



PROJECT CONCEPT NOTE

CARBON OFFSET UNIT (CoU) PROJECT

Title	: 3 MW Small Scale Hydro Electric Power project by M/S Continental Intra-Tech Pvt. Ltd.
Version	: 2.0
PCN Date	: 20/12/2022
CoU Issuance Period	: 20 Years 06 Months
Monitoring Duration	: 29/07/2017 to 31/12/2037



Project Concept Note (PCN)
CARBON OFFSET UNIT (CoU) PROJECT

BASIC INFORMATION

Title of the project activity	3 MW Small Scale Hydro Electric Power project by M/S Continental Intra-Tech Pvt. Ltd.
Scale of the project activity	Small Scale
Completion date of the PCN	20/12/2022
Project participants	Creduce Technologies Private Limited (Project Aggregator) M/S Continental Intra-Tech Pvt. Ltd. (Project Owner)
Host Party	India
Applied methodologies and standardized baselines	Applied Baseline Methodology: AMS-I. D: “Grid connected renewable electricity generation”, version 18 Standardized Methodology: Not Applicable.
Sectoral scopes	01 Energy industries (Renewable/Non-Renewable Sources)
Estimated amount of total GHG emission reductions	To be estimated during verification [An ex-ante estimate is 9,460 CoUs per year at full capacity]

SECTION - A - Description of project activity

A.1 General description of Carbon offset Unit (CoU) project activity

The proposed project titled under UCR is “3 MW Small Scale Hydro Electric Power project by M/S Continental Intra-Tech Pvt. Ltd.”, which is a Hydro Electric Power project located in Pakhnoj Village, Kullu district in the state of Himachal Pradesh (India). The project is an operational activity with continuous reduction of GHG, currently being applied under “Universal Carbon Registry” (UCR).

A.1.1 Purpose of the project activity:

The project activity is a renewable power generation activity that incorporates the installation and operation of two hydro turbines, having aggregated installed capacity of 3 MW in the district Kullu of the state of Himachal Pradesh in India. This project has been promoted by M/S Continental Intra-Tech Pvt. Ltd. This project activity is also called as Haripur Nallah Small Hydro Electric Power Project.

Sr. No.	Turbine	Installed Capacity	Commissioning Date
1	Unit-I	1.5 MW	29/07/2017
2	Unit-II	1.5 MW	05/09/2022

The Hydro Electric Turbines were commissioned by the Himachal Pradesh State Electricity Board (HPSEB), Government of Himachal Pradesh, India. Unit-I was commissioned on 29/07/2017 and Unit-II was commissioned on 05/09/2022. So, in this PCN for ex-ante estimation generation is taken for 3 MW, but during monitoring period carbon credits will be calculated upon actual generation during that time period from respective working turbines.

Haripur Nallah Small Hydro Electric Power Project is a run-of-river project located in the Kullu District in the state of Himachal Pradesh. It utilizes the flow of Pakhnoj Nallah, tributary of Beas River. The project envisages a generation capacity of 3 MW of power by utilizing the available net head 141.9 m. The project activity aims to harness kinetic energy of water (renewable source) to generate electricity. The project comprises a Trench weir for diverting the flow of river. The diverted water passes through Desilting basin. Desilted water enters into water conductor system, forebay and the steel pressure shaft. A surface powerhouse is suitably located on a terrace at left bank of the river. Tail water from the powerhouse is discharged back into the Nallah. The project utilizes a net head of about 141.9 m.

The net generated electricity from the project activity is sold to state electricity board i.e., Himachal Pradesh State Electricity Board (HPSEB) under the Power Purchase Agreement (PPA) signed between the PP and the utility. In pre-project scenario, electricity delivered to the grid by the project activity would have otherwise been generated by the operation of fossil fuel-based grid-connected power plants and by the addition of new fossil fuel-based generation sources in the grid. As the nature of the hydro project, no fossil fuel is involved for power generation in the project activity. The electricity produced by the project is directly contributing to climate change mitigation by reducing the anthropogenic emissions of greenhouse gases into the atmosphere by displacing an equivalent amount of power from grid.

