

## ANNEX R – PASSPORT TEMPLATE

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## SECTION A. Project Title

Title: Nam Ngao Hydropower Project

Date: 24/07/2015

Version no.: 01

## SECTION B. Project description

Nam Ngao Hydropower Project (hereafter referred to as the “the project”) is located about 15km away from Houay Xay, the capital city of Bokeo Province, Lao PDR., and developed by HOUANGPASERT Hydro Power Co., Ltd.. The project is a run-of-the-river hydropower station. The installed capacity is 15MW (2×7.5MW), with annually 81.1 GWh power supplied to the power grid.

Following the Lao PDR’s electrification policy, the electricity supply falls in short compared to the increased electricity demand. The project is expected to constantly contribute clean energy to the Lao Power Grid. For the Lao Power Grid is connected with the power grid in Thailand, the power supplied by the project will not only meet domestic electricity demand, but also increase the net power export to Thailand and decrease the net power import from Thailand, where the power grid is dominated by thermal power plants. The baseline scenario of the project is continuation of the present situation, i.e. electricity supplied from the power grid. By displacing part of the power generated by thermal power plants, the project is therefore expected to reduction of CO<sub>2</sub> emissions by an estimated 49,292 tCO<sub>2</sub>e per year during the first crediting period.



Power supplied to the regional grid consisting of Thailand Power Grid and the Lao Power Grid, will provide clean & cheap electricity power in this region, promote the sustainable development in this region and slowing down the increasing trend of GHG emissions.

There are 34 High Conservation Value areas in Lao PDR which includes 22 National Biodiversity Conservation Areas, 5 Conservation Areas, 1 Wetland Reserves, 6 Hunting Reserves and 6 Other Protected Areas<sup>1</sup>. As described in IEE and interviewed with local authorities, the project is not located at any High Conservation Value area mentioned above. Furthermore, there is no endangered species surrounding the project area.




## SECTION C. Proof of project eligibility

### C.1. Scale of the Project

*Please tick where applicable:*

| Project Type  | Large                    | Small                               |
|---|--------------------------|-------------------------------------|
|  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|  | <input type="checkbox"/> | <input type="checkbox"/>            |

<sup>1</sup> <http://www.parks.it/world/LA/Eindex.html>

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

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

## C.2. Host Country

Lao People's Democratic Republic

## C.3. Project Type

*Please tick where applicable:*

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

*Please justify the eligibility of your project activity:*

Project activity involves construction of a 15 MW capacity run-off-river hydroelectric power plant for electricity generation. Project category is included in the sectoral scope 1 “Energy Industry – Renewable Sources” according to the UNFCCC definition.

The project supply electricity by using hydropower resource to the grid, thus it can be classified as renewable energy supply. The project is a renewable energy project with capacity  $\leq$  15MW, thus it is a small scale project. The project is located in Lao PDR, which is a UNFCCC eligible host country site.

Because the project is replacing electricity generated from the fossil fuel dominated grid, it reduces CO<sub>2</sub> which would have been emitted by thermal power plant connected to the power grid. CO<sub>2</sub> is one of the three greenhouse gases eligible under the Gold Standard. The project is privately owned by Lao local investors, no ODA is flowed into this project.

Furthermore, as a hydropower project,

- 1. As described in IEE and interviewed with local authorities, the project is not located at any High Conservation Value area. Furthermore, there is no endangered species surrounding the project area.
- The Environmental Impact Assessment Report (EIAR) has addressed the following issues sufficiently:
  - i) Competing use of water  
According to the IEE, as currently the nearby villages mainly utilize mountain spring water for drinking, the river water was mainly used for washing and the villages are located at upstream to the project site. Furthermore, as the project doesn't introduce reservoir to regulate the runoff, so the water flow and its seasonal variation in the river will remain the same as before, thus, village could continue use the water from the river.
  - ii) Minimal Ecological Flow  
According to the IEE, the minimal ecological flow should be not less than the natural flow in the dry season.
  - iii) Groundwater level  
As the IEE assessed, the project has no reservoir to store water and regulate river runoff, thus the impact on the groundwater level is so minor that could be ignored. As well due to ecological flow, the vegetation and the associated biodiversity near streams will not be affected according to the assessment in the IEE.
  - iv) Fish Passage Effectiveness  
According to the IEE, no migration fish was observed at the project site, fish way will be introduced in the project. Also since there is no reservoir blocking water flow and minimum water flow is maintained, no impacts will be expected on fishes.
  - v) Sediment Management  
Since there is no reservoir to store water and regulate river runoff causing sediment, it is not an issue for the project. Also according to the IEE, the vegetation in upper stream area remains the same as before therefore no additional soil erosion is expected.
  - vi) Soil Erosion  
The construction may bring some impacts due to land clearing. The topsoil is exposed to the outside environment and may be removed by rain or wind. In order to mitigate such negative impacts, in general two measures are implemented. The first measure is for the immediate control, which is terracing. After construction is completed, the area will be replanted for long-term benefits. The excavated area at the intake weir and powerhouse will be protected by planting trees and grass to control erosion. Soil removed during the construction process will be stockpiled separately and would be reused later on. The local government will be responsible for monitoring of the implementation.
- One-day training for the hydropower plant staff will be conducted on the different issues.

To conclude, the project meets all eligible categories under the Gold Standard eligibility Assessment, it should apply for the registry of Gold Standard Renewable Energy Supply Project.

| Pre Announcement  | Yes                      | No                                  |
|---|--------------------------|-------------------------------------|
| Was your project previously announced?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>To overcome financial weakness, and unfavorable conditions that the project encounters, the project owner decided to seek carbon revenue assistance after the project Feasibility Study Report had been completed by independent design institute on August of 2013.</p> <p>Carbon revenue has been taken into account by project investors in making the project decision to proceed.</p> |                          |                                     |

#### C.4. Greenhouse gas

| Greenhouse Gas |                                     |
|----------------|-------------------------------------|
| Carbon dioxide | <input checked="" type="checkbox"/> |
| Methane        | <input type="checkbox"/>            |
| Nitrous oxide  | <input type="checkbox"/>            |

#### C.5. Project Registration Type

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

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

If Retroactive, please indicate Start Date of project activity dd/mm/yyyy: N/A

#### SECTION D. Unique project identification

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



|           | Coordinates |
|-----------|-------------|
| Latitude  | 20.3835°N   |
| Longitude | 100.3942°E  |



### Explain given coordinates

The Project is located about 15km away from Houay Xay, the capital city of Bokeo Province, Lao PDR. The above coordinates is for the project's Weir.

