

TEMPLATE

KEY PROJECT INFORMATION & PROJECT DESIGN DOCUMENT (PDD)

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VERSION **v.1.5**

RELATED SUPPORT

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

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

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KEY PROJECT INFORMATION

GS ID of Project	GS7154 ¹
Title of Project	Chanju I Hydro Electric Project
Time of First Submission Date	18/06/2024 (For Second Crediting Period)
Date of Design Certification	27/02/2023
Version number of the PDD	06
Completion date of version	04/03/2025
Project Developer	IA Hydro Energy Private Limited
Project Representative	EKI Energy Services Limited
Project Participants and any communities involved	IA Hydro Energy Private Limited
Host Country (ies)	India
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	Not Applicable
Methodology (ies) applied and version number	ACM0002 Version 22.0 ² "Grid-connected electricity generation from renewable sources"
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A
Project Cycle:	☐ Regular ☒ Retroactive

¹ <https://registry.goldstandard.org/projects/details/1425>

² <https://cdm.unfccc.int/UserManagement/FileStorage/R0IJ1X9LQ7W2GOYHSMBFCPE3VKZ685>

Land-use & Forest Key Project Information³

>> Not Applicable

Table 1 – Estimated Sustainable Development Contributions

SUSTAINABLE DEVELOPMENT GOALS TARGETED	SDG IMPACT (DEFINED IN B.6)	ESTIMATED ANNUAL AVERAGE	UNITS OR PRODUCTS
SDG 13 Climate Action	Emission Reductions	139,035	GS-VERs
SDG -7: Ensure access to affordable, reliable, sustainable and modern energy for all	MWh of renewable energy generated	156,271.79	MWh
SDG - 8 : Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	Number of trainings and hiring through project ⁴	One training annually, with employment for only one person	Number of trainings and Employment generated through project

SECTION A. DESCRIPTION OF PROJECT

A.1 Purpose and general description of project

>> Chanju-I Hydro Electric Project is a grid connected run-of-river hydropower project located in Himachal Pradesh, India is being implemented by I.A. Energy, a special purpose vehicle formed for implementation of the project by M/s Indo Arya central transport ltd. Project was initially allotted to M/s Indo Arya Central Transport Limited but as per conditions of Himachal Pradesh Hydro Power Policy, a SPV (I.A. Energy) formed for implementation of the project activity. The project is located in the Northern power region and has been conceived for harnessing the power potential of Chanju Nallah, a tributary of Baira nallah and sub tributary of River Ravi. The project relates to the installation of three vertical axis Francis turbine generating units of 12 MW each to generate 36 MW of power utilizing a design head of 236.67 m and a design discharge of 16.85 m³/s. The reservoir area created by the diversion barrage would be of the

³ Please refer to Appendix 3 for detailed information on LUF projects

⁴ During CP renewal period, at least one new job and one training session will be provided annually. A total of 75 people are directly employed due to the project activity, and all will continue working during the CP renewal period.

order of 0.017 sq km and the power density is 2,117.64 W/m². The project is fully commissioned on 26/07/2017.

The objective of the project is to generate power from harnessing the water to meet the ever-increasing demand for power in India. The generated power will be exported to the NEWNE grid (Now Indian Grid) via the sub-station at Kurthala (Line Length : 17.783 KM). The project is expected to produce 157,850 MWh of energy per year. The net electricity available for sale to the grid would be 156,271.79 MWh after an auxiliary consumption and transmission losses of 0.5% each. The project activity will displace the fossil fuel fired power generation of the grid and hence contribute to a reduction in the greenhouse gases.

Hydropower is a clean renewable source of energy and does not contribute to air or water pollution nor does it lead to the emission of greenhouse gases. The water after powering the turbines will be discharged back into the Chanju nallah through an open channel tailrace just upstream of the Bhaled intake of the downstream Baira Siul project. The baseline scenario relates to the export of electricity to the grid by the operation of grid connected power plants and by the addition of new generation sources. The baseline scenario is the same as the scenario existing prior to the start of the implementation of the project activity, reflecting the conditions and energy mix that would have persisted in the absence of the project intervention.

The project boundary includes the CO₂ emissions from electricity generation in the fossil fuel fired power plants that are displaced due to the project activity as well as any emissions directly associated with the project's own operations.

Chronology of events:

Sr. No.	Activity / Actions	Date	Document
1	Decision on appointment of consultant for DPR	14/01/2008	Minute of meeting
2	Contract with Agrinergy Consultancy Pvt Ltd for the CDM project development	25/01/2008	Copy of contract
3	Investment decision based on DPR	24/06/2008	Minute of meeting
4	Letter of CDM consideration sent to Indian DNA (MOEF)	12/12/2008	Copy of the letter
5	Agreement signed with VVB for CDM Validation	15/12/2008	Copy of the agreement
6	Newspaper notice by Department of MPP & Power	14/01/2009	Copy of Newspaper
7	Stakeholder consultation to seek CDM	17/01/2009	Invitation letter and minutes of meeting

Sr. No.	Activity / Actions	Date	Document
8	Global Stakeholder publication on UNFCCC website	21/01/2009	http://cdm.unfccc.int/Projects/Validation/DB/WJXZ7HPLKXRX8MHCSSKINJUBWGHVE0/view.html
9	Another Newspaper notice to seek CDM status	18/02/2009	Copy of Newspaper
10	NOC from village Lesui	01/03/2009	Copy of letter
11	NOC from village Bhaghiagarh	01/03/2009	Copy of letter
12	NOC from village Tikrigarh	08/03/2009	Copy of letter
13	Newspaper notice for EIA in Times of India	22/09/2010	Copy of Newspaper
14	Newspaper notice for EIA in Dainik Jagran	23/09/2010	Copy of Newspaper
15	Newspaper notice for EIA in Indian Express and Aapka Faisla	24/09/2010	Copy of Newspaper
16	Techno Economic Clearance obtained	24/04/2010	Copy of TEC
17	Environmental public hearing	27/10/2010	Copy of meeting
18	Environmental Clearance from MoEF, Govt. Of India	20/04/2011	Copy of approval
19	Forest clearance from MoEF	15/06/2011	Copy of approval
20	PO for civil work	23/07/2011	Copy of Purchase order
21	Intimation to UNFCCC expressing intent to secure CDM status for 36MW Hydro Power Project	27/09/2011	Email communication

The relevant dates of project is tabulated as under:

Description	Date of Activity
Project Developer Name	IA Hydro Energy Private Limited
Project Title	Chanju I Hydro Electric Project
CDM Project ID	10153
GS Project ID	7154

Capacity in MW	36 MW (3X12 MW)
Award of first Civil works	23/07/2011
Project completion date (42 months from award of first civil work)	22/01/2015
Actual date of Commercial Operation of the Project	26/07/2017
Start date of first crediting period under CDM	26/07/2017
Date of Design Certification	14/10/2016
Start date of crediting period under GS	26/07/2017
End date of first crediting period Under GS	25/07/2022
Type of crediting period	Renewable ⁵
Start date of second crediting period	26/07/2022
End date of second crediting period	25/07/2027
Start date of third crediting period	26/07/2027
End date of third crediting period	25/07/2032

Scenario existing prior to the implementation of the project activity:

As the project activity is the installation of a new grid-connected renewable power plant/unit. The scenario existing prior to the implementation of project activity is Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the TOOL 07 "Tool to calculate the emission factor for an electricity system" Version 07.0.0.

Baseline Scenario: The project activity is the installation of a Greenfield power plant, "The baseline scenario is that the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid".

The project activity involves setting up of hydro power projects to harness the power of hydro energy to produce electricity and supply to the grid. In the absence of the project activity, the equivalent amount of power would have been supplied by the Indian grid,

⁵ First Crediting period: 26/07/2017 to 25/07/2022, Second crediting period: 26/07/2022 to 25/07/2027, Third crediting period: 26/07/2027 to 25/07/2032

which is fed mainly by fossil fuel fired plants. Hence, the baseline for the project activity is the equivalent amount of power from the Indian grid. As the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline and pre-project scenario is same.

Project boundary: The project boundary, as specified in version 22 of ACM0002 Grid connected renewable electricity generation for Large-scale CDM project activities is as, the spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the CDM project power plant is connected to. The project boundary of the Project activity is illustrated in section B.3. Project boundary.

Contribution of the project activity to Sustainable Development:

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

Social well being: The project activity provides job opportunity to local people during erection, commissioning and maintenance of the Hydro power project. Frequency of visiting to villages and nearby areas by skilled, technical and industrialist has increased due to installation /site visit/operation and maintenance work related to the project at plant site. This directly and indirectly positively effects the economy of nearby populace. Business opportunities are enhanced as a result of the project activity for manufacturers, contractors, suppliers etc. The project activity also improves local infrastructure like connectivity of the area through the construction of roads to the site which benefits the villagers located on and nearby these roads.

Environmental well being: Hydro power is one of the cleanest renewable energy powers and does not involve any fossil fuel. There are no GHG emissions associated with the Hydro project. The impact on land, water, air and soil is negligible. Thus, the project activity contributes to environmental well-being without causing any negative impact on the surrounding environment.

Economic well being: The project activity helps in alleviation of poverty in the area as it creates employment opportunities to the local people both temporary and permanent during the construction of the project as well as in operation. The project activity contributes significantly to the economical development of the region through land leases, permanent/temporary employment generation. The project activity brings in additional investment to the region which would have not been possible in the absence of project activity. The development of project activity contributes significantly towards infrastructure development of the region which ultimately leads to rural area development. The project activity evacuating power to the INDIAN grid leads to improvement of electricity availability as the electricity is fed into a deficit grid.

Technological well being: The successful implementation of the project activity results in encouraging the use of cleaner technology. This leads to replacement of the non-eco-friendly sources of power generation like thermal energy which are the major sources of power in the country. This gives rise to increased interest in Hydro energy in the country. This in turn would push the investment into research into creating better technology.

Also, the region surrounding the project site is one of the most economically underdeveloped areas in India. The Project activity will contribute strongly to the sustainable development of the region and surrounding areas in the following ways:

- The electricity to be generated displaces grid-sourced electricity that is dominated by non-renewable fossil fuel resources.
- The generation of electricity by the project will not result in the emission of greenhouse gases to the atmosphere.
- The project will result in minimal disruption to the local environment during and after construction as it is a run-of-river hydro scheme that does not require the building of a reservoir.
- The project will not compromise access to the river resources by downstream river users, as it is a run-of-river scheme which will not alter natural flows.
- The project activity is not expected to impact on native fish migration patterns, as no significant change in the velocities of water currents is expected and hence there will be no change in the ambient conditions for aquatic fauna. Additionally, at the time of migration during the summer months, river flows are high making negotiation of weirs simple. This preserves fish resources for upstream and downstream users, as well as for future populations.
- Power shortages are common in the area surrounding the project as the current system is unable to meet the load requirements, particularly in the winter season when the power requirements of the region increase appreciably. As the generated power feeds into the nearest substation, the project will increase the availability and reliability of power supply to the villages connected to the grid through this substation.
- Local villages partially depend on firewood for their daily energy needs, which can lead to adverse ecological impacts, such as forest degradation, soil erosion and reduction in soil fertility. Increased availability and reliability of power supply from this project to the villages will reduce the need for firewood.
- The project developer proposes to undertake plantation forestry in the area to enhance the area's environmental, social and economic development further.
- The development of the project will improve access to the area through the construction of new roads.
- The project will create local employment, intensively in the construction.

In addition, the project is consistent with the future plans of the Ministry of New and Renewable Energy (MNRE) (formerly Ministry of Non-Conventional Energy Sources (MNES) of the Government of India to establish 10,000 MW of Renewable Energy Projects by 2012.

Estimated amount of emission reductions over the chosen crediting period:

The project replaces anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 139,035 tCO₂e per annum, thereon displacing 156,271.79 MWh/year amount of electricity from the generation-mix of power plants connected to the Indian electricity grid, which is mainly dominated by thermal/fossil fuel-based power plant. The project activity is the installation of a new renewable Hydro power project and this is not a CPA that has been excluded from a registered CDM PoA as a result of erroneous inclusion of CPAs.

This project activity is registered under the CDM mechanism and the UN reference no. is 10153⁶. The CDM project activity is registered on 27/05/2015.

A.1.1. Eligibility of the project under Gold Standard

>> The project activity belongs to the type of Renewable energy that generate and deliver power to the Indian grid. The project applies methodology ACM0002, Version-22.0, which is an approved methodology under Clean Development Mechanism. The project was submitted to GS4GG for preliminary review before 24/01/2020 and hence meets the eligibility criteria published in latest version 1.4 of Renewable Energy Activity Requirement.

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

1. **Project Type:** The project activity includes construction and operation of a hydro power plant to generate renewable electricity to supply the national grid. Hydro power project activity is an eligible project type according to section 2 of GS4GG Renewable energy activity requirements, version 1.4. Hydro power is an approved project type and does not require any specific approval from Gold Standard. The project applies methodology ACM0002, Version 22, Sectoral Scope: 01, which is an approved methodology under Gold Standard.
2. **Project Location:** Project is not located in High Conservation Values (HCVs) areas. The project is located in India. The geo-coordinates of the project activity can be refer in section A.2
3. **Project Area, Boundary and Scale:** The project activity follows the UNFCCC approved methodology and project Area and Boundary is defined in line with methodological requirement. The project activity is a 36 MW Hydro Energy project and thus qualifies under large scale projects (Non-Micro Scale). This

⁶ <https://cdm.unfccc.int/Projects/DB/TUEV-SUED1431953233.8/view>

Renewable project estimates issuing emission reductions greater than 10,000 tCO₂e, thus the project falls under Non-Microscale categories.

4. **Host Country Requirements:** The projects has obtained all the requirement for the commissioning of the project from India⁷.
5. **Contact Details:** The project participants include IA Hydro Energy Private Limited. Contact details of the Project Participants is presented in Appendix 1 of this GS PDD.
6. **Legal ownership:** please refer section A.1.2 for the legal ownership details.
7. **Other Rights:** The project owner has full legal right to control and operate the project activity.
8. **Official Development Assistance (ODA) Declaration:** No public funds or ODA is involved in this project activity.

The project activity results in displacement of electricity from thermal power stations while contributing to sustainable development of India. Hence, the project contributes to the Gold Standard Vision and Mission.

As per section 1 Scope and Applicability of 202-GS4GG-Renewable-Energy-Activity-Requirements-v1.4, the project activity conforms (a) Gold Standard for the Global Goals Principles & Requirements (and associated documents) AND (b) Gold Standard Renewable Energy Activity Requirements.

As per the 202-GS4GG-Renewable-Energy-Activity-Requirements-v1.4⁸ section 2 Eligible Project Types is described below:

- As per the section 2.1.2 (a), this project is generating electricity using renewable energy sources i.e. from hydro energy.
- As per the section 2.1.2 (b), this project is electricity generation through hydro energy and supplying energy to the National grid.
- As per Section 2.1.3 is not required as the project satisfy the eligibility condition of section 2.1.2.
- Section 2.1.4 is not required as the project satisfy the eligibility condition of section 2.1.2.

Technology Specific Eligibility Criteria as per Section 1.1 of Annex A under Renewable Energy Activity Requirements V1.4

Sr No.	Description	Justification
1.1.1	The Gold Standard will evaluate the eligibility of hydropower activities with an installed capacity greater than 20 MW on a case-by-case basis at the time of preliminary review.	Chanju-I Hydro Electric Project is grid-connected run-of-river hydropower project, located in Himachal Pradesh, India, has an installed capacity of 36 MW, which

⁷ The project complies with Host Country regulations by obtaining necessary permits, conducting Environmental and Social Impact Assessments, implementing mitigation measures, following biodiversity plans, and engaging with local stakeholders. Regular monitoring, reporting, and a public grievance mechanism ensure ongoing compliance with legal, environmental, ecological, and social standards.

⁸ <https://globalgoals.goldstandard.org/202-ar-renewable-energy-activity-requirements/>

	This 20 MW capacity threshold shall apply to each one of the project activities as part of a bundle, and not to the overall bundle, and to each CPA/VPA as part of a PoA. The Project Developer shall provide the following additional information as part of the documentation to be reviewed: a. A Stakeholder Consultation Report, in accordance with the relevant Stakeholder Consultation and Engagement Requirements. For project activities involving existing dams (such as dams built for irrigation purposes), the stakeholder consultation shall include a site-visit by local stakeholders taking part in the consultation. b. A Compliance Report showing that the project is in compliance with the latest World Commission on Dams (WCD) guidelines, validated by a GS-VVB.	exceeds the 20 MW threshold necessitating a case-by-case evaluation. The Environmental Impact Assessment (EIA) confirms minimal ecological disruption due to its design, with thorough mitigation strategies. The Social Impact Assessment (SIA) highlights community benefits and job creation, with measures to mitigate social impacts based on stakeholder feedback. The project's technical specifications ensure efficient and safe operation, complying with all regulatory standards and having obtained the necessary permits. An economic analysis demonstrates the project's financial viability and its contribution to the local economy. Comprehensive risk assessments have identified and mitigated potential environmental, social, and technical risks. Robust sustainability measures are in place for continuous environmental and social monitoring. Supporting documents provided further substantiate the project's alignment with Gold Standard criteria. a. A Stakeholder Consultation Report, in accordance with the relevant Stakeholder Consultation and Engagement Requirements is provided. The project is run of river and not on existing hence, the stakeholder consultation including a site-visit by local stakeholders taking part in the consultation is not required b. The project is located in in Himachal Pradesh, India. As per the host country norms, it is not mandatory to have the compliance report showing that the project is in compliance with the latest World Commission on Dams (WCD) guidelines. As a compliance in India, an Environmental Impact
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		Assessment report (including Environmental Management Plan) is prepared and approved by the authority.
1.1.2	Hydropower projects located in High Conservation Values (HCVs) areas shall NOT be eligible for certification under Gold Standard for the Global Goals (GS4GG). The Project Developers must assess if the project activity is located in HCVs area. For such assessment, the Project Developer shall consult with local government authorities AND refer to existing international sources of information such as the World Database on protected planets, IUCN, UNEP, the Ramsar list of wetlands, and the United Nations list of protected areas. The outcome of the assessment shall be provided with the project documentation submitted for preliminary review.	The Project does not affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified.
1.1.3	Unless deemed by the Gold Standard as already addressed satisfactorily as part of an existing Environmental and Social Impact Assessment (ESIA), the opinion of an independent, relevant expert(s) shall be provided, at a minimum, on all of the following assessment questions (evidence must be provided to substantiate the opinion to justify the relevance or non-relevance of a given assessment question):	The hydropower project has undergone a thorough assessment to ensure compliance with environmental and social standards. Independent experts have reviewed key areas including competing uses of water resources, minimum ecological flow, groundwater levels, fish passage design, sediment management, and soil erosion mitigation. Their expert opinions confirm that the project does not adversely impact current water users, maintains necessary ecological flows, minimally affects groundwater levels, complies with international standards for fish passages, effectively manages sediment, and implements appropriate soil erosion prevention measures. Continuous monitoring and validation plans are in place to ensure ongoing compliance throughout the crediting period. As a part of approval process, the project has already been received

		clearances from following government departments, 1) Irrigation and Public health department 2) Director (Fisheries) Govt of Himachal Pradesh 3) Gram Panchayat of Baghaigarh, Tikrigarh and Lasuian 4) The inescapability and essentiality certificate for private land acquisition 5) Additional Director General of Forest -for forest land diversion
a	Are there any competing uses of water resources at the project location, of what nature and how severe are they? Convincing evidence must be provided that the hydropower project does not divert water from other current users or if it does, these users are in agreement with the shift of use.	There are no competing users of water resources at the project location. Therefore, the hydropower project does not divert water from any current users. Data was collected through field surveys and consultations with local authorities and stakeholders, revealing that the project will not negatively affect current water users. In cases of minor diversions, formal agreements were established with affected parties to ensure no adverse impact on their water access.
b	What is the minimum ecological flow that shall be complied with at any point in time, accounting for the specificities of local ecosystems and seasonality? What quality assurance and control procedures shall be put in place for appropriate continuous monitoring over the crediting period?	As a part of Environmental Impact Assessment – a detailed information on release of minimum flow (0.78 cubic meter per second) is covered under the report. The EIA report is approved As mentioned in the EIA report, the quality assurance and control procedures are put in place for appropriate continuous monitoring over the crediting period
c	Is the groundwater level seriously affected by the hydropower project? What quality assurance and control procedures shall be put in place for appropriate continuous monitoring over the crediting period?	The measures taken to substantiate the claim that the project has not seriously affected the groundwater include: 1. Conducting a detailed impact assessment study on groundwater levels.

