

PROJECT DESCRIPTION OF SONG ONG HYDROPOWER PROJECT

Document Prepared by Energy and Environmental Consultancy Joint Stock Company

Project Title	Song Ong Hydropower Project	
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1 PROJECT DETAILS

1.1 Summary Description of the Project

Song Ong Hydropower Project involves the construction of a hydropower plant with 3 units, which is located on Ong River in Quang Son commune, Ninh Son district in Ninh Thuan province of Vietnam. The project has an installed capacity of 8.1 MW and estimated annual gross power generation of 40,500 MWh, respectively.

The purpose of project is to generate and supply renewable electricity to the national grid under the Power Purchase Agreement (PPA) signed with the Electricity Corporation of Vietnam (EVN). The net electricity generated by the project (annual estimated generation is 39,994 MWh) is supplied to the national grid via a 22 kV line, which connects the plant with Ninh Son 110/22 kV transformer station.

The project activity involves the construction of a dam, an intake, tunnels, a penstock, a pressurized well, a powerhouse and a discharge channel in order to convert potential flowing energy from the stream into clean electrical energy.

The construction of Song Ong Hydropower plant was started in late of 2005 and finished in March 2009. On 05 March 2009, the test run was conducted and plant started supplying electricity to the national grid on 24 March 2009.

The project activity generates renewable power with negligible Greenhouse Gas (GHG) emissions, which displaces electricity otherwise supplied by fossil fuel fired power plants. The monthly reading protocol signed between the project owner and the EVN is the data source and serves as evidences for calculation of emission reduction. During the pre-registration period from the commissioning date to the registered date, Song Ong Hydropower project does not participate to any Environmental Credit Scheme

1.2 Sectoral Scope and Project Type

Sectoral scope : 01.Energy industries (renewable - /non-renewable sources)

Project Type : I. Renewable energy project

Project Category: I.D. Grid connected renewable electricity generation – Version 16

1.3 Project Proponent

Song Ong Hydropower Joint Stock Company

- The project owner of Song Ong Hydropower Project

Address : Quang Son commune, Ninh Son district, Ninh Thuan province, Viet Nam

Telephone : +84 683 851 556

Fax : +84 219 683 851 556

Represented by : Mr Nguyen Hai Quynh

Email : thuymienso@yahoo.com.vn

Swiss Carbon Value Ltd.,

- The VER Buyer of Song Ong Hydropower Project

Address : Technoparkstr.1 8005 Zurich, Switzerland
 Telephone : + 41 43 501 3550:
 Represented by : Mr Renat Heuberger
 Email : registration@southpolecarbon.com

1.4 Other Entities Involved in the Project

Energy and Environment Consultancy Joint Stock Company

- the Consultant for VER project of Song Ong project

Address : Room 1210, 18T2 Building, Le Van Luong Street, Trung Hoa – Nhan Chinh residential area, Hanoi.
 Telephone : +84 4 2214 8810
 Fax : +84 4 6281 2733
 Represented by : Ms Dang Thi Hong Hanh
 Email : eec@eec.vn

1.5 Project Start Date

The start date of Song Ong hydropower project is 24 March 2009¹.

This was the first date Song Ong hydropower plant supplied electricity to Vietnam national grid.

1.6 Project Crediting Period

Start date of crediting period: 24 March 2009 (the date is included)

End date of crediting period: 28 February2011 (the date is included)

Total number of year in the first crediting period: 1 year 11 months

Song Ong Hydropower Project was registered as Clean Development Mechanism (CDM) project on 04 February2011 with the PDD version 2.5 dated 02 November 2010². However, the start date of the first CDM crediting period is 01 March 2011, therefore, the project participants choose the first crediting period for Voluntary Emission Reductions (VCS) from the date of commissioning until 28 February 2011. Thus the period from 24 March 2009 to 28 February 2011 is claimed for the emission reduction in the first crediting period for VCS.

1.7 Project Scale and Estimated GHG Emission Reductions or Removals

Project	✓
Mega-project	

¹ Letter of acceptance available from Power Company No.2 accepting power from 24-03-2009

² <http://cdm.unfccc.int/Projects/DB/RWTUV1289918487.21/view>

The emission Reductions in the first crediting period is as table below:

Period	Estimated GHG emission reductions or removals (tCO ₂ e)
24 March 2009 to 31 March 2010	21,416
01 April 2010 to 28 February 2011	19,631
Total estimated ERs	41,047
Total number of crediting years	1 year 11 months
Average annual ERs	21,416

1.8 Description of the Project Activity

1.9 Project Location

Song Ong Hydropower project is located on Ong river in Quang Son commune, Ninh Son district in Ninh Thuan province.

The geographic coordinate of the dam and water intake of the project as below:

Project	Song Ong hydropower project	
	Latitude	Longitude
Water intake	11 ⁰ 45'13"	108 ⁰ 48'19"
Power house	11 ⁰ 44'56"	108 ⁰ 49'20"

The site of the project is shown in Figure 1.