### D.2. Map



### SECTION E. Outcome stakeholder consultation process

### E.1. Assessment of stakeholder comments

Considering the Project is located at remote area with poor transportation condition, the Local Stakeholder Meeting for Nam Ngao Hydropower Project was held at two different places separately. One was held in Vientiane at 2:00 pm Mar 20<sup>th</sup> 2015 (Friday) for government officer, NGOs, experts, etc., the other one was held in Working Camp of the project at 2:00 pm on Mar 23<sup>rd</sup> 2015 (Monday) for local residents surrounding the project site. If NGO was interested, they could attend both of the meetings. The meetings were organized in line with the Gold Standard requirements, and the meetings' agenda is the same exactly.

| Category Code | Organization (if relevant)                                     | Name of invitee | Way of invitation       | Date of invitation | Confirmation received? Y/N |
|---------------|--|-----------------|-------------------------|--------------------|----------------------------|
| A             | Leader& Officer of Village organization                        | Anonymous       | Bulletin or oral notice | 6/3/2015           | Y                          |
| A             | Leader& Officer from Council of village Elder                  | Anonymous       | Bulletin or oral notice | 6/3/2015           | Y                          |
| A             | Leader& Officer from village women's organization              | Anonymous       | Bulletin or oral notice | 6/3/2015           | Y                          |
| A             | Local villagers  | Anonymous       | Bulletin or oral notice | 6/3/2015           | Y                          |
| B             | Officials of local government                                  | Anonymous       | Email                   | 6/3/2015           | Y                          |
| E             | Gold Standard  | Anonymous       | Email                   | 6/3/2015           | N                          |
| F             | Global Association for People and the Environment              | Anonymous       | Email                   | 6/3/2015           | Y                          |
| C             | Lao DNA  | Anonymous       | Email                   | 6/3/2015           | Y                          |
| F             | REEEP  | Anonymous       | Email                   | 6/3/2015           | N                          |
| F             | Mercy Corps  | Anonymous       | Email                   | 6/3/2015           | N                          |
| F             | WWF  | Anonymous       | Email                   | 6/3/2015           | N                          |
| F             | Global Environmental Institute (GEI)                           | Anonymous       | Email                   | 6/3/2015           | N                          |
| F             | Green Peace  | Anonymous       | Email                   | 6/3/2015           | N                          |
| F             | Care International   | Anonymous       | Email                   | 6/3/2015           | N                          |
| F             | Citizens's Alliance for Saving the Atmosphere and Earth (CASA) | Anonymous       | Email                   | 6/3/2015           | N                          |
| F             | Clean Energy Nepal   | Anonymous       | Email                   | 6/3/2015           | N                          |
| F             | Climate Action Network South Africa                            | Anonymous       | Email                   | 6/3/2015           | N                          |
| F             | David Suzuki Foundation  | Anonymous       | Email                   | 6/3/2015           | N                          |
| F             | Development Alternatives                                       | Anonymous       | Email                   | 6/3/2015           | N                          |
| F             | Earth Advantage, Inc.  | Anonymous       | Email                   | 6/3/2015           | N                          |
| F             | EnerGHG India  | Anonymous       | Email                   | 6/3/2015           | N                          |
| F             | Energy Forum   | Anonymous       | Email                   | 6/3/2015           | N                          |

|   |   |           |       |          |   |
|---|---|-----------|-------|----------|---|
| F | Euronatura–Center for Environmental Law and Sustainable Development | Anonymous | Email | 6/3/2015 | N |
| F | European Business Council for Sustainable Energy e5                 | Anonymous | Email | 6/3/2015 | N |
| F | Fair Climate Network  | Anonymous | Email | 6/3/2015 | N |
| F | Forum for the Future  | Anonymous | Email | 6/3/2015 | N |
| F | Fundacion Ecodiversidad Colombia                                    | Anonymous | Email | 6/3/2015 | N |
| F | Zero: Regional Environment Organisation                             | Anonymous | Email | 6/3/2015 | N |
| F | The Climate Group (China)   | Anonymous | Email | 6/3/2015 | N |
| F | Renewable Energy & Energy Efficiency Institute                      | Anonymous | Email | 6/3/2015 | N |
| F | Philippine Solar Energy Society                                     | Anonymous | Email | 6/3/2015 | N |
| F | A World Institute for a Sustainable Humanity (A W.I.S.H)            | Anonymous | Email | 6/3/2015 | N |
| F | The Whitmore Initiative Society                                     | Anonymous | Email | 6/3/2015 | N |
| F | The Environmental Investigation Agency                              | Anonymous | Email | 6/3/2015 | N |
| F | SouthSouthNorth   | Anonymous | Email | 6/3/2015 | N |
| F | SolarAid  | Anonymous | Email | 6/3/2015 | N |
| F | SKG Sangha  | Anonymous | Email | 6/3/2015 | N |
| F | Sibol ng Agham at Teknolohiya                                       | Anonymous | Email | 6/3/2015 | N |
| F | Shanshui Conservation Center, China                                 | Anonymous | Email | 6/3/2015 | N |
| F | PURE the Clean Planet Trust   | Anonymous | Email | 6/3/2015 | N |
| F | Plantons Utile  | Anonymous | Email | 6/3/2015 | N |
| F | Indonesian Climate Action Network                                   | Anonymous | Email | 6/3/2015 | N |
| F | International Centre for Eradication of Poverty                     | Anonymous | Email | 6/3/2015 | N |
| F | Kangmei Institute of Community Development and Marketing            | Anonymous | Email | 6/3/2015 | N |



|   |  |           |       |          |   |
|---|--|-----------|-------|----------|---|
| F | Kiko Network                               | Anonymous | Email | 6/3/2015 | N |
| F | KLIMA                                      | Anonymous | Email | 6/3/2015 | N |
| F | Triangle Generation<br>Humanitaire         | Anonymous | Email | 6/3/2015 | N |
| D | Local independent<br>consultant and expert | Anonymous | Email | 6/3/2015 | Y |

**Individual Invitation:**

The invitation letter was sent out via email to the above mentioned stakeholders.

**The English version individual invitation letter is given below:**

Dear Sir/Madam,

Nam Ngao Hydropower Project is a Gold Standard CDM candidate project. The physical meeting is to be held to collect opinions from stakeholders regarding the impacts from the project according to the requirement of Gold standard.

This meeting will be held at Don Chan Palace Hotel & Convention at 14:00 am March 20<sup>th</sup> (Friday), 2015, as the project participants, we humbly accept the advices, comments and suggestion of all stakeholders, looking forward to your attendance. There will be an introduction and a comments collecting section. Your presence is welcomed.

Kind Regards

HOUANGPASERT Hydro Power Co., Ltd.

Contact Person: Mr Yaodong Lu

Mobile: 00856-20-28190844

South Pole Carbon Asset Management Ltd.

Contact Person: Ms Fang Qun

Telephone: 0086-10-84549953

**The Laotian version:**

## ທ້ອງຖິ່ນມີສ່ວນຮ່ວມເຊີນປຶກສາຫາລື ນ້ຳງາວເຂື່ອນໄຟຟ້າ

ຮຽ : ທ່າ ແຂກຜູ້ມີກຽດທັງຫຼາຍ

ໂຄງກາ ເຂື່ອນໄຟຟ້າ ທີ່ຕັ້ງຢູ່ໃນເມືອງໄດຣພາວເວີ ເປັ ໂຄງກາ ກິ ໄກກາ ພັດທະ າສະອາດໂຄງກາ  
ຫນຶ່ງຂອງອົງກາ ໂກ ລສະແຕ ດາດ.ກອງປະຊຸມສາມັນນີ້ໄດ້ຈັດຕັ້ງຂຶ້ນ ເພື່ອເກັບກຳຄວາມຄິດ  
ເຫັນ ຂອງຜູ້ມີສ່ວນ ຮ່ວມກ່ຽວກັບ ກະທົບຂອງໂຄງກາ ຕາມມາດຕະຖານ ຂອງ ອົງກາ ໂກ ລສະແຕ  
ດາດ.