Hence, project activity is displacing the estimated annual net electricity generation i.e., 10,512 MWh

from the Indian grid system, which otherwise would have been generated by the operation of fossil fuel-based grid-connected power plants. The estimated annual CO₂e emission reductions by the project activity are expected to be 9,461 tCO₂e, whereas the actual emission reduction achieved during the first CoU period shall be submitted as a part of the first monitoring and verification.

A.1.2 Project's Contribution to Sustainable Development

This project is a greenfield activity where grid power is the baseline. The Indian grid system has been predominantly dependent on fossil fuel-powered plants. Renewable power generation is gradually contributing to the share of clean & green power in the grid; however, the grid emission factor is still on the higher side which defines the grid as a distinct baseline.

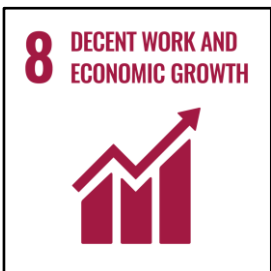
The Government of India has stipulated the following indicators for sustainable development in the interim approval guidelines for such projects which are contributing to GHG mitigations. The Ministry of Environment, Forests & Climate Change, has stipulated economic, social, environmental, and technological well-being as the four indicators of sustainable development. It has been envisaged that the project shall contribute to sustainable development using the following ways:

Social well-being: The project would help in generating direct and indirect employment benefits accruing out of ancillary units for project equipment and Hydro Turbines and for maintenance during the operation of the project activity. It will lead to the development of infrastructure around the project area in terms of improved road network etc. and will also directly contribute to the development of renewable infrastructure in the region.

Economic well-being: The project is a clean technology investment decision based on carbon revenue support, which signifies the flow of clean energy investments into the host country. The project activity requires temporary and permanent, skilled and semi-skilled manpower at the project location; this will create additional employment opportunities in the region. The generated electricity will be displacing an equivalent amount of electricity that otherwise would have been generated by fossil fuel sources, thereby reducing grid emission. In addition, improvement in infrastructure will provide new opportunities for industries and economic activities to be set up in the area. Apart from getting better employment opportunities, the local people will get better prices for their land, thereby resulting in overall economic development.

Technological well-being: The project activity employs state of art technology hydro turbines which has high power generation potential. The successful operation of project activity would lead to the promotion of this technology and would further push R&D efforts by technology providers to develop more efficient and better machinery in the future. Hence, the project leads to technological well-being.

Environmental well-being: The project activity will generate power using zero emissions hydro-based power generation facility which helps to reduce GHG emissions and specific pollutants like SO_x, NO_x, and SPM associated with the conventional thermal power generation facilities. The project utilizes kinetic energy of flowing water for generating electricity which is a clean source of energy. The project activity will not generate any air pollution, water pollution or solid waste to the environment which otherwise would have been generated through fossil fuels. Thus, the project causes no negative impact on the surrounding environment contributing to environmental well-being.

SDG Goals	Description
<p>Goal 7</p> 	<ul style="list-style-type: none"> ➤ The project activity will generate clean energy, which with increased shared will increase the affordability at a cheaper rate to end user. ➤ The project activity will utilize hydro energy (renewal resource) to generate power. The project activity will increase the share of renewable resource-based electricity to global mix of energy consumption
<p>Goal 8</p> 	<ul style="list-style-type: none"> ➤ Decent work and economic growth. ➤ This project activity generates additional employment for skilled and unskilled, also the project situated in remote area will provide employment opportunities to unskilled people from villages. The training on various aspect including safety, operational issues and developing skill set will also be provided to employees
<p>Goal 13</p> 	<ul style="list-style-type: none"> ➤ This 3 MW Continental hydro project meet the SDG 13 goal by saving fossil fuel and produce clean energy. ➤ This project is expected to reduce CO₂ emission 9,460 ton per year. ➤ SDG 13 on clean energy is closely related and complementary. ➤ In a Greenfield project, electricity delivered to the grid by the project would have otherwise been generated by the operation of grid-connected power plants. Thereby the project activity reduces the dependence on fossil fuel-based generation units and as there are no associated emissions with this project it contributes to the reduction of greenhouse gases (GHG) emissions.

