

# GOLD STANDARD PASSPORT

## GOLD STANDARD PASSPORT

### CONTENTS



- A. Project title**
- B. Project description**
- C. Proof of project eligibility**
- D. Unique Project Identification**
- E. Outcome stakeholder consultation process**
- F. Outcome sustainability assessment**
- G. Sustainability monitoring plan**



- H. Additionality and conservativeness deviations**



- Annex 1 ODA declarations**

# GOLD STANDARD PASSPORT

## SECTION A. Project Title

**Nam Hong Hydropower Project**

**Version: 1.0**

**Date of completion: 28/02/2011**

## SECTION B. Project description

### **The purpose of the project activity**

The project's purpose is to generate hydroelectricity by installation of water turbines and generators from a clean and renewable source to supply to the national grid under a Power Purchase Agreement (PPA) signed with the Electricity Corporation of Vietnam (EVN). The project's installed capacity and estimated annual gross power generation is 16 MW and 63,020 MWh, respectively. The net electricity generated (with an estimated annual volume of 62,390 MWh) will be supplied to the national grid via a newly constructed transmission line which will connect between the plant and the transformer station.

### **Description of the project activity**

The project activity involves the construction of two sub-hydropower plants, i.e. Nam Hong 1 hydropower plant and Nam Hong 2 hydropower plant. Each has installed capacity of 8 MW<sup>1</sup>. The project activity is implemented on Nam Hong stream in Chieng Cong commune, Muong La district, Son La province, Vietnam. The main structure of each sub-hydropower plant includes dams, water intake, tunnel, pressurized well, penstock, power house and discharge channel.

Prior to the implementation of the project activity there is no power generation existing at the project location, Electricity in Vietnam is generated mainly from fossil fuel sources and is solely distributed to consumers via the unique national electricity grid.

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 GHG emissions, which will displace part of the electricity otherwise supplied by fossil fuel fired power plants. The Nam Hong hydropower project involves the construction of two reservoirs with an area of 1.36 ha and 1 ha<sup>2</sup>, respectively, the Nam Hong 1 power density of 588.2 W/m<sup>2</sup> and Nam Hong 2 power density of 800 W/m<sup>2</sup>, accordingly. As the power density of each step hydropower plant is all above 10 W/m<sup>2</sup>, GHG emissions from the reservoirs need not to be accounted in the project activity. Thus, this project activity generates GHG emission

<sup>1</sup> FSR, General Description, page 2.

<sup>2</sup> FSR, Environmental Impact Assessment Report, page 28

## GOLD STANDARD PASSPORT

reductions up to a total expected CO<sub>2</sub> emission reduction of 251,726 tCO<sub>2</sub> 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, Vietnam 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 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 to reduce electricity losses across the national grid and to lessen the risks of cascading national grid collapse due to overload.
- 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 Vietnam.

### **Contributions towards local sustainable development:**

#### a) Economic well-being

Once commissioning, this proposed project will increase the industrial share in the economic structure of Son La province – poor mountainous province in the Northwest of Vietnam. This proposed project will have a significant contribution to the state budget via annual taxes (i.e. corporate income tax<sup>3</sup>, resources tax<sup>4</sup>, CER tax<sup>5</sup>).

By supplying a stable electricity output, this project will facilitate the industrialisation process of the province and support economic development of local villages through fostering tourism, trade and services inside the province.

#### b) Social well-being

This project will contribute directly to improve the low-quality infrastructure systems of Chieng Cong commune. The commune is categorised as a very poor mountainous commune with scattered population, less developed and autarky agricultural economy. The project will upgrade and improve roads that then will be integrated into the traffic system of the communes. Besides, the project will construct newly 35kV and 110 kV transmission lines together with sub-hydropower plants, which will contribute to reduce electricity losses and improve the quality of electricity supplying in the regions.

The majority of local residents living in the project area are from the ethnic minorities like Mong and La Ha. They usually live in less favourable living conditions than those of Kinh

<sup>3</sup> Law on Corporate Income Tax No.14/2008/QH12 dated 03 June 2008

<sup>4</sup> Investment Law and Law on resources tax

<sup>5</sup> Decision No.130/2007/QĐ-TTg dated 02 August 2007 of the Prime Minister on some mechanisms and financial policies for the projects invested in under the Clean Development Mechanism and Joint Circular No.58/2008/TTLT-BTC-BTN&MT dated 04 July 2008 of the Ministry of Natural Resources and Environment providing for the implementation of Decision No.130/2007/QĐ-TTg.