ກອງປະຊຸມນີ້ຈະໄດ້ຈັດຂຶ້ນທີ່ໂຮງແຮມ ດີອ ລັ ພາເວຊ໌ ຢູ່ 14:00 am ມືນາ 20 (ວັນສຸກ),

ໃນປີ 2015. ໃ າມຜູ້ຈັດຕັ້ງກອງປະຊຸມ ພວກເຮົາຍິ ດີຮັບຄຳ ະ ຳ, ຄຳເຫັນ ແລະ

ຄຳເຕືອ ຈາກ ຜູ້ມີສ່ວນ ຮ່ວມພຶດທະກຳ ຈະມີພະແ ກ ະ ຳເຕືອ ແລະເກັບກຳຄຳຂໍ້ມູນ

ພວກເຮົາຍິ ດີຮັບເຕືອ ຖ້າທ່າ ມີຈຸດປະສົງເຂົ້າຮ່ວມ.

ຂໍສະແດງຄວາມ ັບຖື

ເບີໂທ: 00856-20-28190844

0086-10-84549953

### **Public Invitation:**

The following invitation letter was published in Laotian via village bulletins or oral notice.

Dear Sir/Madam,

N Nam Ngao Hydropower Project is a Gold Standard CDM candidate project. The physical meeting is to be held to collect opinions from stakeholders regarding the impacts from the project according to the requirement of Gold standard.

This meeting will be held in the Working Camp of the project at 2:00 pm Mar 23<sup>th</sup> (Monday), as the project participants, we humbly accept the advices, comments and suggestion of all stakeholders, looking forward to your attendance. There will be an introduction and a comments collecting section. Your presence is welcomed.

Kind Regards

HOUANGPASERT Hydro Power Co., Ltd.  
Contact Person: Mr Yaodong Lu  
Mobile: 00856-20-28190844

South Pole Carbon Asset Management Ltd.  
Contact Person: Ms Fang Qun  
Telephone: 0086-10-84549953

Until 20 March 2015, No comment from any invited NGOs or governmental officials were received. For stakeholders of the local residents and government officer, questionnaires were distributed after announcement. Local stakeholders filled in and returned the questionnaires.

### **Questionnaire**

The questions in the questionnaire are designed based on the Annex H of the Gold Standard Rules and Toolkit. There are eleven questions are designed for the “Do no harm assessment” and six questions are designed for the “Sustainable Matrix”. In total, 24 questionnaires were sent out to stakeholders. The questionnaires were distributed on 01/03/2015, and these questionnaires were collected by the 15/03/2015. The questions are designed in a way to help stakeholder understand potential impacts on environment, social development and technological & economic development of the project with simple local language.

The questions in the questionnaires are as follow:

1. Do you think the project’s construction and operation will affect the local air quality?
2. Do you think the project’s construction and operation will affect the local water quality?
3. Do you think the project’s construction and operation will affect the local water flow?
4. Do you think the project’s construction and operation will lead to soil pollution or erosion?
5. Do you think the project’s construction and operation will lead to waste water, waste gas or solid waste pollution?
6. Do you think the project’s construction and operation will affect local animal and plant species and quantity?
7. Do you think the project’s construction and operation will affect local archaeological, cultural, historical and spiritual heritage and sites?
8. Do you think the project’s construction and operation will improve the local’s basic infrastructure?
9. Do you think the project’s construction and operation will provide job opportunity?
10. Do you think the project will provide a higher level of remuneration?
11. Do you think the project provide good, safe and clean working environment, adequate security and protection?
12. Do you think the project’s construction and operation will alleviate local poverty and improve the living standards of the poor?
13. Do you think the project will provide continuous, reliable and clean power?
14. Do you think the project’s construction and operation lead to fish decrease and the surrounding watershed wild animals’ number reduce?
15. Was/will your land occupied/flooded due to the project’s construction and operation, please answer:  
Did you get the compensation?  
What is the compensation standard?

- Are you satisfied with the compensation?
16. If you are the owner of other installation affected/will be affected by the project's construction and operation, please answer:  
Did you get the compensation?  
What is the compensation standard?  
Are you satisfied with the compensation?
17. If you are employee of the project, please answer:  
Was the work time arranged in line with state regulation?  
Was Minority hired by the project?  
Was the project provided equal job opportunities to male and female?
18. Which negative impact will be introduced to local environment during the project's construction and operation?  
Which positive impact to local economic will be introduced during the project's construction and operation?
19. Which positive impact will be introduced to your living during the project's construction and operation?
20. What is your attitude of the project's construction and implementation?
21. In general, what is the impact of the project' construction?
22. Other advise, suggestion to the project's construction and implementation

#### Hydropower Project LSC Evaluation Form

|   |   |
|---|---|
| 1. ຊື່ ແລະ ນາມສະກຸນ: 20 ວັນນະວົງ ວັນນະວົງ | 2. ຊື່ ແລະ ນາມສະກຸນ: 20 ວັນນະວົງ ວັນນະວົງ |
| ສຳນວນທີ່ຢູ່ອາໄສ: 20 ວັນນະວົງ ວັນນະວົງ     | ສຳນວນທີ່ຢູ່ອາໄສ: 20 ວັນນະວົງ ວັນນະວົງ     |
| ສຳນວນທີ່ຢູ່ອາໄສ: 20 ວັນນະວົງ ວັນນະວົງ     | ສຳນວນທີ່ຢູ່ອາໄສ: 20 ວັນນະວົງ ວັນນະວົງ     |
| ສຳນວນທີ່ຢູ່ອາໄສ: 20 ວັນນະວົງ ວັນນະວົງ     | ສຳນວນທີ່ຢູ່ອາໄສ: 20 ວັນນະວົງ ວັນນະວົງ     |
| ສຳນວນທີ່ຢູ່ອາໄສ: 20 ວັນນະວົງ ວັນນະວົງ     | ສຳນວນທີ່ຢູ່ອາໄສ: 20 ວັນນະວົງ ວັນນະວົງ     |

#### ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ

|                                      |
|--------------------------------------|
| 1. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ  |
| 2. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ  |
| 3. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ  |
| 4. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ  |
| 5. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ  |
| 6. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ  |
| 7. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ  |
| 8. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ  |
| 9. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ  |
| 10. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ |
| 11. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ |
| 12. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ |

#### ຖ້າມີ, ກະລຸນາລະບຸ:

|                                      |
|--------------------------------------|
| 5. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ  |
| 6. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ  |
| 7. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ  |
| 8. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ  |
| 9. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ  |
| 10. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ |
| 11. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ |
| 12. ສຳນວນທີ່ຢູ່ອາໄສທີ່ຖືກສະໜອງໂດຍລັດ |



3

### Figure 1 Questionnaire Sample

No objection has been received from the local stakeholders. The result of the questionnaire shows the project does not incur any harmful impacts on the local environment. Respondents show that they believe the project can bring sustainable benefits to them and they are very supportive for the operation of the project. The respondents generally deemed that the project generates reliable electricity, benefit local economy development and employment. They also think the project has no negative impact on ecology.

## Stakeholder Meeting

In totally, 24 stakeholders attended the consultation meeting, in order to collect comments from minority, 5 female (accounts for 20.8%) attended the meeting.

|        | Item      | Person number | Percentage (%) |
|--------|-----------|---------------|----------------|
| Gender | Male      | 19            | 79.2           |
|        | Female    | 5             | 20.8           |
| Age    | 0~20      | 1             | 4.2            |
|        | 20~30     | 5             | 20.8           |
|        | 30~40     | 12            | 50.0           |
|        | 40~50     | 6             | 25.0           |
|        | >50       | 0             | 0              |
| Ethnic | Laoloum   | 3             | 12.5           |
|        | Nyahon    | 2             | 8.3            |
|        | Laotheung | 19            | 79.2           |



|            |  |    |      |
|------------|--|----|------|
|            | Other                                  | 0  | 0    |
| Education  | Primary and below                      | 2  | 8.3  |
|            | Junior high school                     | 4  | 16.7 |
|            | Senior middle school                   | 4  | 16.7 |
|            | University and above                   | 14 | 58.3 |
| Profession | Government officer                     | 14 | 58.3 |
|            | local farmer                           | 10 | 41.7 |
|            | NGO(including school)                  | 0  | 0    |
|            | stakeholder(influenced by the project) | 0  | 0    |
|            | Other                                  | 0  | 0    |

The meeting covered all agenda items recommended by the Gold Standard.

