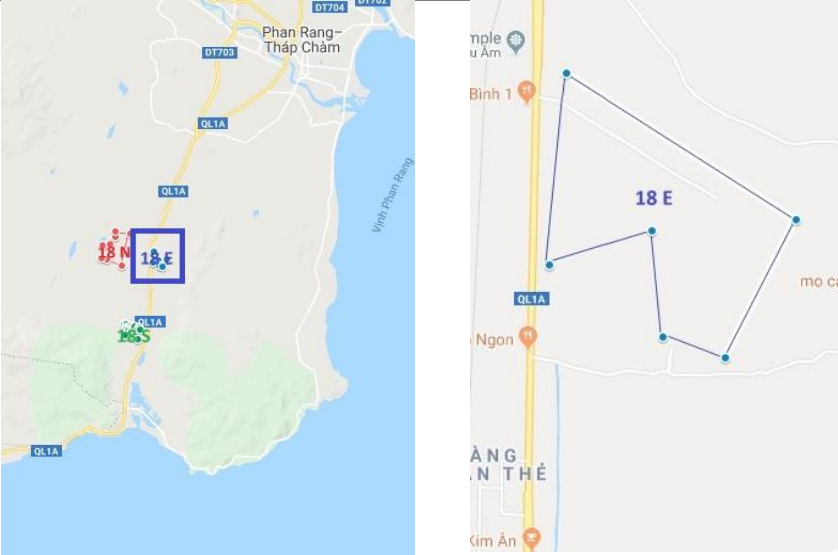
>>

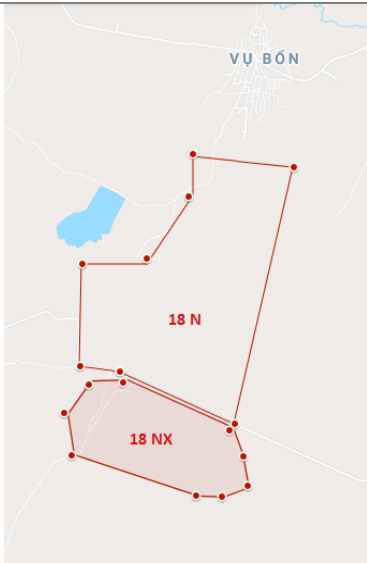
The proposed project activity is located in Vietnam, in the Thuan Nam District, Ninh Thuan Province.

18E	- Highway 1A, Quan The Hamlet, Phuoc Minh Commune
18N +18NX	- Phuoc Ninh Commune
18S	- Highway 1A, Lac Tien Hamlet, Phuoc Minh Commune

The physical/geographical location of the proposed project are as follow:



Corner GPS Coordinates	Aerial locations and layouts	
18E E1 – 11.44853, 108.89506 E2 – 11.44347, 108.90312 E3 – 11.43871, 108.90066 E4 – 11.43945, 108.89845 E5 – 11.44422, 108.89818 E6 – 11.44192, 108.89445		

Corner GPS Coordinates	Aerial locations and layouts	
18N N1 – 11.43961, 108.87468 N2 – 11.44349, 108.86501 N3 – 11.44432, 108.86175 N4 – 11.4526, 108.8618 N5 – 11.45295, 108.86721 N6 – 11.45785, 108.87063 N7 – 11.46102, 108.87072 N8 – 11.45997, 108.87973 18NX NX1 – 11.44297, 108.86535 NX2 – 11.4428, 108.8626 NX3 – 11.44061, 108.86063 NX4 – 11.43733, 108.86123 NX5 – 11.43422, 108.87118 NX6 – 11.43413, 108.87324 NX7 – 11.43497, 108.875 NX8 – 11.43724, 108.87496 NX9 – 11.43926, 108.87384		
18S S1 – 11.40232, 108.87579 S2 – 11.40244, 108.8775 S3 – 11.40046, 108.87753 S4– 11.40105, 108.87928 S5– 11.40046, 108.87753 S6 – 11.40105, 108.87928 S7 – 11.40008, 108.87936 S8 – 11.39916, 108.87739 S9 – 11.39797, 108.87775 S10 – 11.39864, 108.87886 S11 – 11.39814, 108.88152 S12 – 11.39673, 108.88139 S13 – 11.39667, 108.88311 S14 – 11.40119, 108.88264 S15 – 11.40059, 108.8853 S16 – 11.39942, 108.88504 S17 – 11.39915, 108.88617 S18 – 11.3929, 108.88511		

A.3 Technologies and/or measures

>>

The technology being employed is a conversion of solar energy into electrical energy. The project activity is the installation of an environment friendly green technology since there are no GHG emissions associated with the electricity generation. Since this is a greenfield project there was no electricity generation at the project site prior to its implementation.

Photovoltaic (PV) is a power generation method that converts sunlight directly into electricity using semiconductors that exhibit the photovoltaic effect. PV power generation employs solar panels composed of a number of solar cells containing a photovoltaic material. The materials presently used for PV include monocrystalline silicon, polycrystalline silicon, amorphous silicon, cadmium telluride and copper indium selenide/sulphide⁶. The technical specifications⁷ of equipment as follows:

Technical Specifications of PV Modules					
Model	TSM-325PE14A	TSM-330PE14A	JAP72S01-325/SC	JAP72S01-330/SC	JKM400M-72H-V
Type	Multicrystalline	Multicrystalline	Polycrystalline	Polycrystalline	Monocrystalline
Max Power (Pmax)	325	330	325	330	400
Open Circuit Voltage (Voc)	45.6	45.8	46.38	46.40	49.8
Max Power Voltage (Vmp)	37.2	37.4	37.39	37.65	41.7
Short Circuit Current (Isc)	9.19	9.28	9.17	9.28	10.36
Max Power Current (Imp)	8.73	8.83	8.69	8.77	9.60
Efficiency (%)	16.7	17	16.7	17.0	19.88
Power Tolerance	0 ~ +5W		0 ~ +5W		
Max System Voltage	1500V DC(IEC/UL)		1000V/1500V DC(IEC)		
Max Series Fuse	15A		20A		

⁶ <https://www.sciencedirect.com/topics/materials-science/photovoltaics>

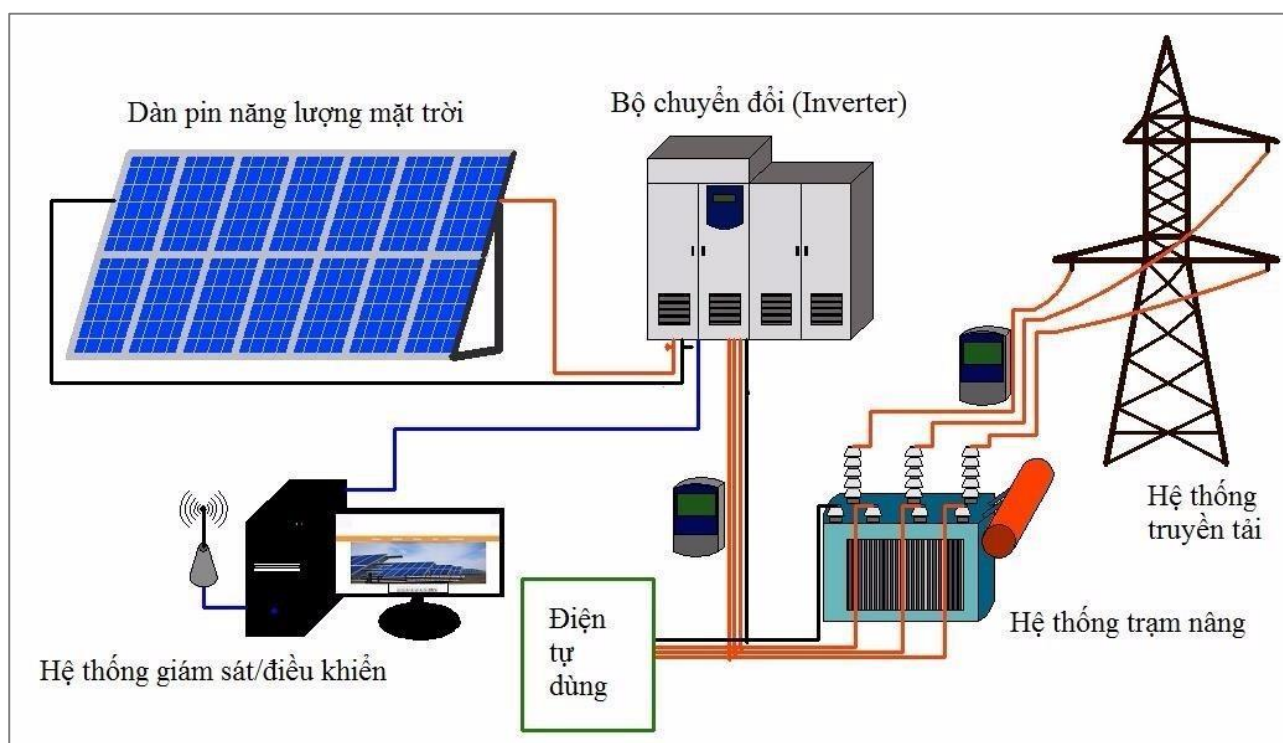
⁷ Suppliers' specifications / data sheet

Technical Specifications of Inverters	
Model	SG3125HV
Max. PV Input Voltage	1500V
Max PV Input Current	4178A
AC Output Power	3593kVA @ 25°C / 3473kVA @ 45°C / 3125kVA @ 50°C
Max AC Output Current	3458A
Max Efficiency / Euro. Efficiency	99.0% / 98.7%
Auxiliary Power Supply	415V, 15kVA
Operating Ambient Temperature range	-35° to 60°C
Cooling Method	Temperature controlled forced air cooling

General Information			
Plant Name	18E	18N + 18NX	18S
Total Capacity	30MW	250 + 75 MW	50MW
Number of Inverter Stations	8	58+18	12
Number of Inverters	16	116 + 36	24
Total Number of Modules	90,990	754,320 + 187,544	153,900
Power generation capacity (per year)	49,007 MWh	414,450 + 127,582 MWh	80,156 MWh
Plant Load Factor (PLF) or Capacity Utilization Factor (CUF)⁸	$49,007 \div (30 \times 8760) = 18.65\%$	$(414,450+127,582) \div [(250 + 75) \times 8760] = 19.04\%$	$80,156 \div (50 \times 8760) = 18.30\%$

The average lifetime of the project is 25 years as per the equipment supplier's specifications.

