



# **SOCIALCARBON VERIFICATION REPORT POINT TWO**

**(FINAL VERSION)**

**South Pole Carbon Asset Management  
Ltd.**

**Grouped Hydropower Plants in  
Chongqing, Yunnan, Sichuan and  
Guizhou Provinces, P.R.China**

**Report NO. SC131206**

**Report Date: 10/03/2014**

**China Environmental United Certification Center Co., Ltd (CEC)**

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| <b>Name of Verification company:</b>                                                                                            | <b>Date of the issue:</b>                                                                |
|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| China Environmental United Certification Center Co., Ltd (CEC)                                                                  | 10/03/2014                                                                               |
| <b>Report Title:</b>                                                                                                            | <b>Approved by:</b>                                                                      |
| Final Verification Report<br>Point Two Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.China | LIU Qingzhi                                                                              |
| <b>Client:</b>                                                                                                                  | <b>Project Title:</b>                                                                    |
| South Pole Carbon Asset Management Ltd.                                                                                         | Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.China |
| <b>Work carried out by:</b>                                                                                                     | <b>Number of pages:</b>                                                                  |
| DU Wei                                                                                                                          | 20                                                                                       |



## Abbreviations

|                    |                                                          |
|--------------------|----------------------------------------------------------|
| CAR                | Corrective Action Request                                |
| CL                 | Clarification Request                                    |
| CO <sub>2</sub>    | Carbon Dioxide                                           |
| CO <sub>2</sub> eq | Carbon Dioxide Equivalent                                |
| CCPG               | Central China Power Grid                                 |
| CSPG               | China Southern Power Grid                                |
| DNA                | Designated National Authority                            |
| DOE                | Designated Operational Entity                            |
| DR                 | Document Review                                          |
| EIA                | Environmental Impact Assessment                          |
| EF                 | Emission Factor                                          |
| ER                 | Emission Reduction                                       |
| FSR                | Feasibility Study Report                                 |
| GHG                | Green House Gas(es)                                      |
| GWh                | Giga Watt Hours                                          |
| GWP                | Global Warming Potential                                 |
| I                  | Interview                                                |
| kW                 | Kilo Watt                                                |
| kWh                | Kilo Watt Hours                                          |
| MWh                | Mega Watt Hours                                          |
| NDRC               | China National Development Reform Commission(DNA)        |
| NGO                | Non Government Organization                              |
| PDD                | Project Design Document                                  |
| PP                 | Project Participant                                      |
| SCR                | Social Carbon Report                                     |
| SHP                | Small Hydropower Project                                 |
| VCS                | Voluntary Carbon Standard                                |
| VCU                | Voluntary Carbon Unit                                    |
| YINGOS             | Yunnan International Non-government Organization Society |
| JGI                | The Jane Goodall Institute                               |



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## 1 INTRODUCTION

South Pole Carbon Asset Management Ltd. has commissioned and contracted CEC to verify the Point Two of the SOCIALCARBON Project “Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.China” (Hereafter called “the Grouped Project”) in P.R.China.

This report summarizes the findings of the verification of this project, performed based on all applicable SOCIALCARBON requirements.

### 1.1 Objective

The purposes of this verification are

- I. to have an independent third party assessment in order to evaluate the accuracy and consistency of the Indicators of the Social Carbon Methodology for this specific point in time and
- II. to verify the consistency of these Indicators with the criteria established and their evolution since last evaluation in order to assure that they can maintain the designation as Social Carbon, following the Social Carbon Methodology.

In particular, the verification evaluates the site data related to the scope of the project and the report prepared to address the project in the specific point in time in order to document the Indicators and their evolution, in compliance with the requirements of the Social Carbon Methodology.

Verification is seen as necessary to provide assurance to stakeholders on the quality and veracity of the project, the Indicators and their evolution on time.

