

GOLD STANDARD PASSPORT

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Annex 1 ODA declarations

SECTION A. Project Title

Title: **Song Bung 5 Hydropower Project**

Date: 02/09/2013

Version no.: 2.0

SECTION B. Project description

Song Bung 5 hydropower project activity, which is owned by Power Engineering Consulting Joint Stock Company 1, involves the construction of a two generating unit hydropower plant having installed capacity of 57MW. The main structures of the project include a dam, water intake, a power house, electricity distribution station etc. The project is located on Bung River in Ma Cooih commune, Dong Giang district and Thanh My town, Nam Giang district, Quang Nam province, Viet Nam.

Prior to the implementation of the project activity, electricity in Viet Nam is generated mainly from fossil fuel sources and is solely distributed to consumers via the unique national electricity grid.

The project's purpose is to generate hydroelectricity from Bung river, a clean and renewable source, to supply the national grid. The project's installed capacity and estimated annual gross power generation is 57 MW and 230,340 MWh, respectively. The net electricity generated (with an estimated annual volume of 226,884.9 MWh) will be supplied to the national grid via a newly constructed transmission line (length of around 13 km) from the plant to a transformer station.

The baseline scenario of the project activity is the same as the scenario existing prior to the start of implementation of the project activity.

The project activity will generate renewable power with negligible greenhouse gas (GHG) emissions, which will displace part of the electricity otherwise supplied by fossil fuel fired power plants in the national grid. The project involves construction of a reservoir with an area of 168 ha and a power density of 33.9 W/m², accordingly. As the power density of this project is greater than 10 W/m², the project is eligible to apply for GHG emission reductions. Total expected CO₂ emission reduction is 915,432 tCO₂ over the first crediting period of 7 years.

The project's contributions to the sustainable development of the local area as well as the host country are as follows:

General contributions towards national sustainable development:

- In recent years, Viet Nam has suffered a critical electricity shortage as a consequence of rapidly increasing demand and insufficient supply, thereby imposing negative impacts on economic growth as well as on the daily lives of people. This project activity will be a contribution towards balancing the supply and demand gap. By exporting electricity directly to the national grid, it will help improve the quality of service and lessen the risks of power failure.
- Reducing reliance on exhaustible fossil fuel based power sources and also reducing the import of fuels for the purpose of power generation.
- Modern and highly efficient turbines and generators are being used in the project and the power transmission will be at high voltage to ensure low losses. The project will accelerate the deployment of renewable energy technologies in Viet Nam.

Contributions towards local sustainable development:

- a) Economic well-being

Once commissioned, this proposed project would increase the industrial share in the economic structure of Quang Nam province. This proposed project will significantly contribute to the state budget via taxes i.e. annual enterprise revenue tax, natural resource tax and CER tax.

By supplying a stable electricity output, this project will facilitate the industrialization process of the province and leverage the performance of traditional trade villages as well as tourism industry and services inside the province.

After commissioning, this project will supply electricity to speed up the commissioning of other large infrastructure projects in the region.

b) Social well-being

The project improves existing roads, which will facilitate the transportation and travel. Thus, the project creates convenience for the transfer and trade in the area, thereby improves minorities' living standard and contribute to fill the gap in development between different ethnic groups in Viet Nam.

By supplying a stable electricity output, this project will facilitate the industrialization process of the province and support economic development of local villages through fostering tourism, trade and services inside the province. This project will contribute directly to improve the low-quality infrastructure systems of the mountainous commune.

The project will construct a new transmission line together with the hydropower plant, which will reduce electricity losses and improve the quality of electricity supply in the region.

The communication system and clean water treatment serving for workers of the project during the both construction and operation phases will be shared with local people. Besides, the project activity could result in the employment of the local people for the construction and operation later. Therefore, this project activity will contribute directly to alleviate poverty in the region.


This demonstrates that the project activity will contribute positively towards sustainable development and that it is consistent with the policies of the Government to encourage environmental protection.





Estimated project start date of operation: 30/11/2012

SECTION C. Proof of project eligibility

C.1. Scale of the Project

Please tick where applicable:

Project Type	Large	Small
	X	<input type="checkbox"/>

	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>

	<input type="checkbox"/>
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C.2. Host Country

The Socialist Republic of Viet Nam

C.3. Project Type

Please tick where applicable:

Project type	Yes	No
Does your project activity classify as a Renewable Energy project?	X	<input type="checkbox"/>
Does your project activity classify as an End-use Energy Efficiency Improvement project?	<input type="checkbox"/>	X
Does your project activity classify as waste handling and disposal project?	<input type="checkbox"/>	X

Please justify the eligibility of your project activity:

- The CDM GS large-scale project activity is in the Renewable Energy Supply category, (Type (i): Renewable Energy Supply Projects) and applies the large scale baseline and monitoring methodology ACM0002, version 12.2.0, “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”.
- The project involves emission reductions of CO₂ from hydro power generation with total capacity of 57MW, which is greater than 15MW, and thus meets the eligibility criteria for large-scale GS eligible Renewable Energy Supply Project.
- The proposed project is not using any ODA funding as defined in the GS manual for Project Developers.
- Project also does not claim certificates from another Certification Scheme other than GS, therefore no double counting occurs and thus it is eligible under the Gold Standard.
- The project is located in Ma Cooih commune, Dong Giang district and Thanh My town, Nam Giang district, Quang Nam province, where are not listed as **High Conservation Value** areas according to criteria set out by the High Conservation Value Resource Network.
- The project is in compliance with the latest WCD guidelines. The WCD report has been validated by DOE appointed for the CDM validation.
- At the stage of project design, an Environmental Impact Assessment report was prepared by an independent and competent party. It was approved by the national authority and satisfactorily addressed environmental and social impact issues, as follows:

Competing uses of water resources	<p>The proposed project is located on Bung River where there are other hydro plants namely Song Bung 2 Hydropower Plant, Song Bung 4 Hydropower Plant, Song Bung 6 Hydropower Plant, etc. which are either under operation or in the construction period. When all of them are put into operation, there may be competing uses of water for the electricity generation. However, as provided for in the provincial master plan as well as in the national master plan, these shall be in close cooperation to ensure that there is no competition in the water use. Furthermore, there are very few residents living at the project location; therefore, almost no agricultural activities which require water from the river take place. Daily activities of the local residents also require very little water volume from Bung River as they mainly use water from drilled wells or naturally mountainous water cracks.</p> <p>It is concluded that there are no competing uses of water resources or water diversion from current use due to the proposed project activity.</p>
Minimal ecological flow	<p>The reservoir of Song Bung 5 Hydropower Plant is designed with daily circulation regime, which means water flow will be daily circulated to the downstream (even in the dry season)¹. With this regime, the minimal flow is secured downstream after the dam, which guarantees habitant quality, securing the minimum water depth for fish migration</p>

¹ EIA report, chapter III, page 97

	<p>during the construction and operation.</p> <p>Furthermore, the technical consultant proposed to design the dam with spillway that allows water to overflow and a sand discharge gate in order to ensure minimum water amount at the downstream and continuous water flow².</p>
Groundwater level	As described above, the minimal water flow is maintained, so the groundwater level is not affected by the project activity.
Fish passage and screens (water intake structure)	For migration of fish and other aquatic species, the dam is designed with spillway, which allows water to pass through daily (even in the dry season) and dam-bottom discharge gate. The water intake structure is installed with screens to avoid waste and fish getting in.
Sediment management	<p>Larger part of suspended substances moving toward the reservoir of Song Bung 5 Hydropower Plant is deposited at the upstream reservoirs that are of annual circulation regime. However, in order to minimize substances flow into the reservoir and bed sedimentation, before the operation, the project owner shall cooperate with local authorities to conduct afforestation and reforestation to increase green cover and minimize topsoil erosion at the reservoir.</p> <p>The dam is designed with discharge gate that enables the sediments to pass through; therefore, there is no accumulation of sediments below the dams, and subsequently typically morphological structures are sustained.</p>
Soil erosion	<p>During the construction period, topsoil erosion may occur due to the excavation activities. However, proper mitigation measures will be applied including³:</p> <ul style="list-style-type: none"> - The contractor shall arrange reasonable time and frequency for the earthwork e.g. excavation in order that it does not occur during the rainy season. - In building the access roads, taking advantage of original terrain, contour to restrict the slope breaking, talus building of high slope and large size. - In the worst case, it is necessary to grow grass or native plants that are of high covering speed or to embank the talus with rock for erosion prevention. - Minimize the vegetable clearance in the project site and surrounding areas. - Implement reforestation with the area equivalent to that lost due to the project activity.