⁸ <https://www.sciencedirect.com/science/article/pii/S2352484715000311>



In the absence of the project activity, the equivalent amount of electricity supplied to grid would have been generated by grid connected power plants, hence the baseline scenario of the project activity is the grid-based electricity system. The project activity does not pose any adverse effect on the environment and contribute positively in reducing GHG emissions by displacing energy generation from fossil fuel powered plants.

Other than the hydro power, the fossil fuels contribute more than 50% of Vietnam total capacity of 62,248 MW⁹ in 2020. Also, Vietnam is still importing 1% of electricity from neighboring countries.

The project activity is expected to generate 671,195 MWh of electricity per annum and thereby achieve emission reductions by avoiding GHG emissions from the business-as-usual scenario electricity generation within the Vietnam national grid. The emission reduction and the crediting period will start with the first day of the documented electricity supply to the national grid. Applying the approved methodology to the project, the annual average emission reduction will be 540,295

⁹ <http://vepg.vn/wp-content/uploads/2022/09/English-Energy-statistics-2020-Dec-2021.pdf>

tCO₂ and the total emission reduction over the 5-year crediting period is expected to reach 2.70 million tCO₂.

A.4 Scale of the project

>>

Large Scale

The total installed capacity of “BIM Solar Farm” is 405 MW¹⁰ which is greater than 15 MW (Section 2.1.2 of “GS4GG Renewable Energy Activity Requirements”) and thereby the proposed project activity is considered as large scale.

A.5 Funding sources of project

>>

The project has received the following funding sources:

Funding Sources	Share
Investment by Project owner (Equity)	30%
Bank Loan (Debt)	70%

The project activity does not have any public funding or Official Development Assistance (ODA) funding.

¹⁰ Annex B of Power Purchase Agreement (PPA) signed for individual power plant.

SECTION B. APPLICATION OF APPROVED GOLD STANDARD METHODOLOGY (IES) AND/OR DEMONSTRATION OF SDG CONTRIBUTIONS

B.1. Reference of approved methodology (ies)

>>

Applied Methodology	
ACM0002: Grid-connected electricity generation from renewable sources (Version 21.0)	
Related Tools	Applicable to Proposed Project
Tool07 – Tool to calculate the emission factor for an electricity system (version 07.0)	To define the baseline scenario and grid emission factor as referred in section B.4.
Tool11 - Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period (version 3.0.1)	To assess the continued validity of the baseline and to update the baseline at the renewal of a crediting period as referred in section B.4

B.2. Applicability of methodology (ies)

>>

Eligibility Criteria as per ACM0002	Compliance by Project Activity
4. This methodology is applicable to grid-connected renewable energy power generation project activities that: (a) Install a Greenfield power plant; (b) Involve a capacity addition to (an) existing plant(s); (c) Involve a retrofit of (an) existing operating plants/units; (d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or (e) Involve a replacement of (an) existing plant(s)/unit(s).	The project activity involved installing a new solar power plant at the site where no renewable power plant was operated prior to the implementation of the project activity (Greenfield plants)

5. In case the project activity involves the integration of a BESS, the methodology is applicable to grid-connected renewable energy 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).	The project does not have BESS installed and therefore this is not applicable.
6. The methodology is applicable under the following conditions: (a) The project activity may include renewable energy power plant/unit of one of the following types: 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	(a) The proposed project activity is a new installation of solar power plant. (b) It doesn't involve any capacity additions/ retrofits/ rehabilitations/ replacements of any existing solar power plant. (c) It does not have BESS installed. (d) It does not have BESS installed.

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 the 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 exigencies² may the BESS be charged with electricity from the grid or a fossil fuel electricity generator. In such cases, the corresponding GHG emissions shall be accounted for as project emissions following the requirements under section 5.4.4 below. The charging using the grid or using fossil fuel electricity generator should not amount to more than 2 per cent of the electricity	
---	--

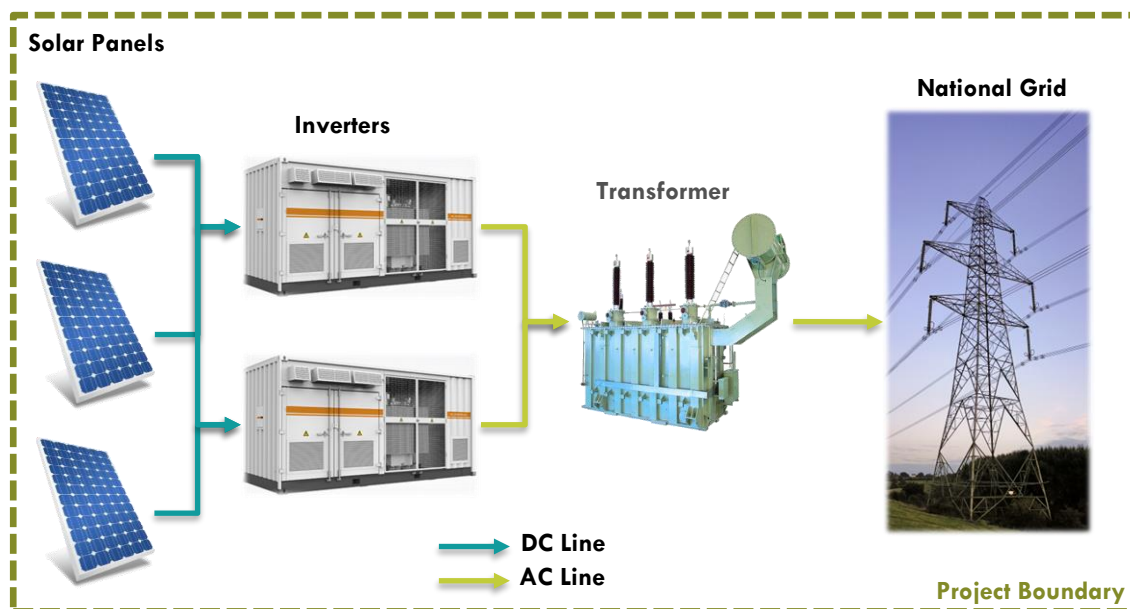
generated by the project renewable energy plant during a monitoring period. During the time periods (e.g. week(s), months(s)) when the BESS consumes more than 2 per cent of the electricity for charging, the project participant shall not be entitled to issuance of the certified emission reductions for the concerned periods of the monitoring period.	
7. In case of hydro power plants, one of the following conditions shall apply:	Not applicable. Proposed project acidity is a solar power plant.
8. In the case of integrated hydro power projects, project proponent shall:	Not applicable. Proposed project acidity is a solar power plant.
9. 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.	Not applicable. The proposed project activity neither involve switching from fossil fuels to renewable energy sources nor biomass fired power plant.
10. 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".	The proposed project activity is a new installation of solar power plant. It doesn't involve any capacity additions/ retrofits/ rehabilitations/ replacements the existing plant.

B.3. Project boundary

>>

As per the chosen methodology ACM0002, the project boundary includes BIM Solar Project connecting physically to the national electricity grid.

The flow diagram of the project boundary is shown in Figure below.



Source	GHGs	Included?	Justification/Explanation
Baseline scenario	CO ₂	Yes	Main emission source
	CH ₄	No	Minor emission source
	N ₂ O	No	Minor emission source
Project Activity	CO ₂	No	The proposed project activity is a solar power plant and thereby all these sources are not applicable.
	CH ₄	No	
	N ₂ O	No	
	CO ₂	No	
	CH ₄	No	
	N ₂ O	No	
	CO ₂	No	
	CH ₄	No	
	N ₂ O	No	

	contained in the heat exchangers			
	CO ₂ emissions from combustion of fossil fuels for electricity generation in solar thermal power plants and geothermal power plants	CO ₂	No	
		CH ₄	No	
		N ₂ O	No	
	For hydro power plants, emissions of CH ₄ from the reservoir	CO ₂	No	
		CH ₄	No	
		N ₂ O	No	
	Charging of BESS using electricity from the grid or from fossil fuel electricity generators.	CO ₂	No	
		CH ₄	No	
		N ₂ O	No	

B.4. Establishment and description of baseline scenario

>>

In 2022, Vietnam has updated its Nationally Determined Contributions (NDC) as follows:

Emission reduction targets in the energy, agriculture, LULUCF, waste and industrial processes by 2030 compared to BAU in NDC 2022 are higher than NDC 2020, Unconditional contribution increased from 9% to 15.8% and Conditional contribution increased from 27% to 43.5%.

However, the new policy encourages private investment in energy efficiency and renewable energy development¹¹, but it does not mandate to implement the renewable energy projects to reach the NDC or net zero targets set by the Vietnam government. Also, there is no corresponding adjustment has been established by the Vietnam government yet. Hence, the project is compliant with the current climate policy.

¹¹ <https://unfccc.int/documents/622541>

As per chosen methodology ACM0002 (Version 21.0):

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

Since the proposed project activity involves the installation of greenfield grid connect solar power plant, the baseline scenario of the project is to provide an equal amount of electricity provided by the national grid where the proposed project is also connected. Vietnam Electricity Corporation (EVN)¹² is the sole operator of the Vietnam national electricity grid where all the power plants in Vietnam are physically connected to and the proposed project activity is not outside of that system.

The combined margin emission factor of the national grid ($EF_{grid,CM,y}$) is calculated as per "Tool to calculate the emission factor for an electricity system (Version 07.0)" and used to calculate the baseline emissions of the proposed project activity.

Assessment of the validity of the current baseline:

The stepwise procedure to assess the continued validity of the baseline and to update the baseline at the renewal of a crediting period is conducted following methodological tool "Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period" (Version 03.0.1, EB 66, Annex 47). The tool consists of two steps. The first step provides an approach to evaluate whether the current baseline is still valid for the next crediting period. The second step provides an approach to update the baseline in case that the current baseline is not valid anymore for the next crediting period.