### 1.2 Scope and Criteria

The verification is based on the interview and evaluation as well as on document and evidence evaluation and review. The following are the reference documents:

- VCS Project Description of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou provinces, P.R.China, 13<sup>th</sup> October 2009;
- Final Validation Report by TUV Rheinland Japan Ltd. Version 03, 25<sup>th</sup> November 2009
- 1<sup>st</sup> Monitoring Report of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou provinces, P.R.China, Version 5.0, 6<sup>th</sup> June 2010
- 1<sup>st</sup> Final Verification Report by TUV Rheinland Japan Ltd. Version 01, 8<sup>th</sup> June 2010
- Guide for Completing Social Carbon Reports, Version 03.1, September 2010;
- Indicators for Micro and Small Scale Hydropower Grouped Project, Version 1.0, August 2010;
- Point Zero Social Carbon Report of Grouped Hydropower Plants in Chongqing,

Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.China

Yunnan, Sichuan and Guizhou provinces, P.R.China, 15<sup>th</sup> October 2010;

- Additional information for auditors of SOCIALCARBON Reports, Version 1.0.
- Final Validation Social Carbon Report by TUV Rheinland Japan Ltd. 15<sup>th</sup> October 2010
- 2<sup>nd</sup> Monitoring Report of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou provinces, P.R.China, Version 2.2, 12<sup>th</sup> June 2012
- 2<sup>nd</sup> Final Verification Report by TUV Rheinland Japan Ltd. Version 02, 25<sup>th</sup> June 2012
- Point One Social Carbon Report of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou provinces, P.R.China, 25<sup>th</sup> July 2012;
- Point Two Social Carbon Report of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou provinces, P.R.China, 28<sup>th</sup> November 2013;
- 3<sup>rd</sup> Monitoring Report of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou provinces, P.R.China, draft version, 3<sup>rd</sup> December 2013
- 3<sup>rd</sup> Monitoring Report of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou provinces, P.R.China, version 2.0, 3<sup>rd</sup> 17<sup>th</sup> January 2014
- 3<sup>rd</sup> Final Verification Report by TUV Rheinland (China) Ltd. Version 02, 28<sup>th</sup> February 2014
- Point Two Social Carbon Report of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou provinces, P.R.China, version 3.0, 5<sup>th</sup> March 2014

Evidences for Point Two Social Activities:

- Partnership Agreement between South Pole Carbon Asset Management Ltd. and Yunnan International Non-Government Organization Society for the 2<sup>nd</sup> social activity, signed on 26<sup>th</sup> November 2012
- Payment Notice, paid by South Pole Carbon Asset Management Ltd. on 7<sup>th</sup> December 2012
- Partnership Agreement between South Pole Carbon Asset Management Ltd. and Jane Goodall China for the eco education programs, signed in March 2013
- Payment Notice, paid by South Pole Carbon Asset Management Ltd. in March 2013
- Name List of the Participants for Agricultural Training Program, signed by participants on 27<sup>th</sup> March 2013
- Name List of the Receivers for Agricultural Tools, signed by receivers on 27<sup>th</sup> March 2013
- Name List of the Receivers for Books, pencils, pencil boxes, dictionaries and musical instruments, signed by receivers or administrators of primary schools on 27<sup>th</sup> and 28<sup>th</sup> March 2013
- 590 Photos of the second Social Activities for Agricultural Training Program, Delivery of Agricultural Tools, Eco Education Programs and Delivery of Books, Pencils, Pencil Boxes, Dictionaries and Musical Instruments to students, taken on 27<sup>th</sup> and 28<sup>th</sup> March 2013.
- Draft Video of the second Social Activities for Agricultural Training Program, Delivery of Agricultural Tools, Eco Education Programs and Delivery of Books, Pencils, Pencil

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Boxes, Dictionaries and Musical Instruments to students, taken on 27<sup>th</sup> and 28<sup>th</sup> March 2013.

- The news about the second social activity was published in Yingos' website. ([http://www.yingos.net/htmlswt/nobody/2013/1113/news\\_5\\_209024.html](http://www.yingos.net/htmlswt/nobody/2013/1113/news_5_209024.html)) in Chinese.
- The news about the eco education programs was reposted by Roots and Shoots Program Beijing Office on the Chinese tweeter (weibo). (<http://weibo.com/1821891405/zpEatBlul>) in Chinese.

### 1.3 Social Carbon project description

The Grouped Project is a project under VCS 2007.1, which consists of 95 run-of-river hydropower stations in less-developed rural areas of south-western China. There are four sub-groups (i.e. 9 projects are located in Yunnan Province, 67 in Chongqing City, 13 in Sichuan Province and 6 in Guizhou Province), which are determined by the geographical boundary.