² Feasibility Study Report, page 4-2

³ EIA report, chapter 4, pp 109-110

Pre Announcement	Yes	No																																
Was your project previously announced?	<input type="checkbox"/>	X																																
<p>Explain your statement on pre announcement</p> <p>Prior to any payment being made for the implementation of the project all announcements were indicating that the project was a CDM project i.e. stakeholders consultation meeting were held to inform of the proposed CDM project activity; official letters needed to obtained the support from the competent authorities for the CDM project were served. Therefore, this project was never announced to be implemented without the revenues from carbon credits.</p> <p>The following is the implementation timeline of the proposed project activity:</p> <table border="1"> <thead> <tr> <th>Development of the hydropower project</th> <th>Activities taken to achieve CDM registration</th> <th>Time</th> <th>Implication on CDM</th> </tr> </thead> <tbody> <tr> <td>Approving Environmental Impact Assessment Report</td> <td></td> <td>21-Feb-2008</td> <td></td> </tr> <tr> <td>Finalizing the Basic Design report</td> <td></td> <td>Feb-2009</td> <td></td> </tr> <tr> <td></td> <td>Minutes of meetings to consult public opinions (local people and local authorities) on the social and environmental impacts of the hydropower project in order to develop it as a CDM activity.</td> <td>02-Mar-2009 & 03-Mar-2009</td> <td><i>CDM early consideration</i></td> </tr> <tr> <td>Issuing the Investment License for the project</td> <td></td> <td>11-May-2009</td> <td></td> </tr> <tr> <td></td> <td>Official letter submitted by the project owner to People's Committee (PPC) of Quang Nam province requesting verification and support for the CDM project.</td> <td>20-Aug-2009</td> <td><i>CDM early consideration</i></td> </tr> <tr> <td></td> <td>Official letter submitted by the Project owner to the DNA requesting verification and support for the CDM project.</td> <td>20-Aug-2009</td> <td><i>CDM early consideration</i></td> </tr> <tr> <td colspan="2">Issuing the Investment Decision on implementing the investment project and CDM project by the Management Board.</td> <td>14-Sept-2009</td> <td><i>Date of making CDM project Investment decision</i></td> </tr> </tbody> </table>			Development of the hydropower project	Activities taken to achieve CDM registration	Time	Implication on CDM	Approving Environmental Impact Assessment Report		21-Feb-2008		Finalizing the Basic Design report		Feb-2009			Minutes of meetings to consult public opinions (local people and local authorities) on the social and environmental impacts of the hydropower project in order to develop it as a CDM activity.	02-Mar-2009 & 03-Mar-2009	<i>CDM early consideration</i>	Issuing the Investment License for the project		11-May-2009			Official letter submitted by the project owner to People's Committee (PPC) of Quang Nam province requesting verification and support for the CDM project.	20-Aug-2009	<i>CDM early consideration</i>		Official letter submitted by the Project owner to the DNA requesting verification and support for the CDM project.	20-Aug-2009	<i>CDM early consideration</i>	Issuing the Investment Decision on implementing the investment project and CDM project by the Management Board.		14-Sept-2009	<i>Date of making CDM project Investment decision</i>
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Signing the construction contract		21-Dec-2009	<i>Starting date of the project activity</i>
	Official letter submitted by the People's Committee of Quang Nam province to the DNA requesting verification and support for the CDM project.	06-Jan-2010	
	Notifying the CDM project to the EB and the DNA	07-Jun-2010	
Signing the Equipment Contract		19-Aug-2010	
Issuing the approval of FSR for the proposed project		30-May-2011	

C.4. Greenhouse gas

Greenhouse Gas	
Carbon dioxide	X
Methane	<input type="checkbox"/>
Nitrous oxide	<input type="checkbox"/>

C.5. Project Registration Type

Project Registration Type	
Regular	<input type="checkbox"/>

Pre-feasibility assessment	Retroactive projects (T.2.5.1)	Preliminary evaluation (e.g.: Large Hydro or palm oil-related project) (T.2.5.2)	Rejected by UNFCCC (T2.5.3)
	X	X	<input type="checkbox"/>

The Start Date of project activity: 21/12/2009

SECTION D. Unique project identification

D.1. GPS-coordinates of project location

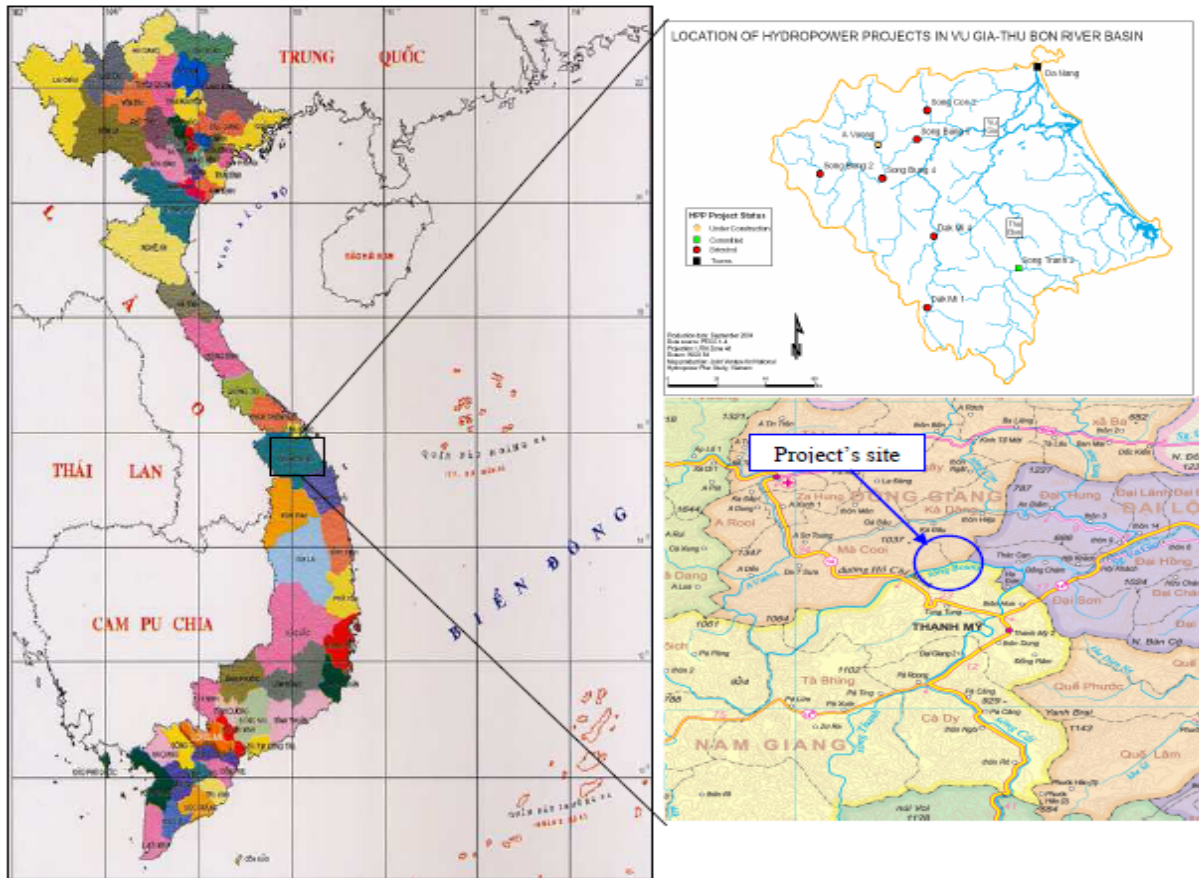
	Coordinates
Latitude	15° 48' 31.12" N
Longitude	107° 44' 43.74" E



Explain given coordinates

The proposed project activity is located on Bung River in Ma Cooih commune, Dong Giang district and Thanh My town, Nam Giang district, Quang Nam province, Viet Nam. The above coordinates indicate the location of the dam. It is taken from the Feasibility Study Report.