Step 1: Assess the validity of the current baseline for the next crediting period

¹² <https://en.evn.com.vn/>

The “Procedures for the renewal of the crediting period of a registered CDM project activity”. Approved by the CDM Executive Board require assessing the impact of new relevant national and/or sectoral policies and circumstances on the baseline.

The validity of the current baseline is assessed using the following Sub-steps:

Step 1.1: Assess compliance of the current baseline with relevant mandatory national and/or sectoral policies

According to the registered PDD, in the absence of the project activity, electricity which will be supplied to the national grid would come from fossil fuel power plants. The generation of electricity by burning fossil fuels result in CO₂ emission into the atmosphere. Hence, the baseline scenario of the project is the electricity delivered to the grid by the project activity that otherwise would have been generated by the operation of grid-connected fossil fuel power plants and by the addition of new generation sources.

There are no new national and/or sectoral policies that could affect the baseline scenario during the renewal of the crediting period. Although national policies favor the development of renewable energy sources, total renewable power generation accounts for less than 50% of total generation of the power grid as of 2019. Hence in the absence of the project activity electricity would still have been generated in the existing fossil fuel power plants or by the addition of new fossil fuel power plants connected to the grid.

Step 1.2: Assess the impact of circumstances

There is no impact of circumstances existing at the time of requesting renewal of crediting period on the current baseline emissions.

The current practice for the baseline emissions is still the GHG emitted by national grid: the equivalent electricity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources within the national grid.

Step 1.3: Assess whether the continuation of the use of current baseline equipment(s) or an investment is the most likely scenario for the crediting period for which the renewal is requested.

The current baseline scenario is the continuation of the current practice. In the absence of the project, the electricity would have been supplied by fossil fuels, and it will not request an investment by the project proponent or third party. So, this step is not applicable.

Step 1.4: Assessment of the validity of the data and parameters

As per the requirement of the methodology, only the grid emission factor has been updated during the second crediting period renewal. Before the time of requesting renewal of the crediting period, the National Electricity System Regulation Centre has issued the latest emission factor for the national grid, so the emission factor of national grid is updated for the second crediting period.

The difference between previous and current emission factor is as follows:

	Operating Margin (OM)	Build Margin (BM)	Combined Margin (CM)
Existing ¹³ : 2015-2017 (tCO ₂ e/MWh)	0.8336	0.8961	0.8492
Current ¹⁴ : 2020-2022 (tCO ₂ e/MWh)	0.9334	0.4197	0.8050

The above emission factors are computed by the Department of Climate Change, Vietnam in accordance with "Tool to calculate the emission factor for an electricity system". The fuel mix¹⁵ for the Vietnam grid in 2016 & 2020 are as follows:

Installed Capacity	2016 (MW)	2020 (MW)	Variance
Hydro	17,824	20,859	+17%
Coal-Fired	14,595	22,077	+51%
FO Fired	1,439	1,579	+10%
Diesel	24	24	0%
Gas Fired	7,467	7,422	-1%
• Combined Cycle Gas Turbine	7,446	7,398	-1%
• Gas Fired	21	24	+14%
Renewable	114	9,715	+8,422%
• Biomass, co-generation	24	325	+1,254%
• Wind	90	538	+498%

¹³ "The Analysis of Emission Factor of Vietnam Grid" report issued by Climate Change Department, Ministry of Natural Resource and Environment (MONRE).

¹⁴ [http://www.dcc.gov.vn/van-ban-phap-luat/1111/Nghien-cuu,-xay-dung-he-so-phat-thai-\(EF\)-cua-luoi-dien-Viet-Nam-nam-2021-\(k%C3%A8m-CV-327/BDKH-PTCBBT\).html](http://www.dcc.gov.vn/van-ban-phap-luat/1111/Nghien-cuu,-xay-dung-he-so-phat-thai-(EF)-cua-luoi-dien-Viet-Nam-nam-2021-(k%C3%A8m-CV-327/BDKH-PTCBBT).html)

¹⁵ <http://vepg.vn/wp-content/uploads/2022/09/English-Energy-statistics-2020-Dec-2021.pdf>

• Solar	0	8,852	-
Imports	800	572	-23%
Total	42,263	62,248	+47%

The reduction of grid emission factor was due to the higher installed capacity of renewables energy plants (12,636 MW) as compared to the fossil fuel-based power plants (7,577 MW).

Step 2: Update the current baseline and the data and parameters

Step 2.1: Update the current baseline

Based on the latest approved version of the methodology ACM0002 (version 21.0), baseline emissions for the second crediting period have been updated (refer section B.6), without reassessing the baseline scenario. In accordance with current context of the sectoral policies and circumstances, the project baseline for the next crediting period is the use of electricity from the national grid.

Step 2.2: Update the data and parameters

The grid emission factor is updated (refer section B.6.2) according to the Department of Climate Change, Vietnam.

B.5. Demonstration of additionality

Please refer to the certified PDD version 7.0 dated on 14/07/2021 for Demonstration of additionality.

B.5.1 Prior Consideration

>>

The project is undergoing renewal of crediting period. Hence, prior consideration is not required.

B.5.2 Ongoing Financial Need

>>

The project activity was not financially viable during the initial crediting period, and it still not due to the low IRR. The IRR was based on the estimated electricity generation, which is the project's sole income source. However, since commercial operations began, actual electricity generation has been 13% lower than the

estimates used for the IRR calculation, as confirmed by previous verifications.

Additionally, the actual O&M costs doubled the estimates used for the IRR.

Moreover, GS-VER revenue is crucial for achieving a positive return and sustaining the project. During the GS development period (2019), the price of technology-based carbon credits was in the range of USD 2 to 3¹⁶, but it has since dropped to below USD 1¹⁷ in the current market.

The carbon revenue remains too low to improve the IRR beyond the nominal benchmark. Income from GS certification will be used to cover O&M costs partially to keep the project going, so the financial needs to sustain the project remain unchanged.

The credit issuances since the start of commercial operations are as follows:

Years	Credits Issued
2019	263,470
2020	442,269
2021	508,246
2022	521,926
2023*	78,271 (up to 28/02/2023)
2024*	To be determined

* 3rd performance review (for the period of 01/03/2023 to 31/05/2024) has not finished yet

The project utilized the carbon revenue which is approximately 0.5% of project's gross income to meet the 3% of the expense related to O&M activities.

Certification related cost: The certification process includes the expenses pertaining to project design, validation, verification and issuances. 42% of the carbon revenue has helped cover these expenses, ensuring the project meets the rigorous standards and criteria set by the Gold Standard.

Operations and Maintenance(O&M): O&M costs includes salary expenses towards manpower, regular cleaning & system monitoring ensuring the project operates optimally. 58% of the carbon revenue meets the 3% of the O&M costs.

¹⁶ <https://carbon-pulse.com/90631/>

¹⁷ <https://carboncredits.com/carbon-prices-today/>

The revenue was realised, hence FAR is not applicable as per clause 4.1.52 (c) of Requirements, Version 1.2.

B.6. Sustainable Development Goals (SDG) outcomes

Relevant Target/Indicator for each of the three SDGs

Sustainable Development Goals Targeted	Most relevant SDG Target	SDG Impact
		Indicator (Proposed or SDG Indicator)
13 Climate Action (mandatory)	Target 13.3: Integrate climate change measures into national policies, strategies grid planning	Indicator 13.2.2. GHG emission reductions per year
8 Decent Work and Economic Growth	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
7 Affordable and Clean Energy	Target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix	Indicator 7.2.1 – Renewable energy share in the total final energy consumption (MWh of electricity generation)

B.6.1 Explanation of methodological choices/approaches for estimating the SDG Impact

>>

SDG	Methodological Approaches	QA/QC
SDG 13: Climate Action	The emission reduction parameter is calculated through net electricity supplied to grid and grid emission factor. The grid emission factor is published by Department of Climate	As per the chosen methodology, equations: (11): $BE_y = EG_{PJ,y} \times EF_{grid,CM,y}$ (17): $ER_y = BE_y - PE_y$ Where: BE = Baseline emission

	Change, Vietnam ¹⁸ and further explained in section B.6.2. This is in line with "Tool to calculate the emission factor for an electricity system, version 7". The emission reductions are calculated as per the chosen methodology in section B.6.3.	EG = Power generation EF = Grid emission factor ER = Emission reduction PE = Project emission were used to calculate the baseline emission & emission reduction and it is further explained in section B.6.4 as well as used in emission reduction spreadsheet. This parameter is calculated and thereby no QA/QC procedure is required.
SDG 8: Decent Work and Economic Growth	The average hourly earnings of female/male employees, by occupation, age and persons with disabilities has been checked through employment contract, payslip and payroll records. Randomly choose employees with designation from payroll records and compare their wages, gender, experience and abilities.	This parameter is not required any QA/QC procedure. The VVB can confirm this parameter with review employee's records and interview with project owner or employees on site.
SDG 7: Affordable and Clean Energy	Electricity produced and supplied to the grid is monitored through energy meters. A SCADA (Supervisory control and data acquisition) in place to control and monitor the plant operation. Net electricity will be calculated by project owner on monthly basis and provided in the monthly/quarterly/biyearly/yearly report or equivalent. The other parameters used to reach net electricity supplied to grid are mentioned in monitoring plan.	This parameter is monitored monthly basis and value of parameter will be cross checked with invoices to national grid. The electricity meters will be calibrated as per supplier recommendations.

¹⁸ [http://www.dcc.gov.vn/van-ban-phap-luat/1111/Nghien-cuu,-xay-dung-he-so-phat-thai-\(EF\)-cua-luoi-dien-Viet-Nam-nam-2021-\(k%C3%A8m-CV-327/BDKH-PTCBBT\).html](http://www.dcc.gov.vn/van-ban-phap-luat/1111/Nghien-cuu,-xay-dung-he-so-phat-thai-(EF)-cua-luoi-dien-Viet-Nam-nam-2021-(k%C3%A8m-CV-327/BDKH-PTCBBT).html)

B.6.2 Data and parameters fixed ex ante

SDG13

Data/parameter	EF_{grid,OM,y}
Unit	tCO ₂ /MWh
Description	Operating Margin CO ₂ emission factor for the electricity system in year y
Source of data	Department of Climate Change, Vietnam
Value(s) applied	0.9334 ¹⁹
Choice of data or Measurement methods and procedures	Calculated as per "Tool to calculate the emission factor for an electricity system, version 07" by using the latest data available for the past three recent years 2020, 2021 and 2022. The Ministry of Natural Resource and Environment (MONRE) has obtained the historical data from "National electricity system regulation centre" and calculated the emission factor.
Purpose of data	For the calculation of the Baseline Emission
Additional comment	This data will be archived for 2 years beyond the crediting period.