A.1.3 With regards to ESG credentials:

At present specific ESG credentials have not been evaluated, however, the project essentially contributes to various indicators which can be considered under ESG credentials. Some of the examples are as follows:

- **Under Environment:**

Environmental criteria may include a company's energy use, waste, pollution, natural resource

conservation, and treatment of animals, etc. For the project proponent, the energy use pattern is now based on renewable energy due to the project and it also contributes to GHG emission reduction and conservation of depleting energy sources associated with the project baseline. Also, the criteria can be further evaluated on the basis of any environmental risks that the company might face and how those risks are being managed by the company. Here, as the power generation will be based on hydro power, the risk of environmental concerns associated with non-renewable power generation and risk related to increasing cost of power, etc. are now mitigated. Hence, the project contributes to ESG credentials.

Under Social:

Social criteria reflect on the company's business relationships, qualitative employment, working conditions with regard to its employees' health and safety, interests of other stakeholders' etc. With respect to this project, the Project Proponent has robust policies in place to ensure equitable employment, health & safety measures, local jobs creation etc. Also, the organizational CSR activities directly support local stakeholders to ensure social sustainability. Thus, the project contributes to ESG credentials.

- **Under Governance:**

Governance criteria relates to overall operational practices and accounting procedure of the organization. With respect to this project, the Project Proponent practices a good governance practice with transparency, accountability and adherence to local and national rules & regulations etc. This can be further referred from the company's annual report. Also, the project activity is a Hydro Electric Power project owned and managed by the proponent for which all required NOCs and approvals are received. The electricity generated from the project can be accurately monitored, recorded and further verified under the existing management practice of the company. Thus, the project and the proponent ensure good credentials under ESG.

A.2 Do no harm or Impact test of the project activity

There was no harm identified from the project and hence no mitigations measures are applicable.

Rational: as per 'Central Pollution Control Board (Ministry of Environment & Forests, Govt. of India)', final document on revised classification of Industrial Sectors under Red, Orange, Green and White Categories (07/03/2016), it has been declared that hydro project activity falls under the "White category". White Category projects/industries do not require any Environmental Clearance such as 'Consent to Operate' from PCB as such project does not lead to any negative environmental impacts. Additionally, as per Indian Regulation, Environmental and Social Impact Assessment is not required for Hydro Projects.

Additionally, there are social, environmental, economic and technological benefits which contribute to sustainable development. The key details have been discussed in the previous section.

A.3 Location of the project activity

Country	:	India
State	:	Himachal Pradesh
District	:	Kullu

Town/Village : Pakhnoij

Haripur Nallah Small Hydro Power Project is accessed through Kullu-Manali road. Project site is located at distance of 38 Km from Kullu District head quarter towards Naggar and Haripur Village. The nearest railway station having Broad Gauge line is at Kirtpur. The project site is 232Km from Shimla (State Head Quarter). The nearest railway station having Broad gauge line can be accessed at Kirtpur. The project site lies between latitude 32°08'44" to 32°08'32", North and longitude 77°10'29" to 77°09'33", East between the altitude of +1686 and +1531.