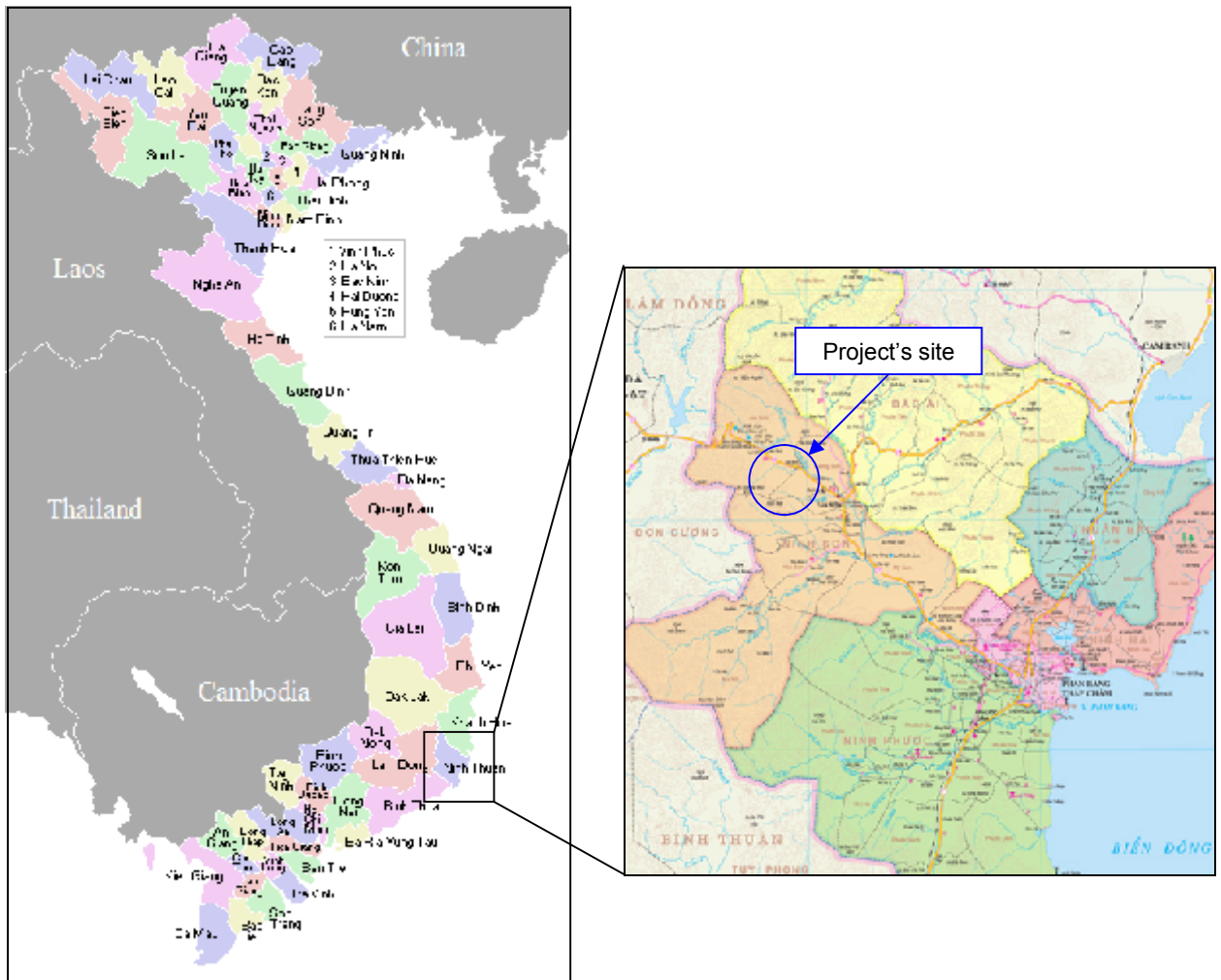


Figure 1. Project site on map

The lay-out of projects is shown below:

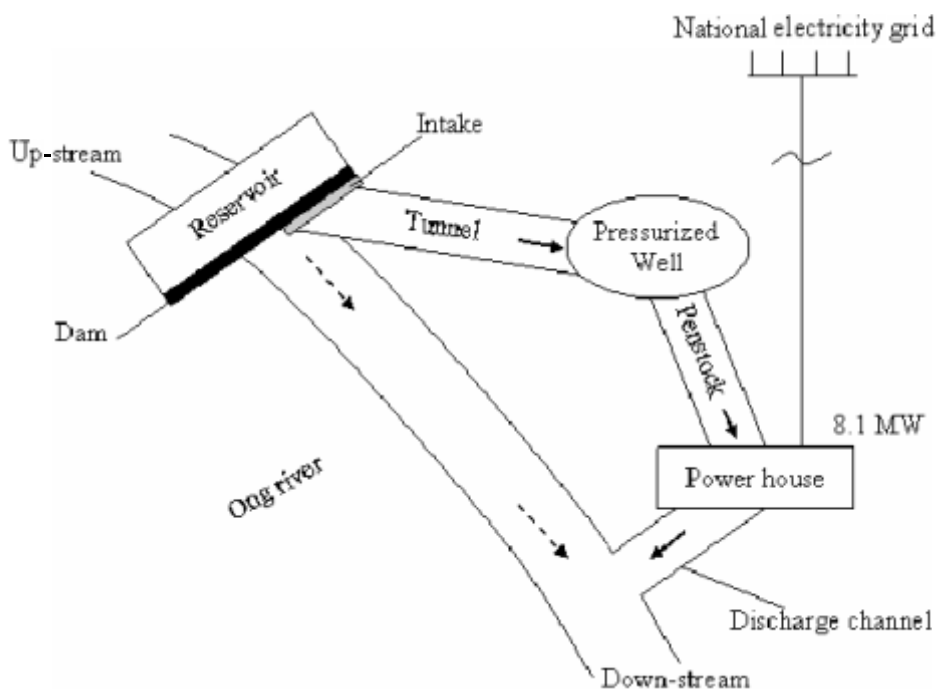


Figure 2. Project lay-out

1.10 Conditions Prior to Project Initiation

The project activity is the installation of a new grid-connected renewable power plant/unit. The baseline scenario of the project activity is the electricity delivered to the grid would have been generated by the operation of grid-connected power plants and by the addition of new generation sources. Prior to the implementation of the project activity, electricity in Vietnam is mainly generated from fossil fuel sources and solely distributed to consumer via the unique national electricity grid.

1.11 Compliance with Laws, Statutes and Other Regulatory Frameworks

1.12 Ownership and Other Programs

1.12.1 Proof of Title

The evidence for the proof of title includes the following;

- The official letter No. 5390/BCN – NLDK on approval the transfer the owner of Song Ong Hydropower project from Midland Construction Corporation to Song Ong Hydropower Joint Stock Company issued on 26 September 2006 by Ministry of Industry. This document indicates that Song Ong Hydropower Joint Stock Company has full owner ship, which is legally accredited by the Vietnamese authority, for the construction and operation of Song Ong hydropower plant.
- Power Operation License No.39/GP – DTDL dated 27 May 2009 from the Ministry of Industry and Trade licences Song Ong Hydropower Joint Stock Company to legally manage and operate Song Ong Hydropower plant.
- Power Purchase Agreement dated 11 November 2008 between Song Ong Hydropower Joint Stock Company and Power Company No. 2
- The LoA issued on 30 June 2008 by the DNA of Viet Nam for Song Ong Hydropower project to proof the GHG generations.
- The land used license issued by the People's Committee of Ninh Thuan Province on 12 March 2007 to allocate land for Song Ong Hydropower Joint Stock Company.
- The official letter No.09/PXN-STN&MT issued on 04 November 2003 by the Department of Natural Resources and Environment on approving the Registration document on Environmental Standard
- Surface water use license issued on 08 April 2010 by Ministry of Natural Resources and Environment.

1.12.2 Emissions Trading Programs and Other Binding Limits

In accordance with the VCS Standard, it is not applicable. Besides, the project owner has provided the declarations of non-other emissions trading programs and other binding limits for the monitoring period.

1.12.3 Participation under Other GHG Programs

The project was developed and registered under Clean Development Mechanism project on 04 February 2011³. The CDM crediting period of Song Ong Hydropower project is from 01 March 2011 to 28 February 2018 with the estimated reduction is 21,416 tonnes CO₂ equivalent per year.

1.12.4 Other Forms of Environmental Credit

During the pre-registration from commissioning date to the CDM registration date, Song Ong Hydropower project did not participate in any Environmental Credit Scheme.

The declaration of not being a participant in any other Environmental Credit Schemes in the monitoring period is provided to the DOE.

1.12.5 Projects Rejected by Other GHG Programs

Song Ong Hydropower project was registered under CDM on 04- February 2011 with registered number of 4117. The project has not been rejected by any other GHG Program.

1.13 Additional Information Relevant to the Project

Eligibility Criteria

Eligibility Criteria is applied for grouped project (eg. PoA). The project is a single project so the eligibility criterion is not applicable.

Leakage Management

The technology used in this project is neither transferred to nor transferred from any other activity thus leakage is considered to be zero. Therefore, the management of leakage is negligible.

Commercially Sensitive Information

There is no commercially sensitive information

Further Information

Not applicable

³ <http://cdm.unfccc.int/Projects/DB/RWTUV1289918487.21/view>

2 APPLICATION OF METHODOLOGY

2.1 Title and Reference of Methodology

2.2 Applicability of Methodology

2.3 Project Boundary

2.4 Baseline Scenario

2.5 Additionality

2.6 Methodology Deviations

3 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

3.1 Baseline Emissions

3.2 Project Emissions

3.3 Leakage

3.4 Summary of GHG Emission Reductions and Removals

4 MONITORING

4.1 Data and Parameters Available at Validation

4.2 Data and Parameters Monitored

4.3 Description of the Monitoring Plan

5 ENVIRONMENTAL IMPACT

6 STAKEHOLDER COMMENTS