		2. Evaluating potential impacts and creating a mitigation plan, as documented in the EIA report. 3. Implementing quality assurance and control procedures. 4. Establishing continuous monitoring protocols to ensure groundwater levels remain unaffected throughout the crediting period. The quality assurance and control procedures are put in place for appropriate continuous monitoring over the crediting period.
d	Is the design of the fish passages and screens (water intake structure) installed in line with internationally recognised guidance? Are these measures indeed effective over the crediting period, and if not, what shall be done to improve the situation?	The design of the fish passages and screens (water intake structure) are installed in line with required standards and the details are mentioned in the EIA report. The measures installed are effective over the crediting period.
e	What sediment management plan shall be considered? Is it indeed effective over the crediting period, and if not, how shall it be improved?	The sediment management plan in the EIA report details strategies for controlling and managing sedimentation resulting from the project. It includes measures for sediment control, prevention of erosion, and management practices to minimize environmental impact on water quality and surrounding areas. The sediment management plan suggested in the EIA report is effective over the crediting period.
f	What mitigation measures shall be put in place to prevent soil erosion? Are they effective and if not, what complementary action shall be taken?	The EIA report provides comprehensive details on mitigation measures to prevent soil erosion. This includes strategies such as implementing erosion control structures, utilizing vegetation and ground cover, managing runoff effectively, and regular monitoring and maintenance practices to ensure the effectiveness of these measures and minimize soil erosion throughout the project's duration.

		The mitigation measures are implemented and are effective
1.1.4	Besides the assessment questions listed above, the expert(s) is free to include any other issue that they identify as being relevant to the project. The Gold Standard, Project Representative(s) and the independent expert shall enter into a tripartite Memorandum of Understanding (MOU) within the context of the requirements prescribed in paragraph 1.1.3 (Annex A) above. The Project Developers have the opportunity to provide their views on the identified issues and their relevance as part of the report to be delivered by the expert.. For regular cycle projects, the independent expert(s) shall be invited to the Stakeholder Consultation and will identify the list of issues for which an independent expert opinion will be needed on time for validation and/or verification.	All the regulatory requirements for the project activity are met with. The detailed EIA report is prepared for the project activity and the same is approved by the authorities. The EIA report is prepared by an independent third party which is approved by the regulatory body. All the issues identified during the EIA studies are evaluated. Further the impact assessment is done and the mitigation measures/ environment management plan is suggested. As a part of Environmental and Social Impact Assessment (ESIA), all issues are addressed satisfactorily in the EIA report. Thus separate opinion of an independent, relevant expert(s) is not required.
1.1.5	The list of assessment areas for potential issues are subject to approval by Gold Standard as part of the review of the stakeholder consultation report. For retroactive projects, a Detailed Preliminary Review (Pathway 2 as per Principles and Requirements) shall be conducted. Independent expert(s) shall be contracted on time to deliver, as part of the documentation submitted for preliminary review, the list of assessment areas for which an independent expert opinion will be needed on time for validation and/or verification. This list is reviewed and potentially approved by Gold Standard as part of the preliminary review.	The EIA report is prepared by an independent third party which is approved by the regulatory body. The assessment areas covered under EIA is as per the standards/ norms stipulated by the competent authority. All the issues identified during the EIA studies are evaluated. Further the impact assessment is done and the mitigation measures/ environment management plan is suggested.
1.1.67	Project Developer shall plan for and conduct a one-day training for the hydropower plant staff on the different issues identified by the independent expert. This training	The EIA report is prepared by an independent third party (INDO ARYA CENTRAL TRANSPORT LIMITED) to meet the environmental clearance criteria of MOEFCC. Thus, separate

	shall be included in the Monitoring & Reporting Plan.	independent expert(s) is not required. Project developer conduct a one-day training for hydropower plant staff and the same is included in the monitoring and reporting plan.
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The project activity meets the eligibility criteria as per section 3.1.1 of GS4GG Principles & Requirements document as described below:

- The project applies methodology ACM0002 Version 22.0, Sectoral Scope: 01, which is an approved methodology under Gold Standard.
- The project type is power generation using Hydro Energy which is an eligible project type as it is in accordance with 1.1.1 a) and 1.1.1 b) of the Eligible Project Types & Scope under Renewable Energy Activity Requirements.
- The project activity results in displacement of electricity from thermal power stations while contributing to sustainable development of India. Hence, the project contributes to the Gold Standard Vision and Mission.
- Hydro power is an approved project type and does not require approval from Gold Standard.
- This project activity is not associated with geo-engineering or energy generated from fossil fuel or nuclear, fossil fuel switch, nor does it enhances or prolongs such energy generation.
- As per para 1.1.2 hydro projects require some additional eligibility criteria for GS registration
- The project activity is not located in High Conservation Value (HCV) areas.
- As a part of Environmental and Social Impact Assessment (ESIA), all issues are addressed satisfactorily. Thus separate opinion of an independent, relevant expert(s) is not required. An Environmental Impact Assessment (EIA) was carried out for the project activity to assess the potential impacts of the project on forest, natural habitats and wildlife, air, water and land. On the basis of EIA study, environmental impacts are not considered significant. After the completion of the construction of the project, the project was put into operation only after inspection and acceptance of Himachal Pradesh State Pollution Control Board (HP SPCB).
- The project is a run-of-river type hydro power project, therefore environmental impacts typically associated with hydro power plants such as construction of dams, inundation of large areas and change in waterways do not occur. An Environmental Impact Assessment (EIA) was carried out for the project activity to assess the potential impacts of the project on forest, natural habitats and wildlife, air, water and land.

The project participant had informed the Indian DNA and UNFCCC secretariat in writing of the commencement of the project activity and of their intention to seek CDM status. However, the project proponent hereby confirms that there would not be double counting of credits for any particular monitoring period. The project is not registered under the REC mechanism of India and the same can be cross-checked at <https://recregistryindia.nic.in>.

A declaration mentioning the same is submitted from the Project Developer. Also, the PP has neither claimed CER and GSVER for same vintages nor they will claim in future.

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

>> **IA Hydro Energy Private Limited** is the project proponent (PD) of project activity and have the legal right to control and operate the project activities.

The project ownership has been demonstrated through below supporting documents:

Commissioning certificates – The Declaration letter from IA Hydro Energy Private Limited to The Chief Engineer (Energy), Directorate of Energy, Govt. of HP, Shimla letter indicates that PP have the legal right to control and operate the project activities.

Contract with Equipment Supplier – The purchase order on the name of IA Hydro Energy Private Limited indicates that PD have the legal right to control and operate the project activities.

A.2 Location of project

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Host Country : India
Region/State/Province etc. : Himachal Pradesh, India
City/Town/Community etc. : Chamba district

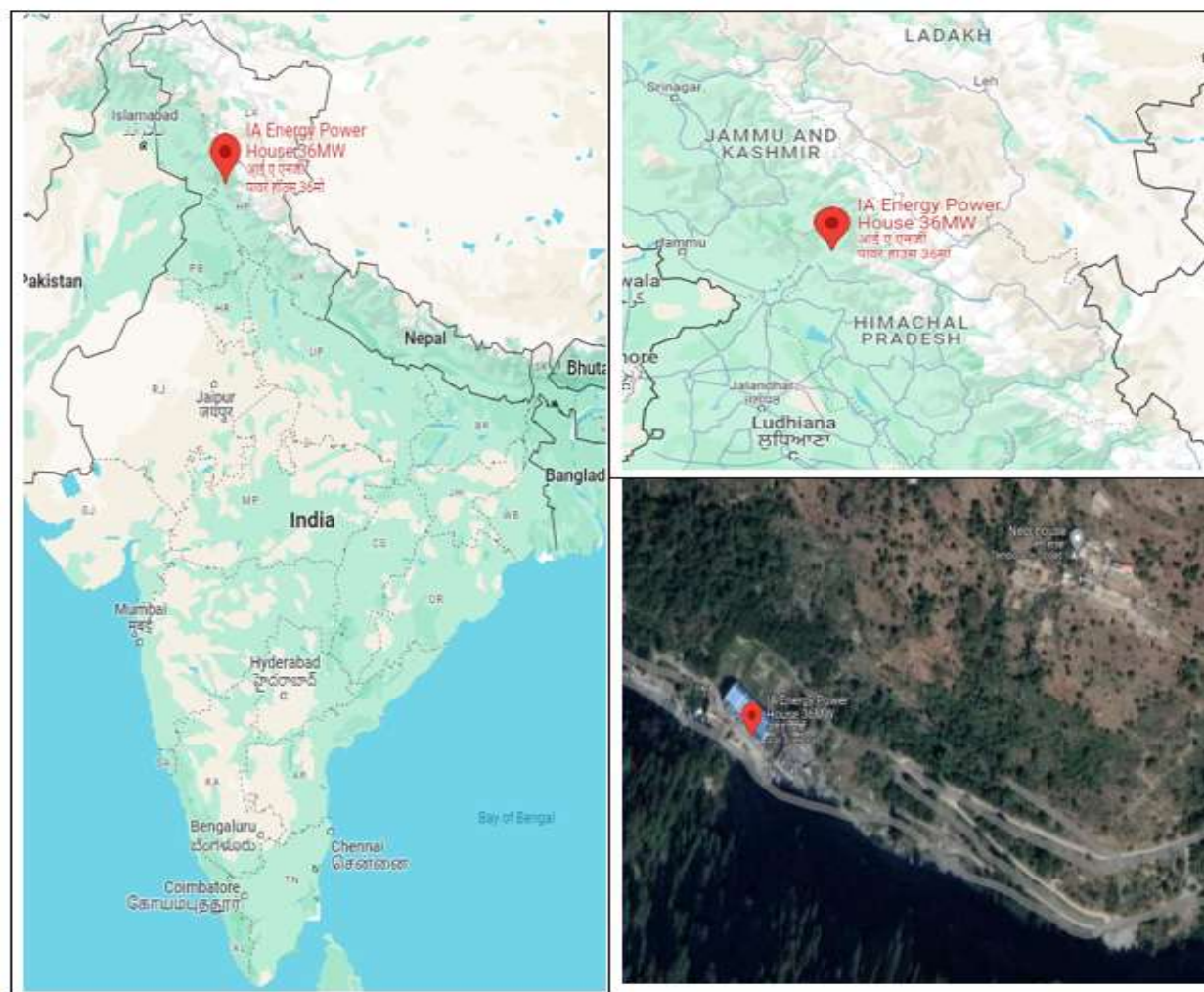
The project is located on Chanju nallah, a tributary of Baira nallah and sub-tributary of the River Ravi. The access distance of the project site from:

State Capital, Shimla : 378 km
 District headquarter, Chamba : 70 km
 Nearest railhead, Pathankot : 190 km

The geographical co-ordinates of the power plant site are:

Longitude : 76°12'06" (76.2016) E to 76°14'52" (76.2477) E
 Latitude : 32°44'14" (32.7372) N to 32°45'43" (32.7619) N

Power house Location: 32°45'40.0"N 76°12'05.0"E (32.761111, 76.201389)
 The project activity is clearly illustrated in the map below:



A.3 Technologies and/or measures

>> Prior to the implementation of the project activity the electricity distribution system was supplied by at least one fossil fuel fired generating unit. The baseline scenario is the same as the scenario existing prior to the start of implementation of the project activity.

The project is a run-of-river hydroelectric power plant with a design discharge of 16.85 m³/sec and design head of 236.67 m. The hydro power plant has an installed capacity of 36 MW (3x12 MW) and is capable of producing 157,850 MWh of power per year in a 90% dependable year with 95% machine availability and operating at a plant load factor of 50.05%. The catchment area at the diversion site is 307 km².

The salient features of the Chanju I Hydro Electric Project are:

Parameter	Value
Net Head of 246 m	1267 rpm
Net Head of 236.67 m	1267 rpm
Type of power house	Surface
Design discharge for individual unit	5.62m ³ /sec

Parameter	Value
Type of switchgear	132kV air insulated switchgear
Speed of turbine	750 rpm
Generation voltage	11kV
Transmission voltage	132kV
transformer (Hybrid SF6 Breaker)	25/20 MVA 3 phase, 11/132 kV

The main components of the project are:

- A 54 m wide gated weir
- A side intake comprising of two segments
- Twin desilting basins to provide flexibility in operation in case one is out of operation
- A 5328 m length of water conductor system
- A 140.4m long, 2.3m diameter surface penstock
- A surface power house to house three vertical axis Francis units of 12MW each
- A tail race channel with a reverse slope that will discharge into the river in the direction of the river flow
- A surface switchyard 100m x 50m which shall house the generator transformer, station transformer and the feeder bays
- 132 kV DC line from Kurthala to Bathri for evacuation of power

The project comprises of a diversion weir across Chanju nallah at about 100 m downstream of the confluence of Chanju and Bhararu nallahs, twin intakes, twin feeder/ connecting tunnels, twin desilting basins approximately 83 m long each, a headrace tunnel approximately 4580 m concrete lined and 748 m steel lined. A 528 m long construction adit, which acts as a surge gallery has been provided at Naredh nallah crossing. Tail water is to be discharged into Chanju nallah through an open channel. A 132 kV switchyard is on the upside of the power house. The Full Reservoir Level (FRL) and Minimum Draw Down Level are to be kept at El. 1,440 m and El. 1,432.75 m respectively. The live storage works out to be 130,700 m³ which is adequate to provide two hours of peaking twice a day at full installed capacity of 36MW. The energy storage capacity of the hydroelectric plant during peak period (1.5 Hours twice in a day) is 50.07GWh.

The turbine characteristics would be selected such that the optimum efficiency falls close to the rated output of the unit at rated head. A pumping station will be provided to supply an adequate quantity of water from the tailrace for cooling of the turbine generator bearings, generator air coolers and selected plant services.

Each synchronous generator would be vertical shaft, salient pole type, 3 phase, 50Hz directly coupled to the turbine.

Project activity is connected to the Grid via two 132kV transmission lines viz. Kurthala Substation and Bathri Substation in LILO arrangement.

In the absence of the project activity the power in the grid would have been supplied by other grid connected power plants and addition of new power plants. The baseline scenario identified in Section B.4 corresponds to this situation.

Age and Technical Life Time:

Designed technical life time of project activity is 40 years. This confirms project activity continues to displace electricity for the life time comparable to the baseline scenario noted.

Technology Transfer:

The project activity does not involve any technology transfer. The total installed capacity of the project activity is 36 MW. The Commissioning date of the project is 27/06/2017.

Baseline Scenario

As the project activity is a new grid-connected renewable power plant/unit, the baseline scenario is the following as per applied methodology: "Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the TOOL 07 "Tool to calculate the emission factor for an electricity system" Version 07.0.0.

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

Purpose of the Project

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

Positive contribution of the project to the following Sustainable Development Goals:

1. **SDG13: Climate Action:** The project leads to reduction of approx. 139,035 tCO₂ per annum due to implementation of project activity.
2. **SDG 7: Affordable and Clean Energy:** The project is generating approx 156,271.79 MWh of clean energy per annum.
SDG 8: Decent Work and Economic Growth: The project is providing direct employment to 01 persons. The project Provide minimum 01 Trainings which are conducted for the O&M staff of the PP.

A.4 Scale of the project

>> The project is a large-scale project utilizing hydro energy to generate electricity. The total installed capacity of the project is 36 MW.

A.5 Funding sources of project

>> There is no public funding from Annex 1 countries and no diversion of Official Development Assistance (ODA) involved in the project activity.

The project is funded by loan and equity. PP want to keep the sources of funding as confidential. Hence as per GS4GG PDD completion guidelines, this confidential information is not provided here.

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

B.1. Reference of approved methodology (ies)

>> **Title:** Grid connected renewable electricity generation.

Methodology: ACM0002, Version 22.0⁹

Sectoral Scope: 01

Type: Energy industries (renewable / non-renewable sources).