The representative location map is shown below

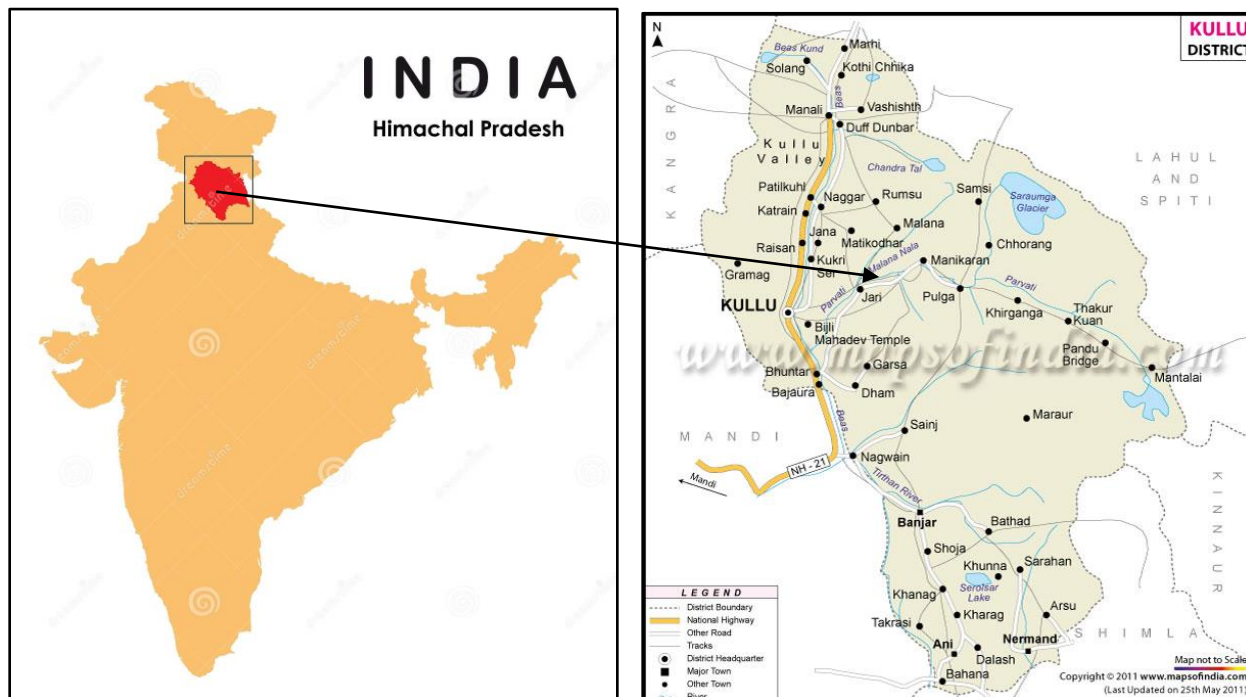


Figure-1- Location of the project activity (courtesy: google images and www.mapsofindia.com)

A.4 Technologies/measures

The project activity involves 2 hydro turbine generators of Pelton Wheel Horizontal type (1500 kW each) with internal electrical lines connecting the project activity with local evacuation facility. The generators generate power at 3.3 kV, which can further be stepped up to 33 kV. The project activity can operate in the frequency of 50 Hz and the voltage of 3.3 kV. The average life time of the generator is around 35 years as per the equipment supplier specification. The other salient features of the technology are:

Design Discharge	2.5 cumecs
Gross Head	154.28m
Net Head	141.9 m
Diversion Weir	
Type	Trench weir
Size	13 m x 10 m (0.80m depth at start and 2.0m depth at end)
Intake	

Type	Head regulator RCC well type
Size	5.0 x 3.40x 2.5m including 0.50m freeboard
Water Conducting System	
Intake to Desilting cum forebay Tank	1: 500 slope RCC Channel
Size	1.65m x 1.65 m including 0.27m freeboard
Length	50.00m
Velocity	1.60m/sec
Desilting cum forebay Tank	
Size	30m x 12m (2.92m depth at begin and 3.79m depth at end including hopper depth)
Forebay tank Size	12x12x5.10m including 0.50m freeboard
Penstock	
Main	1 No., 1.12 m, length 1600 m
Branches	2 Nos., 0.80 m, length 10 m
Velocity	3.02 m/sec
Plate thickness	12mm-14mm-16mm
Power House	
Type	Surface Power house
Plinth Elevation	1531 m
Size	20 m x 15 m
Gross head	154.28m
Net head	141.9 m
Tail Race	
Shape	Open, Rectangle
Size	1.35mx1.35m including 0.22m freeboard
Number	2 No. no joining into one

In the absence of the project activity, the equivalent amount of electricity imported from the NEWNE grid would have been generated from the NEWNE grid, which is predominantly based on fossil fuels¹, hence baseline scenario of the project activity is the grid-based electricity system, which is also the pre-project scenario.