D.2. Map



Source: Snapshot from Google Earth

SECTION E. Outcome stakeholder consultation process

E.1. Assessment of stakeholder comments

Two stakeholder consultation meetings were held for Song Bung 5 Hydropower Project, one in Ma Cooih commune, Dong Giang district and one in Thach My town, Nam Giang district, Quang Nam province. The original copies of meeting minutes are attached as Annex 2.

I. Stakeholder consultation meeting in Ma Cooih commune, Dong Giang district

Date: 03 March 2009

Place: Meeting room at People's Committee of Ma Cooih commune, Dong Giang district

Minutes of meeting:

- For the purpose of the meeting, Mr. Le Van Luc – Representative of Power Engineering Consulting Joint Stock Company 1 presented the content of Feasibility Study Report of the proposed project and explained about CDM as well as need to develop and register the project under CDM.
- All participants agree on the implementation of the project as designed in the feasibility study report.

List of attendants:

Name	Organization	Position
Le Van Luc	Power Engineering Consulting Joint Stock Company – Project owner	General Director
Nguyen Tai Son	Power Engineering Consulting Joint Stock Company – Project owner	Deputy Director General
Le Minh Ha	Power Engineering Consulting Joint Stock Company – Project owner	Accountant
A Lang Bang	Local Authorities	Secretary cum Chairman of People's Council
A Lang Hiep	Local authorities	Vice secretary
A Lang Trach	Local authorities	Chairman of People's Committee
A Lang Knenh	Local authorities	Chairman of Fatherland Front
A Rat Gro	Local authorities	Cadastral official
A Rat son	Local authorities	Chairman of Farmers Association
Po Loong Thi Bo	Local authorities	Chairwoman of Women Union
A Rat Boi	Local authorities	Secretary of Youth Union
A Lang Thanh	Local authorities	Secretary of A So village
A Lang Chin	Local authorities	Vice-chairman of A So village

II. Stakeholder consultation meeting in Thanh My town, Nam Giang district

Date: 02 March 2009

Place: Meeting room at People's Committee of Ma Cooih commune, Dong Giang district

Minutes of meeting:

- For the purpose of the meeting, Mr. Le Van Luc – Representative of Power Engineering Consulting Joint Stock Company 1 presented the content of Feasibility Study Report of the proposed project and explained about CDM as well as need to develop and register the project under CDM.
- All participants agree on the implementation of the project as designed in the feasibility study report.

List of attendants:

Name	Organization	Position
Le Van Luc	Power Engineering Consulting Joint Stock Company – Project owner	General Director
Nguyen Tai Son	Power Engineering Consulting Joint Stock Company – Project owner	Deputy Director General
Le Minh Ha	Power Engineering Consulting Joint Stock Company – Project owner	Accountant
Bho Nuoch Chien	Local Authorities	Secretary cum Chairman of People's Council
Nguyen Cong Phi	Local authorities	Vice chairman of People's Committee
Tran Phuoc Song	Local authorities	Chairman of People's Committee
A Rat Thi Cuong	Local authorities	Chairman of Women Union
Zo Rom Ua	Local authorities	Cadastral official
A Rat Hien	Local authorities	Secretary of Youth Union
A Rat Thay	Local authorities	Chairman of Farmers Association
A Rat Crom	Local authorities	Secretary of Pa Dau 2 village
A Lang Um	Local authorities	Vice-chairman of People's Committee of Pa Dau 2 village

E.2. Stakeholder Feedback Round

Please describe report how the feedback round was organized, what the outcomes were and how you followed up on the feedback.

This section will be filled in when the Stakeholder Feedback Round has been carried out.

E. 3. Discussion on continuous input / grievance mechanism

Discuss the Continuous input / grievance mechanism expression method and details, as discussed with local stakeholders.

	Method Chosen (include all known details e.g. location of book, phone, number, identity of mediator)	Justification
Continuous Input / Grievance Expression Process Book	Comment books are made available at the project site and at the Office of the commune People's Committee so that local stakeholders can provide feedback on the proposed project.	Project site is the place where the local stakeholders can communicate directly (or anonymously via the comment book) with the project's Management Board. The office of the communal People's Committee is a standing unit of the People's Committee to deal with comments from local community on all matters of the commune and is the contact point between local authority and the residents. The comment books will be securely placed in the chosen locations and daily checked by responsible persons.
Telephone access	The telephone numbers of the Project Owner and the GS consultancy company are made available for local stakeholders to provide feedback on the project. Stakeholders can find the telephone number in the Comment Book or on the paper note at the project site.	The telephones are located at the office of the project owner at the project's site and at the office of the GS consultancy company to allow more practical communication with local stakeholders. There is always a receptionist at the desk to answer the calls or have the messages recorded. All received calls shall be logged and recorded in Comment Book with the date, comments, action requested and project responses. Stakeholders are not

		required to give their personal details when they wish to make a comment.
Internet/email access	The Project Owner has its website and its email and the GS consultancy company also has its website and its email for local stakeholders to provide feedback on the project.	There is always a web admin to receive the emails and website comments. All received emails and website comments shall be logged and recorded with the date, comments, action requested and project responses. Stakeholders are not required to give their personal details when they wish to make a comment on the website.
Nominated Independent Mediator (optional)	Not applied	Not applied

All issues identified during the crediting period through any of the Methods shall have a mitigation measure in place. The identified issue should be discussed in the revised Passport and the corresponding mitigation measure should be added to sustainability monitoring plan in section G.

SECTION F. Outcome Sustainability assessment

F.1. 'Do no harm' Assessment

Safeguarding principles	Description of relevance to my project	Assessment of my project risks breaching it (low/medium/high)	Mitigation measure
1. The project respects internationally proclaimed human rights.	The project respects internationally proclaimed human rights. Viet Nam is a state party to 7 core UN human rights treaties, including the UN International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR), to which it acceded in 1982 ⁴ . Viet Nam is now playing an increasing role in regional and international affairs.	Low	N/A
2. The project does not involve and is not complicit in	The project does not involve and is not complicit in involuntary resettlement. As expected in the FSR report by the	Low	N/A

⁴ <http://www1.umn.edu/humanrts/research/ratification-vietnam.html>

involuntary resettlement	designer during the preparation stage, there will be 17 household(s) affected by the project activity. However, it is the fact that these households agreed on the compensation in cash without resettlement because they do not lose all of their land. There is no resettlement occurred. This information is documentarily evidenced and checked on-site.		
3. The project does not involve and is not complicit in the alteration, damage or removal of any critical cultural heritage	Song Bung 5 hydropower project is implemented on a relatively small area (257 hectares), where is mainly thin and invaluable forest. There are neither rare and precious species nor critical cultural heritage found in the project site. ⁵	N/A	N/A
4. The project respects the employees' freedom of association and their right to collective bargaining and is not complicit in restrictions of these freedom and rights	Labour rights are protected in the Labour code of Viet Nam. The right to unionize, bargain collectively are highly protected by this code. The proposed project activity fully respects the employee's freedom and rights and all related laws endorsed by Vietnamese government. <i>Ref. Labour code of Viet Nam, Article 7</i>	N/A	N/A
5. The project does not involve and is not complicit in any form of forced or compulsory labour	All employees are engaged in the project implementation on a voluntary basis. Forced or compulsory labour is regulated in the Labour code of Vietnam. The project fully respects the employee's rights in accordance with all labour related laws. The law compliance is subject to government's inspection and ruling. In case of any terms of violation, due penalty would be enforced as in accordance with the regulations. <i>Ref. Labour code of Viet Nam, Article 9</i>	Low	N/A