Tool:

Tool 21- Tool for the demonstration and assessment of additionality - Version 7.0.0¹⁰

TOOL 07-Tool to calculate the emission factor for an electricity system - Version 07.0¹¹
(EB 100, Annex 04)

TOOL 11- Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period -Version 3.0.1¹² (EB 66 annex 47)

B.2. Applicability of methodology (ies)

>> The project activity meets the applicability conditions of the approved consolidated baseline and monitoring methodology ACM0002, Version 22.0, Sectoral Scope 1, EB 105 as described below:

Para	Applicability	Project Activity
5	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	The project activity is a Renewable Energy Project i.e. run-of-river Hydro Power Project which falls under applicability criteria option 1 (a) i.e., "Install a Greenfield power plant". Hence the project activity meets the given applicability criterion.

⁹ <https://cdm.unfccc.int/UserManagement/FileStorage/R0IJ1X9LQ7W2GOYHSMBFCPE3VKZ685>

¹⁰ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf>

¹¹ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf>

¹² <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-11-v3.0.1.pdf>

Para	Applicability	Project Activity
	e. Involve a replacement of (an) existing plant(s)/unit(s). f. Install a Greenfield power plant together with a grid-connected Greenfield pumped storage power plant. The greenfield power plant may be directly connected to the PSP or connected to the PSP through the grid.	
7	In case the project activity involves the integration of a BESS, the methodology is applicable to grid-connected renewable energy power generation project activities that: a. Integrate BESS with a Greenfield power plant; b. Integrate a BESS together with implementing a capacity addition to (an) existing solar photovoltaic¹ or wind power plant(s)/unit(s); c. Integrate a BESS to (an) existing solar photovoltaic or wind power plant(s)/unit(s) without implementing any other changes to the existing plant(s); d. Integrate a BESS together with implementing a retrofit of (an) existing solar photovoltaic or wind power plant(s)/unit(s). e. Integrate a BESS together with a Greenfield power plant that is operating in coordination with a PSP. The BESS is located at site of the greenfield renewable power plant.	This condition is not relevant, as does not involve the integration of a Battery Energy Storage System (BESS):
8	The methodology is applicable under the following conditions: a) Hydro power plant/unit with or without reservoir, wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit;	The project activity is an installation of a new grid connected renewable energy power plant and hence this condition is met.
	b) In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power capacity addition projects) the existing plant/unit must have started commercial operation prior to the start of a minimum historical reference period of five years. The reference period is used for the calculation of baseline emissions and defined in the baseline emission section. Furthermore, 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;	The project activity does not involve any capacity additions, retrofits or replacements and therefore this condition is not applicable.
	c) In case of Greenfield project activities applicable under paragraph 7(a) above, the project participants shall demonstrate that	This condition is not relevant, as does not involve the integration of a

Para	Applicability	Project Activity
	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);	Battery Energy Storage System (BESS):
	d) The BESS should be charged with electricity generated from the associated renewable energy power plant(s). Only during exigencies 2 may the BESS be charged with electricity from the grid or a fossil fuel electricity generator. In such cases, the corresponding GHG emissions shall be accounted for as project emissions following the requirements under section 5.4.4 below. The charging using the grid or using fossil fuel electricity generator should not amount to more than 2 per cent of the electricity generated by the project renewable energy plant during a monitoring period. During the time periods (e.g., week(s), months(s)) when the BESS consumes more than 2 per cent of the electricity for charging, the project participant shall not be entitled to issuance of the certified emission reductions for the concerned periods of the monitoring period.	This condition is not relevant, as does not involve the integration of a Battery Energy Storage System (BESS):
	e) In case the project activity involves PSP, the PSP shall utilize the electricity generated from the renewable energy power plant(s) that is operating in coordination with the PSP during pumping mode.	This condition is not relevant, as does not involve the PSP
9	In case of hydro power plants, one of the following conditions shall apply: a. The project activity is implemented in existing single or multiple reservoirs, with no change in the volume of any of the reservoirs; or b. The project activity is implemented in existing single or multiple reservoirs, where the volume of the reservoir(s) is increased and the power density calculated using equation (3), is greater than 4 W/m²; or c. The project activity results in new single or multiple reservoirs and the power density, calculated using equation (3), is greater than 4 W/m². d. The project activity is an integrated hydro power project involving multiple reservoirs, where the power density for any of the	The project activity is the installation of a 36 MW run-of-river hydro power project and does not involve the construction of a dam. The reservoir area created by the diversion barrage is of the order of 0.017sq km and hence the power density comes out to be 2,117.64 W/m ² which is greater than 4W/m ² .

Para	Applicability	Project Activity
	reservoirs, calculated using equation (3), is lower than or equal to 4 W/m^2, all of the following conditions shall apply: i. The power density calculated using the total installed capacity of the integrated project, as per equation (4), is greater than 4 W/m^2; ii. Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity; iii. Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m^2 shall be; a. Lower than or equal to 15 MW; and b. Less than 10 per cent of the total installed capacity of integrated hydro power project.	
10	In the case of integrated hydro power projects, project proponent shall: a. Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project; or b. Provide an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs. The purpose of water balance is to demonstrate the requirement of specific combination of reservoirs constructed under CDM project activity for the optimization of power output. This demonstration has to be carried out in the specific scenario of water availability in different seasons to optimize the water flow at the inlet of power units. Therefore, this water balance will take into account seasonal flows from river, tributaries (if any), and rainfall for minimum of five years prior to the implementation of the CDM project activity.	The project activity is a grid connected renewable run-of-river hydro power project. Therefore, this condition is not applicable for project activity.
11	In the case of PSP, the project participants shall demonstrate in the PDD that the project is not using water which would have been used to generate electricity in the baseline.	This condition is not relevant, as does not involve the PSP
12	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	The project activity is an installation of a new grid connected renewable energy project and does

Para	Applicability	Project Activity
	case the baseline may be the continued use of fossil fuels at the site; b. Biomass fired power plants/units.	not involve switching from fossil fuel to renewable energy and hence this criterion is not relevant to the project activity.
13	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 project activity is a new grid connected renewable Hydro power plant and not a retrofits, replacement or capacity additions and therefore this criterion is not applicable to the project activity.
	Applicability conditions of "Tool to calculate the emission factor for an electricity system" Version 07.0(EB 100 Annex 04)¹³	
	This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).	The project is a grid connected Greenfield Hydro power project and thus the tool is applicable.
	Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off- grid power plants. In the latter case, the conditions specified in "Appendix 2: Procedures related to off- grid power generation" should be met. Namely, the total capacity of off-grid power plants (in MW) should be at least 10 per cent of the total capacity of grid power plants in the electricity system; or the total electricity generation by off-grid power plants (in MWh) should be at least 10 per cent of the total electricity generation by grid power plants in the electricity system; and that factors which negatively affect the reliability and stability of the grid are primarily due to constraints in generation and not to other aspects such as transmission capacity.	Steps involved in calculation of Emission Factor is included in section B.6.2 of the PDD as per the requirement of the tool

¹³ <http://cdm.unfccc.int/methodologies/PAMethodologies/tools/am-tool-07-v7.0.pdf>

Para	Applicability	Project Activity
	In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.	Project is located in non-Annex I country and hence the tool is applicable
	Under this tool, the value applied to the CO ₂ emission factor of biofuels is zero.	The project is a Hydro power project and there is no involvement of biofuels.

The applicability condition for TOOL-11 “Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period” is illustrated in section B.4 of the PDD.

Applying the Tool to calculate the emission factor for an electricity system, the combined margin will be calculated through an evaluation of the integrated single Indian grid¹⁴ since the North, Eastern, Western and Northeastern (NEWNE) regional grid and the Southern grid have been synchronized. The NEWNE regional grid consists of contributions from each member state in the North, Eastern, Western and Northeastern sectors. Each of these states has their own generation systems that ultimately feed into the NEWNE grid. The North Regional Load Dispatch Centre (RLDC) is responsible for the dispatch of electricity to all the member states including Uttarakhand where this project is located.

As mentioned above, the NEWNE Grid was synchronized with the Southern Grid to form one integrated single Indian Grid. Hence, key information and data sources used to calculate the combined margin for the Integrated grid was obtained from the CO₂ Database Version 18 published by the Central Electricity Authority in September. Further detail regarding these data sources is provided in Section B.6.1.

B.3. Project boundary

>>

Project boundary has been ascertained using methodology ACM0002 (Version 22.0) - “The spatial extent of the project boundary includes the project power plant/unit and

¹⁴ CO₂ Baseline Database for the Indian Power Sector, User Guide, Version 11, April 2016

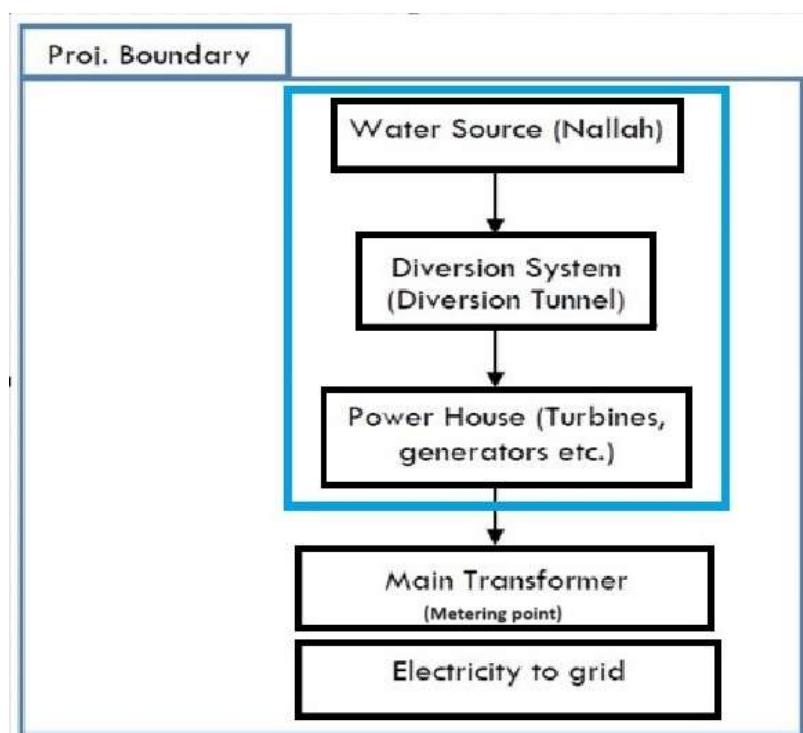
all power plants/units connected physically to the electricity system that the CDM project power plant is connected to.

In case of the project activity the project boundary thus includes the project hydro power plant and all the other power plants connected to the NEWNE grid (Now Indian Grid) of India.

The electricity system is defined according to the "Tool to calculate the emission factor for an electricity system, version 07.0".

For the purpose of the project activity the relevant grid is defined by the power generating units serving the same grid as the project activity. In the case of India there are regional grids which facilitate the transfer of electricity between states and which are supplied by central sector power stations operating in the region. Himachal Pradesh is part of the northern region and we have therefore considered the NEWNE grid (Now Indian Grid).

The below flow diagram physically delineates the project activity and its relevant information:



The GHG emission sources considered for the project boundary and their explanations are as follows:

Source		GHGs	Included?	Justification/Explanation
Baseline scenario	Electricity generation from power plants Connected to Indian grid	CO ₂	Included	Main emission source
		CH ₄	Excluded	Not required as per ACM0002
		N ₂ O	Excluded	Not required as per ACM0002
Project scenario	Electricity generation from grid connected Hydro power project	CO ₂	Excluded	Electricity generation from Hydro does not lead to emissions of greenhouse gases.
		CH ₄	Excluded	Excluded for simplification.
		N ₂ O	Excluded	Excluded for simplification.

B.4. Establishment and description of baseline scenario

>>

The project activity is generation of electricity using hydro energy and exporting the same to the grid system, which is also fed by other fuel sources such as fossil and non-fossil types. Emission reductions due to the project activity are considered to be equivalent to the emissions avoided in the baseline scenario by displacing the grid electricity. Emission reductions are related to the electricity exported by the project and the actual generation mix in the grid system.

As per para 27 of the methodology ACM0002 (Version 22) "The baseline scenario is electricity delivered to the grid by the project activity that 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".

As the project activity displaced electricity from Integrated Indian grid, hence Integrated Indian grid connected power plants are considered for the project baseline.

For the second crediting period, the continued validity of the original baseline should be assessed.

Baseline scenario for the second crediting period in line with the “Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period.” Version 03.0.1¹⁵ .

The tool stipulates the following steps to be carried out.

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

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

The baseline scenario remains unchanged that is electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the TOOL 07 “Tool to calculate the emission factor for an electricity system, Version 07.0”. and is in compliance with all the relevant mandatory national and/or sectoral policies.

There is currently no specific technology identified by the host country for projects aimed at meeting the NDC target, nor have any standards or guidelines been published to determine a project's contribution towards achieving the NDC target. Furthermore, India has already met its NDC target, eliminating the risk of double counting. However, if there should any guidelines be published in the future, the Project Developer (PD) will ensure that GS project activities are not used for double accounting.

Step 1.2: Assess the impact of circumstances

The baseline scenario identified at the validation of the project activity was the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid connected power plants and by the addition of new generation sources into the grid. Thus, this project activity was a voluntary investment which intends to replace equivalent amount of electricity at grid from renewable source.

¹⁵ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-11-v3.0.1.pdf>

PP was not bound to incur this investment; hence absence of project activity (i.e. the investment) does not lead to any continued baseline practice for PD within their scope whereas the continued operation of the project activity would continue to replace equivalent amount of electricity at grid. Hence, the same baseline as identified in the previous crediting period is still valid for the project. Therefore, the assessment of the changes in market characteristics is not required for the renewal of the project's crediting period.

Nevertheless, there is an impressive growth attained by the Indian Power Sector within the recent years, the installed capacity has grown from mere 1,713 MW in 1950 to 416,059 MW as on 31.03.2023, consisting of 237,269 MW Thermal, 125,160 MW RES (Renewable Energy Source) and 6,780 MW Nuclear. Sector-wise details of installed capacity are shown in Table 1. However, it is evident from Table 1 that the installed capacity is predominantly coal based and therefore, is a major source of carbon dioxide emissions in India. Hence, there exists scope for reducing the CO₂ emissions in the country by increased use of renewable energy sources.

Table 1: Sector- wise installed capacity (MW) as on 31/03/2023 (CEA Database version 19)

Sector	Thermal					Nuclear	Hydro	RES	Total
	Coal	Lignite	Gas	Diesel	Total				
State	67537.50	1150.00	7012.05	280.31	75979.86	0.00	27254.45	2492.11	105726.43
Central	65100.00	3640.00	7237.91	0.00	75977.91	6780.00	15664.72	1632.30	100054.93
Private	72598.00	1830.00	10574.24	308.89	85311.14	0.00	3931.00	121035.39	210277.53
All India	205235.50	6620.00	24824	589	237269	6780.00	46850	125160	416059

It is evident from Table 1 that the installed capacity is predominantly coal based and therefore, is a major source of carbon dioxide emissions in India. Hence, there exists scope for reducing the CO₂ emissions in the country by way of fuel substitution, increased use of renewable energy sources, and also by improving the thermal efficiency of power generation.

Thus, current baseline remain same and there is no impact if circumstances, existing at the time of requesting renewal of crediting period.

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 renewal is requested

As explained in step 1.2, the baseline scenario was the electricity import/generation from the power plants connected to the electricity grid. The project activity is green field project and there is no any baseline equipment or investment involved in project activity. Therefore, this condition is not applicable to the project activity.

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

This step stipulates that “Where emission factors, values or emission benchmarks are used and determined only once for the crediting period, they should be updated, except if the emission factors, values or emission benchmarks are based on the historical situation at the site of the project activity prior to the implementation of the project and cannot be updated because the historical situation does not exist anymore as a result of the GS project activity.”

In the context of the present project activity the emission factor has been updated along with the approach used to calculate the emission factor.

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

As evident from the explanation provided above the baseline scenario remains unchanged. Only the approach used to calculate the baseline emission factor is updated as per the latest version of CEA database available at the time of PDD submission for renewal.

In line with the PRINCIPLES & REQUIREMENTS Version 1.2 the impact of new relevant national and/or sectoral policies and circumstances on the baseline taking into account relevant EB guidance with regard to renewal of the crediting period at the time of requesting renewal of crediting period; and the correctness of the application of an approved baseline methodology for the determination of the continued validity of the baseline or its update, and the estimation of emission reductions for the applicable crediting period

Impact of the national and/or sectoral policies and circumstances upon the baseline scenario of the project activity

The Government of India enacted the Electricity Act in the year 2003 to harmonize and rationalize the provisions in the existing laws. The Act consolidated the laws relating to generation, transmission, distribution, trading and use of electricity. With the Enactment of the act, the then existing laws viz, The Indian Electricity Act 1910, The Electricity Supply Act, 1948 and The Electricity Regulatory Commissions Act, 1998 were repealed. The Electricity Act 2003 was in force at the time of the completion of the baseline study for the registered PDD.

Section 3 of the said act required the Central Government to prepare the national electricity policy and tariff policy, in consultation with the State Governments and the Authority for development of the power system based on optimal utilization of resources such as coal, natural gas, nuclear substances or materials, hydro and renewable sources of energy. In accordance with the section 3 of the Electricity Act 2003, the Central Government notified the National Electricity Policy on 12th February 2005 which was in force at the time of completion of the baseline study as stated in the registered PDD of the project activity. This policy has not been revised since then and is currently in force as well.

In addition to the above policies, State Electricity Regulatory Commissions (SERCs) have announced preferential tariffs and Indian Renewable Energy Development Agency (IREDA) provides term loan assistance towards establishing biomass power projects. All these fiscal and financial incentives were in force at the time of completion of the baseline study for the registered PDD of the project activity and still continue to exist.

There is no mandatory national and/or sectoral policies have come into effect that would affect the compliance of the current baseline. Hence, it can be concluded the current baseline complies with all relevant mandatory national and/or sectoral policies that have come into effect after the submission of the project activity for validation and are applicable at the time of requesting renewal of the crediting periods.

However, in spite of the financial incentives given by the government to renewable power projects in India the generation from the low cost must run resources connected

to the Southern Grid has not increased to such an extent that this would lead to more than 50% contribution from the low cost must run resources towards the total generation from the Indian Grid.

The approved consolidated baseline methodology, ACM0002 (Version 22), has been used to determine the baseline and the estimation of emission reductions for the applicable crediting period. As referred in the methodology "Tool to calculate the emission factor for an electricity system" (version 07.0) has been used to determine continued validity of the baseline based on combined margin (CM) calculations.