Most of the grouped projects are developed as run-of-river hydropower projects, consisting of intake structure, the water conveyance system and the power house. Only two projects (i.e. Project No. 74 and 75) involve construction of new reservoirs while the power densities of both projects<sup>1</sup> are greater than 10W/m<sup>2</sup>. The total installed capacity of each grouped project is below 15MW. The electricity generated from the Grouped Project will be supplied to Central China Power Grid (CCPG) and China Southern Power Grid (CSPG), where geographic and system boundaries can be clearly identified. The CCPG and CSPG are both dominated by thermal power plants as per the *China Electrical Power Yearbook 2003~2007/9//10/*. By exporting renewable electricity to the CCPG and CSPG respectively, the project activity achieves greenhouse gas (GHG) emissions reductions by displacing electricity from fossil fuel based power plants connected to the grid.

The Grouped Project is considered to be contributed to sustainable development, by utilization of renewable hydro resources in local area for the generation of electricity that would be have been provided by business-as-usual fossil-fired power to meet the growing power demand within CCPG and CSPG. The project sites were located at rural area where the infrastructure construction was very poor. The entrance road for each sampled project site was built by the project owner and has brought much convenience for local villagers. The local residents around the project site were living at very poor conditions and the local governmental financial sources were very limited. The Grouped Project has created considerable amount of permanent and temporary job opportunities for local residents. In the rural area, the electricity generated from the project activity will be supplied to local people and avoid firewood combustion and thus protecting the forest in local region. In addition, local government will also benefit from the additional income tax for electricity sale of the project activity. It is thus

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<sup>1</sup> It has been validated that the power density of Project No.74 and No.75 was calculated as 16 W/m<sup>2</sup> and 58 W/ m<sup>2</sup> with the surface area of the reservoirs were determined according to the Environmental Impact Assessment Reports.

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concluded that the implementation of the project activity will help in achieving sustainable development in social, environmental and economic aspects for local community.

### ***Point Zero***

According to the Point Zero Social Carbon Report, the grouped project is split into 6 clusters by geography and one cluster per year will be assessed. The actions taken in one cluster will be assessed and be part of Social Carbon Report of the following year. The first cluster consists of 9 projects in Yunnan Province (i.e. Project No. 89~98). Three sampled projects (i.e. Project No. 94, 96 and 98) are included in the community assessment of the Point Zero Social Carbon Report.

During the Point Zero period, China Association for NGO Cooperation (CANGO) and Yunnan International Non-government Organization Society (YINGOS) have conducted one survey in Lishadi Village, which is the location of Lishadi HEPP, and another survey in Yingjiang County, which is the location of Husa River project. According to these surveys, the following suggestions for activities have been brought up by CANGO and YINGOS:

- Provide the education for kids, whose parents are addicted to drugs
- Construct Composting toilets for schools
- Provide books for primary schools' libraries
- Agricultural Education events for adults
- Basketball court reconstruction
- Provide equipments for computer classrooms building

### ***Point One***

During the Point One period, a series of social activities were financed by South Pole Carbon Asset Management Ltd. and organized by YINGOS in March 2011 in Lishadi Village. An agricultural training program has been hold. After the course, villagers were provided with tools, which are scissors, saws and ladders. In addition, a library with many agricultural books and DVDs has been implemented in a community building of Lishadi Village.

According to the Point One Social Carbon Report, the above social activities have been described and evaluated. Several indicators have been improved accordingly.

### ***Point Two***

During the Point Two period, a series of social activities were financed by South Pole Carbon Asset Management Ltd. and organized by YINGOS and JGI China in March 2013 in Shifen Village and Lushan Village. Two agricultural training programs and two eco education programs have been hold. After the course, villagers received the agricultural tools, students received dictionaries, sets of pencil box and painting pencils, sets of musical instruments and

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books.

According to the Point Two Social Carbon Report, the above social activities have been described and evaluated. Several indicators have been improved accordingly.

## 1.4 Level of Assurance

The verification report is based on the Point Two Social Carbon Report and previous Point Zero and Point One Social Carbon Reports, supporting documents made available to the verifier and information collected through performing interviews. The verification opinion is assured provided the credibility of all above.