## GOLD STANDARD PASSPORT

ethnic – the majority of population in Vietnam. Thus, the project will contribute to improve their living standard which will fill the gap in development between different ethnic groups in Vietnam.







- 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 will result in the employment of the local people for the construction and operation later on. 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 environment protection.

### SECTION C. Proof of project eligibility

#### C.1. Scale of the Project

Please tick where applicable:

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

#### C.2. Host Country

The Socialist Republic of Vietnam

# GOLD STANDARD PASSPORT

## 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

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 12.1.0, "Consolidated baseline methodology for grid-connected electricity generation from renewable sources"
- The project involves emission reductions of CO<sub>2</sub> from hydro power generation with the total capacity of 16MW, which is below 20MW and therefore within the GS eligible Renewable Energy Supply project.
- The project not using any ODA fundings 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.

<b>Management domain</b>	The project still maintains the minimum flow at the section behind the dam, which guarantees habitant quality, securing the minimum water depth for fish migration during the construction and operation
	The project owner shall conduct critical measures to provide sufficient transport capacity for sediments i.e. strengthening the tunnel roof, proper arrangement of construction structures, etc.
	The project does not affect the landscape. All lands temporarily occupied shall be returned, and the green cover will also be recovered.
	The implementation of the project slightly disturbs the adapted species; however, this effect is temporary, and ceases upon the project completion
	The project creates reservoirs with small surface area, therefore, flood plain ecosystems shall not be endangered

## GOLD STANDARD PASSPORT

	<b>Hydropeaking</b>	This is small-scale project according to host country regulation. It does not change the natural water flow. Hence, it does not impair fish and benthic populations
		Minimum water flow is still maintained
		Reservoirs of the project apply daily regulation regime, thus creating no isolation of fish and benthic organisms when water level decreases.
	<b>Reservoir management</b>	The reservoirs apply daily regulation regime
		Connectivity with lateral rivers is not impaired
		The reservoirs are daily regulated, which keeps the water level stable, and imposing no impairment on lateral ecosystem
	<b>Sediment management</b>	The sediment transport capacity is maintained
	<b>Power plant design</b>	The power plant is designed in order to maintain the migration of fish upwards and downwards
		The project owner shall use the proper measure the avoid animal injury and death during the plant operation
	<b>Social impacts</b>	The project does not cross any cultural landscapes nor historical remains.
		There are hardly local people living within the project site. All those who lose their land are commensurately compensated for.

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 organized to inform of the CDM project; official letters needed to obtained the support from competent authorities for the CDM project were served. Therefore, this project has not been announced to be going ahead 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>Events and actions taken to achieve CDM registration</th> <th>Time</th> <th>Implication on CDM</th> </tr> </thead> <tbody> <tr> <td>Finalizing Feasibility Study Report of the project</td> <td></td> <td>Jul. 09</td> <td></td> </tr> </tbody> </table>			Development of the hydropower project	Events and actions taken to achieve CDM registration	Time	Implication on CDM	Finalizing Feasibility Study Report of the project		Jul. 09	
Development of the hydropower project	Events and actions taken to achieve CDM registration	Time	Implication on CDM							
Finalizing Feasibility Study Report of the project		Jul. 09								

## GOLD STANDARD PASSPORT

Issuing Investment license		29 Oct. 09	
	Submitting official letter to Son La People's Committee by the project owner to obtain the verification and support for CDM project	26 Nov. 09	CDM early consideration
	Signing the CDM consulting contract with a CDM consultant	28 Nov. 09	CDM early consideration
	Submitting the official letter to DNA Vietnam by Son La Provincial People's Committee to obtain the verification and support for CDM project	15 Dec. 09	CDM early consideration
	Submitting the official letter to DNA Vietnam by the project owner to obtain the verification and support for CDM project	17 Dec. 09	CDM early consideration
	Organized stakeholders consultation meetings to inform of CDM project and consult opinions of the local people and authorities on social and environmental impacts of the project. Minutes of meetings was produced.	20 Dec. 09	CDM early consideration
Issued the Decision on implementing the investment project under Clean Development Mechanism by the Management Board		25 Dec. 09	Date of making decision
Signing the first contract for the construction of auxiliary items i.e. access road, worker huts etc.		28 Oct. 10	Starting date of the project activity
	Notification of CDM project to Executive Board	02 Nov. 10	