As per CEA database version 19, the fossil fuel dominated electricity is more than renewable sector and is continuing with same pattern. In light of the above discussion, it is to be concluded that in accordance with relevant guidelines stipulated in the PRINCIPLES & REQUIREMENTS Version 1.2 national and/or sectoral policies and circumstances had been considered towards formulating the OM & BM baseline scenario. Hence the baseline scenario as applied for the present project activity remains justified.

As per the approved consolidated Methodology ACM0002 (Version 22) para 27: "If the project activity is the installation of a Greenfield power plant with or without a BESS as described under paragraph 5(a) or paragraph 7(a) or paragraph 7(e) above, the baseline scenario is electricity delivered to the grid by the project activity that 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.

The project activity involved setting up of hydro power project to produce electricity and supply to the grid. In the absence of the project activity, the equivalent amount of power would have been supplied by the state grid (part of NEWNE grid (Now Indian Grid)), which is fed mainly by fossil fuel fired plants.

In the absence of the project activity, the equivalent amount of power would have been drawn from the state grid. Hence, the baseline for the project activity is the equivalent amount of power from the NEWNE (Indian) grid.

The combined margin ($EF_{grid,CM,y}$) is the result of a weighted average of two emission factor pertaining to the electricity system: the operating margin (OM) and build margin (BM). Calculations for this combined margin must be based on data from an official source¹⁶ (where available) and made publicly available. The CEA database version 19 is the latest available data at the time of PD submission to VVB for validation, hence same is considered for emission factor calculations.

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

¹⁶ https://cea.nic.in/wp-content/uploads/baseline/2024/04/User_Guide_Version_19.0.pdf

Parameter	Value	Nomenclature	Source
EF _{grid,CM,y}	0.8897 tCO ₂ /MWh	Combined margin CO ₂ emission factor for the project electricity system in year y	Calculated as the weighted average of the operating margin (0.25) & build margin (0.75) values for second crediting period, sourced from Baseline CO ₂ Emission Database, Version 19.0 ¹⁷ , December 2023 published by Central Electricity Authority (CEA), Government of India.
EF _{grid,OM,y}	0.9580 tCO ₂ /MWh	Operating margin CO ₂ emission factor for the project electricity system in year y	Calculated as the last 3 year (2020-2021, 2021-2022 and 2022-23) generation-weighted average, sourced from Baseline CO ₂ Emission Database, Version 19.0, December 2023 published by Central Electricity Authority (CEA), Government of India.
EF _{grid,BM,y}	0.8670 tCO ₂ /MWh	Build margin CO ₂ emission factor for the project electricity system in year y	Baseline CO ₂ Emission Database, Version 19.0, December 2023 published by Central Electricity Authority (CEA), Government of India.

This emission factor will remain fixed for entire crediting period.

The baseline emission calculation for the project activity is attributable to the CO₂ Emission that could have been produced by the fossil fuel based power plants in absence of the project activity. Therefore the amount electricity supplied to the NEWNE grid (Now part of Indian Grid) will be multiplied by the grid emission factor to calculate the baseline emissions reduced by the project activity.

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

Where

- BE_y : Baseline Emissions in year y; tCO₂
 EG_{facility,y} : Quantity of net electricity supplied to the grid as a result of the implementation of the CDM project activity in year y (MWh)
 EF_{grid,CM,y} : CO₂ emission factor of the grid in year y; tCO₂/MWh

As per methodology, combined grid emission factor as per the "Tool to calculate the emission factor for an electricity system" version 07 is calculated as below.

¹⁷ https://cea.nic.in/wp-content/uploads/baseline/2024/04/User_Guide_Version_19.0.pdf

CO₂ Baseline Database for the Indian Power Sector, Version 19, December 2023 published by Central Electricity Authority (CEA), Government of India has been used for the calculation of emission reduction.

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

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

Step 1: Identify the relevant electricity systems

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

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

Table: Geographical Scope of Indian Electricity Grid

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

Northern	Eastern	Western	North-Eastern	Southern
Uttar Pradesh				
Uttarakhand				

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

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

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

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

The Project Participant has chosen only grid power plants in the calculation.

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

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

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

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

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

	2018-19	2019-20	2020-21	2021-22	2022-23
India	14.5%	17.0%	16.5%	15.8%	15.33%

The above data clearly shows that the percentage of total grid generation by low-cost/ must-run plants (on the basis of average of five most recent years) for the Indian grid is less than 50 % of the total generation. Thus, the Average OM method cannot be applied, as low cost/must run resources constitute less than 50% of total grid generation.

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

For the simple OM, the simple adjusted OM and the average OM, the emissions factor can be calculated using either of the two following data vintages:

Ex-ante option: if the ex-ante option is chosen, the emission factor is determined once at the validation stage, thus no monitoring and recalculation of the emissions factor during the crediting period is required.

OR

Ex-post option: if the ex-post option is chosen, the emission factor is determined for the year in which the project activity displaces grid electricity, requiring the emissions factor to be updated annually during monitoring.

PP has chosen ex-ante option for calculation of Simple OM emission factor using a 3-year generation-weighted average, based on the most recent data available at the time of submission of the PD to the VVB for validation.

OM determined at validation stage will be the same throughout the crediting period. There will be no requirement to monitor & recalculate the emission factor during the crediting period.

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

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

Net Generation in Operating Margin (GWH) (incl. Imports)			
	2020-21	2021-2022	2022-23
Indian Grid	958,218	1,035,672	1,117,846

Simple Operating Margin (tCO ₂ /MWh) (incl. Imports) (1) (2)			
	2020-21	2021-2022	2022-23
Indian Grid	0.9402	0.9605	0.9710

Weighted Generation Operating Margin	
Indian Grid	0.9580

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

As per Methodological tool: "Tool to calculate the emission factor for an electricity system" (Version 07.0, EB 100, Annex 4) para 70:

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

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

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

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

Build Margin (tCO ₂ /MWh) (not adjusted for imports)	
	2022-23
Indian Grid	0.8670

Step 6: Calculate the combined margin (CM) emission factor (EF_{grid,CM,y})

As per Methodological tool: "Tool to calculate the emission factor for an electricity system" (Version 07.0, EB 100, Annex 4) para 79:

The calculation of the combined margin (CM) emission factor (EF_{grid,CM,y}) is based on one of the following methods:

- (a) Weighted average CM; or
- (b) Simplified CM.

PP has chosen option (a) i.e. weighted average CM to calculate the combined margin emission factor for the project activity.

The combined margin emissions factor is calculated as follows:

$$EF_{grid,CM,y} = EF_{grid,OM,y} * W_{OM} + EF_{grid,BM,y} * W_{BM}$$

Where

EF _{grid,BM,y}	=	Build margin CO ₂ emission factor in year y (t CO ₂ /MWh)
EF _{grid,OM,y}	=	Operating margin CO ₂ emission factor in year y (t CO ₂ /MWh)
W _{OM}	=	Weighting of operating margin emissions factor (percent)
W _{BM}	=	Weighting of build margin emissions factor (percent)

As per para 86 b) of tool, the following default values should be used for W_{OM} and W_{BM}:

All other projects: W_{OM} = 0.5 and W_{BM} = 0.5 for the first crediting period, and W_{OM} = 0.25 and W_{BM} = 0.75 for the second and third crediting period, unless otherwise specified in the approved methodology which refers to this tool.

Since project activity is of Hydro power generation, the above weightage has been considered for OM and BM.

Therefore, EF_{grid,CM,y} = 0.9580 * 0.25 + 0.8670 * 0.75

$$= 0.8897 \text{ tCO}_2/\text{MWh}$$

For the purpose of calculations, $EF_{\text{grid,CM},y} = EF_{\text{CO}_2,\text{grid},y}$

Using the fixed carbon dioxide emissions factor determined above, this equation may be simplified to the following:

$$BE_y = EG_y * 0.8897$$

As per the methodology, for Greenfield renewable energy power plants:

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

Where,

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

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

Since the carbon dioxide emission factor has been fixed ex-ante at 0.8897 tCO₂/MWh, baseline emissions are calculated as:

$$BE_y = EG_{\text{facility},y} * 0.8897$$

Project Emissions: For most renewable power generation projects activities $PE_y = 0$. As per applied methodology only emission associated with the fossil fuel combustion, emission from operation of geo-thermal power plants due to release of non-condensable gases, emission from water reservoir of Hydro should be accounted for the project emission. Since the project activity is a Hydro power project,

The project activity results in new reservoir and as per the methodology –

For hydro power project activities that result in new single or multiple reservoirs and hydro power project activities that result in the increase of single or multiple existing reservoirs, project proponents shall account for project emissions, estimated as follows:

(a) If the power density (PD) of power plant is greater than 4 W/m² and less than or equal to 10 W/m²:

$$PE_{HP,y} = \frac{EF_{\text{Res}} * TEG_y}{1000}$$

Where

$PE_{HP,y}$ = Emission from water reservoirs(tCO₂e/yr)

EF_{Res} = is the default emission factor for emissions from reservoirs of hydro power plants in year y (kgCO₂e/MWh)

TEG_y = Total electricity produced by the project activity, including the electricity supplied to the grid and the electricity supplied to internal loads, in year y (MWh).

(b) If the power density (PD) of the power plant is greater than 10 W/m²:

$$PE_{HP,y} = 0$$

The power density of the project activity is calculated as follows:

$$PD = \frac{Cap_{PJ} - Cap_{BL}}{A_{PJ} - A_{BL}}$$

Where

PD = Power density of the project activity, in W/m²

Cap_{PJ} = Installed capacity of the hydro power plant after the implementation of the project activity (W)

Cap_{BL} = Installed capacity of the hydro power plant before the implementation of the project activity (W)

For New hydro power plants, this value is Zero.

A_{PJ} = Area of the single or multiple reservoirs measured in the surface of the water, after the implementation of the project activity, when the reservoir is full (m²)

A_{BL} = Area of the single or multiple reservoirs measured in the surface of the water, before the implementation of the project activity, when the reservoir is full (m²). For new reservoirs, this value is zero."

Hence $PE_y = 0$

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

Hence, $LE_y = 0$

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

$$ER_y = BE_y - PE_y$$

ER_y = Emission reductions in year y (t CO₂e/year)

BE_y = Baseline emissions in year y (t CO₂/year)

PE_y = Project emissions in year y (t CO₂e/year)

B.5. Demonstration of additionality

>>This project is already registered under GOLD STANDARD FOR THE GLOBAL GOALS (GS4GG)¹⁸ and completed its first crediting period. There is no change in the additionality of the project. So, the additionality of the project can be referred from the section B.5 of the registered PDD.

B.5.1 Prior Consideration

>>The This project is already registered under GOLD STANDARD FOR THE GLOBAL GOALS. Please refer section B.5 of the registered PDD for the information on prior consideration of the project.

B.5.2 Ongoing Financial Need

>> **Project Financial Overview and Dependency on Carbon Revenue:**

The project has successfully demonstrated additionality at the time of registration, which supports its 40-year lifespan. However, despite its potential, actual electricity generation and the corresponding emission reductions have consistently fallen short of estimates, underscoring the project's reliance on carbon credits for financial sustainability. Since commissioning, carbon revenues have been crucial for sustaining the project, though ongoing financial needs stem from several operational aspects, including operation and maintenance (O&M) expenses, employee salaries, training costs, consultant costs, Validation and Verification Body (VVB) costs, and Gold Standard for Global Goals (GS4GG) costs. Notably, during the initial crediting period, the project did not claim Gold Standard Verified Emission Reductions (GS VERs), further highlighting the ongoing financial necessity to sustain operations.

Generation Performance Metrics: The Plant Load Factor as per registered PDD is 50.05% and during Crediting period 01, it has shown significant fluctuations, indicating reduced generation capacity. The following are key changes in PLF over recent years:

Start Date	End Date	Days	Generation in KWh/ Year	Tariff Rate ¹⁹ (Rs/ kWh)	PLF achieved during Year	Variation in PLF (%)
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¹⁸ <https://registry.goldstandard.org/projects/details/1425>

¹⁹ As per Invoice

26/07/2017	31/03/2018	249	30,637,880.00	3.10	14.24%	-58.29 ²⁰ %
01/04/2018	31/03/2019	365	137,442,000.00	3.63	43.58%	-12.92%
01/04/2019	31/03/2020	366	169,759,000.00	3.74	53.68%	7.26%
01/04/2020	31/03/2021	365	159,343,000.00	4.50	50.53%	0.95%
01/04/2021	31/03/2022	365	146,522,000.00	4.50	46.46%	-7.17%
01/04/2022	31/03/2023	365	140,022,000.00	4.50	44.40%	-11.29%
01/04/2023	31/03/2024	366	154,936,710.00	4.50	49.00%	-2.11%
Total for 5 Year		1710	643,703,880.00	3.89	43.57%	-12.95%
Total for 7 Year		2441	938,662,590.00	4.07	44.51%	-11.07%

According to the registered PDD and IRR sheet (<https://cdm.unfccc.int/Projects/DB/TUEV-SUED1431953233.8/view>), the Equity IRR without CDM for the project was calculated at 9.14%, which is below the benchmark of 12.25%. The projected Plant Load Factor (PLF) during registration was 50.05%, but the actual PLF achieved during the 5-year crediting period was 43.57%, and 44.51% for the 7-year crediting period, both significantly lower than expected. This deviation resulted in significant revenue shortfalls: 13.08% less revenue during the 5-year period (actual revenue: 2,259.29 million INR against the expected 2,599.19 million INR) and 6.28% less revenue during the 7-year period (actual revenue: 3,410.43 million INR against the expected 3,638.87 million INR). Since electricity generation is the sole revenue source, the reduced PLF undermines the project's financial sustainability, affecting its ability to contribute to Sustainable Development Goals (SDGs) like renewable energy promotion, job creation, and climate change initiatives. To sustain the project, ongoing financial support, operational improvements, and diversification of revenue streams are essential.

Income & Expenses Record: The financial performance over the years reflects significant variability and persistent challenges. Total income in FY 2024 dropped sharply to ₹603.44 million from ₹1,587.06 million in FY 2023 and ₹1,922.10 million in

²⁰ Using 34.14% as the expected PLF for the 249-day period would provide a more balanced value, giving a Variation in PLF (%) of -58.28%.

FY 2022, highlighting a substantial revenue decline. Total comprehensive income for FY 2024 was ₹60.31 million, a drastic decrease from ₹329.11 million in FY 2023 but higher than ₹40.37 million in FY 2022. The net profit margin as a percentage of total income remained negative across all years, standing at -90% in FY 2024, consistent with FY 2021 (-90%) and worse than FY 2023 (-79%). Earlier years like FY 2020, FY 2019, and FY 2018 reported margins of -103%, -101%, and -294%, respectively. This data underscores consistent financial struggles, marked by declining revenue and negative profitability. Details are tabulated below:

STATEMENT OF PROFIT & LOSS FOR THE YEAR ENDED				
Particulars	31/03/2024	31/03/2023	31/03/2022	31/03/2021
Total Income (INR Million)	603.44	1,587.06	1,922.10	885.96
Total Expenses (INR Lakhs)	5,181.98	11,799.89	18,528.62	7,592.83
Profit Before Tax (INR Lakhs)	852.46	4,373.13	692.34	1,266.80
Total Tax Expenses (INR Lakhs)	251.06	1,081.57	288.54	333.81
Profit -loss for Year (INR Lakhs)	601.40	3,291.56	403.80	932.99
Total comprehensive Income (INR Lakhs)	603.13	3,291.06	403.66	924.73
Total comprehensive Income (INR Million)	60.31	329.11	40.37	92.47
Total % of Income (Net profit of Gross Revenue)	9.99%	20.74%	2.10%	10.44%

STATEMENT OF PROFIT & LOSS FOR THE YEAR ENDED			
Particulars	31/03/2020	31/03/2019	31/03/2018
Total Income (INR Million)	800.74	991.92	225.68
Total Expenses (INR Lakhs)	8,403.79	10,088.89	8,566.25
Profit Before Tax (INR Lakhs)	122.01	-169.68	-6,309.41
Total Tax Expenses (INR Lakhs)	392.30	-75.36	-1,940.27
Profit -loss for Year – (INR Lakhs)	-270.29	-94.32	-4,369.13
Total comprehensive income (INR Lakhs)	-272.90	-92.42	-4,367.63
Total comprehensive Income (INR Million)	-27.29	-9.24	-436.76
Total % of Income (Net profit of Gross Revenue)	-3.41%	-0.93%	-193.53%

Project Borrowings Details: With borrowings accounting for 56.23% of the project cost, securing additional carbon revenue is critical to improving operational efficiency, stabilizing income streams, and ensuring sustainable growth. The project developer must address the repayment of borrowings, including a term loan from the State Bank of India with an outstanding amount of ₹1,530.34 million. Additionally, a bank overdraft carved out of the term loan, amounting to ₹179.63 million, is repayable in 176 monthly

instalments starting from February 2024, with no immediate lump-sum payment required.

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)
SDG -13 :Take urgent action to combat climate change and its impacts	Target 13.2: Integrate climate change measures into national policies, strategies and planning.	Impact: Emission Reductions Indicator: 13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)
SDG -7 :Ensure access to affordable, reliable, sustainable and modern energy for all	Target 7.2 : By 2030, increase substantially the share of renewable energy in the global energy mix.	Impact- MWh of renewable energy generations Indicator 7.2.1- Renewable energy share in the total final energy consumption

SDG - 8 : Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	Target 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.	Impact- Employment generated through project Indicator: 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities
	Target 8.6: By 2020, substantially reduce the proportion of youth not in employment, education or training.	Impact- Number of trainings Indicator: 8.6.1 Proportion of youth (aged 15-24 years) not in education, employment or training.

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

>>

Sustainable Development Goals Targeted	Methodological choices/approaches for estimating the SDG outcome
SDG -7 : Ensure access to affordable, reliable, sustainable and modern energy for all	Measurement Method: - Electricity produced and supplied to the grid is monitored through energy meter. Net electricity will be calculated by state electricity board and PP on monthly basis and provided in the share certificate/monthly report or equivalent. The other parameters used for net electricity supplied to grid are mentioned in monitoring plan. QA/QC Process: This parameter is monitored monthly and value of parameter will be cross checked with invoices. The meters will be calibrated on regular frequency.
SDG - 8 : Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	Measurement Method: - Training and employment generations monitored through training records, staff register or letter from O&M contractor for training and employment details or HSE/HR records. QA/QC Process: This parameter is based on records, data and no any QA/QC procedure required. The VVB can confirm this parameter with interview with PP or Site incharge or employees for training and employment generation.
SDG -13 : Take urgent action to combat climate change and its impacts	Measurement Method: - The emission reduction parameter is calculated as product of net electricity supplied to grid and grid emission factor. The grid

emission factor is ex-ante parameter and determined based on data obtained from "CO₂ Baseline Database for Indian Power Sector" version 19, published by the Central Electricity Authority, Ministry of Power, Government of India. This is in line with "Tool to calculate the emission factor for an electricity system, version 7". The emission reductions are calculated as per registered PDD and as per methodology requirement.