A.5 Parties and project participants

Party (Host)	Participants
India	<p>Creduce Technologies Private Limited (Aggregator) Contact person : Shailendra Singh Rao Mobile : +91 9016850742, 9601378723 Address : 2-O-13,14 Housing Board Colony, Banswara, Rajasthan -327001, India</p> <p>M/S Continental Intra-Tech Pvt. Ltd. (Project Owner) Address: Vill. Haripur Tehsil & Distt. Kullu, Himachal Pradesh, India.</p>

¹ http://www.cea.nic.in/executive_summary.html

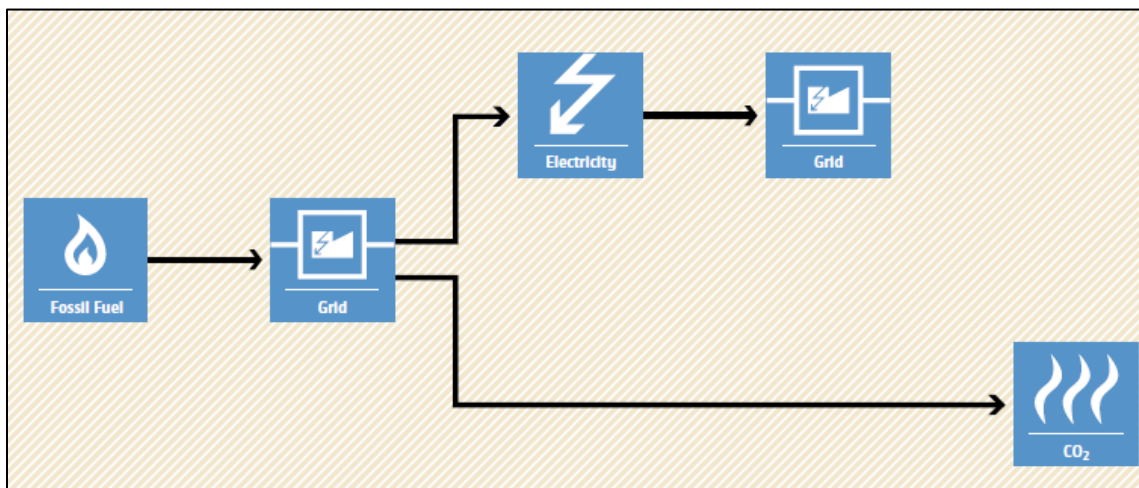
A.6 Baseline Emissions

The baseline scenario identified at the PCN stage of the project activity is:

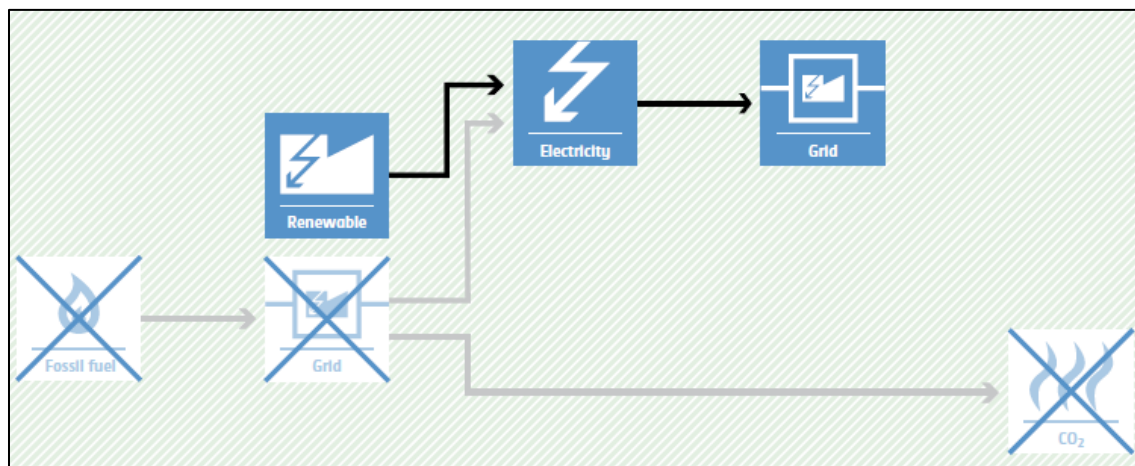
In the absence of the project activity, the equivalent amount of electricity would have been imported from the grid (which is connected to the unified Indian Grid system (NEWNE Grid)), which is carbon intensive due to being predominantly sourced from fossil fuel-based power plants. Hence, the baseline scenario of the project activity is the grid-based electricity system, which is also the pre-project scenario.