### C.4. Greenhouse gas

## GOLD STANDARD PASSPORT

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

### C.5. Project Registration Type

<b>Project Registration Type</b>	
Regular	X

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

**Start Date of Construction: 28/10/2010**

### SECTION D. Unique project identification

#### D.1. GPS-coordinates of project location

Hydropower plant		Northern latitude	Eastern longitude
Nam Hong 1	Power house	21°27'12"	104°13'14"
	Dam	21°27'08"	104°14'12"
Nam Hong 2	Power house	21°27'24"	104°11'35"
	Dam	21°27'36"	104°12'30"



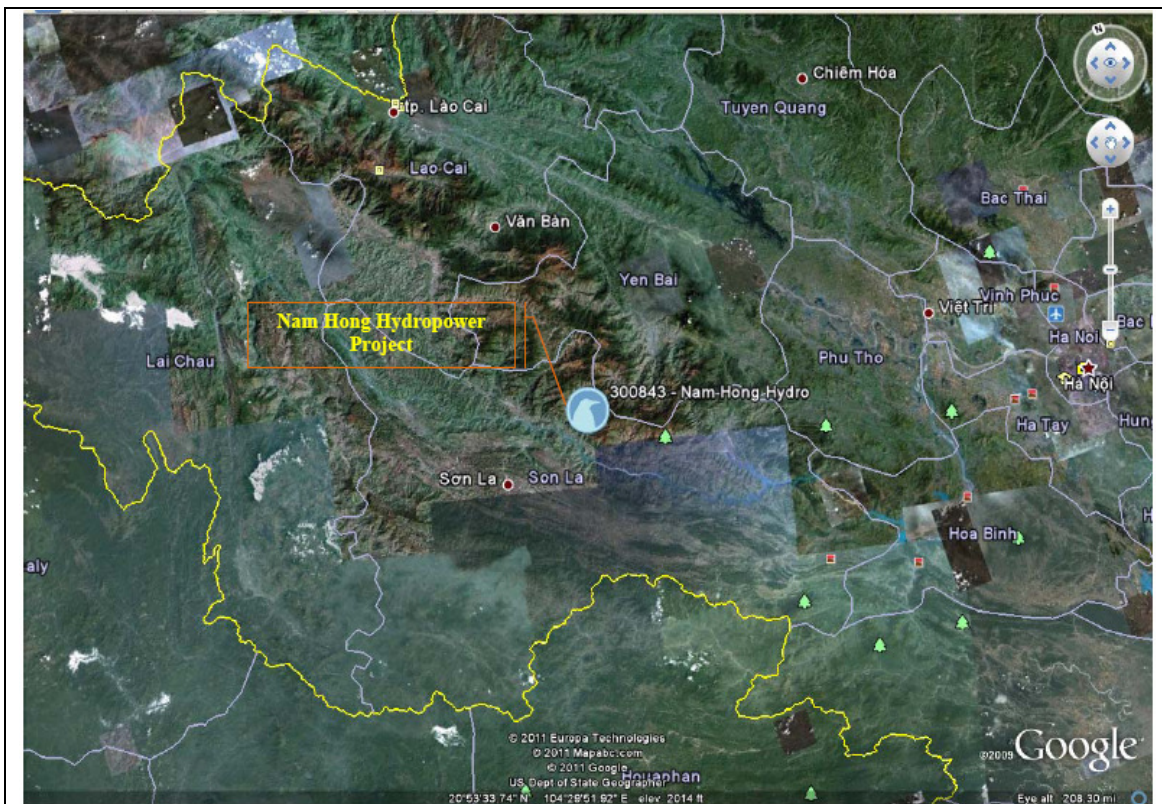
# GOLD STANDARD PASSPORT



*Explain given coordinates*

The project activity is located on Nam Hong stream in Chieng Cong commune, Muong La district, Son La province, Vietnam. These are the coordinates of power house and dam of Nam Hong 1 and Nam Hong 2 hydropower projects respectively. It is taken from the Feasibility Study Report.