## 1.5 Indicators of the Social Carbon and Project Performance

"Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.China – Point Two Social Carbon Report" was issued in 28<sup>th</sup> November 2013 by South Pole Carbon Asset Management Ltd. with assessment of the Indicators of the Social Carbon Standard and their evolution since Point Zero and Point One. The Indicators for Point Two of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.China are as follows:

### Social Resources (Score 4.4)

#### 1. P - Population displacement and activities

*Evaluates the need of people's displacement during the project implantation, just as the adopted procedures in order to avoid negative impacts and maximize the positive ones.*

Index: 6

#### 2. C – Social Impact of the project

*Evaluates the relevant socio-economic impacts occurred due to the provision of electricity to:*

- *Use of electricity in households (i.e for lighting, cooking, electronic equipments)*
- *Public services (i.e. schools, offices, health centers, etc.)*
- *Systems for water pumping (i.e. human consumption and productive activities such as irrigation and mills)*
- *Impacts on the development of industries*

*Also evaluates if there is a framework or plan for the assessment of social effects of the project, including:*

- *Characterization of the beneficiaries*
- *Characterization of intervention and projected effects*
- *Severity of the effects*

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Index: 3

### **3. P - Communication with stakeholders**

*Evaluates the process for contacting stakeholders in the planning, implementation and operation stages. The indicator also assesses the existence of an integrated approach among the items that will be evaluated next – acceptance, demands and campaigns – with systems for feedback.*

Index: 4.5

### **4. C - Acceptance**

*Evaluates the level of support or acceptance from the neighboring population in regard to the entrepreneur.*

Index: 4

### **5. C – Socio Economic Issues**

*Assesses the comprehensiveness of local socio-economic conditions and the compatibility of the activities proposed for planning and implementing the additional programs with these conditions.*

Index: 3.5

### **6. P - Benefits Sharing**

*Evaluates how many clusters are benefiting from the additional programs.*

Index: 4.5

### **7. A - Additional Social Programs**

*The index is obtained as the average of the three aspects (programs, beneficiaries, impact/relevance).*

Index: 5.3

### **Human Resource (Score 4.5)**

### **8. P - Capacity of local project owners**

*Evaluates if the carbon project is subject to risks or bad performance due to project owners' lack of capacity or availability of human resources for managing the operational activities or participating in the carbon project design activities.*

Observations:



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The project owners fulfilled all legal requirements. Carbon Credits could be issued and are in line with the expectations.

Index: 5

#### **9. C - Capacity of local community members**

*Evaluates if the members of the community are grouped or organized facilitating the implementation of programs.*

Index: 3.5

#### **10. P - Capacity of local organization(s)**

*Evaluates the institutional capacity of local organizations responsible for developing and implementing the plan for additional actions to benefit local stakeholders.*

Index: 4.5

#### **11. A - Additional Human Programs**

*The index is obtained as the average of the three aspects (programs, beneficiaries, impact/relevance).*

Index: 5

#### **Financial Resource (Score 4.4)**

##### **12. P - Market**

*Evaluates eligibility of credits to compliance or to voluntary markets.*

Index: 4.5

##### **13. P - Sale of Credits**

*Evaluates uncertainties regarding the value of commercialized credits generated by the project and their attractiveness to potential buyers.*

Index: 5

##### **14. P - Funds for additional programs**

*Evaluates if source of funds are clearly defined and if available for implement programs to achieve continual improvement goals.*

Index: 4.5

#### **15. P - Costs for additional programs**

*Assess if programs to achieve continual improvement goals have financial planning, such as financial analyses and budgets.*

Index: 3.5

#### **Natural Resource (Score 4.8)**

#### **16. P - Environmental Impacts**

*Evaluates magnitude of environmental impacts of the project, existence of environmental impact statements/studies, and maintenance of environmental evaluation procedures.*

Index: 5.5

#### **17. P - Environmental Legislation**

*Evaluates accordance of the project with environmental laws and norms, including agreements with public authorities, such as environmental licenses, requested authorizations for installation, etc.*

Index: 6

#### **18. A - Additional Environmental Programs**

*Evaluates the quality and results of additional environmental programs.*

Index: 3

#### **Biodiversity/Technology Resource (Score 3.4)**

#### **19. P - Transfer of New Technology**

*Evaluates the level of technological innovation and the technologies employed in the project, the origin of the equipment, existence of royalties and technological licenses, and the necessity of international technical assistance. In cases where the technology employed is already known (a common scenario of hydro power plants), it evaluates if there are innovations regarding operational procedures and maintenance, actions for mitigation of impacts, or other aspects that show a break from the common practice of the sector. The existence of research and development projects (R&D) related to the project are also considered in this indicator.*

Index: 4.5

#### **20. C – Access to electricity**

*Evaluate the level of access that local people and organizations have to the electricity provided*

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*by the project and, considering:*

- a) If the cost of electricity is affordable for local population*
- b) If grid connection are available*
- c) Quality and continuity of the energy provided*