### Agenda

Registration  
 Welcome remarks  
 Introduction of Participants  
 Project Overview and introduction  
 Break  
 Questions and Answers  
 Introduction of the Gold Standard and its procedures  
 Questions and Answers  
 Break  
 Open discussion (All stakeholders are invited to give their comments, critics and support concerning the project)  
 Declared the meeting closed

| Stakeholder comment  | Was comment taken into account (Yes/ No)? | Explanation (Why? How?)  |
|--|---|--|
| Does the project provide job opportunities to nearby village?                                    | Yes                                       | Project Owner's representative mentioned that all the construction works would be open for local construction company, and would request the company to recruit locally.   |
| Some stakeholders expected the project owner could provide stable electricity to nearby village. | Yes                                       | The Project Owner's representative mentioned that it is not allowed to supply electricity directly from the plant to end user, but the project owner would keep the power line(s) for construction even after the project comes into operation, thus the surrounding village can use those power lines to connect to the grid. |
| Is there Land occupied by the project?   | No  | Project Owner's representative confirmed that none village would   |

|  |     |  |
|--|-----|--|
|  |     | be directly affected by the intake weir, access road and powerhouse construction, due to the project site is far away from villages.   |
| Is the technology used in the project reliably?          | Yes | The project owner confirmed that they will choose reputable manufacturer to provide mature technology and equipment.   |
| Does the project's implementation affect the irrigation? | No  | The project owner explained that there's no reservoir for the project to regulate the run off of the river, thus will not affect the water for irrigation. Actually project is far away from nearby village and there is no farmland nearby. |

All comments from stakeholders are taken into account and promptly responded. For the minutes of the meeting and other details regarding the consultation meeting, please refer to the Local Stakeholder Consultation report.

Attendance List of Stakeholder Meeting

| No. | Name (Name)    | Organization (Unit) | Gender | Address (Village)  | Contact details (Contact details) |
|-----|----------------|---------------------|--------|--------------------|-----------------------------------|
| 1   | Mr. Lay Ya     | Chap Village        | Male   | Chap Village       | 091 55874899                      |
| 2   | Mr. Chai Chuan | Chai Chuan Village  | Male   | Chai Chuan Village | 091 55874899                      |
| 3   | Mr. Nam An     | Phum S.             | Male   | Phum S.            | 091 55874899                      |
| 4   | Mr. Chai Chuan | Chai Chuan Village  | Male   | Chai Chuan Village | 091 55874899                      |
| 5   | Mr. Nam An     | Phum S.             | Male   | Phum S.            | 091 55874899                      |
| 6   | Mr. Chai Chuan | Chai Chuan Village  | Male   | Chai Chuan Village | 091 55874899                      |
| 7   | Mr. Nam An     | Phum S.             | Male   | Phum S.            | 091 55874899                      |
| 8   | Mr. Chai Chuan | Chai Chuan Village  | Male   | Chai Chuan Village | 091 55874899                      |
| 9   | Mr. Nam An     | Phum S.             | Male   | Phum S.            | 091 55874899                      |
| 10  | Mr. Chai Chuan | Chai Chuan Village  | Male   | Chai Chuan Village | 091 55874899                      |
| 11  |                |                     |        |                    |                                   |
| 12  |                |                     |        |                    |                                   |
| 13  |                |                     |        |                    |                                   |
| 14  |                |                     |        |                    |                                   |
| 15  |                |                     |        |                    |                                   |
| 16  |                |                     |        |                    |                                   |
| 17  |                |                     |        |                    |                                   |
| 18  |                |                     |        |                    |                                   |
| 19  |                |                     |        |                    |                                   |

List Participants Consultation Workshop on 30 March 2015 at District Public Hall, Vientiane, Lao PDR

| No. | Name and Surname    | Organization | Position          | Phone number | E-mail                  | Signature |
|-----|---------------------|--------------|-------------------|--------------|-------------------------|-----------|
| 1   | Mr. Thong Chongpran | EDMCC, BOB   | Director of EDMCC | 020 222 4022 | thongchongpran@edmc.com |           |
| 2   | Mr. Thong Chongpran | EDMCC, BOB   | Deputy Director   | 020 222 4022 | thongchongpran@edmc.com |           |
| 3   | Mr. Thong Chongpran | EDMCC, BOB   | Deputy Director   | 020 222 4022 | thongchongpran@edmc.com |           |
| 4   | Mr. Thong Chongpran | EDMCC, BOB   | Deputy Director   | 020 222 4022 | thongchongpran@edmc.com |           |
| 5   | Mr. Thong Chongpran | EDMCC, BOB   | Deputy Director   | 020 222 4022 | thongchongpran@edmc.com |           |
| 6   | Mr. Thong Chongpran | EDMCC, BOB   | Deputy Director   | 020 222 4022 | thongchongpran@edmc.com |           |
| 7   | Mr. Thong Chongpran | EDMCC, BOB   | Deputy Director   | 020 222 4022 | thongchongpran@edmc.com |           |
| 8   | Mr. Thong Chongpran | EDMCC, BOB   | Deputy Director   | 020 222 4022 | thongchongpran@edmc.com |           |
| 9   | Mr. Thong Chongpran | EDMCC, BOB   | Deputy Director   | 020 222 4022 | thongchongpran@edmc.com |           |
| 10  | Mr. Thong Chongpran | EDMCC, BOB   | Deputy Director   | 020 222 4022 | thongchongpran@edmc.com |           |
| 11  | Mr. Thong Chongpran | EDMCC, BOB   | Deputy Director   | 020 222 4022 | thongchongpran@edmc.com |           |
| 12  | Mr. Thong Chongpran | EDMCC, BOB   | Deputy Director   | 020 222 4022 | thongchongpran@edmc.com |           |
| 13  | Mr. Thong Chongpran | EDMCC, BOB   | Deputy Director   | 020 222 4022 | thongchongpran@edmc.com |           |
| 14  | Mr. Thong Chongpran | EDMCC, BOB   | Deputy Director   | 020 222 4022 | thongchongpran@edmc.com |           |
| 15  | Mr. Thong Chongpran | EDMCC, BOB   | Deputy Director   | 020 222 4022 | thongchongpran@edmc.com |           |
| 16  | Mr. Thong Chongpran | EDMCC, BOB   | Deputy Director   | 020 222 4022 | thongchongpran@edmc.com |           |
| 17  | Mr. Thong Chongpran | EDMCC, BOB   | Deputy Director   | 020 222 4022 | thongchongpran@edmc.com |           |
| 18  | Mr. Thong Chongpran | EDMCC, BOB   | Deputy Director   | 020 222 4022 | thongchongpran@edmc.com |           |
| 19  | Mr. Thong Chongpran | EDMCC, BOB   | Deputy Director   | 020 222 4022 | thongchongpran@edmc.com |           |

Figure 2 Attending List of the Consultation Meeting



Figure 3-1 Photo of the 1<sup>st</sup> physical meeting



Figure 3-2 Photo of the 2<sup>nd</sup> physical meeting

## 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.

During the consultation meeting, the stakeholders were informed that they are invited for the feedback round. The relevant content will be added after the Stakeholder Feedback Round is completed. And the outcome of the Stakeholder Feedback Round will be summarized in the final version of the GS-passport.