## D.2. Map



Source: Map derived from: Google Earth

## SECTION E. Outcome stakeholder consultation process

### E.1. Assessment of stakeholder comments

The meeting, which covered the economic, social and environmental impact of the project

## GOLD STANDARD PASSPORT

has been conducted by the project participants. It was held on 13 July 2010 at office of People's committee of Chieng Cong commune. During the meeting, participants were encouraged raise their comments on the socio-economic and environmental impacts of the project.

Here below, we summarize the open questions from the first meeting and assessed their relevance:

Stakeholder comment	Was comment taken into account (Yes/ No)?	Explanation (Why? How?)
Soil condition Land occupied will be commensurately compensated for. Return temporarily occupied land to the local people, etc.	Yes	This issue is valid and very important because it is one of twelve mentioned indicators of sustainable development. It is also considered in the project designed document.
Re-cultivation and resettlement The project owner should care about the plantation and resettlement for the households whose land is occupied.	Yes	Re-cultivation and resettlement fall into main issues regarding the implementation of Nam Hong Hydropower project. A specific plan to perform this work is produced before and during the project implementation.
Concern about fish habitat	Yes	For the purpose of the project, a reservoir is to be created which imposes impacts on fauna (e.g. fish). However, mitigation measures will be taken into account such as creating new habitats for fish in affected area.

For the minutes of the meeting and other details regarding the consultation meeting, please refer to the Local Stakeholder Consultation report.

## GOLD STANDARD PASSPORT

### E.2. Stakeholder Feedback Round

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

*(This section will be filled in as soon as the Stakeholder Feedback Round has been carried out).*

### 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 is not complicit in Human rights abuses	The project is located in a scattered population area. Therefore, it does not interfere the uniqueness of indigenous people	Low	
2. The project does not involve and is not complicit in involuntary resettlement	There are no enforced resettlement in the proposed project	Low	
3. The project does not involve	No cultural places are	Low	

## GOLD STANDARD PASSPORT

and is not complicit in the alteration, damage or removal of nay critical cultural heritage	existing in the project site <sup>6</sup>		
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	The project demonstrated not to limit freedom of association and right to collective bargaining more than required by law. <i>Ref. Labour code of Vietnam, Article 7</i>	Low	
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. <i>Ref. Labour code of Vietnam, Article 9</i>	Low	
6. The project does not employ and is not complicit in any form of child labour	The project does not involve the employment and complicit of child labour. The Host country have its own credible legislation in place prohibiting child labour.	Low	

<sup>6</sup> Feasibility Study Report

## GOLD STANDARD PASSPORT

	<i>Ref. Labour code of Vietnam</i>		
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	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. there is strong solidarity existing among people from different minority groups within the project site. In (host country), there is labour legislation that protects against some facets of this principle. <i>Ref. Labor code of Vietnam, Article 5</i>	Low	
8. The project provides workers with a safe and healthy work environment and is not complicit in exposing workers to unsafe or unhealthy work	A hydro project in general does not expose workers to unsafe or unhealthy work environments in terms of toxins or chemicals. In	Low	

## GOLD STANDARD PASSPORT

environments.	addition the project follows national safety rules under (Host Country) Law that covers work safety. <i>Ref. Labor code of Vietnam, Article 7</i>		
9. The project takes a precautionary approach in regard to environmental challenges and is not complicit in practices contrary to the precautionary principle.	The project activity does not threaten human health or the environment. This was checked before the construction start by the project owner in the framework of an EIA to see if the components in the project activity are in compliance to the law in various aspects e.g. health & safety, hazardous waste release etc. <i>Ref. EIA, Chapter II, page 9</i>		
10. The project does not involve and is not complicit in	There are no critical natural habitats located at or close to	Low	

## GOLD STANDARD PASSPORT

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 site		
11. The project does not involve and is not complicit in corruption	Vietnam has ratified the Convention against Corruption. All permits that are required legally have been attained following applicable laws <sup>7</sup> .	Low	
<b>Additional relevant critical issues for my project type</b>	<b>Description of relevance to my project</b>	<b>Assessment of relevance to my project (low, medium, high)</b>	<b>Mitigation measure</b>
1			
2			

<sup>7</sup>

[http://vi.wikipedia.org/wiki/C%C3%B4ng\\_%C6%B0%E1%BB%9Bc\\_ph%C3%B2ng\\_ch%E1%BB%91n\\_g\\_tham\\_nh%C5%A9ng](http://vi.wikipedia.org/wiki/C%C3%B4ng_%C6%B0%E1%BB%9Bc_ph%C3%B2ng_ch%E1%BB%91n_g_tham_nh%C5%A9ng)