⁵ EIA report, Chapter 2, pp 53 - 54

6. The project does not employ and is not complicit in any form of child labour	<p>The project does not involve the employment and complicit of child labour. The host country has its own credible legislation in place prohibiting child labour.</p> <p>In Viet Nam, there is a comprehensive definition of child labour in terms age limitation, working hours, etc. Such employment regulations are prescribed in Labour code of Viet Nam.</p> <p>The proposed project requires a limited number of skilled employees to operate, maintain and manage the plant. Therefore, it does not employ and is not complicit in any form of child labour.</p> <p><i>Ref. Labour code of Viet Nam, Chapter XI</i></p>	Low	N/A
7. The project does not involve and is not complicit in any form of discrimination based on gender race, religion, sexual orientation or any other basis.	<p>The project does not discriminate against individuals and employment of staff is not based on gender, race, religion, sexual orientation or on any other basis. According to the interview with project owner, there is strong solidarity among people from different minority groups in the project site. In Viet Nam, there is labour legislation that protects against some facets of this principle.</p> <p><i>Ref. Labour Code of Viet Nam, Article 5</i></p>	Low	N/A
8. The project provides workers with a safe and healthy work environment and is not complicit in exposing workers to unsafe or unhealthy work environments.	<p>A hydro project in general does not expose workers to unsafe or unhealthy work environment in terms of toxins or chemicals. In addition the project follows national safety rules under the host country laws that covers work safety.</p> <p><i>Ref. Labour code of Viet Nam, Article 7</i></p>	Low	N/A
9. The project takes a precautionary approach in regard to	<p>The project activity does not threaten human health or the environment. This was checked before the construction</p>	Low	N/A

environmental challenges and is not complicit in practices contrary to the precautionary principle.	start by the project owner in the framework of an EIA to see if the components in the project activity are in compliance with the laws in various aspects e.g. health & safety, hazardous waste release etc.		
10. The project does not involve and is not complicit in significant conversion or degradation of critical natural habitats, including those that are (a) legally protected, (b) officially proposed for protection, (c) identified by authoritative sources for their high conservation value, or (d) recognized as protected by traditional local communities.	The project does not involve and is not complicit in significant conversion or degradation of critical natural habitats. There are no critical natural habitats located at or close to the project site.	N/A	N/A
11. The project does not involve and is not complicit in corruption.	Viet Nam has ratified the United Nations Convention against Corruption. All permits that are required legally have been obtained following applicable laws ⁶ . Furthermore, the project is owned by a private equity company, and there is no governmental subsidy disbursed to the project. Therefore, the project does not involve and is not complicit in corruption and is not prone to entrusted power abuse nor corruption.	Low	N/A

⁶ http://vi.wikipedia.org/wiki/C%C3%B4ng_%C6%B0%E1%BB%9Bc_ph%C3%B2ng_ch%E1%BB%91ng_tham_nh%C5%A9ng

F.2. Sustainable Development matrix

Indicator	Mitigation measure	Relevance to achieving MDG	Chosen parameter and explanation	Preliminary score
Gold Standard indicators of sustainable development.	If relevant copy mitigation measure from “do no harm” – table, or include mitigation measure used to neutralise a score of ‘-‘	Check www.undp.or/m dg and www.mdgmonit or.org Describe how your indicator is related to local MDG goals	Defined by project developer	Negative impact: score ‘-‘ in case negative impact is not fully mitigated score 0 in case impact is planned to be fully mitigated No change in impact: score 0 Positive impact: score ‘+’
Air quality	<ul style="list-style-type: none"> - Spraying water and covering material trucks’ body to minimize dust; - Utilizing modern execution means to reduce exhaust gases and noise; - Making no operation of noisy machinery during the rest time of local residents; - Restoring green cover around the project site to balance ratio O₂/–CO₂ and evaporation⁷. 	Ensuring the environmental sustainability	Dust, GHG and other air pollutant: The air pollution mainly comes from the construction. Proper measures are employed to mitigate the potential impacts During the operation period, the electricity generated by the project partially replaces electricity generation from other conventional sources of energy, and directly reducing emissions other than GHG such as SO _x and NO _x ,	0

⁷ EIA report, chapter IV, pp 105-106

			<p>which contributes to the air quality improvement to a certain extent. However, such contribution is difficult to qualify or measure; therefore, this indicator is scored neutrally.</p>	
Water quality and quantity	<p>During the construction period, water source may be contaminated by various factors; however, proper mitigation measures are employed as follows:</p> <ul style="list-style-type: none"> - Excavation debris is used for the construction of access roads. - Strictly controlling discharge of organic domestic wastes. Wastes shall be collected for disposal or combustion; - Building standardized water-closets; waste oil is collected and transported away for treatment; - Rock, earth and 	Ensuring the environmental sustainability	<p>Excavation debris, and contamination of public resources and water supply:</p> <p>In order to avoid the water contamination, necessary mitigation measures are employed. Regarding the water quantity, as the reservoir of the project is designed with spillway, which allows water to pass over, and circulated on the daily basis, the water quantity downstream will not be affected. Therefore, compared to the baseline there is no significant change. For those reasons, this</p>	0

	solid waste are not allowed to be discharged to the river; disposal sites are arranged corresponding to each construction phase ⁸ .		indicator is scored neutrally.	
Soil condition	<ul style="list-style-type: none"> - The inundated land area will be commensurately compensated for; - To fill up the excavated areas where are exploited for building materials as soon as possible; - Excavation debris, muck from the construction stage is disposed off safely at the proper site. - To place gabions (or stone-filled galvanized or coated wire baskets) along stream banks to protect it from erosion. - Periodic monitoring will be conducted by a qualified party to ensure re-plantation is sufficient. 	Ensuring the environmental sustainability	Land loss and erosion, excavation debris: During the construction period, topsoil erosion may occur within the project site due to the excavation activities. However, proper mitigation measures will be applied by the project owner. Therefore, this indicator is scored neutrally for conservative.	0

⁸ EIA report, chapter IV, pp. 106-109

Other pollutants	<ul style="list-style-type: none"> - Noise mainly comes from the construction machinery, concrete casting and transportation vehicles, blasting activities. To address this impact, the project owner adopted low noise equipments. Transportation and machine operations were avoided at night. - For the area subject to permanent land occupation and semi-submerge, the Project owner shall cooperate with local authorities to prepare a proper compensation plan. - For the area subject to temporary land occupation: it will be returned to its original owners after completion of the project. Access and service road will improve the transportation of local area. 	Ensuring the environmental sustainability	<p>Noise, waste management and other pollutant:</p> <p>Noise occurs during the construction but stops when the construction is completed. During the construction, the project owner shall apply proper measures to strictly manage the discharge of organic wastes resulted from daily activities. Domestic wastes are regularly collected, dumped and burnt properly. Furthermore, there are very few residents living near the project site and during the operation period the project does not create other pollutants such as ash, it is cleaner than the coal power plants it partially replaces. This indicator is scored neutrally.</p>	0
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	- Solid/liquid waste from the construction stage are properly and safely collected and disposed off in accordance with local laws and regulations as relevant.			
Biodiversity	<p>- The restoration of forest and watershed green cover is an urgent mission that needs to be done during the construction phase and regularly supplemented afterward.</p> <p>- To utilize new areas, bald areas or bushy areas for cultivation, and afforestation could help enrich the vegetable cover⁹.</p>	Ensuring the environmental sustainability	<p>Threatened plants and animals</p> <p>As there is no water reduction area, the aquatic organisms and fish (if any) at the downstream will generally not be disturbed. On the other hand, the creation of reservoir will increase water surface area, which facilitates fishing and aquaculture.</p> <p>The reservoir has daily flow regime and the dam is designed with spillway and discharge gate; therefore, there is almost no obstruction on migration of aquatic species.</p> <p>In conclusion, there is no significant change</p>	0

⁹ EIA report, chapter IV, page 110

			to the livelihood of plants or animals before or after the project; therefore, this indicator is scored neutrally.	
Quality of employment		Eradicating extreme poverty and hunger	<p>Training of staff, labour conditions:</p> <p>During the construction and operation phases, a certain number of jobs will be provided to local people¹⁰. Once they are employed, they will be trained to work as the operators. These employees will be provided with sufficient accommodation, and health care as required by local laws. Hence, the quality of employment will be enhanced thanks to training courses provided to the workers and rural labourers. Jobs in the plant will help local people improve their living</p>	+