## E. 3. Discussion on continuous input / grievance mechanism

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

During the consultation meeting, the stakeholders were informed that they are invited for the feedback round, the continuous input methods were discussed, and finally the following methods were determined:

|  | Method Chosen (include all known details e.g. location of book, phone, number, identity of mediator) | Justification                      |
|--|--|------------------------------------|
| Continuous Input / Grievance Expression Process Book | Grievance expression book in Villages  | Kept by the leader of the villages |
| Telephone access                                     | +00856-20-28190844   | Project manager                    |
| Internet/email access                                | Yaodong.lu@gmail.com   | Project manager                    |

*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

Project is a run-off-river type project and does not involve use or generation of any hazardous waste. All of the project activity is implemented considering related environmental and safety precautions. Based on the analysis, only relevant areas related to project activity are determined as labor standards and environmental protection which are assessed as given in table below.

| Safeguarding principles  | Description of relevance to my project   | Assessment of my project risks breaching it (low/medium/high) | Mitigation measure  |
|--|--|---|---|
| <b>Human Rights</b>  |  |   |   |
| 1. The project respects internationally proclaimed human rights including dignity, cultural property and uniqueness of indigenous people. The project is not complicit in Human Rights abuses. | The project respects internationally proclaimed human rights, including personal and political freedom, economic, social and culture freedoms, etc. and none of the project participate is arms producer /distributor or land mines producer/distributor. Lao PDR (host country) has ratified two 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) <sup>2</sup> . The project will have no negative impact on the lifestyles of local and indigenous people. The people in the surrounding area will benefit from the electricity they will get from the new | Low   | No mitigation measure is required for this indicator. Project will be implemented in compliance with regulations. |

<sup>2</sup> <http://www1.umn.edu/humanrts/research/ratification-laos.html>



|   |  |     |  |
|---|--|-----|--|
|   | hydropower station. The electricity for the neighbors is distributed by a local grid and is part of the internal electricity use.  |     |  |
| 2. The project does not involve and is not complicit in involuntary resettlement.   | The project does not involve and is not complicit involuntary resettlement. As expected in the Initial Environment Examination (IEE) report by the designer during the preparation stage, the project is far away from villages, and there is no village impacted by the project. Also, there is no any private land affected or expropriation due to the implementation of the project. | Low | No mitigation measure is required for this indicator |
| 3. The project does not involve and is not complicit in the alteration, damage or removal of any critical cultural heritage.  | The Project does not involve and is not complicity in the alteration, damage or removal of any critical cultural heritage. There is no protected area, national park or archaeological site within the project boundaries.   | Low | No mitigation measure is required for this indicator |
| <b>Labour Standards</b>   |  |     |  |
| 4. The project respects the employees' freedom of association and their right to collective bargaining and is not complicit in restrictions of these freedoms and rights. | The project activity does not interfere with legal rights regarding employees' freedom of association or their right to collective bargaining. The project fully respects the employee's freedom and rights and all related laws endorsed by Lao government.<br>Ref: Labour Law <sup>3</sup> , Article 5   | Low | No mitigation measure is required for this indicator |

<sup>3</sup> [http://www.na.gov.la/docs/eng/laws/soc\\_cult/Labour%20%282006%29%20Eng.pdf](http://www.na.gov.la/docs/eng/laws/soc_cult/Labour%20%282006%29%20Eng.pdf)



|  |   |     |  |
|--|---|-----|--|
| 5. The Project does not involve and is not complicit in any form of forced or compulsory labour.   | <p>All employees are engaged in the project implementation on a voluntary basis. The project fully respects the employee's rights in accordance with all labour related laws.</p> <p>The host country has ratified a total of eight ILO Conventions, including five of the eight ILO core Conventions<sup>4</sup> (covering forced labour, equal, discrimination and child labour).</p> <p>Ref: Labour Law, Article 3</p> | Low | No mitigation measure is required for this indicator |
| 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>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>Ref: Labour Law, Article 41</p>           | Low | No mitigation measure is required for this indicator |
| 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>In Laos PDR(host country), labour legislation forbid any form of discriminate based on gender, race, religion, sexual orientation or on any other basis. According to the interview with the project owner, there is strong solidarity existing among people from different minority groups in the project site.</p>   | Low | No mitigation measure is required for this indicator |

<sup>4</sup> <http://www.ilo.org/asia/countries/lao-peoples-democratic-republic/lang--en/index.htm>

|  |   |        |   |
|--|---|--------|---|
|  | Ref: Labour Law, Chapter 5&Chapter 7  |        |   |
| 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>The construction of the project requires intensive labour for construction and machinery operation.</p> <p>Workers may be exposed to risk on the construction, e.g. occupational hazard and accidents.</p> <p>A hydro project in general does not expose workers to unsafe or unhealthy work environments in terms of toxins or chemicals.</p>   | Medium | <p>The workers are trained in respect to construction safety. The project owners will provide safe and healthy environment in line with the labour law.</p> <p>Ref: Labour Law, Chapter 6</p>   |
| <b>Environmental Protection</b>  |   |        |   |
| 9. The project takes a precautionary approach in regard to environmental challenges and is not complicit in practices contrary to the precautionary principle. | <p>The project activity is only a hydropower project which not includes any planting, agriculture or similar activities. The project activity does not threaten human health or the environment. The project will be constructed and operated in an environmental friendly way.</p> <p>All the release (i.e. waste water, solid waste, excavation waste) and hazard waste (i.e. waste oil) will be handled according to the national legislation.</p> <p>Adequate hearing protection will be provided during the blasting time.</p> | Low    | <p>The project will implemented according to national regulations including “Environmental Protection Law”, “National Policy on Environmental and Social Sustainability of the Hydropower Sector in Lao PDR”.</p> <p>Precautionary principles have been taken to avoid negative impacts to the local environment prior to the project starting to operation.</p> <p>In order to minimize impact on environment,</p> |

|  |  |  |  |
|--|--|--|--|
|  |  |  | <p>mitigation measures will be issued which includes;</p> <ul style="list-style-type: none"> <li>-Releasing minimal flow to ensure the biodiversity in the downstream of the river;</li> <li>-Proper disposal of wastes; Solid waste(such as excavation waste) can be collected regularly and transported to the site waste management facility for segregation prior to reuse or to sending off-site for recycling;</li> <li>- Restricted working hour in construction area and times for ground blasting;</li> <li>- Provide adequate hearing protection to Construction workers when noise levels of 70-80 dB or above due to the blasting;</li> <li>- Buffer zones of vegetation shall be left along stream banks to maintain riparian habitats and prevent sedimentation;</li> <li>-Rehabilitation of land</li> </ul> |
|--|--|--|--|

|  |  |     |   |
|--|--|-----|---|
|  |  |     | after construction works are completed including tree planting and topsoil restoration. |
| <b>Social impacts</b>  |  |     |   |
| 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. The project is located in an isolated area and there are no critical natural habitats located at or close to the project site. As a hydropower project, the project will not lead to invasive species introduction or activity displacement.  | Low | Company will comply with all national regulations.                                      |
| <b>Anti-Corruption</b>   |  |     |   |
| 11. The project does not involve and is not complicit in corruption.   | Lao PDR has published relevant law <sup>5</sup> to against corruption. Furthermore, Lao PDR ratified the UN Convention against Corruption <sup>6</sup> on Sep. 25, 2009, Lao PDR will have the right to ask for assistance from other member countries in investigating and dealing with corruption cases with foreign elements.<br>The project is a private-owned, the project owner does not condone or support corruption.<br>Ref: Penal Law, Article 157 | Low | No mitigation measure is required for this indicator.                                   |