## GOLD STANDARD PASSPORT

etc...			
--------	--	--	--

### F.2. Sustainable Development matrix

For the purpose of achieving the sustainable development goals, the environmental, social and technological as well as economic indicators are analyzed. The Sustainable Development matrix are as following:

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' assessment, and include mitigation measure used to neutralise a score of '-'	Check <a href="http://www.undp.org/mdg">www.undp.org/mdg</a> and <a href="http://www.mdgmonitor.org">www.mdgmonitor.org</a>  Describe how your indicator is related to local MDG goals	Defined by project developer	<u>Negative impact:</u> score '-' in case negative impact is not fully mitigated, score '0' in case impact is planned to be fully mitigated  <u>No change in impact:</u> score '0'  <u>Positive impact:</u> score '+'
Air quality	Spraying water on the road and covering material trucks to avoid dust; utilizing modern	Ensuring the environmental sustainability	<b>Dust, GHG and other air pollutant:</b> Impacts on air quality are fully mitigated. This indicator is thus neutral.	0
Water quality and quantity		Ensuring the environmental sustainability	<b>Contamination of public resources and</b>	0



## GOLD STANDARD PASSPORT

			<b>water supply:</b> Small scale run-of-river hydropower stations do not alter the water that runs through them. Therefore, compared to the baseline there is no significant change.	
Soil condition	The inundated land area will be commensurately compensated for; When the project is commissioned, the project proponents commit to conduct plantation around the project site to avoid erosion	Ensuring the environmental sustainability	<b>Land loss, and erosion:</b> The formation of reservoir results in inundation of a part of natural land. However, the areas are small for small scale hydro projects and the major part of inundated land is uncultivated or hilly. Impacts are fully mitigated. Hence, the project negligibly affects the soil quality.	0
Other pollutants		Ensuring the environmental sustainability	<b>Noise, waste management and other pollutant:</b> Noise appears during the construction, but stops when the construction is completed. Furthermore, there are very	0

## GOLD STANDARD PASSPORT

			few residents living close to the project site. As the project does not create other pollutants such as ash, it is cleaner than the coal power plants it partially replaces.	
Biodiversity	During the construction and operation phases, the project participants shall comply with the requirements on environmental protection	Ensuring the environmental sustainability	<b>Threatened plants and animals</b> There is no significant change to the livelihood of plants or animals before or after the project.	0
Quality of employment		Eradicating extreme poverty and hunger	<b>Training of staff:</b> The quality of employment will be enhanced thanks to training courses provided to the workers and rural labourers	+
Livelihood of the poor		Eradicating extreme poverty and hunger	<b>Livelihood of workers:</b> The project will improve the livelihood of those hired through income. However, because of its limited impacts, the indicator is	0

## GOLD STANDARD PASSPORT

			scored neutrally	
Access to affordable and clean energy services		Contributing to eradicate extreme poverty and hunger	<b>Change in energy use:</b> The project will reduce dependency on expensive fossil fuels (coal, diesel, natural gas, etc.) and create more affordable clean energy for Vietnam.	+
Human and institutional capacity			<b>Public participation, education and skills:</b> Although the project will improve the human and institutional capacity through involvement of stakeholders in the LSC meeting, the overall benefits are not significant. In practice, only the employees working on the project can be considered as the main beneficiaries	0
Quantitative employment and income generation		Contributing to eradicate extreme poverty and hunger	<b>Employment creation:</b> Project will employ people during the construction and operation	+

## GOLD STANDARD PASSPORT

			phases.	
Balance of payments and investment			<p><b>Level of fuel import:</b></p> <p>In Vietnam, 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</p>	0
Technology transfer and technological self-reliance			<p><b>Introduction of new technology in the region, along with training and workshops:</b></p> <p>The project owner shall use the state-of-art technology which is imported abroad. Enclosing with the equipment is usage manual and training course for the operator</p>	+