Schematic diagram showing the baseline scenario:

Baseline Scenario:



Project Scenario:



A.7 De-bundling

This project activity is not a de-bundled component of a larger project activity.

SECTION - B - Application of methodologies and standardized baselines

B.1 Reference to methodologies and standardized baselines

Sectoral scope	:	01, Energy industries (Renewable/Non-renewable sources)
Type	:	I-Renewable Energy Projects
Category	:	AMS. I.D. (Title: “Grid connected renewable electricity generation”, version 18)

B.2 Applicability of methodologies and standardized baselines

The project activity involves generation of grid connected electricity from the construction and operation of a new hydro power-based power project. The project activity has installed capacity of 3 MW which will qualify for a small-scale project activity under Type-I of the Small-Scale methodology. The project status is corresponding to the methodology AMS-I.D., version 18 and the applicability of the methodology is discussed below:

Applicability Criterion	Project Case
1. This methodology comprises renewable energy generation units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass: (a) Supplying electricity to a national or a regional grid; or (b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.	The project activity involves setting up of a grid connected renewable energy (Hydro) generation plant for supplying to national grid. Thus, it fulfils the criteria (a) of point 1.
2. This methodology is applicable to project activities that: (a) Install a Greenfield plant; (b) Involve a capacity addition in (an) existing plant(s); (c) Involve a retrofit of (an) existing plant(s); (d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or (e) Involve a replacement of (an) existing plant(s).	The option (a) of applicability criteria 2 is applicable as project is a Greenfield plant /unit. Hence the project activity meets the given applicability criterion.

<p>3. Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:</p> <p>a) The project activity is implemented in existing reservoir, with no change in the volume of the reservoir; or</p> <p>b) The project activity is implemented in existing reservoir, where the volume of the reservoir(s) is increased and the power density as per definitions given in the project emissions section, is greater than 4 W/m².</p> <p>c) The project activity results in new reservoirs and the power density of the power plant, as per definitions given in the project emissions section, is greater than 4 W/m²</p>	<p>This is run-of-river type of project. Hence this criterion is not applicable.</p>
<p>4. If the new unit has both renewable and non-renewable components (e.g., a wind/diesel unit), the eligibility limit of 15 MW for a small-scale CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15 MW.</p>	<p>The proposed project is 3 MW Hydro power project, i.e., only component is renewable power project below 15 MW, thus the criterion is not applicable to this project activity.</p>
<p>5. Combined heat and power (co-generation) systems are not eligible under this category.</p>	<p>This is not relevant to the project activity as the project involves only hydro power generating units.</p>
<p>6. In the case of project activities that involve the capacity addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.</p>	<p>This project activity does not involve the capacity addition of an existing project. Therefore, this criterion is not applicable.</p>
<p>7. In the case of retrofit, rehabilitation or replacement, to qualify as a small-scale project, the total output of the retrofitted, rehabilitated or replacement power plant/unit shall not exceed the limit of 15 MW.</p>	<p>The project activity is a new installation, it does not involve any retrofit measures nor any replacement and hence is not applicable for the project activity.</p>
<p>8. In the case of landfill gas, waste gas, wastewater treatment and agro-industries projects, recovered methane emissions are eligible under a relevant Type III category. If the recovered methane is used for electricity generation for supply to a grid, then the baseline for the electricity component shall be in accordance with procedure prescribed under this</p>	<p>This is not relevant to the project activity as the project involves only Hydro power generating units.</p>