<sup>5</sup> [http://www.na.gov.la/docs/eng/laws/pub\\_adm/Penal%20%282005%29%20Eng.pdf](http://www.na.gov.la/docs/eng/laws/pub_adm/Penal%20%282005%29%20Eng.pdf)

<sup>6</sup> <http://www.unlao.org/Blog/post/Lao-PDR-joins-international-fight-against-corruption.aspx>

## F.2. Sustainable Development matrix

| Indicator                  | Mitigation measure   | Relevance to achieving MDG  | Chosen parameter and explanation   | Preliminary score |
|----------------------------|--|---|--|-------------------|
| <b>Environment</b>         |  |   |  |                   |
| Air quality                | <p>Dust due to project construction and emission due to construction equipment according to the IEE report.</p> <p>The mitigation methods for dust suppression has been employed, including</p> <ul style="list-style-type: none"> <li>-Topsoil removal land cleaning and rehabilitation will be undertaken progressively</li> <li>-Spraying water on the roads, spoil sumps, topsoil stockpiles and disturbed areas</li> <li>-Combustion engines be inspected and adjusted to minimize the air pollution</li> <li>- Workers wearing masks to prevent respiration discomfort and the dust screens are applied</li> </ul> | <p>Related to MDG Goal 7: Ensure environmental sustainability</p> <p>Target 7.a</p> <p>Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources</p> | <p><b>Parameter:</b><br/>air quality indicators</p> <p>Dust emission occurs due to the excavation process, however the emission can be mitigated using appropriate measures. On the other hand, the project will reduce SOx, NOx emissions due to combustion of fossil fuel for electricity generation in the baseline scenario.</p> <p>Thus, this sustainable indicator scores a “0”.</p> | 0                 |
| Water quality and quantity | <p>During the construction and operation, the following measures will be taken to minimize impacts on water quality:</p> <ul style="list-style-type: none"> <li>-Introduce sanitation facility to treat the human waste</li> </ul>   | <p>Related to MDG Goal 7: Ensure environmental sustainability</p> <p>Target 7.b</p> <p>Reduce biodiversity loss.</p>  | <p><b>Parameter:</b><br/>Flow rate of water released &amp; The water quality indicators</p> <p>During the project</p>  | 0                 |



- Collected dirty water from disturbed land and treat before release to the environment  
-Store the hydrocarbons(e.g. fuel and lubricants) and chemical reagents in safe place away from any water courses, the container of reagents and drums of used oil or grease are stored under cover at all times.

The project is a run-of -river project, so it will discharge all of the water that is used for electricity generation. Conservation of locally adapted species and ecosystems are done via ensuring minimum water flow.

As the IEE assessed, the project is a run of river type hydro project and has no reservoir to store water and regulate river runoff, thus the impact on the groundwater level is so minor that could be ignored. As well due to ecological flow, the vegetation and the associated biodiversity near streams will not be affected according to the assessment in the IEE.

construction period, washing wastewater and wastewater with oil from machinery were produced. During the project operation period, domestic wastewater and sanitary wastewater is generated. The project owner applies treatment to discharged wastewater to make sure it is complied with the local regulation. Quantity of water released will be monitored to ensure the minimum flow by environment monitoring department is achieved.

Thus, this indicator therefore scores "0".

|                  |   |  |   |   |
|------------------|---|--|---|---|
|                  | Thus, it does not change water balance and the level of the underground water is not affected.  |  |   |   |
| Soil condition   | The construction may bring some impacts due to land clearing. The topsoil is exposed to the outside environment and may be removed by rain or wind. In order to mitigate such negative impacts, in general two measures are implemented. The first measure is for the immediate control, which is terracing. After construction is completed, the area will be replanted for long-term benefits. The excavated area at the intake weir and powerhouse will be protected by planting trees and grass to control erosion. Soil removed during the construction process will be stockpiled separately and would be reused later on. The local government will be responsible for monitoring of the implementation. | Related to MDG Goal 7: Ensure environmental sustainability | <p><b>Parameter:</b><br/>Replantation</p> <p>Proper measures have been adopted to prevent negative impact on soil condition due to the project.</p> <p>The projects have to recover the plantation, which is affect during the construction period. The condition of the replantation will be monitored.</p> <p>Given the appropriate mitigation measures, this indicator scores "0".</p> | 0 |
| Other pollutants | To reduce/avoid the noise impacts, following measures will be taken:  | Related to MDG Goal 7: Ensure environmental sustainability | <p><b>Parameter:</b><br/>Level of noise</p>   | 0 |

|                           |  |  |  |   |
|---------------------------|--|--|--|---|
|                           | <ul style="list-style-type: none"> <li>-The drilling machines should be equipped with noise control devices such as mufflers.</li> <li>-Construction workers exposed to noise levels of 80 dB or more should be provided with adequate hearing protection.</li> <li>-Restrict working hours, Making no operation of noisy machinery during the rest time of local residents</li> </ul>   |  | <p>As the main construction sites are not adjacent to the local communities, the impact of noise is limited. And the project site is far away from the village and mitigation measures implemented during construction work.</p> <p>This indicator scores "0".</p>                 |   |
| Biodiversity              | <p>Conservation of locally adapted species and ecosystems are done via ensuring minimum flow and recovery of vegetation after construction.</p> <p>According to the IEE, there is no migration fish was observed. Also since the project is run of river type hydro with no reservoir blocking water flow while minimum water flow is maintained, no impacts will be expected on fishes.</p> <p>The project has no reservoir to store water and regulate river runoff, thus the impact on the groundwater level is so minor that could be ignored.</p> | Related to MDG Goal 7: Ensure environmental sustainability | <p><b>Parameter:</b><br/>Recovery of the vegetation</p> <p>The project owner will recovery the vegetation after construction.</p> <p>There is no endangered species in the project on-site.</p> <p>Thus, given the appropriate mitigation measures, this indicator scores "0".</p> | 0 |
| <b>Social development</b> |  |  |  |   |

|                        |   |   |  |   |
|------------------------|---|---|--|---|
| Quality of employment  | - | <p>MDG Target 1.A:<br/>Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day.</p> <p>MDG Target 1.B:<br/>Achieve full and productive employment and decent work for all, including women and young people</p> | <p><b>Parameter:</b><br/>Training plan</p> <p>Staffs to be employed for the project are most local people having poor education background.</p> <p>Compared to the baseline scenario, trainings provided by the project owner will improve the employees' qualifications which might help them to find job more easily in future. Staff will be trained for the positions created during construction&amp; operation phases. All Health and Safety measurements will be applied according to local regulations. The project will provide long-term jobs.</p> <p>Thus, this sustainable indicator scores a "+".</p> | + |
| Livelihood of the poor | - | <p>MDG Target 1.A:<br/>Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day.</p> <p>MDG Target 1.B:<br/>Achieve full and productive employment and decent work for all, including</p>                        | <p><b>Parameter:</b><br/>Number of the installed pumps on-site</p> <p>Water supply program is prepared for the local people to improve their water supply system.</p> <p>Thus, this sustainable</p>  | + |