¹⁰ EIA report, Chapter 3, pp 86-87

			standards and reduce social evils in the region. Regarding occupation health management, the management board of the project shall issues regulations for the implementation of health care measures, food safety and hygiene inspection as required by Ministry of Health.	
Livelihood of the poor	For those who lose their land permanently, the project owner shall closely cooperate with local authorities to make a proper compensation plan. In case of temporary land occupation, it will be returned to its owner after completion of the project.	Eradicating extreme poverty and hunger	Livelihood of workers and residents: The project will improve the livelihood of those hired through income. The residents who are living at the project site may lose their land and attached assets for the purpose of project implementation. However, those residents will receive commensurate compensation made by the project owner in accordance with	0

			local and national laws. There are immigrants in the project area, who come for work only and no competition in term of livelihood with native residents. The impact is not significant and difficult to qualify or measure; therefore, the indicator is scored neutrally.	
Access to affordable and clean energy services		Contributing to eradicate extreme poverty and hunger	<p>Change in energy use:</p> <p>The project will reduce dependency on expensive fossil fuels (local, diesel, natural gas, etc.) and create more affordable clean energy for Viet Nam. The electricity generated by the project activity will be delivered to the national grid, thus alleviating the power shortage in the country. For those reasons, this indicator is scored positively.</p>	+

Human and institutional capacity			Public participation, education and skills, gender equality: Although the project will improve the human and institutional capacity through involvement of stakeholders in the meeting, the overall benefits are not significant. In practice, only the employees working on the project can be considered as the main beneficiaries. There is also an equality of both male and female participation.	0
Quantitative employment and income generation		Contributing to eradicate extreme poverty and hunger	Household income, employment creation: Project will employ people during the construction and operation phases including local residents, thereby increasing local income. It is expected that there will be roughly 15 - 20 jobs created.	+

Balance of payments and investment			Level of fuel import: In Viet Nam, thermal power plants are using coal as fuel which is expensive fossil fuel. Therefore, renewable power plants like hydropower plants will decrease dependency on these expensive fossil fuels. However, since this impact is small in relation to macro-economic perspective, a neutral score is chosen.	0
Technology transfer and technological self-reliance			Introduction of new technology in the region, along with training and workshops: The project owner shall use the environmentally safe and sound technology which is imported abroad. Enclosing with the equipment is usage manual and training course for the operator conducted by the supplier. Hence,	0

			<p>technology transfer will be achieved.</p> <p>However, this impact is difficult to qualify or measure; therefore, this is scored “neutral” for conservative.</p>	
Justification choices, data source and provision of references				
Air quality	<p>The plant does not emit the substances above; therefore, it imposes no impact on air quality.</p> <p>During the construction, there are factors that affect the air quality such as dust, waste gases from executing means, vehicles, blasting activities; however, the project proponents have applied proper mitigation measures i.e. spraying water on the road, covering material truck, using modern executing means. Hence, this indicator is given score “neutral”. The information will be evaluated in the Environmental Impact Assessment Report (EIA) to be sent to DNA of Viet Nam.</p> <p>The project will result in GHG reductions; detail on the calculation of this reduction is available in the project design document (PDD).</p>			
Water quality and quantity	<p>Thanks to the mitigation measures as stated in the SD matrix, the water quality will be ensured to meet the relevant standard.</p> <p>Regarding the water quantity, as proposed in the FSR the reservoir of the project is designed with spillway and discharge gate, and applies the daily-regulation regime; therefore, water quantity downstream is not affected. Furthermore, there is another hydro plant (Song Bung 6) at downstream of Bung river, which utilizes water discharged from Song Bung 5 hydropower plant for the operation. Hence, the water volume after the dam of Song Bung 5 hydropower plant shall be sufficient for the operation of Song Bung 6.</p>			
Soil condition	<p>According to the approved EIA report, in order to mitigate negative impacts on soil condition, especially topsoil erosion, the project owner will apply the following measures among the others;</p> <ul style="list-style-type: none"> - The contractor shall arrange reasonable time and frequency for the earthwork e.g. excavation in order that it does not occur during the rainy season. - In building the access roads, taking advantage of original terrain, contour to restrict the slope breaking, talus building of high slope and large size. - In the worst case, it is necessary to grow grass or native plants that are of high covering speed or to embank the talus with rock for erosion prevention. 			

	<ul style="list-style-type: none"> - Minimize the vegetable clearance in the project site and surrounding areas. - Implement reforestation with the area equivalent to that lost due to the project activity. <p>Hence, the score “neutral” is chosen for this indicator.</p>
Other pollutants	<p>The project shall ensure that the level of noise pollution shall be within the maximum permissible level for the industry. As the project does not create other pollutants such as ash, it is cleaner than the coal power plants it partially replaces. Waste will be collected for a proper treatment. The project owner will prohibit any unauthorized discharge of organic waste by the workers on the site. Disposal sites are arranged in comfort with each construction period. This information is stated in the EIA report.</p> <ul style="list-style-type: none"> - For the area of permanent land occupation and semi-submerge: The project owner shall cooperate with local authorities to make a proper compensation plan. - For the area of temporary land occupation: it will be returned to its owner after the completion of the project. Access and service road will improve transportation of local area.
Biodiversity	<p>Impacts on flora and fauna are negligible. This information will be demonstrated in the EIA.</p> <p>In order to restore the green cover in the impacted areas, the project owner shall conduct plantation in the campus of such facilities as power house, reservoir, etc. For the temporarily occupied land areas such as industrial parking place, service road, worker accommodation, disposal site, etc. they will be restored with plants when the project is operated.</p>
Quality of employment	<p>The project will create employment opportunities, involving various jobs, for technicians, qualified and unskilled workers. Labour contract shall be made in accordance with host country laws.</p>
Livelihood of the poor	<p>The project contributes to the local development by creating more employments during the construction and operation phases. The project also contributes to local budget via taxes. As small scale hydropower projects are often located in inaccessible and poor areas, this is especially important. The project is expected to provide jobs for a hundred of local people during both construction and operation phase. For those who have their land affected by the proposed project, they will receive commensurate compensation in accordance with local and national laws. Livelihoods of the local residents will be secured because apart from affected land area, they also have other land parcels where they can move to for cultivation. The immigrants in the project area come for work only; therefore, they are not affected by the project implementation in term of livelihoods. This information will be evaluated in the EIA.</p>

Access to affordable and clean energy services	The project will reduce dependency on expensive fossil fuels (coal, diesel, natural gas, etc.) and create more affordable clean energy for Vietnam. Electrical energy generated by the project will be supplied to the national grid under pending Power Purchase Agreement (PPA).
Human and institutional capacity	Project will contribute to increase the skills for new employees and bring about a higher level of awareness of important environmental issues. This information will be evaluated in the EIA.
Quantitative employment and income generation	Project will generate employment opportunities and income to the local community during both the construction and operation phases. This information will be confirmed during the site visit.
Balance of payments and investment	In Viet Nam, thermal power plants are using coal as fuel which is expensive fossil fuel. Therefore, renewable power plants like hydropower plants will decrease dependency on these expensive fossil fuels. <i>Ref. FSR</i>
Technology transfer and technological self-reliance	Project will provide opportunities to access new technologies via training, workshops. This indicator can be substantiated by technical manuals and/or training records.

SECTION G. Sustainability Monitoring Plan

No		1
Indicator		Air quality
Mitigation measure		- Spraying water on the road, and covering material trucks to avoid dust dispersion; - Utilizing modern technology to reduce waste gases emission - Restoring green cover around the project site to balance ratio O ₂ /CO ₂ and evaporation. - Making no operation of noisy machinery during the rest time of local residents;
Chosen parameter		Dust, waste gases, and other air pollutant including noise
Current situation of parameter		Dust, waste gases and other pollutant are emitted into the atmosphere.
Estimation of baseline situation of parameter		No dust, waste gases and other pollutant are emitted into the atmosphere.
Future target for parameter		The emission of dust, waste gases and other pollutants is restricted
Way of monitoring	How	Air quality examination
	When	During the construction and operation

	By who	Project owner / environment centre
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No	2	
Indicator	Water quality and quantity	
Mitigation measure	<ul style="list-style-type: none"> - Excavation debris is used for the construction of access roads; - Strictly controlling discharge of organic domestic wastes. Wastes shall be collected for disposal or combustion; - Building standardized water-closets; waste oil is collected and transported away for treatment; - Rock, soil and solid waste are not allowed to be discharged to the river; disposal sites are arranged corresponding to each construction phase. 	
Chosen parameter	<ul style="list-style-type: none"> - Contamination of public resources - Minimum flow 	
Current situation of parameter	Change to the water quality	
Estimation of baseline situation of parameter	Water resources are not contaminated	
Future target for parameter	<ul style="list-style-type: none"> - Water quality is up to the local standard - Minimum flow at the downstream is secured 	
Way of monitoring	How	Water quality examination
	When	During the construction and operation
	By who	Project owner / environment centre

No	3	
Indicator	Soil condition	
Mitigation measure	<ul style="list-style-type: none"> - The inundated land area will be commensurately compensated for; - To fill up the excavated areas where are exploited for building materials as soon as possible; - Excavation debris, muck from the construction activities is disposed off safely at the proper site. - To place gabions along stream banks to protect it from erosion. 	