Data/parameter	EF_{grid,BM,y}
Unit	tCO ₂ /MWh
Description	Build Margin CO ₂ emission factor for the electricity system in year y

¹⁹ [http://www.dcc.gov.vn/van-ban-phap-luat/1111/Nghien-cuu,-xay-dung-he-so-phat-thai-\(EF\)-cua-luoi-dien-Viet-Nam-nam-2021-\(k%C3%A8m-CV-327/BDKH-PTCBBT\).html](http://www.dcc.gov.vn/van-ban-phap-luat/1111/Nghien-cuu,-xay-dung-he-so-phat-thai-(EF)-cua-luoi-dien-Viet-Nam-nam-2021-(k%C3%A8m-CV-327/BDKH-PTCBBT).html)

Source of data	Department of Climate Change, Vietnam
Value(s) applied	0.4197 ²⁰
Choice of data or Measurement methods and procedures	Calculated as per "Tool to calculate the emission factor for an electricity system, version 07" by using the latest data available for the past three recent years 2020, 2021 and 2022. The Ministry of Natural Resource and Environment (MONRE) has obtained the historical data from "National electricity system regulation centre" and calculated the emission factor.
Purpose of data	For the calculation of the Baseline Emission
Additional comment	This data will be archived for 2 years beyond the crediting period.

Data/parameter	EF_{grid,CM,y}
Unit	tCO ₂ /MWh
Description	Combined Margin CO ₂ emission factor for the electricity system in year y
Source of data	National electricity system regulation centre
Value(s) applied	0.8050
Choice of data or Measurement methods and procedures	The combined margin emissions factor is calculated as per Tool 7, paragraph 86 a), where the different weightage applied for OM & BM emission factors for the solar power generation project activities: $EF_{grid,CM,y} = (EF_{grid,OM,y} \times W_{OM}) + (EF_{grid,BM,y} \times W_{BM})$ Where: EF_{grid,BM,y}= Build margin CO₂ emission factor in year y (tCO₂/MWh) EF_{grid,OM,y}= Operating margin CO₂ emission factor in year y (tCO₂/MWh) W_{OM} = Weighting of OM emissions factor (%) = 75%

²⁰ [http://www.dcc.gov.vn/van-ban-phap-luat/1111/Nghien-cuu,-xay-dung-he-so-phat-thai-\(EF\)-cua-luoi-dien-Viet-Nam-nam-2021-\(k%C3%A8m-CV-327/BDKH-PTCBBT\).html](http://www.dcc.gov.vn/van-ban-phap-luat/1111/Nghien-cuu,-xay-dung-he-so-phat-thai-(EF)-cua-luoi-dien-Viet-Nam-nam-2021-(k%C3%A8m-CV-327/BDKH-PTCBBT).html)

	W_{BM} = Weighting of BM emissions factor (%) = 25%
Purpose of data	For the calculation of the Baseline Emission
Additional comment	This data will be archived for 2 years beyond the crediting period.

B.6.3 Ex ante estimation of SDG Impact

>>

SDG 7: Affordable and Clean Energy

The baseline outcome benefit is zero.

The project activity generates 671,195 MWh which will be monitored by electricity meters. No ex-ante estimation required for SDG 7.

SDG 8: Decent Work and Economic Growth

The baseline outcome benefit is zero.

The project currently provides actual employment of 72 local people at present and it may remain the same throughout project lifetime. This will help to achieve SDG 8 with indicators 8.5.2 "Unemployment rate, by sex, age and persons with disabilities" and following 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". Number of jobs created and wages for both men and women to demonstrate that the project provides decent work for all women and men and equal pay for equal work. The pay for men and women will be proportional to nature of work which they engaged for and the working hours is similar to all employees. This will be monitored through payroll records and attendance system which is available at the project site.

In addition, project activity improves the quality of employment by giving training to employee. All employees are trained on health and safety issues during each monitoring period. This will help to achieve "the project labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment." Training records or certificates will be provided during each monitoring period.

SDG 13: Climate Action

Baseline Emission:

As per Equation (11) of ACM0002 (Version 21.0), the baseline emissions are to be calculated as follows:

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

Where:

BE_y = Baseline emissions in year y (tCO₂/yr)

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

$EF_{grid,CM,y}$ = Combined margin CO₂ emission factor for grid connected power generation in year y calculated using the latest version of "TOOL07: Tool to calculate the emission factor for an electricity system" (tCO₂/MWh)

As per Equation (12) of ACM0002 (Version 21.0), the $EG_{PJ,y}$ for the greenfield power plant is calculated as follows:

$$EG_{PJ,y} = EG_{facility,y}$$

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

The estimated electricity generation²¹ by the proposed project is as follows:

18N + 18NX (MWh)	18S (MWh)	18E (MWh)	Total ($EG_{PJ,y}$)
414,450 + 127,582	80,156	49,007	671,195

The CM emission factor for the Vietnam's electricity system ($EF_{grid,CM,y}$) = 0.8050 tCO₂/MWh.

Hence the baseline is:

$$\begin{array}{rclcl}
 EG_{PJ,y} & \times & EF_{grid,CM,y} & = & BE_y \\
 671,195 \text{ MWh/yr} & \times & 0.8050 \text{ tCO}_2/\text{MWh} & = & 540,295 \text{ tCO}_2/\text{yr}
 \end{array}$$

Project Emission:

²¹ Estimated by using power simulations variant – Done by Bouygues Energies & Services (France)

The proposed project activity involves the generation of electricity by development of solar power project. The generation of electricity does not result in greenhouse gas emissions and therefore the project emission (PE_y) is zero.

Leakage Emission:

As per the paragraph 61 of ACM0002 (Version 21.0), no leakage emission (LE_y) is considered.

Emission Reduction:

As per Equation (17) of ACM0002 (Version 21.0), the emission reduction (ER_y) of the proposed project as follows:

$$\begin{array}{rclcl}
 BE_y & - & PE_y & = & ER_y \\
 540,295 \text{ tCO}_2/\text{yr} & - & 0 \text{ tCO}_2/\text{yr} & = & 540,295 \text{ tCO}_2/\text{yr}
 \end{array}$$

B.6.4 Summary of ex ante estimates of each SDG Impact

SDG 7: Affordable and Clean Energy – Ensure access to affordable, reliable, sustainable and modern energy for all

Year	Baseline estimate (MWh)	Project estimate (MWh)	Net benefit (MWh)
2024 (01/06 – 31/12)	0	447,463	447,463
2025	0	671,195	671,195
2026	0	671,195	671,195
2027	0	671,195	671,195
2028	0	671,195	671,195
2029 (01/01 – 31/05)	0	223,732	223,732
Total	0	3,355,975	3,355,975
Total number of crediting years	5		
Annual average over the crediting period	0	671,195	671,195

SDG 8: Decent Work and Economic Growth – Promote inclusive and sustainable economic growth, employment and decent work for all

The project leads to employment opportunities which would not have been possible in the baseline scenario. The project currently provides permanent employment to 72 people.

SDG 13: Climate Action – Take urgent action to combat climate change and its impacts

Year	Baseline estimate (tCO ₂ e)	Project estimate (tCO ₂ e)	Net benefit (tCO ₂ e)
2024 (01/06 – 31/12)	360,197	0	360,197
2025	540,295	0	540,295
2026	540,295	0	540,295
2027	540,295	0	540,295
2028	540,295	0	540,295
2029 (01/01 – 31/05)	180,098	0	180,098
Total	2,701,476	0	2,701,476
Total number of crediting years	5		
Annual average over the crediting period	540,295	0	540,295

B.7. Monitoring plan

B.7.1 Data and parameters to be monitored

SDG 13

Data / Parameter	ERy - Annual emission reduction
Unit	tCO ₂ e/year
Description	The project will generate renewable energy, which will displace part of the electricity otherwise supplied by fossil fuel fired power plants, thereby the emission reductions are achieved by this project
Source of data	Calculated by net electricity generated by the project activity and combined margin emission factor of electricity system.

Value(s) applied	540,295 tCO ₂ e/year
Measurement methods and procedures	Computed as recommended by the ACM0002 (Version 21.0)
Monitoring frequency	Once for each monitoring period
QA/QC procedures	This parameter is cross checked with the electricity supplied to grid
Purpose of data	Direct emission reductions of the Project over the Baseline
Additional comment	None

SDG 8: Decent Work and Economic Growth (Indicator 8.5.1 – Average hourly earnings of female and male employees, by occupation, age and persons with disabilities)

Data / Parameter	Employees' monthly wages
Unit	Vietnam Dong per employee
Description	Monthly wages to all employees by the project activity
Source of data	Job contracts (or) Pay slip (or) Payroll records
Value(s) applied	Employees' wages record available during verification.
Measurement methods and procedures	Randomly choose employees with similar designation from payroll records and compare their wages and experience
Monitoring frequency	Once for each monitoring period
QA/QC procedures	Payroll records, job contracts and staff register will be provided annually. After first verification, only changes in employees will be reported.
Purpose of data	To demonstrate contribution to SDG8- 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"
Additional comment	None

SDG 7: Affordable and Clean Energy (Indicator 7.2.1: Renewable energy share in the total final energy consumption)

Data / Parameter	EG_{facility,y}
Unit	MWh/yr
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y
Source of data	Electricity meter(s)
Value(s) applied	671,195 MWh/yr
Measurement methods and procedures	Electricity generated would be monitored by the electricity meters on a continuous basis and readings will be taken every month for billing purpose. The meters have the capability to store data as well as transfer them to server which is located in the HV substation control room. It can be downloaded on a monthly basis for billing purpose. Archive of the data would be available for entire lifetime of the project.
Monitoring frequency	Continuous measurement and at least monthly recording
QA/QC procedures	Electricity meters will be calibrated once in three years as per EVN requirement. The electricity generation can also be cross-checked using the invoices billed to EVN EPTC for payment.
Purpose of data	Calculation of baseline emissions
Additional comment	None

Safeguarding Principle Assessment

Data / Parameter	3. Community Health, Safety and Working Conditions
Unit	Not applicable
Description	The Project shall avoid community exposure to increased health risks and shall not adversely affect the health of the workers and the community.