|  |   | women and young people   | indicator scores a “+”.   |   |
|--|---|--|---|---|
| Access to affordable and clean energy services | - | Target 8.B and 8.c<br>Address the special needs of the least developed countries, landlocked developing countries and small island developing States | <p><b>Parameter:</b><br/>the net electricity generated to the local grid</p> <p>Before the construction of the project, the local residents adopt firewood as the main energy source. The construction of the project will change the energy use and promote local electrification. The construction of the project will improve local electricity transmission system, promote the electrification progress. The project increases the renewable energy.</p> <p>Thus, this sustainable indicator scores a “+”.</p> | + |
| Human and institutional capacity               | - | -  | <p>The project enables of local female, as there is no gender barrier for employment of the project.</p> <p>Stakeholder comments are collected during the GS-CDM project development through a series of ground survey, village profile and household survey with the use of questionnaires and</p>   | 0 |



|   |                         |   |   |   |
|---|-------------------------|---|---|---|
|   |                         |   | <p>interviews.</p> <p>Through the stakeholder meeting, local residents participated in the decision-making of the project design. There is no significant impact on this indicator resulting from the project development.</p> <p>Thus this indicator scores "0".</p>   |   |
| <b>Economic and technological development</b> |                         |   |   |   |
| Quantitative employment and income generation | -                       | <p>MDG Target 1.A:<br/>Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day.</p> <p>MDG Target 1.B:<br/>Achieve full and productive employment and decent work for all, including women and young people</p> | <p><b>Parameter:</b><br/>Number of jobs created</p> <p>During the construction period, plenty of job opportunities were provided to local residents, and the newcomers surged in the area will bring local people especially the poor and disadvantaged groups lots of employment chances.</p> <p>As a result the employment rate and income level have increased. And the average salary for the project employee is higher than the local level.</p> <p>So this indicator scores "+".</p> | + |
| Balance of payments and                       | The construction of the | Target 8.B and 8.c  | The construction of the   | 0 |

|   |   |   |   |   |
|---|---|---|---|---|
| investment  | project will lead domestic investment to the project site area, where the most under developed area in a least developed country. | Address the special needs of the least developed countries, landlocked developing countries and small island developing States                              | <p>project will lead millions of investment to the local area. The power generated by the project activity will displace electricity supplied by the grid. Given the fact that coal resources are abundant, the renewable energy generation by the project will have a substantial impact on the balance of payments. Hence, compared with the baseline scenario there is no significant difference in terms of the balance of payments.</p> <p>Thus this indicator scores "0".</p> |   |
| Technology transfer and technological self-reliance | -   | <p>Target 8.F</p> <p>In cooperation with the private sector, make available the benefits of new technologies, especially information and communications</p> | <p>The turbine and generator of the project will adopt the mature technology from a foreign manufacturer, which has been well experience. The foreign engineers will transfer the technology on turbine and generator to local staffs on the equipment's installation and operation. And relevant training will be offered. While there is no significant impact on this indicator resulting from the project development.</p>  | 0 |

|   |  |   |  |  |
|---|--|---|--|--|
|   |  |   | Thus, this sustainable indicator scores a “0”. |  |
| <b>Justification choices, data source and provision of references</b> |  |   |  |  |
| Air quality   |  | In the IEE Report, it states that mitigation measures are applied to control the expected dust emission.  |  |  |
| Water quality and quantity  |  | In the IEE Report, it states that all the wastewater in project activities is treated before discharging to the river.  |  |  |
| Soil condition  |  | In the IEE Report, it states that project does not significantly impacts on the soil condition. Mitigation measures are applied to project short term soil degradation: rehabilitation of vegetation in the affected places is conducted right after the completion of the construction work. |  |  |
| Other pollutants  |  | There is not any disturbing noise at residential areas because of the project location is far from local village.   |  |  |
| Biodiversity  |  | The ecosystem surround the project area is not endangered, the impacts deriving from the project activity is not significant on the biodiversity.   |  |  |
| Quality of employment   |  | Source: Training documents provided by project owner  |  |  |
| Livelihood of the poor  |  | Source: Materials provided by the project owner   |  |  |
| Access to affordable and clean energy services                        |  | The project may diversify the grid to toward more green level. However, given the amount of electricity produced by the project, it still plays small part in the local grid.   |  |  |
| Human and institutional capacity                                      |  | Source: IEE and the on-site stakeholder materials   |  |  |
| Quantitative employment and income generation                         |  | The project provides job opportunities to the local people and increase income generation in the region.<br>Source: FSR   |  |  |
| Access to investment  |  | Source: Concession Agreement provided by Project owner  |  |  |
| Technology transfer and technological self-reliance                   |  | Source: Contract Agreement  |  |  |

## SECTION G. Sustainability Monitoring Plan

|   |        |   |
|---|--------|---|
| No  |        | 1   |
| Indicator                                     |        | Air Quality   |
| Mitigation measure                            |        | The project caused dust emission due to the construction work. The level of emission was complied with the legal dust emission limits. The project owner used wet damping, sprinklers to minimize the dust emission during the construction period. |
| <i>Repeat for each parameter</i>              |        |   |
| Chosen parameter                              |        | The air quality indicators  |
| Current situation of parameter                |        | The current air quality in the project area   |
| Estimation of baseline situation of parameter |        | The current air quality in the project area   |
| Future target for parameter                   |        | To meet with local regulation and rules   |
| Way of monitoring                             | How    | Examination by the environment monitoring department according to the relevant standards and regulations  |
|   | When   | Upon first verification   |
|   | By who | Project Owner   |

|   |        |   |
|---|--------|---|
| No  |        | 2   |
| Indicator                                     |        | Water Quality and quantity  |
| Mitigation measure                            |        | The minimum flow will be released to maintain the eco-system and meet demand for irrigation in the downstream. On-site treatment of construction wastewater prior to discharge. |
| <i>Repeat for each parameter</i>              |        |   |
| Chosen parameter                              |        | Flow rate of water released & Water quality indicators  |
| Current situation of parameter                |        | The current water quality in the project area   |
| Estimation of baseline situation of parameter |        | The current water quality in the project area   |
| Future target for parameter                   |        | Compliance with the local standards and regulations   |
| Way of monitoring                             | How    | Examination by the environment monitoring department according to the relevant standards and regulations  |
|   | When   | Annually  |
|   | By who | The Local environment monitoring department   |

|                                  |  |
|----------------------------------|--|
| No                               | 3  |
| Indicator                        | Soil condition   |
| Mitigation measure               | To prevent soil erosion, trees and grass will be planted in the non-plant slopes. Drain system will be established in the quarry area and slag yard will be covered during rainy season. Thus, the construction of the project will not lead to observable change in soil quality. |
| <i>Repeat for each parameter</i> |  |
| Chosen parameter                 | Restoration of land and tree plantation activities   |
| Current situation of parameter   | Soil naturally covered by plants or stones   |

|   |        |  |
|---|--------|--|
| Estimation of baseline situation of parameter |        | N/A  |
| Future target for parameter                   |        | The bared soil due to the project construction should be covered during rainy season in construction period, and trees and grass should be covered after project construction. |
| Way of monitoring                             | How    | Observations during site visits and continuous monitoring during construction  |
|   | When   | Annually   |
|   | By who | Project Owner  |

|   |        |  |
|---|--------|--|
| No  |        | 4  |
| Indicator                                     |        | Other pollutants   |
| Mitigation measure                            |        | For the solid waste, the project will adopt following measures: (i) Minimize the waste production and maximize waste recycling and reuse; and (ii) Promote safe waste disposal. For fuel, oil and lubricant storage areas should be located well away from any watercourses. All hydrocarbons (e.g. fuels and lubricants) and chemical reagents will be stored in safe places. |
| Repeat for each parameter                     |        |  |
| Chosen parameter                              |        | Solid wastes from construction stage and operational period; Oil   |
| Current situation of parameter                |        | The Mitigation measures was applied during the construction of the project   |
| Estimation of baseline situation of parameter |        | N/A  |
| Future target for parameter                   |        | Minimize the impact of solid waste for the local village and environment   |
| Way of monitoring                             | How    | Site visits and interviews with locals   |
|   | When   | Annually   |
|   | By who | Project Owner  |