QA/QC Process: This parameter is calculated, and no any QA/QC procedure required.

B.6.2 Data and parameters fixed ex ante

Relevant SDG Indicator	SDG 13 (Indicators 13.2.1)
Data/parameter	EF_{grid,OM,y}
Unit	tCO ₂ /MWh
Description	Operating Margin CO ₂ emission factor in year y
Source of data	Calculated from CEA database, Version 19, December 2023
Value(s) applied	0.9580
Choice of data or Measurement methods and procedures	Calculated as per "Tool to calculate the emission factor for an electricity system, version 07" as per the latest data available for the most three recent years 2020-2021, 2021-2022 and 2022-23. The data is obtained from "CO ₂ Baseline Database for Indian Power Sector" version 19, published by the Central Electricity Authority, Ministry of Power, Government of India.
Purpose of data	For the Calculation of the Baseline Emission
Additional comment	This data will be archived for 2 years beyond the crediting period.

Relevant SDG Indicator	SDG 13 (Indicators 13.2.1)
Data/parameter	EF_{grid,BM,y}
Unit	tCO ₂ /MWh

Description	Build Margin CO ₂ emission factor in year y
Source of data	Calculated from CEA database, Version 19, December 2023
Value(s) applied	0.8670
Choice of data or Measurement methods and procedures	Calculated as per "Tool to calculate the emission factor for an electricity system, version 07" as per the latest data available for the most three recent years 2020-2021, 2021-2022 and 2022-23. The data is obtained from "CO ₂ Baseline Database for Indian Power Sector" version 19, published by the Central Electricity Authority, Ministry of Power, Government of India.
Purpose of data	For the Calculation of the Baseline Emission
Additional comment	This data will be archived for 2 years beyond the crediting period.

Relevant SDG Indicator	SDG 13 (Indicators 13.2.1)
Data/parameter	EF_{grid,CM,y}
Unit	tCO ₂ /MWh
Description	Combined margin CO ₂ emission factor in year y
Source of data	Calculated from CEA database, Version 19, December 2023
Value(s) applied	0.8897
Choice of data or Measurement methods and procedures	The combined margin emissions factor is calculated as follows for second crediting period: $EF_{grid,CM,y} = EF_{grid,OM,y} * W_{OM} + EF_{grid,BM,y} * W_{BM}$ Where EF_{grid,BM,y} = Build margin CO₂ emission factor in year y (t CO₂/MWh) EF_{grid,OM,y} = Operating margin CO₂ emission factor in year y (t CO₂/MWh) W_{OM} = Weighting of operating margin emissions factor (25%) W_{BM} = Weighting of build margin emissions factor (75%)
Purpose of data	Calculation of 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: Ensure access to affordable, reliable, sustainable and modern energy for all

The project activity generates 156,271.79 MWh of affordable and clean energy per year.

SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

The project leads to employment opportunities which would not have been possible in the baseline scenario. The project provides employment of at least 5 persons in second crediting period²¹.

Also, project activity improves the quality of employment by giving training to employee.

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

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

As per para 59 of methodology, being Greenfield project,

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

$$BE_y = EG_{\text{facility},y} * EF_{\text{grid},CM,y}$$

Where,

$EG_{\text{facility},y}$ = Total quantity of net electricity delivered to the grid

Project Investors' Name	Capacity	PLF (%)	Net Losses	Generate d Power (MWh) p.a.	Baseline Emission Factor (tCO ₂ /MWh)	Baseline emissions (tCO ₂ /year)
IA Hydro Energy Private Limited	36 MW	50.05 %	1%	156,271.79	0.8897	139,035

$$EF_{\text{grid},CM,y} = \text{Baseline emission factor} \\ = 0.8897 \text{ tCO}_2/\text{MWh}$$

$$BE_y = 156,271.79 \text{ MWh} * 0.8897 \text{ tCO}_2/\text{MWh} \\ = 139,035 \text{ tCO}_2$$

As per Section B.4: PE_y = 0

Thus

²¹During CP renewal period, at least one new job and one training session will be provided annually. A total of 75 people are directly employed due to the project activity, and all will continue working during the CP renewal period.

$$ER_y = BE_y - PE_y$$

$$ER_y = BE_y - 0$$

$$ER_y = BE_y$$

Therefore

$$ER_y = BE_y = 139,035 \text{ tCO}_2$$

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

SDG 7 – Ensure access to affordable, reliable, sustainable and modern energy for all, Net electricity supplied to national grid (MWh)

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
26/07/2022 to 25/07/2023	0 MWh/yr	156,271.79 MWh/yr	156,271.79 MWh/yr
26/07/2023 to 25/07/2024	0 MWh/yr	156,271.79 MWh/yr	156,271.79 MWh/yr
26/07/2024 to 25/07/2025	0 MWh/yr	156,271.79 MWh/yr	156,271.79 MWh/yr
26/07/2025 to 25/07/2026	0 MWh/yr	156,271.79 MWh/yr	156,271.79 MWh/yr
26/07/2026 to 25/07/2027	0 MWh/yr	156,271.79 MWh/yr	156,271.79 MWh/yr
Total	0 MWh/yr	781,358.96 MWh/yr	781,358.96 MWh/yr
Total number of crediting years		5	
Annual average over the crediting period	0 MWh/yr	156,271.79 MWh/yr	156,271.79 MWh/yr

Since project activity is renewable electricity generation, the quantity of Affordable and Clean Energy is mentioned under project estimate. In baseline, no any renewable energy generation, hence mentioned as zero.

SDG 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
26/07/2022 to 25/07/2023	0 Training, 0 Jobs	1 Training, 01 Jobs	1 Training, 01 Jobs

26/07/2023 to 25/07/2024	0 Training, 0 Jobs	1 Training, 01 Jobs	1 Training, 01 Jobs
26/07/2024 to 25/07/2025	0 Training, 0 Jobs	1 Training, 01 Jobs	1 Training, 01 Jobs
26/07/2025 to 25/07/2026	0 Training, 0 Jobs	1 Training, 01 Jobs	1 Training, 01 Jobs
26/07/2026 to 25/07/2027	0 Training, 0 Jobs	1 Training, 01 Jobs	1 Training, 01 Jobs
Total	0 Training, 0 Jobs	05 Training, 05 Jobs	05 Training, 05 Jobs

Total number of crediting years 5

Annual average over the crediting period 0 Training, 0 Jobs 1 Training, 01 Jobs 1 Training, 01 Jobs

The project leads to employment opportunities which would not have been possible in the baseline scenario. The project provides employment at least 05 persons. Also, project activity improves the quality of employment by giving training to employee. Thus minimum 1 training/ year will be conducted by the project activity.

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

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

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
26/07/2022 to 25/07/2023	139,035 tCO ₂	0 tCO ₂	139,035 tCO ₂
26/07/2023 to 25/07/2024	139,035 tCO ₂	0 tCO ₂	139,035 tCO ₂
26/07/2024 to 25/07/2025	139,035 tCO ₂	0 tCO ₂	139,035 tCO ₂
26/07/2025 to 25/07/2026	139,035 tCO ₂	0 tCO ₂	139,035 tCO ₂
26/07/2026 to 25/07/2027	139,035 tCO ₂	0 tCO ₂	139,035 tCO ₂
Total	695,175 tCO ₂	0 tCO ₂	695,175 tCO ₂
Total number of crediting years		5	
Annual average over the crediting period	139,035 tCO ₂	0 tCO ₂	139,035 tCO ₂

The project activity falls under Indian grid, which constitutes of both fossil fuels and non-fossil fuels sources of electricity generation hence in baseline, the estimated emission is 139,035 tCO₂ per year. Since the project is Hydro power energy project, therefore the project does not emit any GHG.

B.7. Monitoring plan

B.7.1 Data and parameters to be monitored

SDG 7: Affordable and Clean Energy (Indicators 7.2.1)

Relevant SDG Indicator	SDG 7 (Indicators 7.2.1)
Data / Parameter	EG_{facility,y} or EG_{PJ,y}
Unit	MWh/yr
Description	Net Quantity of Electricity supplied to grid
Source of data	Calculated from difference of Gross electricity generation and Auxiliary consumption by the project activity
Value(s) applied	156,271.79 MWh/yr
Measurement methods and procedures	Net electricity generated will be calculated from the readings of Gross electricity generation and Auxiliary consumption by the project activity.
Monitoring frequency	Continuous measurement and at least monthly recording
QA/QC procedures	This is cross-checked against the import/export meter installed by state electricity board. The generation and auxiliary energy meter will be calibrated annually by an independent accredited third party.
Purpose of data	The Data/Parameter is required to calculate the baseline emission
Additional comment	The data will be kept for two years after the end of the crediting period or the last issuance of CERs for this project activity, whichever occurs later.

Relevant SDG Indicator	SDG 7 (Indicators 7.2.1)
Data / Parameter	EG_{Gross}
Unit	MWh
Description	Gross electricity generation by the project activity
Source of data	Energy meter readings from plant records
Value(s) applied	157,850
Measurement methods and procedures	The data will be measured/metered continuously and a logbook will be maintained on site to record hourly readings from the energy meter. The readings will be

	taken by the shift Engineer. This hourly data will be signed off at the end of every 8 hour shift by the engineer in charge of the shift and again at the end of each day by the power plant manager.
Monitoring frequency	Continuous measurement and Monthly recording
QA/QC procedures	The generation energy meter will be calibrated annually by an independent accredited third party.
Purpose of data	The Data/Parameter is required to calculate the baseline emission
Additional comment	The data will be kept for two years after the end of the crediting period or the last issuance of CERs for this project activity, whichever occurs later.

Relevant SDG Indicator	SDG 7 (Indicators 7.2.1)
Data / Parameter	EG_{y Aux}
Unit	MWh
Description	Auxiliary consumption by the project activity
Source of data	Energy meter readings from Plant records
Value(s) applied	789.25
Measurement methods and procedures	The data will be measured/metered continuously and a logbook will be maintained on site to record on daily basis from the auxiliary meter. The readings will be taken by the shift Engineer. This daily data will be signed off by the engineer in charge of the shift and by the power plant manager.
Monitoring frequency	Continuous measurement and Monthly recording
QA/QC procedures	The auxiliary meter will be calibrated annually by an independent accredited third party.
Purpose of data	The Data/Parameter is required to calculate the baseline emission
Additional comment	The data will be kept for two years after the end of the crediting period or the last issuance of CERs for this project activity, whichever occurs later.

SDG 13: Climate Action (Indicators 13.2.1)

Relevant SDG Indicator	SDG 13 (Indicators 13.2.1)
Data / Parameter	ER_y
Unit	tCO ₂ e
Description	Emission reductions achieved per year
Source of data	As per Estimated ER sheet. During the verification, the results shall be obtained from the Actual ER sheet.
Value(s) applied	139,035 (estimated)

Measurement methods and procedures	The baseline emissions are the product of electrical energy baseline $EG_{PJ,y}$ expressed in MWh of electricity produced by the renewable generating unit multiplied by an emission factor.
Monitoring frequency	As per monitoring period
QA/QC procedures	This parameter is calculated, and no any QA/QC procedure required.
Purpose of data	To Monitor the SDG 13 Indicator
Additional comment	Data will be archived in paper & electronic form for two years after the end of crediting period or of the last issuance of GS credits for this project activity, whichever occurs later

SDG 8: Decent Work and Economic Growth

Relevant SDG Indicator	SDG 8 (Indicators 8.5.1)
Data / Parameter	Number of employment generation
Unit	Number
Description	Number of people employed directly due to the project activity in CP renewal period (The project activity provides employment to a number of individuals. These positions are either permanent or temporary and require various skill levels. The workforce includes a diverse range of genders, ensuring skilled and inclusive staffing.)
Source of data	Plant records or the training records for all the employees/Letter from O&M contractor for employment generation/ VVB interview with employees, local stakeholders etc. The staff register/ HR records for income generation of staff/ HR Policies regarding health insurance/social security will be checked for staff income generation and company policy benefits.
Value(s) applied	1 ²²
Measurement methods and procedures	The total number of persons working in the plant would be calculated based on the daily log available at site. This parameter also monitors number of men/women employed by the project activity. The project activity ensures that "equal pay for work of equal value" for both men and women and there is no any discrimination against women.

²² During CP renewal period, at least one new job and one training session will be provided annually. A total of 75 people are directly employed due to the project activity, and all will continue working during the CP renewal period.

	This parameter also monitors the income generation of the staff and company policy benefits like health insurance/social security etc. "The employment covers number of men and number of women employed by the project activity. The job is of type temporary/permanent or skilled/unskilled, etc. Also, it is ensued that peoples will get equal payment for equal work. The payment will be based on work and no any gender inequality for payment for work of equal value.
Monitoring frequency	Monthly monitoring and annual compilation
QA/QC procedures	The number of persons employed would be mentioned in the plant register, which can be crossed checked with attendance register. The information required for this parameter can be checked by VVB during site visit through interview with people or through relevant supporting documents.
Purpose of data	To Monitor the SDG 8 Indicator
Additional comment	-

Relevant SDG Indicator	SDG 8 (Indicators 8.6.1)
Data / Parameter	Quality of employment
Unit	-
Description	Training of Staff
Source of data	Plant records or The training records for all the employees/Letter from O&M contractor for employment generation/ VVB interview with employees, local stakeholders etc
Value(s) applied	1 training per year
Measurement methods and procedures	Together with the technology supplier, the Project organise training for the staff on the technology and the monitoring of the plant operation, and the emergency and safety procedures.
Monitoring frequency	Annual
QA/QC procedures	The training records for all the employees
Purpose of data	To Monitor the SDG 8 Indicator
Additional comment	-

It is to be noted that the registered CDM PDD mentioned parameters like CapPJ (Installed capacity of the hydro power plant after the implementation of the project Activity) and APJ (Area of the single or multiple reservoirs measured in the surface of the water, after the implementation of the project activity, when the reservoir is full). These parameters are not directly used in emission reduction calculations. These

parameters are used to confirm capacity and area of reservoir. Hence these two parameters are not mentioned in above monitoring plan.

B.7.2 Sampling plan

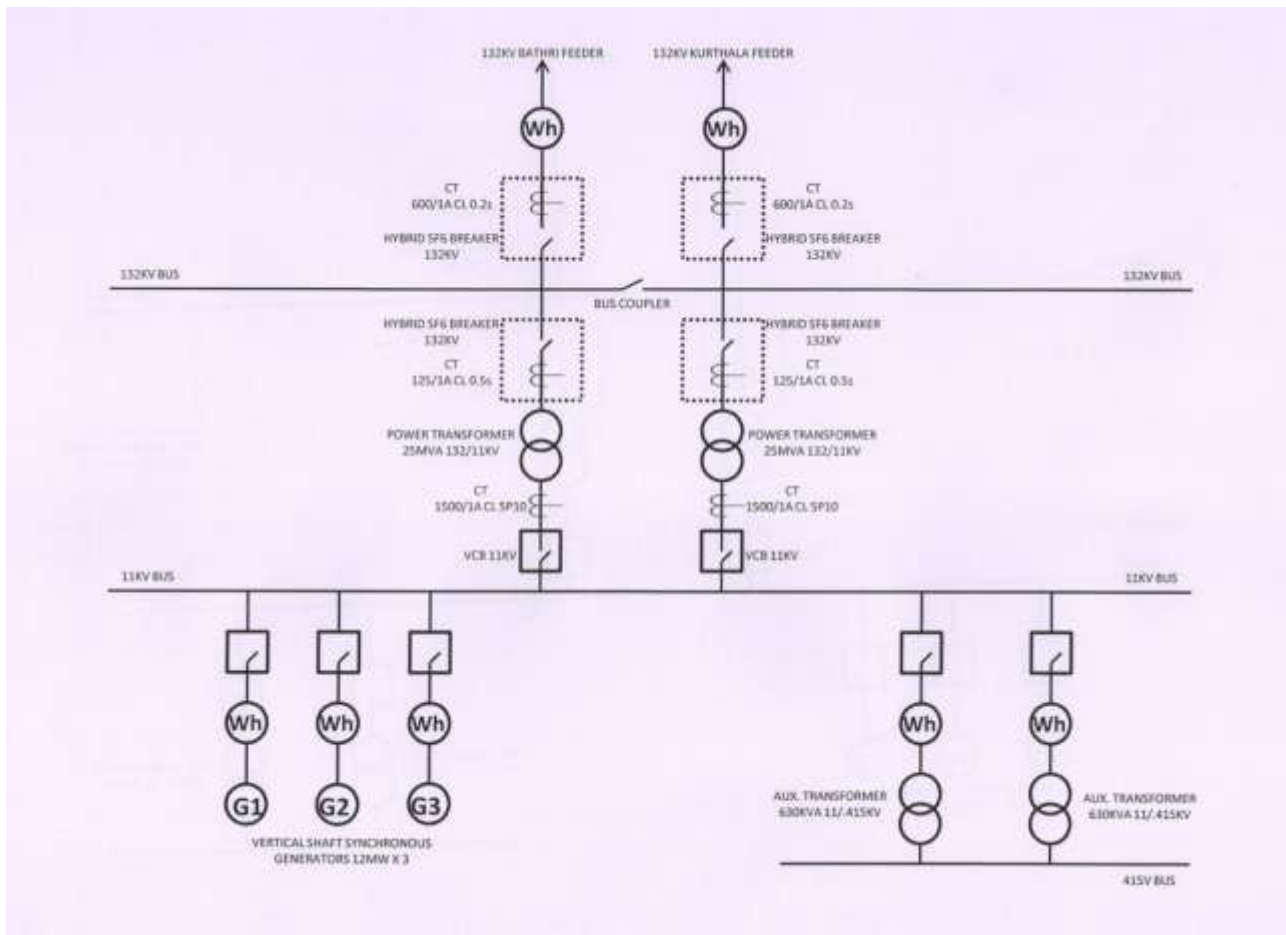
>> Not Applicable

B.7.3 Other elements of monitoring plan

>> In accordance with the methodology all the data collected during the crediting period will be archived electronically and kept for at least two years after the end of crediting period. 100% of the data will be monitored and the meters owned by project owners will be calibrated annually to ensure low uncertainty in the monitored data.