Source of data	Training records (either attendance register or event photos of the training)
Value(s) applied	Not applicable
Measurement methods and procedures	The training records include attendance registers and photos will be available to measure the level of safety trainings conducted for workers and awareness training provided to community regarding climate change and mitigation measures.
Monitoring frequency	Once for each monitoring period

B.7.2 Sampling plan

>>

Not applicable.

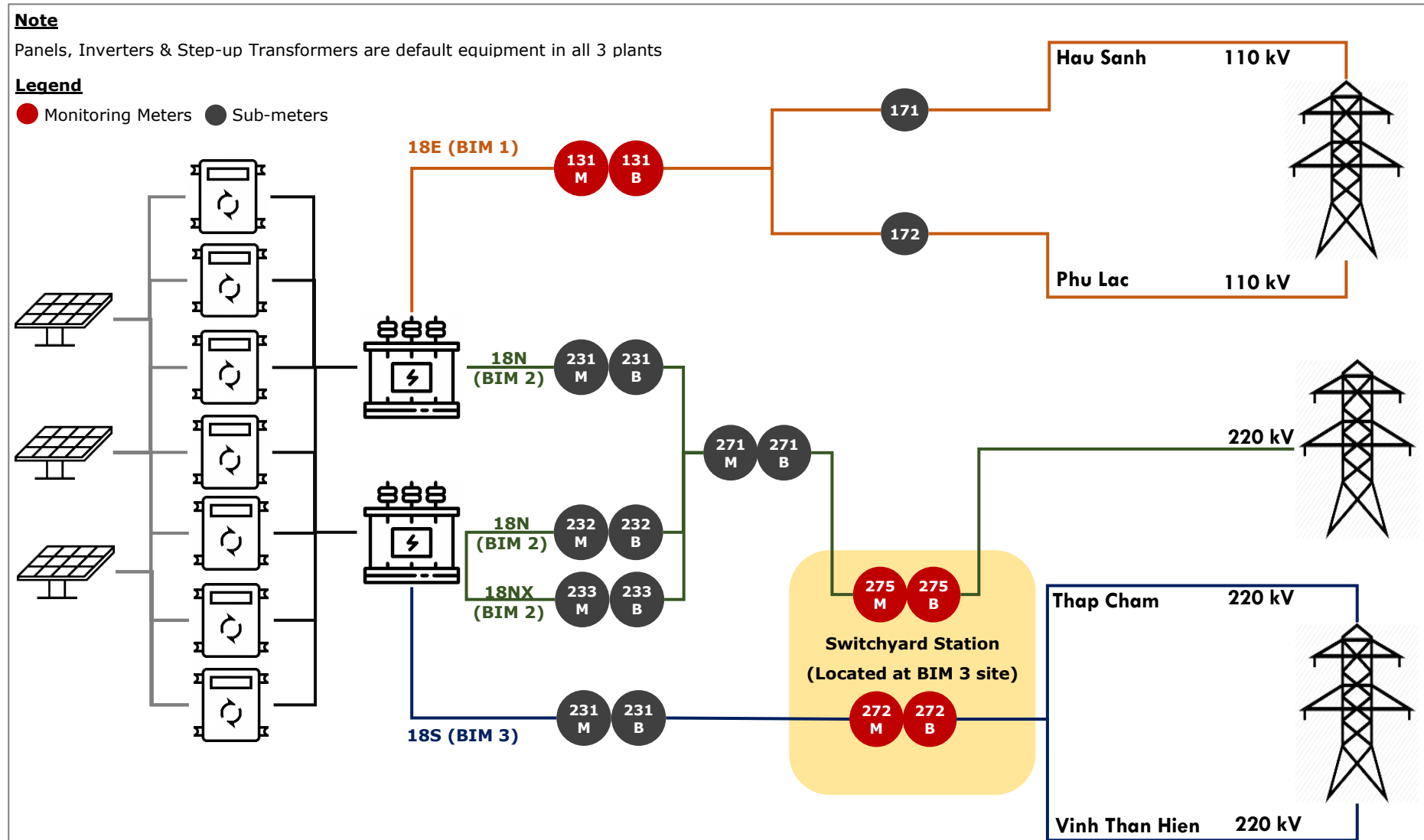
B.7.3 Other elements of monitoring plan

>>

Monitoring data is collected in accordance with the agreement done between the project owner and Vietnam Electricity Corporation (EVN) which provides the infrastructure for the connection to the national grid. Data will be stored electronically, during the crediting period and at least two years after the last issuance of credits for the solar power project activity in the concerning crediting period. The Project Participant will be responsible for storage of data received from the measuring devices.

Monitoring procedures

The metering layout for three plants are as follows:



All the installed electricity meters have an internal memory that can be stored 18 months of monitored data. The electricity meters will obtain hourly data and send to the historical server located at HV substation control room on a daily basis. The data can be downloaded from the computer at control room through web-based dashboard installed by EVN. The data will be monitored by the assigned operator at control room during 5am to 6pm and the EVN who can see the data remotely from their location. There will be no data after sunset and the inverter turn in to standby mode. The operator will collate and compile all operational data on a monthly basis and send to plant operation manager. The operation manager will verify the data and send to top management for endorsement before proceeding to billing to power purchaser.

Period of archiving

The data will be archived electronically every hour in meters and the meters will send the data to historical server on a daily basis. Monthly data can be downloaded for billing purposes.

Calibration of equipment

The calibration of electricity meters will be done as per supplier recommendation by an independent accredited third party. However, the tariff meters are validated by EVN as per their requirement in three years interval. The relevant calibration certificates will be made available at the time of verification. The following meters are installed at sites:

Plant Name	Brand	Model	Meter Type	Accuracy class
18N, 18NX & 18S	Elster	A1700	PB3KAAGHT-5	Tariff Meter: 0.2 Others: 0.5
18E	Landis+Gyr	E650 Series 3	ZMD402CT44.2407 S3	

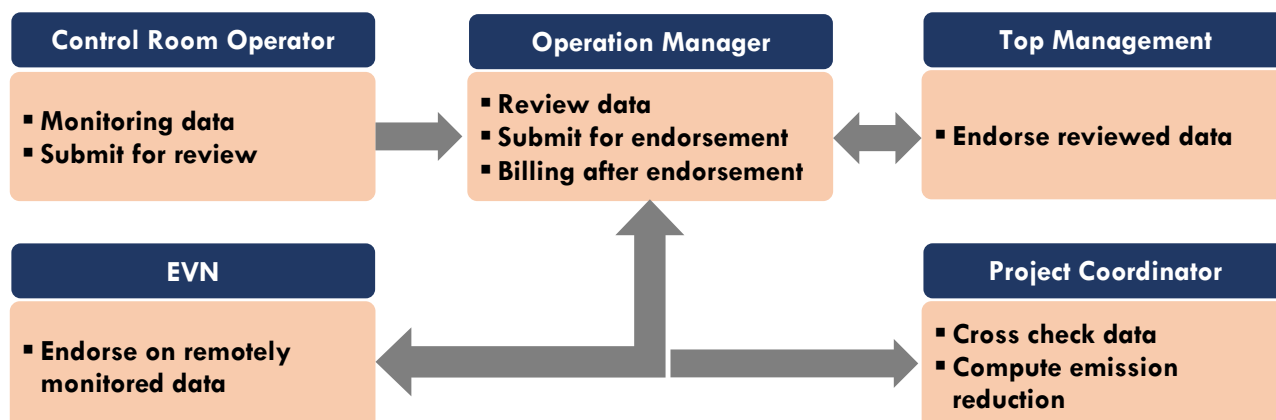
Internal Audit

An internal audit will be carried out by project coordinator every year at the power plant to ensure that the parameters are being monitored in accordance with this Project Design Document (PDD). The findings (if any) of the audit will be included in the annual report.

Training requirements

The suppliers of the equipment will train the staff in-charge during erection, to operate and maintain the equipment efficiently. Apart from this, the equipment supplier will provide complete manuals and documentation providing details for the maintenance schedule and the required activities associated with it.

The following roles and responsibilities will be used to monitor the project activity as per procedures:



The monitored data will be reported on a yearly basis for the calculation and estimation of emission reductions. This data will be checked against the billing to EVN. If the project is not performing as expected or if there are any negative impacts on the volume of emission reductions obtained, identify the where the project is deviating in its generation of emission reductions and the immediate measures which need to be undertaken to maintain the expected generation of emission reductions from the operation of this project. Should there be any significant changes in plant operation, these will be notified and amendments to the PDD will be requested during the following verification by VVB.

For each verification period, project owner will prepare a monitoring report that will be submitted to a VVB for verification. Project owner ensures that the procedures and monitoring plan are being followed. All data will be kept for a minimum of 2 years following issuance of certified emission reductions or the end of the crediting period, whichever is later, and the storage of this data will be the responsibility of the project owners.

SECTION C. DURATION AND CREDITING PERIOD

C.1. Duration of project

C.1.1 Start date of project

>>

20/07/2018²²

As per 4.1.39 of GS4GG, the date of “Engineering, Procurement & Construction (EPC)” agreement signed is considered as project starting date. The EPC was signed for 18E & 18S on 08/08/2018 and for 18N on 20/07/2018. Hence, the earliest date has been chosen for project starting date.

C.1.2 Expected operational lifetime of project

>>

25 years

C.2. Crediting period of project

C.2.1 Start date of crediting period

>>

Starting date of the second crediting period: 01/06/2024

Starting date of the first crediting period: 01/06/2019

Since the date of operational license for each plant is varying as follows, the above start date of crediting period has been chosen for a conservative manner:

18E: 22/04/2019

18N: 11/05/2019

18S: 07/05/2019

C.2.2 Total length of crediting period

>>

CP1 – 5 years 0 months (01/06/2019 – 31/05/2024)

CP2 – 5 years 0 months (01/06/2024 – 31/05/2029)

CP3 – 5 years 0 months (01/06/2029 – 31/05/2034)

²² Date of “Engineering, Procurement & Construction – EPC” Agreement signed

SECTION D. SUMMARY OF SAFEGUARDING PRINCIPLES AND GENDER SENSITIVE ASSESSMENT

D.1 Safeguarding Principles that will be monitored

A completed Safeguarding Principles Assessment is in [Appendix 1](#), ongoing monitoring is summarised below.