|   |        |  |
|---|--------|--|
| No  |        | 5  |
| Indicator                                     |        | Biodiversity   |
| Mitigation measure                            |        | The project owner will enforce soil conservation actions during and after the construction period according to relevant local regulation |
| Repeat for each parameter                     |        | The recovery of vegetations.   |
| Chosen parameter                              |        |  |
| Current situation of parameter                |        | Natural situation  |
| Estimation of baseline situation of parameter |        | -  |
| Future target for parameter                   |        | Recovery of vegetation after construction  |
| Way of monitoring                             | How    | Site visits and interviews with locals   |
|   | When   | Annually   |
|   | By who | Project Owner  |



|   |        |  |
|---|--------|--|
| No  |        | 6  |
| Indicator                                     |        | Quality of employment  |
| Mitigation measure                            |        | Staff will be trained for the positions created during construction& operation phases. All Heath and Safety measurements will be applied according to local regulations. |
| Repeat for each parameter                     |        |  |
| Chosen parameter                              |        | Training Plan&Records  |
| Current situation of parameter                |        |  |
| Estimation of baseline situation of parameter |        | -  |
| Future target for parameter                   |        | All relevant staff to be trained for Health and Safety and relevant staff should be certified for working at high voltage environment.                                   |
| Way of monitoring                             | How    | Check employment records and training documents/certificates   |
|   | When   | Annually   |
|   | By who | Project Owner  |

|   |        |   |
|---|--------|---|
| No  |        | 7   |
| Indicator                                     |        | Livelihood of the poor  |
| Mitigation measure                            |        | Water supply program was prepared for the local people to improve their water supply system.  |
| Repeat for each parameter                     |        |   |
| Chosen parameter                              |        | Number of the installed pumps on-site.  |
| Current situation of parameter                |        | Local residents lack the basic water supply system, solution of new water supply system is under investigation but not decided to install more pump and well. |
| Estimation of baseline situation of parameter |        | -   |
| Future target for parameter                   |        | Implement the water supply program, assist local residents got clean water conveniently, thus improve the sanitation and livelihood of the poor.              |
| Way of monitoring                             | How    | Site visit to the water supply program.   |
|   | When   | Annually after the program is completed.  |
|   | By who | Project Owner   |

|   |  |
|---|--|
| No  | 7  |
| Indicator                                     | Access to affordable and clean energy services   |
| Mitigation measure                            | N/A  |
| Repeat for each parameter                     |  |
| Chosen parameter                              | Net electricity generation by project activity.  |
| Current situation of parameter                | Local residents adopt firewood as the main energy source, which may lead damage to forest and biodiversity.      |
| Estimation of baseline situation of parameter | 81.1 GWh   |
| Future target for parameter                   | The future target for the annual net electricity generation by the project is available for the local residents. |

|                   |        |   |
|-------------------|--------|---|
| Way of monitoring | How    | Project owner will monitor the net electricity generation according to the electricity generation meter |
|                   | When   | Continuous  |
|                   | By who | DOE   |

|   |  |  |
|---|--|--|
| No  | 8  |  |
| Indicator                                     | Quantitative employment and income generation  |  |
| Mitigation measure                            | During the construction period, job opportunities were provided to local residents, and the existence of the project in the area will bring local people especially the poor and disadvantaged groups lots of employment chances |  |
| Repeat for each parameter                     |  |  |
| Chosen parameter                              | Number of jobs created   |  |
| Current situation of parameter                | In rural area of Lao PDR, local residents do not have any employment opportunities.  |  |
| Estimation of baseline situation of parameter | No employment opportunities.   |  |
| Future target for parameter                   | Provide jobs and training opportunities for local residents, reduce poverty.   |  |
| Way of monitoring                             | How  | Through checking materials of employment and wage payment. |
|   | When   | Annually   |
|   | 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.

Benchmark analysis is applied to demonstrate the additionality of the project. The benchmark value is 15.31%. The analysis shows that without the revenue of CERs, the IRR of the project will be 8.27%, much lower than the benchmark. The sensitive analysis shows that even if the  $\pm 10\%$  variation range of the key parameters adopted, the IRR of the project still can't surpass the benchmark. The project is not financial attractive. However, the CDM revenue is able to help project overcome the investment barriers.

The common practice analysis shows that there are essential distinctions between the proposed project and other hydropower projects in the region, the proposed project activity is not considered

as common practice for the region and is additional.  
Details are available in the Project Design Document.

## H.2. Conservativeness

All the calculations are made in a conservative approach. Details can be found in the PDD. Please see the following sections for:

**Baseline Calculation:** B4.Description of baseline and its development;

## ANNEX 1 ODA declaration

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.



### ANNEX D • OFFICIAL DEVELOPMENT ASSISTANCE DECLARATION

Date: 19 Nov, 2013

The Gold Standard Foundation

79 Avenue Louis-Casas

Geneva-Corinthe, CH-1216

Switzerland

RE: Declaration of Non-Use of Official Development Assistance by Project Owner of Nepal  
Hydropower project GSI 41087

[Project Owner] Heuangpaseuth Hydropower Co., Ltd.

As Project Owner of the above-referenced project, and acting on behalf of all Project Participants, I now make the following representations:

[Project Representative] Lakhmady HEUANGPASEUTH

I hereby declare that I am duly and fully authorized by the Project Owner of the above-referenced project to act on behalf of all Project Participants and make the following representations:

#### I. The Gold Standard Documentation

I am familiar with the provisions of The Gold Standard Documentation relevant to Official Development Assistance (ODA). I understand that the above-referenced project is not eligible for Gold Standard registration if the project receives or benefits from Official Development Assistance with the condition that some, or all, of the carbon credits (CERs, ERUs, or VDEs) coming out of the project are transferred to the ODA donor country. I hereby expressly declare that no financing provided in connection with the above-referenced project has come from or will come from ODA that has been or will be provided under the condition, whether express or implied, that any or all of the carbon credits issued as a result of the project's operation will be transferred directly or indirectly to the country of origin of the ODA.

#### II. Duty to Notify Upon Discovery

If I learn or if I am given any reason to believe at any stage of project design or implementation that ODA has been used to support the development or implementation of the project, or that an entity providing ODA to the host country may at some point in the future benefit directly or indirectly from the carbon credits generated from the project as a condition of investment, I will notify The Gold Standard immediately using the Amended ODA Declaration Form provided below.



#### III. Investigation

The Gold Standard reserves the right to conduct an investigation into any project it reasonably believes may be receiving ODA with the condition that some or all of the carbon credits from the project will be transferred to the ODA donor country.

#### IV. Sanctions

I am fully aware that the sanctions identified in The Gold Standard Terms and Conditions may be applied to me or the above-referenced project in the event that any of the information provided above is false or I fail to notify The Gold Standard of any changes to ODA in a timely manner.

I swear that all of the statements contained herein are true to the best of my knowledge.

Signed:   
Name: Lakhmady HEUANGPASEUTH  
Title: Managing  
On behalf of: Heuangpaseuth Hydropower Co., Ltd.  
Place: Lee PDR

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