Monitoring procedures

Monitoring shall consist of metering the gross generation and auxiliary consumption of electricity in the project activity. There will be three 8 hour shifts and the readings of gross generation from meters will be taken on an hourly basis by the shift Engineer and recorded in logbooks. For auxiliary consumption, the daily data will be recorded in log books. This hourly data will be signed off at the end of every shift by the engineer in charge of the shift and again at the end of each day by the power plant manager. The power plant manager will analyze the data every month and report to the head office.



Period of archiving

The data will be archived electronically every month and will be maintained.

Calibration of equipments

The calibration of energy meters will be done once in a year by an independent accredited third party (Himachal Pradesh State Electricity Board Limited). The calibration certificates will be made available at the time of verification.

Internal Audit

An internal audit will be carried out every year at the power plant to ensure that the parameters are being monitored in accordance with the PDD. Periodic training of employees would ensure that there are no discrepancies in transferring of the data from logbooks to soft copy. The audit reports will be provided to the VVB undertaking periodic verification.

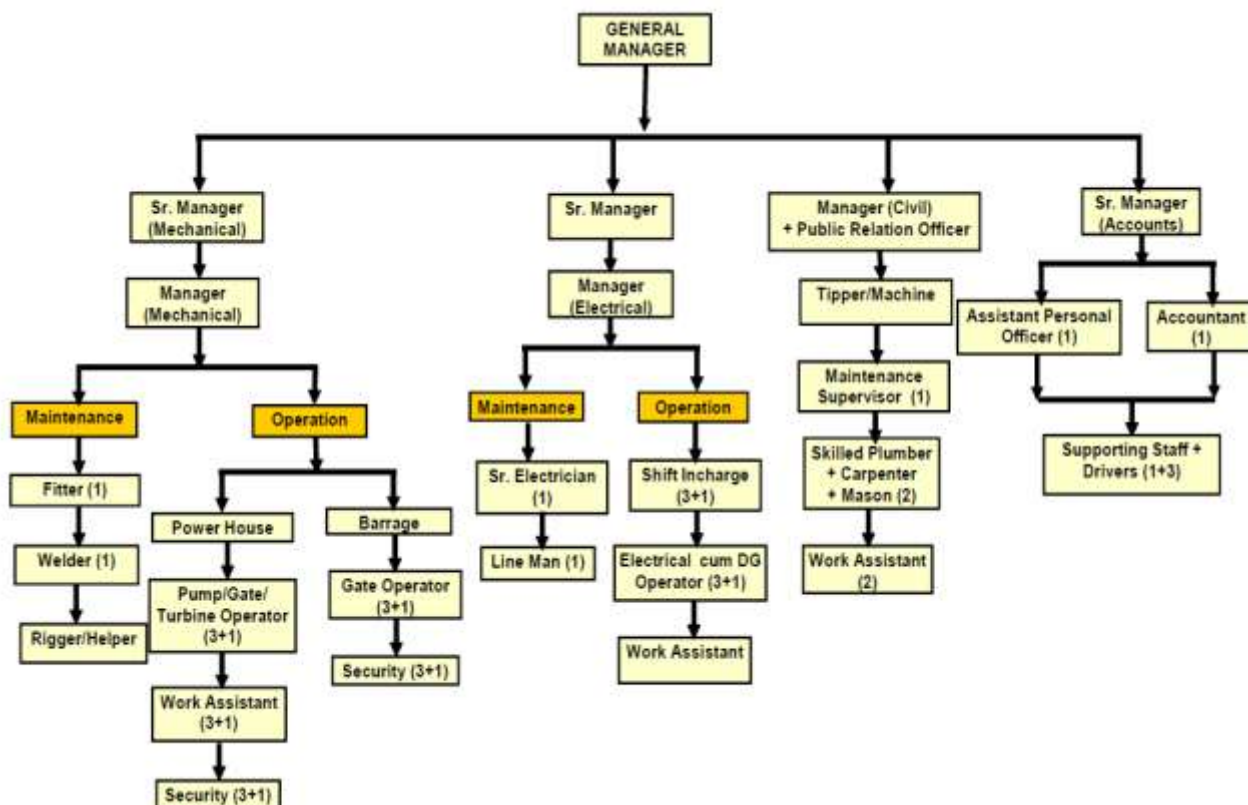
Training requirements

The suppliers of the equipments will train the staff in- charge during erection, to operate and maintain the equipments 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.

Emergency Preparedness

The project will employ highly skilled workers and periodic training of employees would ensure that they are well equipped to handle emergency situations.

The following organization structure will be used to monitor the project activity as per procedures



The monitored data will be reported on a monthly basis for the calculation and estimation of emission reductions. This data will be checked against initial estimates and a summary report will be provided quarterly. . If the project is not performing as expected or if there are any negative impacts on the volume of emission reductions obtained, on the basis of the monthly data being monitored, a report will be prepared outlining 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 significant changes to the set-up or operation of the plant, these will be notified and amendments to the PDD will be requested through a DOE.

For each verification period I. A. Energy will prepare a monitoring report that will be submitted to a VVB for verification. I. A. Energy 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 developers.

SECTION C. DURATION AND CREDITING PERIOD

C.1. Duration of project

C.1.1 Start date of project

>>23/07/2011 (Date of Purchase order for civil work)

C.1.2 Expected operational lifetime of project

>>40 Years 00 Months

C.2. Crediting period of project

C.2.1 Start date of crediting period

>> 26/07/2017²³ (this is commissioning date of full 36 MW capacity and is within two years back from expected GS registration)

- First Crediting period: 26/07/2017 to 25/07/2022
- Second crediting period: 26/07/2022 to 25/07/2027
- Third crediting period: 26/07/2027 to 25/07/2032

C.2.2 Total length of crediting period

>> The crediting period under GS4GG can be a maximum of 15 years and it follows 5 years renewable crediting period cycle.

²³ The project is registered with UNFCCC with reference no CDM 10153. The crediting period for the project activity under UNFCCC is 7 years and renewable twice. The 1st crediting period is from 26/07/2017 to 25/07/2024 followed by 2nd from 26/07/2024 to 25/07/31 and 3rd from 26/07/2031 to 25/07/2038. The 1st crediting period under GS4GG will start from 2 years retroactive from the date of initial submission with GS till 25/07/2024.

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
Not Applicable	Not Applicable

There are no any mitigation measures required and no any Safeguarding principles are added to the monitoring plan. Hence this section is not applicable.

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?	As per Gold Standard Gender Policy, p. 10 "Foundational gender-sensitive requirement - This strengthens Gold Standard's 'do no harm' approach and addresses safeguards to prevent or mitigate adverse impacts on women or men and girls and boys. Such action is mandatory for all projects seeking Gold Standard certification and includes compliance with the gender 'do no harm' safeguards, gender gap analysis and gender sensitive stakeholder consultations." The project being a renewable energy project is not gender sensitive project. The project does not adversely impact women or men.
Question 2 - Explain how the project aligns with existing country policies, strategies and best practices	India is party to "Convention on the Elimination of All Forms of Discrimination against Women" and the project is aligned its labour policies which does not discriminate on gender.

Question 3 - Is an Expert required for the Gender Safeguarding Principles & Requirements?

The Project has completed the following gender assessment questions below:

1. Is there a possibility that the Project might reduce or put at risk women's access to or control of resources, entitlements and benefits?
 - No, the Project being a Hydro Power project does not reduce access to or control of resources for women.
2. Is there a possibility that the Project can adversely affect men and women in marginalized or vulnerable communities (e.g., potential increased burden on women or social isolation of men)?
 - Yes, the project could negatively impact marginalized communities. For example, women might face more work or responsibilities, while men might feel socially isolated if their roles or jobs are affected. It's important to assess these potential issues and plan to address them to ensure both men and women benefit equally.
3. Is there a possibility that the Project might not take into account gender roles and the abilities of women or men to participate in the decisions/designs of the project's activities (such as lack of time, child care duties, low literacy or educational levels, or societal discrimination)?
 - No, the CSR activities carried out by the project proponent/O&M contractor are discussed with the community consisting both the genders.
4. Does the Project take into account gender roles and the abilities of women or men to benefit from the Project's activities (e.g., Does the project criteria ensure that it includes minority groups or landless peoples)?
 - Yes the project takes into account gender roles and abilities of women/men. Job profile is allocated based on the type of work to be carried out.
5. Does the Project design contribute to an increase in women's workload that adds to their care responsibilities or that prevents them from engaging in other activities?
 - No, on the contrary the project leads to increased availability of electricity in the regional grid thereby uplifting the living standards.
6. Would the Project potentially reproduce or further deepen discrimination against women based on gender, for instance, regarding their full participation in design and implementation or access to opportunities and benefits?
 - No, since the project is a renewable electricity generation project, thus it will not have discriminated against women.
7. Would the Project potentially limit women's ability to use, develop and protect natural resources, taking

into account different roles and priorities of women and men in accessing and managing environmental goods and services?

- No, in fact, the project leads to improved electricity in the regional grid thereby leading to less usage of fuel for lighting.

8. Is there a likelihood that the Project would expose women and girls to further risks or hazards?

No, in fact, due to improved electricity availability the usage of fuel for lighting would be reduced as well as indoor air quality would be improved.

Question 4 - Is an Expert required to assist with Gender issues at the Stakeholder Consultation?

Expert was not required to assist with Gender issues at the stakeholder consultation. As per para 4.4 of the Gender Policy,

The project is currently a CDM project applying for retroactive GS CER registration. The LSC conducted as part of the CDM project including relevant stakeholders.

SECTION E. SUMMARY OF LOCAL STAKEHOLDER CONSULTATION

As stakeholder consultation is not required for the renewal of the Crediting Period and there have been no changes in the project design, monitoring approach, emission reduction calculations and relevant stakeholders.

Hence, the project design capacity, monitoring approach, emission reduction calculations and relevant stakeholders remain unchanged.

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

>> The local population is considered the major stakeholder for the project activity. A notice was published on 14/01/2009 for seeking EIA clearance and carbon credits in three local newspapers – Dainik Jagran, The Tribune and Dainik Tribune followed by stakeholder meeting on 17/01/2009.

The Government of Himachal Pradesh state had made it mandatory for all hydroelectric projects in the region to undertake a public consultation before the start of the implementation of work. The project data must be made publicly available in national

and local dailies and invite comments for a period of 60 days. Based on the comments received during the public consultation period and the feedback from the project participants on how the public comments are addressed, the Government of Himachal Pradesh decides whether to sanction the project. A stakeholder consultation meeting was held on 27/10/2010 for EIA clearance and carbon credits, which discussed the company's intention to apply for carbon credits.

Another stakeholder meeting was held at barrage site of project area of Chanju on 18/05/2013. The meeting opened with a welcome note from Mr. S.B Lalit (Vice President) I.A Energy who explained the purpose of the meeting. He further provided brief information on CDM, its development and benefits.

He notified the stakeholders on the various social, economic and technological wellbeing from the project. He requested the stakeholders present to provide their honest suggestions and comments on the upcoming project in the region.

Another major stakeholder is the Himachal Pradesh State Electricity Board (HPSEB) and the project owners have received the Techno Economic Clearance (TEC) for the project activity. The Office of Principal Secretary (Power) to Government of Himachal Pradesh also made public announcement in local dailies for public comments on the project before according techno economic clearance to the project.

The project activity has obtained no objection certificates from the gram panchayat – Baghaigarh, Tikrigarh and Leiusin and the Himachal Pradesh Fisheries Department. The project has also taken clearance from the Irrigation and Public Health Department, Government of Himachal Pradesh for utilizing the water resources in the Himachal Pradesh state.

Summary of comments received

The stakeholder meeting for EIA and CDM was conducted at "VIII Bhaghaigarh, Tehsil Churah, Dist Chamba on 17/01/2009. The meeting was attended by the local people, the body of gram panchayat and the representative of I. A. ENERGY. Concerns and responses were recorded during the meeting at the project site. No comments were received in response to the newspaper notices.

Common queries and responses are listed below: (meeting 1 dated 17/01/2009)

S.No.	Queries Raised	IAC TL Reply
1.	To whom the employment will be given in construction of project?	The preference will be given to the local villagers only, so that maximum people can get employment opportunities due to this project. Depending upon the capability & education qualification of the people, employment will be given in the form of Skilled & Unskilled.
2.	Will this project spoil the soil of surrounding area?	Unlike the coal based power plant project, will affect the surrounding environment but in our project since water will use as renewable source for power generation which is clean and environment friendly hence there is no chances of spoil of surrounding area.
3.	Local transport vehicles will use for construction of project	Management has decided to use local transport vehicles so as to get indirect work from company rather than outside agency during the construction of project.

S.No.	Queries Raised	IACITL Reply
4.	How this project will help in development of local area?	As per CSR activity we will incur expenditure @ 2% of the net profit in development of local area in the form of pakka road, borewell, samuhik bhawan, health medical checkup camps, vocational training, skill development etc.

Another stakeholder meeting for EIA and CDM was conducted on 27/10/2010 at "Rajkiya Prathmik Vidyalaya" and was attended by the local people, the body of gram panchayat and the representative of I. A. ENERGY. Concerns and responses were recorded during the meeting at the project site.

Common queries and responses are listed below: (meeting 2 dated 27/10/2010)

S.No.	Question	Answer
1	Whether the company will provide employment opportunity especially to the project affected area?	The employment preference will be given to the project affected families followed by the project affected Panchayats & local area people.
2	Whether the company will give the opportunity to the local people in construction works to the project affected area?	The company will provide small works/contracts depending on the skill level to the local people.
3	Whether the development activities to be undertaken in the project affected villages by the project proponent during the construction and operation stage?	The representative has informed that 1.5% of the project cost has already been earmarked in EIA/EMP for the development of villages. In addition to this the company will also undertake development works under its Corporate Social Responsibility Programme. The representative of the project activity also informed that 1% of the revenue generated will be deposited in the local area development fund for the development of the affected villages.
4	What steps to be taken for the upliftment of the education and health?	The representative of the project activity informed that they have kept the provision for the strengthening of existing educational institutes in the project area and providing the ambulance & free medicines to the local people.

Another stakeholder meeting for EIA and CDM was conducted on 18/05/2013. The meeting was attended by the local people, the body of gram panchayat and the representative of I. A. ENERGY. Concerns and responses were recorded during the meeting at the project site.

Common queries and responses are listed below: (meeting 2 dated 18/05/2013)

1) We have heard that apart from river water, power can be generated from other sources of nature – such as wind, sun, etc. What is the difference between all these

powers? Why does the government not invest equally in renewable energy projects to source all the power that it needs?

PP Response: The government is investing in all type of renewable energy projects like wind power, solar power and hydel power. The Bhakra Nangal Dam over Satluj river, the Pong Dam in the state of Himachal are all prime examples of government investment to harness power from renewable energy in the form of hydro power. The government has also made a long term plan to use renewable sources of energy for generating power, wherein the Prime Minister himself is involved (National Action Plan on Climate Change). This has a lot of focus on solar energy (energy generated from the Sun).

But these technologies also have a few areas of concern. These have to be harnessed only from the source where these gifts of nature are available. This brings up certain logistical and regulatory problems as well. The amount of investment required for these technologies too is very high. And the per unit generation cost in long run is cheaper for hydel projects.

Also, as against the power generated from the fossil fuels, the reliability in these renewable energy technologies is a little uncertain as this depends entirely on the forces of nature. This can be in the case of hydro power where the input depends upon the amount of rainfall in the monsoons – most of you being farmers understand this much better than others. There is a similar case while generating energy by wind and solar.

Despite all this, the government has recognized the problem of 'Global Warming' and the consequences in the change in the climate. The government has therefore very strongly focused on renewable energy technologies by bringing out its National Action Plan on Climate Change which will strive to limit or reduce the effect of Global Warming. Though power may not be sourced entirely from renewable energy, but as a result of these all – round initiatives and the heightened awareness, in the future we expect more and more focus and investment in renewable energy technologies.

2) How much more employment opportunities or improve economic development of area will be created?

PP Response: As you know that project construction activity has created enough employment opportunity at the village level. Lot of villagers have got employment – skilled and non skilled

Apart from this, petty contracts for civil work especially protection work of road etc. have been given to local villagers, which has created indirect employment.

The local people of the area are also benefitted indirectly by deploying their passenger vehicles and transport vehicles and machinery on hire with company and the contractors. Others are benefitted by rental income of their accommodation given on rent to the company and contractors. The local shopkeepers are benefitted due to additional customers created due to project in the form of labour from outside and other staff including engineers. Hence these kinds of projects not only help in generating employment for local but also result in skill development for the locals which can help them making earnings in the future.

3) What are the impacts of the project on environmental and aesthetic value of the surrounding area?

PD Response: Water is a clean energy source and does not emit greenhouse gases or carbon dioxide. Since there is no pollution, the surrounding land, water, and air is preserved. Yes, during the construction period as you all know some negative impacts are there which are being mitigated as far as possible by applying suitable measures. But these negative impacts are very meagre against the long-term benefits of the project. You have already noticed these benefits in the case of Baira Suil (196 MW) Project in your near vicinity commissioned in nineteen eighties and where you can see that area has been reclaimed very effectively and area converted more green due to plantation carried out in the area by project authorities.

All the stakeholders were happy in knowing that the hydro project activity in their locality will be contributing to a global cause and they commended the I. A. ENERGY for their initiatives in the areas of climate change and sustainable development. In particular, the stakeholders appreciated the project promoter for the environment friendly hydro power generation project.

Report on consideration of comments received

No comments were received

Stakeholder feedback Round:

The SFR have been planned for 60 days after listing project with GS. The email was sent on 02/02/2019 to relevant stakeholders like NGOs, DNA officials, Gold Standard officials along with project documents

The process for the SFR is as follows;

- E mail and Invitations send to relevant stakeholders
- The non-technical summary of project activity along with Registered PDD, web link of UNFCCC web page for the same registered project in CDM, draft GS4GG PDD submission to relevant stakeholders, GS Public view section web link.
- Grievance Mechanism Feedback/Questions from Stakeholders
- Answers for questions received from stakeholders during online SFR process.