Principles	Mitigation Measures added to the Monitoring Plan
Principle 3 – Community Health, Safety and Working Conditions	Refer section B.7.1

D.2. Assessment that project complies with GS4GG Gender Sensitive requirements

Question 1 - Explain how the project reflects the key issues and requirements of Gender Sensitive design and implementation as outlined in the Gender Policy?	The project owner has prepared the project activity to ensure the contribution to generate livelihood benefits and enable women and men to equitably contribute to the local development through the project implementation.
---	--

Question 2 - Explain how the project aligns with existing country policies, strategies and best practices	The project does not involve in any form of based on gender, race, religion, sexual orientation, or any other basis as per the country policies, strategies and best practices. Vietnam was ratified²³ relevant ILO core conventions on equality, namely Equal Remuneration Convention (Convention No 100) and Discrimination (Employment and Occupation) Convention (Convention No 111) in 1997 to prevent any form of discrimination.
Question 3 - Is an Expert required for the Gender Safeguarding Principles & Requirements?	No. The Project Owner has its own internal regulations including their commitments to implement the gender equality. All the GS mandatory requirements of the gender equality and women's right are met properly.
Question 4 - Is an Expert required to assist with Gender issues at the Stakeholder Consultation?	Not required as the project activity already accessed gender issues while conducting the consultation before design certification.

SECTION E. SUMMARY OF LOCAL STAKEHOLDER CONSULTATION

The below is a summary of the 2 step GS4GG Consultation for monitoring purposes. Please refer to the separate Stakeholder Consultation Report for a complete report on the initial consultation and stakeholder feedback round.

E.1 Summary of stakeholder mitigation measures

>>

23 https://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:103004

The project is undergoing renewal of crediting period. PP has previously conducted the Stakeholder consultation meetings on 13/03/2019 and 14/03/2019 in line with GS4GG requirements and guidelines and can make reference to the registered PDD.

Stakeholder feedback round was also conducted from 13/06/2019 to 12/08/2019. The soft copies of Stakeholder Consultation Report (SCR) and PDD have been circulated through emails to various stakeholders who were invited through emails for consultation meetings. Those who don't have email access such as local residents were informed through village management board about the feedback round. Hard copies of SCR and draft PDD were available at the board office for distribution. There were no feedback/comments received during the feedback round.

The local stakeholders can give their feedback/comments anytime using the grievances expression process book located at the site office.



E.2 Final continuous input / grievance mechanism

METHOD	INCLUDE ALL DETAILS OF CHOSEN METHOD (S) SO THAT THEY MAY BE UNDERSTOOD AND, WHERE RELEVANT, USED BY READERS.
--------	---

Continuous Input / Grievance expression process book is placed at the site office
Grievance (floor 1, BIM Salt JSC, Highway 1A, Quan The Hamlet, Phuoc
Expression Process Minh Commune, Thuan Nam District, Ninh Thuan Province,
Book (mandatory) Vietnam) as per stakeholders' suggestion

GS Contact
(mandatory) help@goldstandard.org

Telephone access +84 936 656 694
Mr Nguyen Phuong Trung

Internet/ email trung.np@bimgroup.com
access Mr Nguyen Phuong Trung

APPENDIX 1 - SAFEGUARDING PRINCIPLES ASSESSMENT

Complete the Assessment below and copy all Mitigation Measures for each Principle into [SECTION D](#) above. Please refer to the instructions in the [Guide to Completing](#) this Form.

SOCIAL SAFEGUARDING PRINCIPLES		
Reference requirement	Question	Response
ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project developer, its representatives and the Project disrespect internationally proclaimed human rights?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Is the project involved or complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Have local communities or individuals raised human rights concerns regarding the project (e.g., during the stakeholder engagement process, grievance processes, public statements)?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Is there a risk that rights-holders (e.g., Project-affected stakeholders) do not have the capacity to claim their rights?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does this project undermine national or regional measures for the realisation of the right to development?	☐ YES ☒ NO
If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.		
NA		
Would the project potentially involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalised groups?	☐ YES ☐ POTENTIALLY ☒ NO

ERROR! REFERENCE SOURCE NOT FOUND.	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalised or excluded individuals or groups, including persons with disabilities?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalised individuals or groups, including persons with disabilities?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	☐ YES ☐ POTENTIALLY ☒ NO

Briefly describe below how the project incorporates a human rights-based approach.

For example, by describing how the project design:

- is informed by human rights analysis, including from UN human rights mechanisms (human rights treaty bodies, universal periodic review, special procedures)
- includes measures to assist the government to realise (respect, protect and fulfil) human rights under international law and to implement human rights-related standards in national law (whichever is higher)
- enhances the availability, accessibility and quality of benefits and services for potentially marginalised individuals and groups, and to increase their inclusion in decision-making processes that may impact them (consistent with the non-discrimination and equality human rights principle)
- provides reasonable accommodations to strengthen inclusivity and accessibility of project benefits and services to persons with disabilities.

The Project Proponent and the Project does not conflict with the economic livelihood or other factors of the local communities. Thus, the Project does not cause any human rights abuse and respects internationally proclaimed human rights issue.

As a member of United Nations and part of UN Agreement on Human Rights²⁴, it is ensured by law in Vietnam that no action can be taken against human rights.

ERROR! REFERENCE SOURCE NOT FOUND. ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Have women's groups/leaders raised gender equality concerns regarding the project, (e.g., during the stakeholder engagement process, grievance processes, public statements)?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE	Does the project undermine the principles of non-discrimination, equal treatment, and equal pay for equal work?	☐ YES ☒ NO

²⁴ <https://thuvienphapluat.vn/van-ban/Quy-en-dan-su/Tuyen-ngon-quoc-te-nhan-quyen-1948/65774/loi-dung.aspx>

NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project prevent men and women from having equal opportunities to participate in identified tasks and activities, whether through paid work, volunteer work, or community contributions, as appropriate?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project limit the participation of women or men based on pregnancy, maternity/paternity leave, or marital status?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Is information about project objectives being communicated in a way that is inappropriate for the local context and not tailored to the methods of understanding of both women and men, which could hinder their participation?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Has the project assessed gender risks without referencing the country's gender strategy or equivalent national commitment?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Has expert stakeholder(s) been involved, and has their input been requested for the project design on gender equality and women's empowerment?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

NA

Would the project potentially involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	adverse impacts on gender equality and/or the situation of women and girls?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	exacerbation of risks of gender-based violence? For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc.	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	☐ YES ☐ POTENTIALLY ☒ NO

ERROR! REFERENCE SOURCE NOT FOUND.	limitations on women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well-being.	☐ YES ☐ POTENTIALLY ☒ NO
---	--	--

Briefly describe below how the project is addressing any identified risk to gender equality and women's empowerment.

The project fully complied with Vietnam labor code²⁵ where the gender equality is clearly defined.

The project does not create any direct or indirect impacts on gender equality and/or the situation of women.

The project has applied the principles of non-discrimination and equal treatment, pay & work.

BIM Solar Project does not involve in any form of discrimination in any kind. Vietnam also ratified²⁶ relevant ILO core conventions on equality, namely Equal Remuneration Convention (Convention No 100) and Discrimination (Employment and Occupation) Convention (Convention No 111) in 1997.

ERROR! REFERENCE SOURCE NOT FOUND.**ERROR! REFERENCE SOURCE NOT FOUND.**

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve potential risks to the health and safety of affected communities during its life cycle?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any potential risks to the workers' safety and health?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

NA

Would the project potentially involve or lead to:

ERROR! REFERENCE	construction and/or infrastructure development (e.g., roads, buildings, dams)?	☐ YES ☒ NO
-------------------------	--	--

²⁵ https://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=91650

²⁶ https://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:103004

<u>SOURCE NOT FOUND.</u>		
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	☐ YES ☐ POTENTIALLY ☒ NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	harm or losses due to failure of structural elements of the project (e.g., collapse of buildings or infrastructure)?	☐ YES ☐ POTENTIALLY ☒ NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	risks of water-borne or other vector-borne diseases (e.g., temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	☐ YES ☐ POTENTIALLY ☒ NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g., explosives, fuel and other chemicals during construction and operation)?	☐ YES ☐ POTENTIALLY ☒ NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g., food, surface water purification, natural buffers from flooding)?	☐ YES ☐ POTENTIALLY ☒ NO

Briefly describe below how the project is addressing any identified risk related to community health and safety.