Chosen parameter		Land loss, erosion
Current situation of parameter		Land is occupied for the implementation of the project
Estimation of baseline situation of parameter		The site is untouched by human activities
Future target for parameter		Land loss will be commensurately compensated for; land erosion will be restricted by plantation.
Way of monitoring	How	Compensation documents, site visit
	When	During the construction and operation
	By who	Project owner

No	4
Indicator	Biodiversity/Fish passage
Mitigation measure	<ul style="list-style-type: none"> - The dam is designed with spillway and discharge gate that allow fish to move back and forth; - In order to restore the green cover in the impacted areas, the project owner shall conduct plantation in the campus of such facilities as power house, reservoir, etc. - To utilize new areas, bald areas or bushy areas for the cultivation and afforestation could help enrich the green cover. - For the temporarily occupied land areas such as industrial parking place, service road, worker accommodation, disposal site, etc. they will be restored with plants when the project is operated.
Chosen parameter	<ul style="list-style-type: none"> - Fish passage - Cultivation of plants and afforestation for impacted areas
Current situation of parameter	<ul style="list-style-type: none"> - Fish migration is disturbed - Green cover is impacted by the project activity
Estimation of baseline situation of parameter	<ul style="list-style-type: none"> - Fish passage is not disturbed - Green cover stays natural
Future target for parameter	<ul style="list-style-type: none"> - Fish passage is designed properly to allow fish migration back and forth - Impacted areas to be recovered with plantation and afforestation

Way of monitoring	How	On-site check
	When	During the construction and operation
	By who	Project owner

No		5
Indicator		Quality of employment
Mitigation measure		n/a
Chosen parameter		Training records, functions of jobs created, labour conditions of the project activity, occupation health management, safeguards put in place and living standards of the plant staff.
Current situation of parameter		Current situation of parameter is equal to baseline situation
Estimation of baseline situation of parameter		Staff to be employed for the project are most local people having poor educational background
Future target for parameter		<div>- The staffs are trained on the technical issues relating to the operation of the plant. They will receive the professional certificate.</div> <div>- Jobs help local people improve their living standard by receiving the payment made by the project owner and reduce social evils in the region.</div> <div>- Labour condition of the project activity is secured to safeguard effective management of occupation health. The project owner shall be in cooperation with local authorities and medical centres to conduct health check-up for the plant staffs; issue policies regarding health care for the plant staff.</div>
Way of monitoring	How	Checking documentation, internship, interview
	When	Once per given period
	By who	The project owner

No	6
Indicator	Access to affordable and clean energy services
Mitigation measure	n/a
Chosen parameter	The operation of hydropower plant
Current situation of parameter	Using hydropower, a clean energy, instead of fossil fuel energy

Estimation of baseline situation of parameter		There was no power or using fossil fuel based energy with high price
Future target for parameter		Reducing the dependence on expensive fossil fuels (coal, diesel, etc.) and creating more affordable clean energy
Way of monitoring	How	Checking consumption of clean energy (i.e. hydropower)
	When	Once per given period
	By who	Project owner/CDM consultant

No		7
Indicator		Quantitative employment and income generation
Mitigation measure		n/a
Chosen parameter		Employment creation/income generation
Current situation of parameter		Both long-term and short-term jobs have been created during the construction and operation processes.
Estimation of baseline situation of parameter		No new jobs are created as the project activity did not exist.
Future target for parameter		The number of jobs and income will be increased
Way of monitoring	How	Through the evaluation of documents for wages paid and social security documents.
	When	Once per given period
	By who	Project owner

Additional remarks monitoring

N/A

SECTION H. Additionality and conservativeness



This section is only applicable if the section on additionality and/or your choice of baseline does not follow Gold Standard guidance

H.1. Additionality

Additionality assessment is performed according to the “Tool for the demonstration and assessment of additionality”, version 06.0.0 approved by UNFCCC. Details are available in the registered PDD.

H.2. Conservativeness

To assess conservativeness, comparison between the methodology versions of CDM registered PDD and the latest applicable version at the time of first submission of GS documentation; the analysis of same is provided as below:

Methodology Section	Version 12.2	Version 13
Applicability Conditions (General)	This methodology is applicable to grid-connected renewable power generation project activities that (a) install a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plant); (b) involve a capacity addition; (c) involve a retrofit of (an) existing plant(s); or (d) involve a replacement of (an) existing plant(s).	This methodology is applicable to grid-connected renewable power generation project activities that (a) install a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plant); (b) involve a capacity addition; (c) involve a retrofit of (an) existing plant(s); or (d) involve a replacement of (an) existing plant(s).
Applicability Conditions (General)	The project activity is the installation, capacity addition, retrofit or replacement of a power plant / unit of one of the following types : hydropower plant / unit (either with a run- of-river reservoir or an accumulation 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 the installation, capacity addition, retrofit or replacement of a power plant / unit of one of the following types: hydropower plant / unit (either with a run- of-river reservoir or an accumulation reservoir), wind power plant / unit, geothermal power plant / unit, solar power plant / unit, wave power plant/unit or tidal power plant / unit;
Applicability Conditions (General)	In the case of capacity additions, retrofits or replacements (except for wind, solar, wave or tidal power capacity addition projects which use Option 2: on page 10 to calculate the parameter EGPI,y): the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity.	In the case of capacity additions, retrofits or replacements (except for wind, solar, wave or tidal power capacity addition projects which use Option 2: on page 10 to calculate the parameter EGPI,y): the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity.
Applicability Conditions (Hydro)	In case of hydro power plants: <ul style="list-style-type: none"> • The project activity is implemented in an existing single or multiple reservoir, with no change in the volume of any of reservoir; or • The project activity is implemented in an existing single or multiple reservoirs, where the volume of reservoir is increased and the power density of each reservoir, as per the definitions given in the Project Emissions section, is greater than 4 W/m²; or • The project activity results in new single or multiple reservoirs and the power density of each reservoir, as per definitions given in the Project Emissions section, is greater than 4 	In case of hydro power plants: <ul style="list-style-type: none"> • The project activity implemented in an existing single or multiple reservoir, with no change in the volume of any reservoirs; or • The project activity is implemented in an existing single or multiple reservoirs, where the volume of reservoir is increased and the power density of each reservoir, as per the definitions given in the Project Emissions section, is greater than 4 W/m²; or • The project activity results in new single or multiple reservoirs and the power density of each reservoir, as per definitions given in the Project Emissions section, is greater than 4