Identification of Stakeholders:

The Stakeholder feedback round have been conducted to consider and receive feedback from the possible stakeholders to the project, i.e. NGOs. Apart from these, the stakeholders as identified by Gold standard Board, i.e. Gold standard partnered NGOs in India and DNA of India (MoEF).

Invitations to Stakeholders:

The Stakeholder feedback round have been done by online method. Email invitations were sent to GS partnered NGO's and MoEF. The relevant documents of project activity like GS passport, project Technical summary were made available during Stakeholder feedback round.

As per GS toolkit, for SFR process physical meeting is not mandatory. Thus online e mail have been sent to NGOs, Govt officials, GS personnel etc.

For local stakeholders, public notice has been put at project site. Also SFR process are mainly to cover the issues raised during local stakeholder consultation and there were no any negative comments raised during initial physical local stakeholder consultation.

Thus public notice put at project site village and requested the feedback for this project activity as a part of SFR was sufficient and meets the requirement as per GS4GG. This public notice covers all local stakeholders for feedback during SFR process. The public notice has mentioned different feedback methods like the grievance register, telephone access, internet access so that local stakeholders can give their feedback for the project activity.

The national/international NGO Supporters were identified for stakeholder feedback round and e mail have been sent for their feedback. The C and D category stakeholders are invited through online SFR. For category A and B, the public notice has been put at project site.

Question/Comments session:

No major comments were received from the stakeholders.

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 (mandatory)	Grievance Register to be maintained at office of PP and O&M site office at Project location. The project activity site office is appropriate publicly accessible location at which local stakeholders can provide their feedback on the project. This location is also conducive to continuous and regular checks for stakeholder comments. Also Grievance Register has been kept at PD office so that any stakeholder can give their comments to PP.
GS Contact (mandatory)	help@goldstandard.org
Telephone access	Mr. Sandeep Sharma, representative of Project Participant is responsible and his mobile number +91 9755060515 shall be available for any stakeholder to comment. For those who are unable to travel to site or are not literate, they may contact the Project Implementer via telephone. Persons dialing this telephone number will have access to a Project representative who speaks both English and the national language, Hindi.

Internet/email access	PP representative: manish@enkingint.org Gold Standard: info@goldstandard.org
	The email id of the project Implementer has been provided for continuous input / grievance for the convenience of stakeholders with internet access.
Nominated Independent Mediator (optional)	No Independent mediator is assigned. However, Mr. Manish Dabkara, representative of Project Participant has been assigned as the point of contact for all the local issues.

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
P.1 HUMAN RIGHTS		
<u>P.1.1.1 </u>	Does the project developer, its representatives and the Project disrespect internationally proclaimed human rights?	☐ YES ☒ NO
<u>P.1.1.1 </u>	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
<u>P.1.1.2 </u>	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
<u>P.1.1.3 </u>	Is there a risk that rights-holders (e.g., Project-affected stakeholders) do not have the capacity to claim their rights?	☐ YES ☒ NO
<u>P.1.1.3 </u>	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. The project, its developer, and representatives adhere to internationally proclaimed human rights standards, as evidenced by the absence of disrespect towards such rights. Moreover, the project maintains a clear stance against involvement or complicity in any form of violence or human rights abuses, in line with the Universal Declaration of Human Rights. Throughout stakeholder engagement processes, no human rights concerns have been raised by local communities or individuals, indicating a commitment to respectful and inclusive practices. Additionally, there is no evidence suggesting that rights-holders lack the capacity to claim their rights in relation to the project. Furthermore, the project does not undermine national or regional measures aimed at realizing the right to development, further underscoring its commitment to upholding human rights principles.		
Would the project potentially involve or lead to:		
<u>P.1.1.1 </u>	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

P.1.1.2 	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
P.1.1.3 	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
P.1.1.3 	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 is not in conflict with the economic livelihood of the local community. The Project does not cause any human rights abuse and respects internationally proclaimed human rights issue. Further, the Project meets the local labor law requirements thus does not cause any human rights abuse. The India has ratified the United Nations Human Rights Rules and regulations. The India ratified the same as per web link²⁴ given below. The project adheres to the host country's commitment to: Universal Declaration of Human Rights (UDHR) International Covenant on Economic, Social and Cultural Rights, India Accession 10/04/1979²⁵. International Covenant on Civil and Political Rights India Accession 10/04/1979²⁶. The project does not involve Any conflict with livelihood of local people and respect all human rights. Stakeholder consultation had been carried out to take their opinion. The host country prohibits discrimination on the basis of a person's race, sex, religion, place of birth, or social status.

P.2 | GENDER EQUALITY AND WOMEN'S EMPOWERMENT

²⁴ http://tbinternet.ohchr.org/_layouts/TreatyBodyExternal/Treaty.aspx?CountryID=79&Lang=EN

²⁵ <http://hrlibrary.umn.edu/research/ratification-india.html>

²⁶ <http://hrlibrary.umn.edu/research/ratification-india.html>

<u>P.2.1.1</u>	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
<u>P.2.1.2</u>	Does the project undermine the principles of non-discrimination, equal treatment, and equal pay for equal work?	☐ YES ☒ NO
<u>P.2.1.2</u>	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
<u>P.2.1.2</u>	Does the project limit the participation of women or men based on pregnancy, maternity/paternity leave, or marital status?	☐ YES ☒ NO
<u>P.2.1.2</u>	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
<u>P.2.1.3</u>	Has the project assessed gender risks without referencing the country's gender strategy or equivalent national commitment?	☐ YES ☒ NO
<u>P.2.1.4</u>	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.

The project being a renewable energy project is not a gender sensitive project. The project does not adversely impact women or men.

Would the project potentially involve or lead to:

<u>P.2.1.1</u>	adverse impacts on gender equality and/or the situation of women and girls?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.2.1.1</u>	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
<u>P.2.1.2</u>	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.2.1.2</u>	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?	☐ YES ☐ POTENTIALLY ☒ NO

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

The project does not adversely affect men and women in marginalized or vulnerable communities. Employment opportunities have been provided by the PP to the local people from the nearby villages around the project site which in turn has improved the livelihood and living standards of the local people. The HR policy of PP mentions that all employees are given equal opportunities for betterment irrespective of the gender.

P.3 | COMMUNITY HEALTH AND SAFETY

<u>P.3.1.1 </u>	Does the project involve potential risks to the health and safety of affected communities during its life cycle?	☐ YES ☒ NO
<u>P.3.1.2 </u>	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.

The project does not pose any potential risks to the health and safety of affected communities over its life cycle. Additionally, there are no identified risks to the safety and health of workers involved in the project. These findings indicate a commitment to prioritizing community health and safety measures, as well as ensuring a safe working environment for project personnel.

Would the project potentially involve or lead to:

<u>P.3.1.1 </u>	construction and/or infrastructure development (e.g., roads, buildings, dams)?	☐ YES ☒ NO
<u>P.3.1.2 </u>	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.3.1.2 </u>	harm or losses due to failure of structural elements of the project (e.g., collapse of buildings or infrastructure)?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.3.1.2 </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>P.3.1.2 </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>P.3.1.2 </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.

The project is renewable energy technology (Hydro power based power generation Technology) and does not have exposure to increased health risks and shall not adversely affect the health of the workers and the community. Necessary health and safety measures are taken during construction and operation phase, as well as throughout the operational lifetime of the project activity, also staffs are trained to be able to work with high voltages and occupational health and safety. PP follows the National Policy on Safety, Health and Environment at work²⁷, published by Ministry of Labor and Employment, Government of India

P.4 | CULTURAL HERITAGE, INDIGENOUS PEOPLE, DISPLACEMENT AND RESETTLEMENT

P.4.1 | Sites of Cultural and Historical Heritage

<u>P.4.1.1 </u>	Does the project involve altering, damaging, or removing sites, objects, or structures of significant cultural heritage?	☐ YES ☒ NO
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If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

The project does not involve altering, damaging, or removing sites, objects, or structures of significant cultural heritage. Therefore, there is no need to provide an explanation for compliance with applicable requirements.

Would the project potentially involve or lead to:

<u>P.4.1.1 </u>	activities adjacent to or within a cultural heritage site?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.4.1.1 </u>	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.4.1.1 </u>	alterations to landscapes and natural features with cultural significance?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.4.1.1 </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>P.4.1.2 </u>	utilisation of tangible and/or intangible forms (e.g., practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	☐ YES ☐ POTENTIALLY ☒ NO

²⁷ <https://labour.gov.in/sites/default/files/SafetyHealthandEnvironmentatWorkPlace.pdf>

<u>P.4.1.2</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>P.4.1.3</u>	If answer to question above is "YES" - does the project provide equitable sharing of benefits from commercialization of such knowledge, innovation, or practice, consistent with their customs and traditions?	☐ YES ☐ NO ☒ NA
<u>P.4.1.4</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>P.4.1.4</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.

This is a registered hydro power project, there are no protected archaeological and cultural heritage sites are reported within the project footprint". Law on Cultural heritage is protected against alteration, damage or removal by the "law on cultural heritage.

P.4.2 | Forced Eviction and Displacement

<u>P.4.2.1</u>	Does the project involve any risks related to involuntary relocation of people?	☐ YES ☒ NO
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If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

The project does not entail any risks related to the involuntary relocation of people. Therefore, there is no need for an explanation regarding compliance with applicable requirements in this regard.

Would the project potentially involve or lead to:

<u>P.4.2.1</u>	risk of forced evictions or involuntary relocation of people?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.4.2.2</u>	temporary or permanent and full or partial physical displacement (including people without legally recognisable claims to land)?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.4.2.2</u>	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
<u>P.4.2.2</u>	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?	☐ YES ☐ NO ☒ NA

	- has the project integrated Resettlement Action Plan or Livelihood Action Plan into the Project design?	
<u>P.4.2.3</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>P.4.2.3</u>	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.

- There is no risk of forced evictions or involuntary relocation of people.
- There is no temporary or permanent, full or partial physical displacement, including people without legally recognizable claims to land.
- There is no economic displacement, such as loss of assets or access to resources due to land acquisition or access restrictions, even in the absence of physical relocation.

Since the responses to the above questions are all "NO," there is no need to provide descriptions of the project situation or justification/evidence for compliance with applicable requirements.

P.4.3 | LAND TENURE AND OTHER RIGHTS

<u>P.4.3.1</u>	Does the project involve any risks related to identifying and managing legitimate tenure rights that may be affected by the project?	☐ YES ☒ NO
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If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

The project does not involve any risks related to identifying and managing legitimate tenure rights that may be affected by the project. Therefore, there is no need to provide an explanation for compliance with applicable requirements in this regard.

Would the project potentially involve or lead to:

<u>P.4.3.1</u>	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
<u>P.4.3.1</u>	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
<u>P.4.3.2</u>	Changes in legal arrangements, if yes, are the changes done in line with relevant laws and regulations?	☐ YES ☐ NO ☒ NA
<u>P.4.3.2</u>	Changes in legal arrangements, if yes, are these changes agree with free, prior and informed consent of the involved stakeholders?	☐ YES ☐ NO ☒ NA
<u>P.4.3.3</u>	Does some other entity (other than the project developer) hold uncontested land title for the entire Project Boundary?	☐ YES ☒ NO

		☐ NA
<u>P.4.3.4</u>	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☒ NO ☐ NA
<u>P.4.3.4</u>	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
<u>P.4.3.5</u>	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.

P.4.3.5 For ongoing stakeholder consultation, a grievance register has been placed at the site and the grievances of the local stakeholders are resolved from time to time.

P.4.4 | INDIGENOUS PEOPLES

<u>P.4.4.1</u>	Does the project involve Indigenous People within the Project area of influence who may be affected directly or indirectly by the Project?	☐ YES ☒ NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The project does not involve indigenous people within its area of influence who may be affected directly or indirectly by the project.

Would the project potentially involve or lead to:

<u>P.4.4.1</u>	affect areas where indigenous peoples are present (including project area of influence)	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.4.4.1</u>	affect areas, land and territory claimed by indigenous peoples?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.4.4.1</u>	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.4.4.7</u>	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?	☐ YES ☐ NO ☒ NA

	- Was the plan developed in accordance with the effective and meaningful participation of indigenous peoples and in accordance with UNDP Guidelines?	
<u>P.4.4.3</u>	risk of forcibly removing indigenous people from their lands and territories?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.4.4.4</u>	utilisation and/or commercial development of natural resources on lands and territories claimed by indigenous peoples? Consider, and where appropriate ensure, consistency with the answers under Principle 4.1 above	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.4.4.5</u> <u>P.4.4.6</u>	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
<u>P.4.4.8</u>	Does the project lack appropriate feedback and grievance channels for Indigenous Peoples and their representatives?	☐ YES ☒ NO ☐ NA
<u>P.4.4.8</u>	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
<u>P.4.4.9</u>	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☒ NO ☐ NA

<u>P.4.4.9 </u>	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
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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.

- The project does not affect areas where indigenous peoples are present, including the project area of influence.
- There are no impacts on areas, land, and territory claimed by indigenous peoples.
- The project does not have any impacts, either positive or negative, on the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples.
- Consequently, there is no risk of forcibly removing indigenous people from their lands and territories.
- There is no utilization or commercial development of natural resources on lands and territories claimed by indigenous peoples.

P.5 | CORRUPTION

<u>P.5.1.1 </u>	Does the project involve, or is it complicit in, contributing to or reinforcing corruption or corrupt projects?	☐ YES ☒ NO
<u>P.5.1.1 </u>	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.

The project does not involve or contribute to corruption, nor does it have a risk of encouraging bribery, kickbacks, or other unethical behavior. Therefore, there is no need to explain the project situation or outline compliance measures for applicable requirements in this regard.

ECONOMIC SAFEGUARDING PRINCIPLES

P.6 | ECONOMIC IMPACTS

P.6.1 | LABOUR RIGHTS AND WORKING CONDITIONS

<u>P.6.1.1 </u>	Does the project involve, facilitate, or condone forced labor, or pose a potential risk of forced labor?	☐ YES ☒ NO
<u>P.6.1.1 </u>	Does the project violate any labor or health and safety laws, international obligations, or ILO conventions?	☐ YES ☒ NO
<u>P.6.1.2 </u>	Does the project violate the principles of equal opportunity and fair treatment in its employment decisions?	☐ YES ☒ NO
<u>P.6.1.3 </u>	Does the project violate national laws, if available regarding non-discrimination in employment?	☐ YES ☒ NO
<u>P.6.1.4 </u> <u>P.6.1.5 </u>	Does the project allow child labor?	☐ YES ☒ NO
<u>P.6.1.7 </u> <u>P.6.1.8 </u>	Does the project have insufficient processes and measures in place to ensure the safety and health of project workers?	☐ YES ☒ NO

<u>P.6.1.9</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>P.6.1.10</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.

- The project does not involve, facilitate, or condone forced labor, nor does it pose a potential risk of forced labor.
- It does not violate any labor or health and safety laws, international obligations, or ILO conventions.
- The project upholds the principles of equal opportunity and fair treatment in its employment decisions.
- There are no violations of national laws regarding non-discrimination in employment.
- Child labor is not allowed in the project.
- Processes and measures are in place to ensure the safety and health of project workers.
- The project has sufficient measures to safeguard and support vulnerable workers, such as women, people with disabilities, migrant workers, and young workers, and to prevent harassment, abuse, bullying, or exploitation, including gender-based violence.
- A grievance mechanism is available for workers to voice workplace concerns, and information about this mechanism is provided to workers at the time of recruitment and is easily accessible.

Would the project potentially involve or lead to:

(NOTE: APPLIES TO BOTH PROJECT AND CONTRACTOR WORKERS)

<u>P.6.1.1</u>	use of forced labour?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.6.1.1</u>	working conditions that do not meet national labour laws and international commitments?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.6.1.1</u>	working conditions that may deny freedom of association and collective bargaining?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.6.1.1</u>	absence of documented working agreements with all individual workers <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>	☐ YES ☐ POTENTIALLY ☒ NO

<u>P.6.1.1</u>	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
<u>P.6.1.1</u>	having no arrangements for basic services ²⁸ 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
<u>P.6.1.2</u>	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
<u>P.6.1.2</u>	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
<u>P.6.1.2</u>	harassment, intimidation, and/or exploitation, especially in regard to women?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.6.1.3</u>	discriminatory working conditions and/or lack of equal opportunity where national law provides provision to address non-discrimination in employment?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.6.1.4</u>	use of child labour? (including third-party engaged workers)	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.6.1.4</u>	inadequate and verifiable mechanisms for age verification?	☐ YES ☒ NO
<u>P.6.1.7</u>	no processes and measures in place for the safety and health of project workers?	☐ YES ☒ NO
<u>P.6.1.7</u>	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

²⁸ 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.

<u>P.6.1.7</u>	No provision to record and document accidents, diseases, incidents, and any resulting injuries, illnesses, or deaths?	☐ YES ☒ NO
<u>P.6.1.8</u>	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	☒ YES ☐ NO
<u>P.6.1.9</u>	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
<u>P.6.1.10</u>	No grievance mechanism available for workers to voice workplace concerns.	☐ YES ☒ NO
<u>P.6.1.11</u>	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.

P.6.1.8 - The Project Developer ensures the training of workers, documentation and reporting of accidents and incidents and emergency preparedness and response measures. All the supporting documents are provided as follows:

- Training Attendance sheets.
- Employee Records
- Salary slips of the employees

P.6.2 | NEGATIVE ECONOMIC CONSEQUENCES

<u>P.6.2.1</u>	Is there a risk of project failure during implementation or after project certification due to a lack of financial resources?	☐ YES ☒ NO
<u>P.6.2.2</u>	Does the project have potential negative impacts or pose a risk to the local economy?	☐ YES ☒ NO
<u>P.6.2.2</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.

- There is no risk of project failure during implementation or after project certification due to a lack of financial resources.
- The project does not have potential negative impacts or pose a risk to the local economy.
- Despite the benefits the project may bring, there are no potential risks or negative impacts on vulnerable or marginalized social groups.

Would the project involve or lead to:

<u>P.6.2.2</u>	economic impacts (negative/detrimental) to the local economy?	☐ YES ☐ POTENTIALLY
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		☒ NO
<u>P.6.2.2 </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.