NA

ERROR! REFERENCE SOURCE NOT FOUND.**ERROR! REFERENCE SOURCE NOT FOUND.**

ERROR! REFERENCE SOURCE NOT FOUND.**ERROR! REFERENCE SOURCE NOT FOUND.**

<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	Does the project involve altering, damaging, or removing sites, objects, or structures of significant cultural heritage?	☐ YES ☒ NO
--	--	--

If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

NA

Would the project potentially involve or lead to:

<u>ERROR! REFERENCE</u>	activities adjacent to or within a cultural heritage site?	☐ YES ☐ POTENTIALLY
--------------------------------	--	--

<u>SOURCE NOT FOUND.</u>		☒ NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	☐ YES ☐ POTENTIALLY ☒ NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	alterations to landscapes and natural features with cultural significance?	☐ YES ☐ POTENTIALLY ☒ NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g., knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	☐ YES ☐ POTENTIALLY ☒ NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	utilisation of tangible and/or intangible forms (e.g., practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	☐ YES ☐ POTENTIALLY ☒ NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	If answer to question above is "YES" or "POTENTIALLY" - are the communities made aware of their right under the law, scope and nature of proposed development and its potential consequences?	☐ YES ☐ NO ☒ NA
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	If answer to question above is "YES" - does the project provide equitable sharing of benefits from commercialisation of such knowledge, innovation, or practice, consistent with their customs and traditions?	☐ YES ☐ NO ☒ NA
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	If answer to question above is "YES" - are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	If answer to question above is "YES", has project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any risks related to involuntary relocation of people?	☐ YES ☒ NO
If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.		
NA		
Would the project potentially involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	risk of forced evictions or involuntary relocation of people?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	temporary or permanent and full or partial physical displacement (including people without legally recognisable claims to land)?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	economic displacement (e.g., loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES" or "POTENTIALLY", - has the project developed Resettlement Action Plan or Livelihood Action Plan in consultation and agreement with affected individual, group or community? - has the project integrated Resettlement Action Plan or Livelihood Action Plan into the Project design?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES" - are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
NA		

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any risks related to identifying and managing legitimate tenure rights that may be affected by the project?	☐ YES ☒ NO
---	--	--

If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

NA

Would the project potentially involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	impacts on or changes to land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	uncertainties with regards to land tenure, access rights, usage rights or land ownership? Examples include, but are not limited to water access rights, community-based property rights and customary rights.	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Changes in legal arrangements, if yes, are the changes done in line with relevant laws and regulations?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Changes in legal arrangements, if yes, are these changes agree with free, prior and informed consent of the involved stakeholders?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Does some other entity (other than the project developer) hold uncontested land title for the entire Project Boundary?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Have project developer in consultation with stakeholders established a functioning mechanism to receive, process, resolve, communicate and record grievances?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve Indigenous People within the Project area of influence who may be affected directly or indirectly by the Project?	☐ YES ☒ NO
---	--	--

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project potentially involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	affect areas where indigenous peoples are present (including project area of influence)	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	affect areas, land and territory claimed by indigenous peoples?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above questions is "YES" or "POTENTIALLY", - Is it determined that the proposed project may affect the rights, lands, resources, or territories of indigenous people? - Has an "Indigenous People Plan" (IPP) or "Indigenous People Plan Framework" been elaborated and included in the project documentation? - Was the plan developed in accordance with the effective and meaningful participation of indigenous peoples and in accordance with UNDP Guidelines?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	risk of forcibly removing indigenous people from their lands and territories?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	utilisation and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	☐ YES ☐ POTENTIALLY

NOT FOUND.	Consider, and where appropriate ensure, consistency with the answers under Principle 4.1 above	☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES" or "POTENTIALLY" - Did the project obtain free, prior and informed consent from indigenous people before taking their cultural, intellectual, religious, and/or spiritual property? - Does the project ensure that the indigenous people receive an equitable sharing of benefits resulting from the use of their traditional knowledge and practices? ? - Does the project ensure that the sharing of benefits resulting from the use of indigenous peoples' traditional knowledge and practices is culturally appropriate and inclusive? - Does the project ensure that the provision of equitable sharing of benefits does not impede land rights or equal access to basic services including health services, clean water, energy, education, safe and decent working conditions, and housing?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project lack appropriate feedback and grievance channels for Indigenous Peoples and their representatives?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Has a grievance mechanism not been established at the beginning of programme or project implementation with due consideration given to customary dispute settlement mechanisms among the Indigenous Peoples concerned and will it remain operational throughout the project cycle?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
NA		

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve, or is it complicit in, contributing to or reinforcing corruption or corrupt projects?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of encouraging bribery, kickbacks, or other unethical behavior?	☐ YES ☒ NO
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
NA		

ECONOMIC SAFEGUARDING PRINCIPLES

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve, facilitate, or condone forced labor, or pose a potential risk of forced labor?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project violate any labor or health and safety laws, international obligations, or ILO conventions?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project violate the principles of equal opportunity and fair treatment in its employment decisions?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project violate national laws, if available regarding non-discrimination in employment?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project allow child labor?	☐ YES ☒ NO

<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>		
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u> <u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	Does the project have insufficient processes and measures in place to ensure the safety and health of project workers?	☐ YES ☒ NO
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	Does the project have insufficient measures to safeguard and support vulnerable project workers, such as women, people with disabilities, migrant workers, and young workers, and to prevent any kind of harassment, abuse, bullying, or exploitation, including gender-based violence (GBV)?	☐ YES ☒ NO
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE NOT</u> <u>FOUND.</u>	Does the project have no grievance mechanism available for workers to voice workplace concerns? Is information about this mechanism not provided to workers at the time of recruitment, or is it not easily accessible?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project potentially involve or lead to:

(NOTE: APPLIES TO BOTH PROJECT AND CONTRACTOR WORKERS)

<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	use of forced labour?	☐ YES ☐ POTENTIALLY ☒ NO
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	working conditions that do not meet national labour laws and international commitments?	☐ YES ☐ POTENTIALLY ☒ NO
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	working conditions that may deny freedom of association and collective bargaining?	☐ YES ☐ POTENTIALLY ☒ NO
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u>	absence of documented working agreements with all individual workers	☐ YES ☐ POTENTIALLY

NOT FOUND.	<i>if such agreements do not exist, or do not address working conditions and terms of employment, the project developer shall provide reasonable working conditions and terms of employment.</i>	☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	use of migrant workers? <i>if engaged, the developer shall ensure that they are engaged substantially equivalent terms and conditions to non-migrant workers carrying out similar work.</i>	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	having no arrangements for basic services ²⁷ for workers? <i>the project developer shall put in place and implement policies on the quality and management of the accommodation and provision of basic services in a manner consistent with the principles of non-discrimination and equal opportunity. Workers' accommodation arrangements should not restrict workers' freedom of movement or of association</i>	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	any form of discrimination or harassment based on factors unrelated to job requirements, such as gender, race, nationality, ethnicity, social or indigenous origin, religion or belief, disability, age, or sexual orientation?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	any form of discrimination in any aspect of employment, such as recruitment, compensation, working conditions, training, job assignment, promotion, termination, or discipline?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	harassment, intimidation, and/or exploitation, especially in regard to women?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	discriminatory working conditions and/or lack of equal opportunity where national law provides provision to address non-discrimination in employment?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	use of child labour? (including third-party engaged workers)	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE	inadequate and verifiable mechanisms for age verification?	☐ YES

²⁷ Basic services requirements refer to minimum space, supply of water, adequate sewage and garbage disposal system, appropriate protection against heat, cold, damp, noise, fire, and disease-carrying animals, adequate sanitary and washing facilities, ventilation, cooking and storage facilities and natural and artificial lighting, and in some cases basic medical services.

SOURCE NOT FOUND.		☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	no processes and measures in place for the safety and health of project workers?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	No provision of safety and health training provisions, including on the proper use and maintenance of personal protective equipment conducted by competent persons and the maintenance of training records?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	No provision to record and document accidents, diseases, incidents, and any resulting injuries, illnesses, or deaths?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	No measures to protect vulnerable project workers from harassment, exploitation, and gender-based violence (GBV)? This includes women, people with disabilities, migrant workers, and young workers.	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	No grievance mechanism available for workers to voice workplace concerns.	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	No measures for due diligence and the establishment of policies and procedures to manage and monitor the performance of third-party employees in the project?	☐ YES ☒ NO

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Is there a risk of project failure during implementation or after project certification due to a lack of financial resources?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have potential negative impacts or pose a risk to the local economy?	☐ YES ☒ NO

<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	Are there any potential risks or negative impacts this project may have on vulnerable or marginalised social groups, despite the benefits it may bring?	☐ YES ☒ NO
--	---	--

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	economic impacts (negative/detrimental) to the local economy?	☐ YES ☐ POTENTIALLY ☒ NO
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	negative economic consequences during and after project implementation, e.g., for vulnerable and marginalised social groups in targeted communities?	☐ YES ☐ POTENTIALLY ☒ NO

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	Does the project have a risk of increasing greenhouse gas emissions over the Baseline Scenario?	☐ YES ☒ NO
--	---	--

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	increase greenhouse gas emissions over the Baseline Scenario?	☐ YES ☐ POTENTIALLY ☒ NO
--	---	--

If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project pose a risk to the availability and reliability of energy supply to other users?	☐ YES ☒ NO
---	---	--

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	negative impact on the availability and reliability of energy supply to other users?	☐ YES ☐ POTENTIALLY ☒ NO
---	--	--

If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project increase water usage to a level that will not allow for the maintenance of environmental flows?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project result in the discharge of wastewater that does not meet the required standard for beneficial reuse and could therefore negatively impact the environmental flow?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have the potential risk to exceed the rate of recharge for the groundwater source?	☐ YES ☒ NO

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any processes or activities that could contaminate the groundwater and render it unsuitable for use?	☐ YES ☒ NO
---	---	--

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Wastewater discharge of quality that does not meet the required standard for beneficial reuse?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	significant extraction, diversion of ground water? For example, construction of dams, reservoirs, river basin developments, groundwater extraction	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of negatively impacting the catchment and has it been assessed and addressed?	☐ YES ☒ NO
---	--	--

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND. -	negatively impact on the catchment area? <i>If yes, Erosion prevention measures, including soil and slope protection measures, must be implemented before project commencement. These measures should involve natural terracing, infiltration strips, permanent ground cover, hedge and tree rows, and effective slope length assessment. Regular reassessment of these measures is necessary.</i>	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.**ERROR! REFERENCE SOURCE NOT FOUND.**

ERROR! REFERENCE SOURCE NOT FOUND.**ERROR! REFERENCE SOURCE NOT FOUND.**

ERROR! REFERENCE SOURCE NOT FOUND. -	Is there any risk of soil resource degradation or loss of ecosystem services provided by soils in the project? <i>If yes, the project shall maintain healthy soils by minimising negative impacts on soil health, productivity, structure, and water retention. Steps to minimise soil degradation include crop rotation, composting, using N-fixing plants, and reducing tillage and ecologically harmful substances.</i>	☐ YES ☒ NO
--	---	--

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities?	☐ YES ☐ POTENTIALLY ☒ NO
---	--	--

NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	if answer to above question "yes" or "potentially", does project adopt appropriate and culturally sensitive sustainable resource management practices?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have any risks associated with natural or man-made hazards that could result from land use changes due to the project?	☐ YES ☒ NO
---	---	--

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	any potential risks that require emergency preparedness and response planning?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	if answer to above question "yes" or "potentially", did the project developer disclose appropriate information about emergency preparedness and response to affected communities?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the transfer, handling, and use of genetically modified organisms/living modified organisms that may result in adverse effects on biological diversity?	☐ YES ☒ NO
---	--	--