methodology. If the recovered methane is used for heat generation or cogeneration other applicable Type-I methodologies such as “AMS-I.C.: Thermal energy production with or without electricity” shall be explored.	
9. In case biomass is sourced from dedicated plantations, the applicability criteria in the tool “Project emissions from cultivation of biomass” shall apply.	No biomass is involved, the project is only a hydropower project and thus the criterion is not applicable to this project activity.

B.3 Applicability of double counting emission reductions

There is no double accounting of emission reductions in the project activity due to the following reasons:

- Project is uniquely identifiable based on its location coordinates,
- Project has a dedicated commissioning certificate and connection point,
- Project is associated with energy meters which are dedicated to the consumption point for the project developer.

B.4 Project boundary, sources, and greenhouse gases (GHGs)

As per applicable methodology AMS-I.D. Version 18, “The spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the project power plant is connected to.”

Thus, the project boundary includes the Hydro Power Plant and the Indian grid system.

Source		Gas	Included?	Justification/Explanation
Baseline	Grid connected electricity generation	CO ₂	Yes	Main emission source
		CH ₄	No	Minor emission source
		N ₂ O	No	Minor emission source
		Other	No	No other GHG emissions were emitted from the project
Project	Greenfield Hydro Electric Power project Activity	CO ₂	No	No CO ₂ emissions are emitted from the project
		CH ₄	No	Project activity does not emit CH ₄
		N ₂ O	No	Project activity does not emit N ₂ O
		Other	No	No other emissions are emitted from the project

B.5 Establishment and description of the baseline scenario

As per the approved consolidated methodology AMS-I.D. Version 18, if the project activity is the

installation of a new grid-connected renewable power plant/unit, the baseline scenario is the following:

“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 a new hydro power plant to harness kinetic energy of flowing water. In the absence of the project activity, the equivalent amount of power would have been supplied by the Indian grid, which is fed mainly by fossil fuel-fired plants. Hence, the baseline for the project activity is the equivalent amount of power produced at the Indian grid.

A "grid emission factor" refers to a CO₂ emission factor (tCO₂/MWh) that will be associated with each unit of electricity provided by an electricity system. The UCR recommends an emission factor of 0.9 tCO₂/MWh for the 2013 - 2020 years as a fairly conservative estimate for Indian projects not previously verified under any GHG program. Also, for the vintage 2021, the combined margin emission factor calculated from the CEA database in India results in higher emissions than the default value. Hence, the same emission factor has been considered to calculate the emission reduction under a conservative approach.

B.5.1 Net GHG Emission Reductions and Removals

$$\text{Thus, } ER_y = BE_y - PE_y - LE_y$$

Where:

ER_y = Emission reductions in year y (tCO₂/y)

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

PE_y = Project emissions in year y (tCO₂/y)

LE_y = Leakage emissions in year y (tCO₂/y)

• *Baseline Emissions*

Baseline emissions include only CO₂ emissions from electricity generation in power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants. The baseline emissions are to be calculated as follows:

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

BE_y = Baseline emissions in year y (t CO₂)

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

$EF_{grid,y}$ = UCR recommended emission factor of 0.9 tCO₂/MWh has been considered. (Reference: General Project Eligibility Criteria and Guidance, UCR Standard, page 4)

Estimated annual baseline emission reductions (BE_y)

$$= 10,512 \text{ MWh/year} \times 0.9 \text{ tCO}_2/\text{MWh}$$

$$= 9,460 \text{ tCO}_2/\text{year}$$

Hence Net GHG emission reduction, = 9,460-0-0 = 9,460 tCO₂/year (i.e., 9,460 CoUs/year)

- **Project Emissions**

As per Paragraph 39 of AMS-I.D. version-18, only emissions associated with fossil fuel combustion, emissions from the operation of geothermal power plants due to the release of non-condensable gases, emissions from a water reservoir of Hydro should be accounted for the project emission. Since the project activity is a Hydro Electric Power project, project emission for renewable energy plants is nil.