	W/m ² .	W/m ² .
Applicability Conditions (Hydro)	<p>In case of hydro power plants using multiple reservoirs where the density of any of the reservoirs is lower than 4 W/m²; all the following conditions must apply:</p> <ul style="list-style-type: none"> • The power density calculated for the entire project activity using equation 5 is greater than 4 W/m²; • Multiple reservoirs and hydro power plants located at the same river and where are designed together to function as an integrated project that collectively constitute the generation capacity of the combined power plant; • Water flow between multiple reservoirs is not used by any other hydropower unit which is not a part of the project activity; • Total installed capacity of the power units, which are driven using water from the reservoirs with power density lower than 4 W/m², is lower than 15MW; • Total installed capacity of the power units, which are driven using water from reservoirs with power density lower than 4 W/m², is less than 10% of the total installed capacity of the project activity from multiple reservoirs. 	<p>In case of hydro power plants using multiple reservoirs where the power density of any of the reservoirs is lower than 4 W/m²; after implementation of the project activity all of the following conditions must apply:</p> <ul style="list-style-type: none"> • The power density calculated for the entire project activity using equation 5 is greater than 4 W/m²; • Multiple reservoirs and hydro power plants located at the same river and where are designed together to function as an integrated project that collectively constitutes the generation capacity of the combined power plant; • Water flow between the multiple reservoirs is not used by any other hydropower unit which is not a part of the project activity; • Total installed capacity of the power units, which are driven using water from the reservoirs with power density lower than 4 W/m², is lower than 15MW; • Total installed capacity of the power units, which are driven using water from reservoirs with power density lower than 4 W/m², is less than 10% of the total installed capacity of the project activity from multiple reservoirs.
Applicability Conditions (General)	This methodology is not applicable to project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site;	This methodology is not applicable to project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site;
Applicability Conditions (General)	This methodology is not applicable to the biomass fired power plants;	This methodology is not applicable to the biomass fired power plants;
Applicability Conditions (General)	This methodology is not applicable to hydro power plant that results in the creation of a new single reservoirs or in the increase in an existing single reservoirs where the power density of the power plant is less than 4 W/m ²	This methodology is not applicable to hydro power plant that results in the creation of a new single reservoirs or in the increase in an existing single reservoirs where the power density of the power plant is less than 4 W/m ²
Inclusion of BE and PE Gases	Baseline: CO ₂ included; Project: Reservoir emissions - CH ₄ included; Project: Fossil fuel combustion - CO ₂ exclude.	Baseline: CO ₂ included; Project: Reservoir emissions - CH ₄ included; Project: Fossil fuel combustion - CO ₂ exclude.
Baseline Assessment	If the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is the following: 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 to calculate the emission factor for an electricity system".	If the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is the following: 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 to calculate the emission factor for an electricity system".
Additionality Assessment	Not Required	Not Required
Methodologic	Baseline Emissions: Electricity supplied to grid	Baseline Emissions: Electricity supplied to grid

al Choices (ER calculation)	(green field option) <u>Project Emissions:</u> Neglected for fossil consumption in hydro projects (Table 1 - project activity emissions for hydro projects) <u>Leakage:</u> Neglected	(green field option) <u>Project Emissions:</u> Fossil fuel consumption (Neglected). As per ver. 13 on page 6: The use of fossil fuels for the back up or emergency purposes (e.g. diesel generators) can be neglected. <u>Leakage:</u> Neglected
Grid Emission Factor	As per registered PDD; GEF = 0.5764 tCO ₂ /MWh (Tool to calculate the emission factor for an electricity system Version 02.2.1)	As per latest published data, the GEF of Vietnam is 0.5408 tCO ₂ /MWh, which is lower than registered PDD. Thereby the ERs will be updated accordingly.

At the time of first submission, the emission factor has been calculated and published by the host country DNA (i.e. DNA of Vietnam) using the latest relevant EF tool and data availability at 0.5408 tCO₂/MWh which is lower than GEF applied in registered PDD i.e. 0.5764 tCO₂/MWh. Applying the conservativeness principle, the PP has applied the lower EF value in the calculation of emission reductions to be generated by the proposed project. These emission reductions will supersede those in the registered PDD for the purpose of GS registration.

Year	Estimation of project activity emissions (tonnes of CO ₂ e)	Estimation of baseline emissions (tonnes of CO ₂ e)	Estimation of leakage (tonnes of CO ₂ e)	Estimation of overall emission reductions (tonnes of CO ₂ e)
2012 (01/07/2012 – 31/12/2012)	0	61,349	0	61,349
2013	0	122,699	0	122,699
2014	0	122,699	0	122,699
2015	0	122,699	0	122,699
2016	0	122,699	0	122,699
2017	0	122,699	0	122,699
2018	0	122,699	0	122,699
2019 (01/01/2019 – 30/06/2019)	0	61,349	0	61,349
Total (tCO₂ e)	0	858,892	0	858,892

ANNEX 1 ODA declaration

To be included before the validation starts

ANNEX 2 Minutes of Meeting

1. Ma Cooih commune



CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM
Độc lập - Tự do - Hạnh phúc

BIÊN BẢN CUỘC HỌP

V/v: Tham khảo ý kiến nhân dân về tác động Kinh tế - Xã hội của dự án thủy điện Sông Bung 5 để thực hiện dự án Cơ chế phát triển sạch (CDM)

Hôm nay ngày 03 / 3 /2009, tại xã Mã Cooih, huyện Đông Giang, tỉnh Quảng Nam. Đại diện Chủ đầu tư dự án thủy điện Sông Bung 5 tiến hành cuộc họp với đại diện chính quyền địa phương và đại diện nhân dân trong xã để tham khảo ý kiến về tác động Kinh tế - Xã hội và Môi trường của dự án đến địa phương;

Thành phần tham dự gồm có:

I. Đại diện chính quyền địa phương và nhân dân:

HÙNG THỰC Ông: A. Lãng. Long Chức vụ: Bí. thư. Huyện. ủy. KIỂM. SÁT. HẠNG
Ông: A. Lãng. Hiệp Chức vụ: Phó. bí. thư. Huyện. ủy
Ông: A. Lãng. Truân Chức vụ: Chủ. tịch. UBND. xã
PHÓ CHỦ TỊCH Ông: A. Lãng. Cao. Anh Chức vụ: Chủ. tịch. MTTW
Ông: A. Bất. D. Nô Chức vụ: Cán. bộ. An. ninh
Ông: A. Bất. Sơn Chức vụ: Chủ. tịch. Hội. nông. dân
Bà: Ph. Long. Thị. hê Chức vụ: Chủ. tịch. Hội. phụ. nữ
Ka Pu Tân Ông: A. Bất. Trí Chức vụ: Bí. thư. Huyện. TN. CS. H. C. M.
Ông: A. Lãng. Truân Chức vụ: Bí. thư. Chi. bộ. thôn. A. S.
Ông: A. Lãng. Chín Chức vụ: Phó. thôn. A. S.

II. Đại diện Chủ đầu tư - Công ty cổ phần Tư vấn xây dựng điện 1

(1) Ông: Lê Văn Lực Chức vụ: Tổng Giám đốc
(2) Ông: Nguyễn Tài Sơn Chức vụ: Phó Tổng Giám đốc
(3) Ông: Lê Minh Hà Chức vụ: Kế toán trưởng công ty

Hội nghị đã nghe ông Lê Văn Lực - Tổng Giám đốc Công ty cổ phần Tư vấn xây dựng Điện 1 đại diện Chủ Dự án trình bày nội dung của báo cáo Dự án đầu tư và đánh giá những tác động Kinh tế - Xã hội và Môi trường của dự án thủy điện Sông Bung 5.

1. Các tác động tích cực:

- Dự án sản xuất một nguồn điện sạch và ổn định, góp phần thúc đẩy quá trình điện khí hoá nông thôn, nâng cao dân trí và phát triển sản xuất tại địa phương, góp phần thúc đẩy sự phát triển nền kinh tế chung của khu vực;
- Tạo công ăn việc làm cho người dân địa phương, giảm tỷ lệ thất nghiệp của địa phương. Khi công trình đi vào xây dựng và vận hành, nhu cầu về lương

thực và nhu yếu phẩm tăng cao sẽ tạo điều kiện sản xuất các mặt hàng nông sản và các dịch vụ thương mại của nhân dân địa phương phát triển;

- Góp phần nâng cao đời sống của nhân dân trong vùng, thu hẹp khoảng cách về kinh tế, văn hoá giữa các dân tộc và các khu vực trong vùng;
- Đóng góp vào ngân sách địa phương thông qua thuế;
- Trong quá trình triển khai, việc tiếp xúc, làm việc, trao đổi thông tin với các cán bộ và công nhân có trình độ sẽ giúp người dân địa phương nâng cao dân trí và trình độ văn hoá, học hỏi kinh nghiệm và cách thức làm việc;

2. Các tác động tiêu cực và biện pháp khắc phục

- Về tác động tiêu cực: Dự án sẽ làm ảnh hưởng đến một số vấn đề về môi trường tự nhiên như: tạo ra tiếng ồn, bụi trong quá trình thi công; làm ngập một phần thảm thực vật; làm thay đổi nhỏ đến hệ động thực vật trên cạn và dưới nước.
- Biện pháp khắc phục: Các tác động tiêu cực này sẽ được giám sát chặt chẽ trong quá trình thi công nhằm giảm thiểu các tác động xấu như: bố trí xe phun nước liên tục trong công trường, phối hợp với chính quyền địa phương và các cơ quan đề xuất các biện pháp trồng và bảo vệ rừng đầu nguồn, tăng cường giám sát bảo vệ các loài động thực vật...