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	the transfer, handling and use of genetically modified organisms/living modified organisms (GMOs/LMOs) that result from modern biotechnology	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "yes" has a risk assessment by a competent Expert stakeholder been carried out in accordance with Annex iii of the Cartagena protocol on biosafety to the convention on biological diversity?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "yes" has any risks identified in the risk assessment?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Forestry (for example Afforestation/Reforestation) involving GMO planting? <i>Note - Forestry projects (for example Afforestation/Reforestation) involving GMO planting are not eligible for Certification under Gold Standard for the Global Goals.</i>	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of releasing pollutants to air, water, and land in routine, non-routine, or accidental circumstances?	☐ YES ☒ NO
---	--	--

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	any potential risk of pollutant release that cannot be avoided?	☐ YES ☐ POTENTIALLY ☒ NO
---	---	--

ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "Yes" or "potentially", has the project identified all potential pollution sources that may degrade the quality of soil, air, surface, and groundwater in the project area?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "Yes" or "potentially", do the pollution prevention and control technologies and practices applied during the project life cycle align with national regulations or international best practices?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "Yes", is there a monitoring plan to ensure that mitigation measures are implemented, and resources are protected?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the generation of waste materials (both hazardous and non-hazardous)?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the use of any chemicals or materials subject to international bans or phase-outs?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	the generation and management of waste materials?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE	treatment, destruction, or disposal of waste material?	☐ YES

SOURCE NOT FOUND.		☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "Yes", does the project involve an environmentally friendly method that includes appropriate control of emissions and residues resulting from the handling and processing of waste material?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "yes", does project has measures in place to address health risks?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Involve manufacture, trade, and use of chemicals and hazardous materials subject to international bans or phase-outs due to their high toxicity to living organisms, environmental persistence, potential for bioaccumulation, or potential for depletion of the ozone layer	☐ YES ☐ POTENTIALLY ☒ NO

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the use of chemical pesticides?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve purchase, store, manufacture, trade or use products that fall in Classes IA (extremely hazardous) and IB (highly hazardous)	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project use fertilisers, and if so, are measures being taken to minimise their use and nutrient losses to the environment?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	chemical pesticides use for pest management?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "yes" or "potentially", does project has documented Chemical Pesticides Policy in place?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	purchase, store, use, manufacture, or trade in Class II (moderately hazardous) pesticides?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "yes" or "potentially", does project has appropriate controls on manufacture, procurement, or distribution and/or use of these chemicals?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of unsustainable forest management, including timber harvesting?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project pose a risk of depleting biodiversity and ecosystem functionality in areas where improved forest management is undertaken?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project risk not meeting requirements for environment-friendly, socially beneficial, and economically viable plantations using native species whenever possible?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE	Does the project involve the risk of negatively influencing access to and availability of food for people affected?	☐ YES ☒ NO
-----------------------------	---	--

<u>SOURCE NOT FOUND.</u>		
---	--	--

If the answer to the question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	modification of the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	☐ YES ☐ POTENTIALLY ☒ NO
--	--	--

If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND. ERROR! REFERENCE SOURCE NOT FOUND.

<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	Does the project involve any risks to animal welfare? Animal welfare shall be ensured by providing access to water and food, appropriate environment, humane treatment, and staff training. Evidence of mistreatment will be treated as an immediate non-conformity.	☐ YES ☒ NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	Does the project involve any potential risk of excessive or inadequate use of veterinary medicines?	☐ YES ☒ NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	Does the project involve the risk of administering synthetic growth promoters, including hormones?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	animal husbandry or harvesting of fish populations or other aquatic species? ²⁸	☐ YES ☐ NO ☒ NA
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	limiting access for animals to basic needs like drinking water, adequate food, daylight, appropriate shelter etc.?	☐ YES ☐ POTENTIALLY ☒ NO
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	inadequate measures to isolate sick animals and control the spread of disease, especially zoonotic diseases?	☐ YES ☐ NO ☒ NA
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	inadequate low-stress methods, equipment, and facilities that facilitate calm animal movement.	☐ YES ☐ NO ☒ NA
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	inadequate measures to ensure that animals are exposed to the least stress possible during transportation and slaughtering?	☐ YES ☐ NO ☒ NA
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	inappropriate spacing per animal and stocking rates per land unit?	☐ YES ☐ NO ☒ NA
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	inadequate measures to address the specific needs of aquatic animals?	☐ YES ☐ NO ☒ NA
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u> <u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u>	primary production of living natural resources such as animal husbandry, aquaculture, and fisheries? If the answer is yes, implement industry-standard sustainable management practices in line with to one or more relevant and credible standards and utilise available technologies.	☐ YES ☐ NO ☒ NA

²⁸ 'Involve' means if the project mechanism and/or impact(s) are achieved via changing animal husbandry practices in some way.

NOT FOUND.		
-------------------	--	--

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have the risk of negatively impacting HCV areas and/or critical habitats?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project in the project area or area of downstream impacts have risks to the following: native tree patches, individual native trees, freshwater resources (including rivers, lakes, swamps, temporary water bodies, and wells), habitats of rare, threatened, and endangered species, and biodiversity-enhancing areas?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	identified habitats as HCV areas and or Critical habitats?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "yes", does the project have any risks that could negatively impact the catchment, project success, and surrounding HCV and ecological assets, as well as any measurable adverse impacts on the criteria or biodiversity values for which the critical habitat was designated, and on the ecological processes supporting that biodiversity?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "yes", is a robust, appropriately designed, and long-term Habitats and Biodiversity Action Plan absent which will make the project unable to achieve net gains of those biodiversity values for which the critical habitat was designated?	☐ YES ☐ NO ☒ N/A
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project area or area of downstream impacts have native tree patches, individual native trees, freshwater resources (including rivers, lakes, swamps, temporary water bodies, and wells), habitats of rare, threatened, and endangered species, and biodiversity-enhancing areas?	☐ YES ☐ POTENTIALLY ☒ NO

ERROR! REFERENCE SOURCE NOT FOUND.	If the answer to the above question is "yes", will the project have any adverse effects on these areas?	☐ YES ☐ No ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If the answer to above question is "yes", does the project has opportunities to minimise unwarranted conversion or degradation of the habitat and to enhance the habitat as part of its development?	☐ YES ☐ No ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Is the project applying Land Use & Forest Activity Requirements and managing a minimum 10% of the project area to protect or enhance the biological diversity of native ecosystems following HCV approach as per the given requirements?	☐ YES ☐ No ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project lead to the reduction or negative impact on any recognised Endangered, Vulnerable or Critically Endangered species?	☐ YES ☒ NO
---	--	--

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	distortion of habitats of endangered species?	☐ YES ☐ POTENTIALLY ☒ NA
ERROR! REFERENCE SOURCE	If answer to the above question is "yes", does the project plan to protect and enhance them?	☐ YES ☐ POTENTIALLY ☐ NO ☒ N/A

NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does project introduce any alien species (not currently established in the country or region of the project) into new environments?	☐ YES ☒ NO
---	---	--

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	risk of introducing any alien species with a high risk of invasive behaviour regardless of whether such introductions are permitted under the existing regulatory framework?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	risk of potential accidental or unintended introductions including the transportation of substrates and vectors (such as soil, ballast, and plant materials) that may harbour alien species.	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	risk of spreading alien species into areas in which they have not already been established?	☐ YES ☐ POTENTIALLY ☒ NO

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

APPENDIX 2 - CONTACT INFORMATION OF PROJECT DEVELOPER(S)

Organization name	BIM Renewable Energy Joint Stock Company
Registration number with relevant authority	4500617479
Street/P.O. Box	Lac Tien Village, Phuoc Minh Commune,
Building	BIM – Ninh Thuan Branch Office
City	Thuan Nam District
State/Region	Ninh Thuan Province
Postcode	-
Country	Vietnam
Telephone	02593960273
E-mail	
Website	https://bimgroup.com/en
Contact person	Mr. Nguyen Phuong Trung
Title	Project Coordinator
Salutation	
Last name	Trung
Middle name	Phuong
First name	Nguyen
Department	Renewable Energy
Mobile	+84 936 656 694
Direct tel.	
Personal e-mail	trung.np@bimgroup.com

APPENDIX 3 - LUF ADDITIONAL INFORMATION

Not applicable.

APPENDIX 4 - DESIGN CHANGES

A4.1. Details of proposed or actual design change

>>

Not applicable.

A4.2. Describe the impacts of design change on the following

a. Additionality

>>

Not applicable.

b. Applicability of methodology and other methodological regulatory documents with which the project activity has been certified

>>

Not applicable.

c. Compliance with the monitoring plan of the applied methodology

>>

Not applicable.

d. Level of accuracy and completeness in the monitoring of the project activity compared with the requirements contained in the registered monitoring plan

>>

Not applicable.

e. Scale of the project activity

>>

Not applicable.

f. Stakeholder consultation

>>

Not applicable.

g. Sustainable development criteria

>>

Not applicable.

h. Safeguarding assessment

>>

Not applicable.

i. Compliance with applicable legislation

>>

Not applicable.

j. Only for LUF Projects: Transparent summary of all approved changes in Project Area, Eligible Area and accompanying changes in ex-ante emissions removals.

Not applicable.

Revision History

Version	Date	Remarks
1.5	29 June 2023	Editorial changes to match V2.1 of the Safeguarding Principles Requirements
1.4	21 June 2023	Editorial changes to match V2.0 of the Safeguarding Principles Requirements
1.3	14 April 2023	Integrated the design change memo as annex of the document. Editorial changes
1.2	14 October 2020	Hyperlinked section summary to enable quick access to key sections Improved clarity on Key Project Information Inclusion criteria table added Gender sensitive requirements added Prior consideration (1 yr rule) and Ongoing Financial Need added Safeguard Principles Assessment as annex and a new section to include applicable safeguards for clarity Improved Clarity on SDG contribution/SDG Impact term used throughout Clarity on Stakeholder Consultation information required Provision of an accompanying Guide to help the user understand detailed rules and requirements
1.1	24 August 2017	Updated to include section A.8 on 'gender sensitive' requirements
1.0	10 July 2017	Initial adoption