There are no negative economic impacts on the local economy resulting from the project. Additionally, there are no negative economic consequences during or after project implementation for vulnerable and marginalized social groups in targeted communities.

P.7 | CLIMATE AND ENERGY

P.7.1 | GHG EMISSIONS

<u>P.7.1.1 </u>	Does the project have a risk of increasing greenhouse gas emissions over the Baseline Scenario?	☐ YES ☒ NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The project does not have a risk of increasing greenhouse gas emissions over the baseline scenario. Therefore, there is no need to explain the project situation or outline compliance measures for applicable requirements in this regard.

Would the project involve or lead to:

<u>P.7.1.1 </u>	increase greenhouse gas emissions over the Baseline Scenario?	☐ YES ☐ POTENTIALLY ☒ NO
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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.

As the response indicates "NO" to the possibility of the project increasing greenhouse gas emissions over the Baseline Scenario, there is no need to provide a description or justification for compliance with applicable requirements.

P.7.2 | ENERGY SUPPLY

<u>P.7.2.1 </u>	Does the project pose a risk to the availability and reliability of energy supply to other users?	☐ YES ☒ NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

the project does not pose a risk to the availability and reliability of energy supply to other users. therefore, there is no need to explain the project situation or outline compliance measures for applicable requirements in this regard.

Would the project involve or lead to:

<u>P.7.2.1</u>	negative impact on the availability and reliability of energy supply to other users?	☐ YES ☐ POTENTIALLY ☒ NO
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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.

Since the response indicates "NO" to the possibility of the project having a negative impact on the availability and reliability of energy supply to other users, there is no need to provide a description or justification for compliance with applicable requirements.

P.8 | WATER

P.8.1 | IMPACT ON NATURAL WATER PATTERNS/FLOWS

<u>P.8.1.1</u>	Does the project increase water usage to a level that will not allow for the maintenance of environmental flows?	☐ YES ☒ NO
<u>P.8.1.1</u>	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
<u>P.8.1.1</u>	Does the project have the potential risk to exceed the rate of recharge for the groundwater source?	☐ YES ☒ NO
<u>P.8.1.1</u>	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.

Since all responses are "no," there's no need to provide explanations or outline compliance measures.

Would the project involve or lead to:

<u>P.8.1.1</u>	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
<u>P.8.1.1</u>	Wastewater discharge of quality that does not meet the required standard for beneficial reuse?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.8.1.1</u>	significant extraction, diversion of ground water? For example, construction of dams, reservoirs, river basin developments, groundwater extraction	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.8.1.2</u>	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.

Since all responses indicate "no" to potential impacts on watercourses, groundwater, watershed patterns, wastewater discharge quality, and significant extraction/diversion of groundwater, there is no need to provide a brief description or justification for compliance with applicable requirements.

P.8.2 | EROSION AND/OR WATER BODY INSTABILITY

<u>P.8.2.1 </u>	Does the project have a risk of negatively impacting the catchment and has it been assessed and addressed?	☐ YES ☒ NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The project does not have a risk of negatively impacting the catchment, as indicated by the response. Therefore, there is no need to explain the project situation or outline compliance measures for applicable requirements in this regard.

Would the project involve or lead to:

<u>P.8.2.2 </u>	negatively impact on the catchment area?	
-		
<u>P.8.2.5 </u>	<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
<u>P.8.2.6 </u>	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.

- The project does not have a risk of negatively impacting the catchment area, as indicated by the response to question P.8.2.5.
- Additionally, the opinions and recommendations of Expert Stakeholders are sought and demonstrated as being included in the project design, as indicated by the response to question P.8.2.6.

Since the response to both questions is "NO," there is no need to provide further explanation or compliance measures.

P.9 | ENVIRONMENT, ECOLOGY AND LAND USE

P.9.1 | LANDSCAPE MODIFICATION AND SOIL

<u>P.9.1.1 </u>	Is there any risk of soil resource degradation or loss of ecosystem services provided by soils in the project?	
-		
<u>P.9.1.3 </u>	<i>If yes, the project shall maintain healthy soils by minimising negative impacts on soil health, productivity, structure, and</i>	☐ YES ☒ NO

	<i>water retention. Steps to minimise soil degradation include crop rotation, composting, using N-fixing plants, and reducing tillage and ecologically harmful substances.</i>	
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Since the response to question P.9.1 is "NO," indicating that there is no risk of soil resource degradation or loss of ecosystem services provided by soils in the project, there is no need to provide further explanation or compliance measures.

Would the project involve or lead to:

<u>P.9.1.4</u>	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.9.1.4</u>	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.

Since the response to both questions P.9.1.4 is "NO," indicating that the project does not involve the production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities, nor does it potentially involve such activities, there is no need to provide a description or justification for compliance with applicable requirements.

P.9.2 | VULNERABILITY TO NATURAL DISASTER

<u>P.9.2.1</u>	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
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Since the response indicates "NO" to the presence of risks associated with natural or man-made hazards resulting from land use changes due to the project, there's no need to explain the project situation or outline compliance measures.

Would the project involve or lead to:

<u>P.9.2.2</u>	any potential risks that require emergency preparedness and response planning?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.9.2.2</u>	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.

Since the response to both questions P.9.2.2 is "NO," indicating that there are no potential risks requiring emergency preparedness and response planning and that the project developer did not disclose information about emergency preparedness and response to affected communities, there is no need to provide a description or justification for compliance with applicable requirements.

P.9.3 | BIOSAFETY AND GENETIC RESOURCES

P.9.3.1	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
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Since the response indicates "NO" to the involvement of the transfer, handling, and use of genetically modified organisms/living modified organisms that may result in adverse effects on biological diversity, there's no need to explain the project situation or outline compliance measures.

Would the project involve or lead to:

P.9.3.1	the transfer, handling and use of genetically modified organisms/living modified organisms (GMOs/LMOs) that result from modern biotechnology	☐ YES ☐ POTENTIALLY ☒ NO
P.9.3.1	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
P.9.3.2	If answer to above question is "yes" has any risks identified in the risk assessment?	☐ YES ☐ NO ☒ NA
P.9.3.3	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.

Since the response to question P.9.3.1 is "NO," indicating that the project does not involve the transfer, handling, and use of genetically modified organisms/living modified organisms resulting from modern biotechnology, and the subsequent questions are marked "NA" because of the absence of GMOs/LMOs involvement, there is no need to provide a description or justification for compliance with applicable requirements in this regard.

P.9.4 | RELEASE OF POLLUTANTS

P.9.4.1	Does the project have a risk of releasing pollutants to air, water, and land in routine, non-routine, or accidental circumstances?	☐ YES ☒ NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The project does not have a risk of releasing pollutants to air, water, or land in routine, non-routine, or accidental circumstances. Therefore, there is no need to provide further explanation or ensure compliance with applicable requirements regarding pollutant release.

Would the project involve or lead to:

P.9.4.1	any potential risk of pollutant release that cannot be avoided?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.4.3	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
P.9.4.2	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
P.9.4.3	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.

Since the response to question P.9.4.1 is "NO," indicating that the project does not have a risk of releasing pollutants to air, water, and land in routine, non-routine, or accidental circumstances, there is no need to explain the project situation or outline compliance measures.

P.9.5 | HAZARDOUS AND NON-HAZARDOUS WASTE

P.9.5.1	Does the project involve the generation of waste materials (both hazardous and non-hazardous)?	☐ YES ☒ NO
P.9.5.3	Does the project involve risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	☐ YES ☒ NO
P.9.5.5	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.

All hazardous and non-hazardous wastes will be disposed as per the local regulations. The project activity does not involve emission of hazardous waste.

Would the project involve or lead to:

P.9.5.1	the generation and management of waste materials?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.5.1	treatment, destruction, or disposal of waste material?	☐ YES ☒ NO

		☐ NA
<u>P.9.5.1</u>	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
<u>P.9.5.3</u>	risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	☐ YES ☒ NO ☐ NA
<u>P.9.5.3</u>	If answer to above question is "yes", does project has measures in place to address health risks?	☐ YES ☐ NO ☒ NA
<u>P.9.5.4</u>	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.

The project potentially involves the generation and management of waste materials. However, it does not involve the treatment, destruction, or disposal of waste material. If the project were to involve waste treatment, destruction, or disposal, it would utilize an environmentally friendly method with appropriate control of emissions and residues.

There is no risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use. Consequently, there are no measures in place to address health risks associated with the release of hazardous materials.

The project does not involve the 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.

P.9.6 | PESTICIDES & FERTILISERS

<u>P.9.6.1</u>	Does the project involve the use of chemical pesticides?	☐ YES ☒ NO
<u>P.9.6.5</u>	Does the project involve purchase, store, manufacture, trade or use products that fall in Classes IA (extremely hazardous) and IB (highly hazardous)	☐ YES ☒ NO
<u>P.9.6.6</u>	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.

Since all responses are "NO" to the questions regarding the use of chemical pesticides, purchase, storage, manufacture, trade, or use of highly hazardous products, and the use of fertilizers with measures taken to minimize their use and nutrient losses to the environment, there is no need to explain the project situation or outline compliance measures.

Would the project involve or lead to:

<u>P.9.6.1</u>	chemical pesticides use for pest management?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.9.6.4</u>	If answer to question above is "yes" or "potentially", does project has documented Chemical Pesticides Policy in place?	☐ YES ☐ NO ☒ NA
<u>P.9.6.5</u>	purchase, store, use, manufacture, or trade in Class II (moderately hazardous) pesticides?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.9.6.5</u>	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.

Since the response to question P.9.6.1 indicates "NO" to the use of chemical pesticides for pest management and "NO" to the purchase, storage, use, manufacture, or trade in moderately hazardous pesticides, there is no need to provide a description or justification for compliance with applicable requirements. Additionally, since the project does not involve the use of chemical pesticides, there is no need for a Chemical Pesticides Policy or appropriate controls on the manufacture, procurement, distribution, or use of these chemicals.

P.9.7 | HARVESTING OF FORESTS

<u>P.9.7.1</u>	Does the project have a risk of unsustainable forest management, including timber harvesting?	☐ YES ☒ NO
<u>P.9.7.1</u>	Does the project pose a risk of depleting biodiversity and ecosystem functionality in areas where improved forest management is undertaken?	☐ YES ☒ NO
<u>P.9.7.1</u>	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.

Since all responses are "NO" to the questions regarding the risk of unsustainable forest management, depletion of biodiversity and ecosystem functionality, and not meeting requirements for environment-friendly, socially beneficial, and economically viable plantations, there is no need to explain the project situation or outline compliance measures.

P.9.8 | FOOD SECURITY

<u>P.9.8.1</u>	Does the project involve the risk of negatively influencing access to and availability of food for people affected?	☐ YES ☒ NO
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If the answer to the question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The project is not involving the risk of negatively influencing access to and availability of food for people affected.

Would the project involve or lead to:

P.9.8.1	modification of the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	☐ YES ☐ POTENTIALLY ☒ NO
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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.

Since the response indicates "NO" to the risk of negatively influencing access to and availability of food for people affected by the project, there is no need to explain the project situation or outline compliance measures.

P.9.9 | ANIMAL WELFARE

P.9.9.1	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
P.9.9.2	Does the project involve any potential risk of excessive or inadequate use of veterinary medicines?	☐ YES ☒ NO
P.9.9.4	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.

Since the answer to all three questions is "no," indicating that the project does not involve risks to animal welfare, potential excessive or inadequate use of veterinary medicines, or the administration of synthetic growth promoters, there's no need to explain the project situation or outline compliance measures in this regard.

Would the project involve or lead to:

P.9.9.1	animal husbandry or harvesting of fish populations or other aquatic species? ²⁹	☐ YES ☒ NO ☐ NA
P.9.9.1	limiting access for animals to basic needs like drinking water, adequate food, daylight, appropriate shelter etc.?	☐ YES ☐ POTENTIALLY ☒ NO

²⁹ 'Involve' means if the project mechanism and/or impact (s) are achieved via changing animal husbandry practices in some way.

<u>P.9.9.3</u>	inadequate measures to isolate sick animals and control the spread of disease, especially zoonotic diseases?	☐ YES ☒ NO ☐ NA
<u>P.9.9.5</u>	inadequate low-stress methods, equipment, and facilities that facilitate calm animal movement.	☐ YES ☒ NO ☐ NA
<u>P.9.9.6</u>	inadequate measures to ensure that animals are exposed to the least stress possible during transportation and slaughtering?	☐ YES ☒ NO ☐ NA
<u>P.9.9.7</u>	inappropriate spacing per animal and stocking rates per land unit?	☐ YES ☒ NO ☐ NA
<u>P.9.9.8</u>	inadequate measures to address the specific needs of aquatic animals?	☐ YES ☒ NO ☐ NA
<u>P.9.9.9</u> <u>P.9.9.10</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

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.

There are no significant concerns regarding animal welfare or sustainable management practices in the project. Therefore, there is no need for further elaboration or justification.

P.9.10 | HIGH CONSERVATION VALUE AREAS AND CRITICAL HABITATS

<u>P.9.10.1</u>	Does the project have the risk of negatively impacting HCV areas and/or critical habitats?	☐ YES ☒ NO
<u>P.9.10.2</u>	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.

Since the answers indicate "no" to all questions regarding risks to animal welfare, including animal husbandry, access to basic needs, disease control, stress during transportation and slaughtering, spacing per animal, measures for aquatic animals, and primary production of living natural resources such as animal husbandry,

aquaculture, and fisheries, there's no need to provide a description or justification for compliance with applicable requirements in this regard.

Would the project involve or lead to:

<u>P.9.10.1</u>	identified habitats as HCV areas and or Critical habitats?	☐ YES ☐ POTENTIALLY ☒ NO
<u>P.9.10.1</u>	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
<u>P.9.10.1</u>	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
<u>P.9.10.2</u>	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
<u>P.9.10.2</u>	If the answer to the above question is "yes", will the project have any adverse effects on these areas?	☐ YES ☐ No ☒ NA
<u>P.9.10.3</u>	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
<u>P.9.10.4</u>	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
<u>P.9.10.5</u>	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.

Based on the provided responses, the project does not involve identified habitats as High Conservation Value (HCV) areas or Critical habitats, nor does it pose risks that could negatively impact surrounding ecological assets or biodiversity values. Additionally, there is no specific Habitat and Biodiversity Action Plan in place, as it's not applicable to the project. The project area or downstream impacts do not contain native tree patches, freshwater resources, or habitats of rare, threatened, and endangered species, thus minimizing adverse

effects on these areas. Furthermore, there are no opportunities identified to minimize habitat conversion or degradation, and the project is not currently applying Land Use & Forest Activity Requirements to protect or enhance native ecosystems. Lastly, the opinions and recommendations of Expert Stakeholders have not been sought nor demonstrated as being included in the project design. Given these circumstances, the project appears to have minimal impact on critical habitats and biodiversity values, and there are no apparent requirements for further justification or compliance.

P.9.11 | ENDANGERED SPECIES

<u>P.9.11.1 </u>	Does the project lead to the reduction or negative impact on any recognised Endangered, Vulnerable or Critically Endangered species?	☐ YES ☒ NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The project does not lead to the reduction or negative impact on any recognized Endangered, Vulnerable, or Critically Endangered species. Therefore, there is no need to provide further explanation or ensure compliance with applicable requirements in this regard.

Would the project involve or lead to:

<u>P.9.11.2 </u>	distortion of habitats of endangered species?	☐ YES ☐ POTENTIALLY ☒ NA
<u>P.9.11.2 </u>	If answer to the above question is "yes", does the project plan to protect and enhance them?	☐ YES ☐ POTENTIALLY ☐ NO ☒ N/A
<u>P.9.11.2 </u>	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.

Since the response to whether there's a distortion of habitats of endangered species is "NA," indicating that such a risk is not applicable to the project, there's no need to provide a description or justification for compliance with applicable requirements in this regard. Similarly, the project does not plan to protect and enhance habitats of endangered species, as indicated by the "N/A" response to the corresponding question. Additionally, since the opinions and recommendations of Expert Stakeholders are not sought and included in the project design, as indicated by the "NA" response to that question, there's no need for further explanation regarding compliance with this requirement.

P.9.12 | INVASIVE ALIEN SPECIES

<u>P.9.12.1 </u>	Does project introduce any alien species (not currently established in the country or region of the project) into new environments?	☐ YES ☒ NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Since the response to the question is "NO," indicating that the project does not introduce any alien species into new environments, there's no need to provide an explanation or demonstrate compliance with applicable requirements in this regard.

Would the project involve or lead to:

<u>P.9.12.1</u>	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
<u>P.9.12.1</u>	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
<u>P.9.12.2</u>	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.

Since the response to all the questions is "no," indicating that there is no risk of introducing alien species or spreading them into new areas, there's no need to provide a description of the project situation or demonstrate compliance with applicable requirements in this regard.

APPENDIX 2 - CONTACT INFORMATION OF PROJECT DEVELOPER(S)

Organization name	IA Hydro Energy Private Limited
Registration number with relevant authority	-
Street/P.O. Box	C/o Shri Bajrang Power & Ispat Ltd,
Building	Village Borjhara, Urla-Guma Road,
City	Raipur,
State/Region	Chhattisgarh,
Postcode	493221
Country	India
Telephone	+91-771 4288019
E-mail	commercial.bjr@goelgroup.co.in
Website	-
Contact person	
Title	-
Salutation	Mr
Last name	Goyal
Middle name	Kumar
First name	Shravan
Department	-
Mobile	-
Direct tel.	-
Personal e-mail	skgoyal@goelgroup.co.in

APPENDIX 3 - LUF ADDITIONAL INFORMATION

Not Applicable as this project is generating electricity by using Hydro energy.

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.

DATE OF APPROVED DESIGN CHANGE (MM/DD/YYYY)	PROJECT AREA (HA)		ELIGIBLE AREA (HA)		EX-ANTE ESTIMATE (TCO2E)	
	INCREASE OR DECREASE ?	VALUE (HA)	INCREASE OR DECREASE ?	VALUE (HA)	INCREASE OR DECREASE ?	PERCENTAGE (%)
Not Applicable						

APPENDIX 5 – METER CALIBRATION DETAILS

Main meter Serial no.	Check meter Serial no.	Make	Category	Class	Type
Q0333350	Q0333438	Secure	B	0.2s	P3E
Q0333420	Q0333442	Secure	B	0.2s	P3E

DOCUMENT 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