## GOLD STANDARD PASSPORT

			conducted by the supplier. Hence, technology transfer will be achieved.	
<b>Justification choices, data source and provision of references</b> A justification paragraph and reference source is required for each indicator, regardless of score				
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, etc.; 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 (EIAR) 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>Small scale hydropower stations do not alter the water that runs through them.</p> <p>The water quality and quantity including minimum flow and daily regulation regime shall be assessed in the EIAR.</p>		
Soil condition		<p>The formation of reservoir results in inundation of a part of natural land. However, the areas are small for small scale hydro projects and the major part of inundated land is uncultivated or hilly. Hence, the project negligibly affects the soil quality. This information will be evaluated in the EIAR.</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. This information will be stated in the EIAR</p>		
Biodiversity		<p>Impacts on flora and fauna are negligible. This information will be demonstrated in the EIAR.</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</p>		

## GOLD STANDARD PASSPORT

	accordance with host country laws.
Livelihood of the poor	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 often are 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. This information will be evaluated in the EIAR.
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 EIAR
Quantitative employment and income generation	Project will generated 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 Vietnam, 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 training records.

### SECTION G. Sustainability Monitoring Plan

No	1
Indicator	Quality of employment
Mitigation measure	n/a
Chosen parameter	Training records
Current situation of parameter	Current situation of parameter is equal to baseline situation

## GOLD STANDARD PASSPORT

Estimation of baseline situation of parameter		Staffs to be employed for the project are most local people having poor educational background.
Future target for parameter		The staffs are trained on the technical issues relating to the operation of the plant. They will receive the professional certificate.
Way of monitoring	How	Checking documentation, internship
	When	Once per given period
	By who	The project owner

No		2
Indicator		Access to affordable and clean energy services
Mitigation measure		n/a
Chosen parameter		Change in energy use
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	The project owner/

No		3
Indicator		Quantitative employment and income generation.
Mitigation measure		N/A
Chosen parameter		Employment creation
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 created, as the project activity didn't exist.
Future target for parameter		The number of jobs will be increased.
Way of monitoring	How	Through the evaluation of documents for wages paid and social security documents.
	When	Once per verification period.
	By who	Project owner

No		4
Indicator		Technology transfer and technological self-reliance

## GOLD STANDARD PASSPORT

Mitigation measure	n/a	
Chosen parameter	Training records	
Current situation of parameter	New technology is imported from abroad, which may be followed by training courses and workshops	
Estimation of baseline situation of parameter	There was no technology transition	
Future target for parameter	Successfully transferring new and advanced technology into the region.	
Way of monitoring	How	Checking documents
	When	Upon verification
	By who	Project owner

No	5	
Indicator	Air quality	
Mitigation measure	Spraying water on the road, and covering material trucks to avoid dust; utilizing modern technology	
Chosen parameter	Dust, waste gases, and other air pollutant	
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	Dust, waste gases and other pollutants are prevented from being emitting into the atmosphere and is less than when compared to the baseline.	
Way of monitoring	How	Air quality examination
	When	During the operation
	By who	Project owner / environment centre

No	6	
Indicator	Water quality	
Mitigation measure	n/a	
Chosen parameter	Contamination of public resources	
Current situation of parameter	Change to the water quality	
Estimation of baseline situation of parameter	Water resources are not contaminated	
Future target for parameter	Water quality is ensured	
Way of monitoring	How	Water quality examination
	When	Upon the verification
	By who	Project owner / environment centre

No	7	
Indicator	Soil condition	
Mitigation measure	The inundated land area will be commensurately	



## GOLD STANDARD PASSPORT

		compensated for; When the project is commissioned, the project proponents commit to conduct plantation around the project site to avoid erosion
Chosen parameter		Land loss, erosion
Current situation of parameter		Same as the baseline situation
Estimation of baseline situation of parameter		Land is occupied for the implementation of the project
Future target for parameter		Land occupied will be commensurately compensated for; land erosion is restricted by plantation.
Way of monitoring	How	Compensation documentation, site visit
	When	During the validation and verification
	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" approved by UNFCCC. Details are available in the PDD.

### H.2. Conservativeness

A conservative approach has been followed in calculating the baseline emission factors and investment analysis sections as detailed in the PDD.

## ANNEX 1 ODA declaration

## GOLD STANDARD PASSPORT

Project financing for this project activity will not use Official Development Assistance (ODA) Funds as defined in the Gold Standard Manual for Project Developers. There are no loans or grants being provided by International Finance Institutions, which include ODA.

Copy of this document will be submitted to DOE upon the site visit.