3. Kết luận

- Toàn thể đại biểu đều nhất trí ủng hộ chủ trương xây dựng công trình với các nội dung được nêu trong báo cáo Dự án đầu tư;
- Dự án có tác động tốt đến sự phát triển kinh tế - xã hội trong khu vực.

T/M CHỦ ĐẦU TƯ
TỔNG GIÁM ĐỐC



Lê Văn Lực

T/M ĐẢNG ỦY XÃ
P. BÍ THƯ



Alăng Hiệp

T/M CHÍNH QUYỀN ĐỊA PHƯƠNG
CHỦ TỊCH UBND XÃ




ALĂNG TRÁCF

T/M HỘI ĐỒNG NHÂN DÂN XÃ
CHỦ TỊCH



Alăng Bang

T/M MẶT TRẦN TÔ QUỐC XÃ
CHỦ TỊCH


Alông K Rinh


T/M HỘI PHỤ NỮ XÃ
CHỦ TỊCH

ruh
phonghi Bê


ĐỊA CHÍNH XÃ

Alông K Rinh

T/M HỘI NÔNG DÂN XÃ
CHỦ TỊCH


Alông K Rinh

T/M ĐOÀN TNCS HỒ CHÍ MINH XÃ
BÍ THƯ ĐOÀN


Alông K Rinh

T/M ĐẢNG ỦY THÔN A SỜ
BÍ THƯ THÔN

Alông K Rinh

T/M THÔN A SỜ
TRƯỞNG THÔN

Alông K Rinh

2. Thanh My town

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM
Độc lập - Tự do - Hạnh phúc

BIÊN BẢN CUỘC HỌP

V/v: Tham khảo ý kiến nhân dân về tác động Kinh tế - Xã hội của dự án thủy điện Sông Bung 5 để thực hiện dự án Cơ chế phát triển sạch (CDM)

Hôm nay ngày 01/3/2009, tại Thị trấn Thanh Mỹ, huyện Nam Giang, tỉnh Quảng Nam. Đại diện Chủ đầu tư dự án thủy điện Sông Bung 5 tiến hành cuộc họp với đại diện chính quyền địa phương và đại diện nhân dân trong xã để tham khảo ý kiến về tác động Kinh tế - Xã hội và Môi trường của dự án đến địa phương;

Thành phần tham dự gồm có:

I. Đại diện chính quyền địa phương và nhân dân:

CHUNG THỰC BẢN 10 NÀY DÙNG VỚI BẢN SỐ 177/KH.01/2009 UBND THỊ TRẤN THANH MỸ	Ông: <u>Phạm Văn Cường</u>	Chức vụ: <u>Bi. thư. Huyện ủy. kiêm. CT. HĐND</u>
Ông: <u>Nguyễn Công Phi</u>	Chức vụ: <u>Phó. chủ tịch. UBND</u>	
Ông: <u>Trần Văn Hùng</u>	Chức vụ: <u>PCT. UBND. T. xã</u>	
Ông: <u>A. Bắc. Thị. Cường</u>	Chức vụ: <u>Chủ tịch. Hội. Phụ. nữ</u>	
Ông: <u>Z. Lê. Văn. Út</u>	Chức vụ: <u>Các. bộ. đội. Chi. xã</u>	
Ông: <u>A. Bắc. Văn</u>	Chức vụ: <u>Bi. thư. Đoàn. T. xã. H. xã</u>	
K. P. Tân. Bắc. Thuyết	Chức vụ: <u>Chủ tịch. Hội. đồng. dân</u>	
(8) Ông: <u>A. Bắc. Chấn</u>	Chức vụ: <u>Bi. thư. Chi. bộ. Đoàn. P. xã. 2</u>	
(9) Ông: <u>A. Lê. Văn. Um</u>	Chức vụ: <u>Phó. chủ. tịch. Đoàn. P. xã. 2</u>	
(10) Ông:	Chức vụ:	

II. Đại diện Chủ đầu tư - Công ty cổ phần Tư vấn xây dựng điện 1

(1) Ông: Lê Văn Lực	Chức vụ: Tổng Giám đốc
(2) Ông: Nguyễn Tài Sơn	Chức vụ: Phó Tổng Giám đốc
(3) Ông: Lê Minh Hà	Chức vụ: Kế toán trưởng công ty

Hội nghị đã nghe ông Lê Văn Lực - Tổng Giám đốc Công ty cổ phần Tư vấn xây dựng Điện 1 đại diện Chủ Dự án trình bày nội dung của báo cáo Dự án đầu tư và đánh giá những tác động Kinh tế - Xã hội và Môi trường của dự án thủy điện Sông Bung 5.

1. Các tác động tích cực:

- Dự án sản xuất một nguồn điện sạch và ổn định, góp phần thúc đẩy quá trình điện khí hoá nông thôn, nâng cao dân trí và phát triển sản xuất tại địa phương, góp phần thúc đẩy sự phát triển nền kinh tế chung của khu vực;
- Tạo công ăn việc làm cho người dân địa phương, giảm tỷ lệ thất nghiệp của địa phương. Khi công trình đi vào xây dựng và vận hành, nhu cầu về lương

thực và nhu yếu phẩm tăng cao sẽ tạo điều kiện sản xuất các mặt hàng nông sản và các dịch vụ thương mại của nhân dân địa phương phát triển;

- Góp phần nâng cao đời sống của nhân dân trong vùng, thu hẹp khoảng cách về kinh tế, văn hoá giữa các dân tộc và các khu vực trong vùng;
- Đóng góp vào ngân sách địa phương thông qua thuế;
- Trong quá trình triển khai, việc tiếp xúc, làm việc và trao đổi thông tin với các cán bộ và công nhân có trình độ sẽ giúp người dân địa phương nâng cao dân trí và trình độ văn hoá, học hỏi kinh nghiệm và cách thức làm việc;

2. Các tác động tiêu cực và biện pháp khắc phục

- Về tác động tiêu cực: Dự án sẽ làm ảnh hưởng đến một số vấn đề về môi trường tự nhiên như: tạo ra tiếng ồn, bụi trong quá trình thi công; làm ngập một phần thảm thực vật; làm thay đổi nhỏ đến hệ động thực vật trên cạn và dưới nước.
- Biện pháp khắc phục: Các tác động tiêu cực này sẽ được giám sát chặt chẽ trong quá trình thi công nhằm giảm thiểu các tác động xấu như: bố trí xe phun nước liên tục trong công trường, phối hợp với chính quyền địa phương và các cơ quan đề xuất các biện pháp trồng và bảo vệ rừng đầu nguồn, tăng cường giám sát bảo vệ các loài động thực vật...

3. Kết luận

- Toàn thể đại biểu đều nhất trí ủng hộ chủ trương xây dựng công trình với các nội dung được nêu trong báo cáo Dự án đầu tư;
- Dự án có tác động tốt đến sự phát triển kinh tế - xã hội trong khu vực.

T/M CHỦ ĐẦU TƯ
TỔNG GIÁM ĐỐC *vea*


Lê Văn Lực

T/M ĐẢNG ỦY XÃ
BÍ THƯ


BỊNHƯỚC CHIẾN

T/M CHÍNH QUYỀN ĐỊA PHƯƠNG
CHỦ TỊCH UBND XÃ



NGUYỄN CÔNG PHU

T/M HỘI ĐỒNG NHÂN DÂN XÃ
CHỦ TỊCH



T/M MẶT TRẬN TỔ QUỐC
P. CHỦ TỊCH


TRẦN PHƯỚC ĐỒNG

ĐỊA CHÍNH THỊ TRẤN


Trương Văn

T/M HỘI PHỤ NỮ THỊ TRẤN
CHỦ TỊCH


Trương Thị Cường

T/M HỘI NÔNG DÂN THỊ TRẤN
CHỦ TỊCH

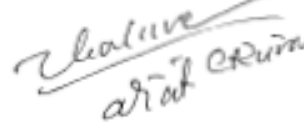

Trương Văn

T/M ĐOÀN TNCS HỒ CHÍ MINH
BÍ THƯ ĐOÀN



ARATTIEN

T/M ĐẢNG ỦY THÔN PÁ DẦU 2
BÍ THƯ THÔN


Arattien

T/M THÔN PÁ DẦU 2
P. TRƯỞNG THÔN


Arattien