Thus, PE = 0

- **Leakage Emission**

As per paragraph 42 of AMS-I.D. version-18, 'If the energy generating equipment is transferred from another activity, leakage is to be considered.' In the project activity, there is no transfer of energy-generating equipment and therefore the leakage from the project activity is considered zero.

Hence, LE = 0

The actual emission reduction achieved during the first CoU period shall be submitted as a part of the first monitoring and verification. However, for the purpose of an ex-ante estimation, the following calculation has been submitted:

B.6 Prior History

The project was not applied under any other GHG mechanism. Hence the project will not cause double accounting of carbon credits (i.e., CoUs).

B.7 Changes to the start date of crediting

The crediting period under UCR has been considered from the date of the generation of electricity. There is no change in start date of crediting period.

B.8 Permanent changes from PCN monitoring plan, applied methodology or applied standardized baseline

Not applicable.

B.9 Monitoring period number and duration

Total Monitoring Period: 04 Years and 06 Months

Date: 29/07/2017 to 31/12/2037 (inclusive of both dates).

B.10 Monitoring Plan

Data and Parameters available (ex-ante values):

Data / Parameter	UCR recommended emission factor
Data unit	tCO ₂ /MWh
Description	A "grid emission factor" refers to a CO ₂ emission factor (tCO ₂ /MWh) which will be associated with each unit of electricity provided by an electricity system. The UCR recommends an emission factor of 0.9 tCO ₂ /MWh for the 2013 - 2020 years as a fairly conservative estimate for Indian projects not previously verified under any GHG program. Hence, the same emission factor has been considered to calculate the

	emission reduction under conservative approach.
Source of data	https://a23e347601d72166dcd6-16da518ed3035d35cf0439f1cdf449c9.ssl.cf2.rackcdn.com//Documents/UCRCoUStandardAug2022updatedVer6_090822220127104470.pdf
Value applied	0.9
Measurement methods and procedures	-
Monitoring frequency	Ex-ante fixed parameter
Purpose of Data	For the calculation of Emission Factor of the grid
Additional Comment	The combined margin emission factor as per CEA database (current version 16, Year 2021) results into higher emission factor. Hence for 2021 vintage UCR default emission factor remains conservative.

Data and Parameters to be monitored (ex-post monitoring values):

Data / Parameter	EG _{PJ,facility, y}
Data unit	MWh
Description	Net electricity supplied to the NEWNE grid facility by the project activity per year
Source of data	Joint Meter Reading report issued by State electricity Board
Measurement procedures (if any):	<p>Data Type: Measured</p> <p>Monitoring equipment: Energy Meters are used for monitoring</p> <p>Recording Frequency: Continuous monitoring and Monthly recording from Energy Meters, Summarized Annually</p> <p>Archiving Policy: Paper & Electronic</p> <p>Calibration frequency: 5 years (as per CEA provision)</p> <p>Generally, the calculation is done by the Authority/Discom Therefore, based on the joint meter reading certificates/credit notes, the project shall raise the invoice for monthly payments. In case the monthly JMR provides net export quantity, the same will be directly considered for calculation. However, if the JMR does not directly provide “net electricity” units, then quantity of net electricity supplied to the grid shall be calculated using the parameters reflected in the JMR.</p> <p>For example, the difference between the measured quantities of the grid export and the import will be considered as net export:</p> $EG_{PJ,y} = EG_{Export} - EG_{Import}$

Measurement Frequency:	Monthly
Value applied:	10,512 (Ex-ante estimate)
QA/QC procedures applied:	Continuous monitoring, hourly measurement monthly recording. Tri-vector (TVM)/ABT energy meters with accuracy class 0.2s
Purpose of data:	The Data/Parameter is required to calculate the baseline emission.
Any comment:	Data will be archived electronically for a period of 36 months beyond the end of crediting period.