Index: 3.5

## **21. C - Irrigation benefits**

*Evaluates how the project deals with irrigation needs.*

Index: 4

## **22. C - Spread of electrical appliances**

*Evaluates how the project has impacted the spread and use of electrical appliances.*

Index: 3

## **23. C - Spread of IT and communications technology**

Index: 2.5

## **24. A - Additional Technology Programs**

*Evaluates the quality and results of additional technology programs.*

Index: 3

## **Carbon Resource (Score 5.1)**

### **25. P - Additionally**

*Consists of reduction of greenhouse gas emissions or increase in removal of CO<sub>2</sub> beyond what would occur in absence of project activity. This item evaluates tools used for assessing additionally and compliance with national and international standards.*

Index: 6

### **26. P - Emission Reductions Calculations & Monitoring**

*Evaluates methodologies used to calculate emissions and monitor compliance with national and international standards.*

Index: 6

### **27. P - Validation & Verification**

*Evaluates existence of total or partial validation/verification of project by a third party, if third party is accredited by UNFCCC, and compliance procedures for validation/verification with national and international standards.*

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Index: 6

## 28. P - Project Performance

*Evaluates performance of project, verified by comparison with estimates of emissions reductions under the PDD.*

Index: 5.5

## 29. A - Additional Climate Change Programs

*Evaluates the quality and results of additional climate programs.*

Index: 2

### Project Performance for Point One and Changes since Point Zero

**Table 1 – Performance by Resource – Point Zero**

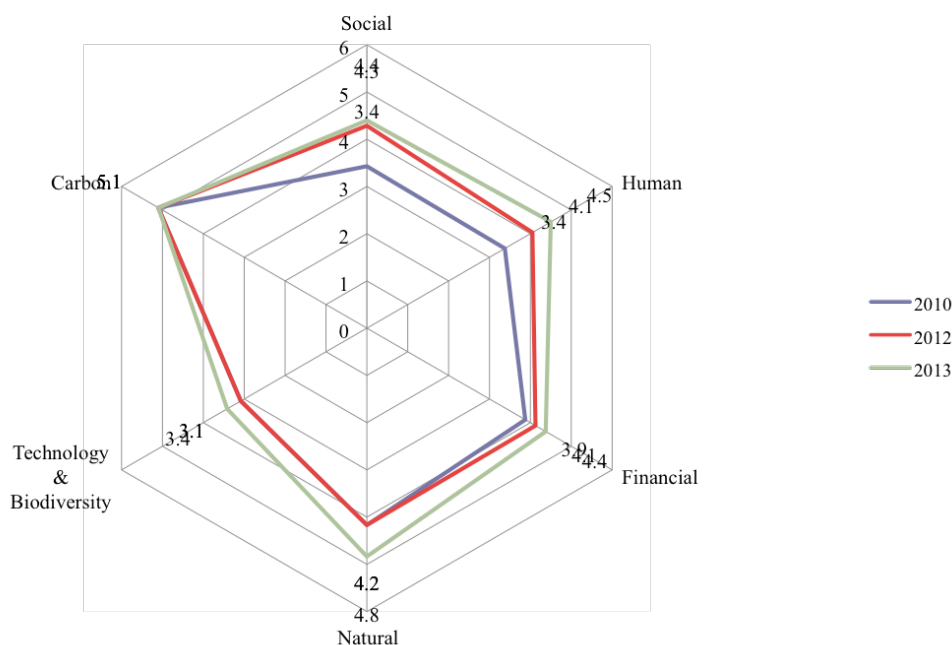
| Resource      | Critical | Transitory | Sustainable | Average | General Performance |
|---------------|----------|------------|-------------|---------|---------------------|
| Social        | 28.6%    | 42.9%      | 28.6%       | 3.4     | Satisfactory        |
| Human         | 50.0%    | 25.0%      | 25.0%       | 3.4     | Satisfactory        |
| Financial     | 25.0%    | 25.0%      | 50.0%       | 3.9     | Satisfactory        |
| Natural       | 33.3%    | 0.0%       | 66.7%       | 4.2     | Sustainable         |
| Technological | 33.3%    | 50.0%      | 16.7%       | 3.1     | Satisfactory        |
| Carbon        | 20.0%    | 0.0%       | 80.0%       | 5.1     | Sustainable         |
| Total         | 32%      | 24%        | 44%         | 3.8     | Satisfactory        |

**Table 2 – Performance by Resource – Point One**

| Resource      | Critical | Transitory | Sustainable | Average | General Performance |
|---------------|----------|------------|-------------|---------|---------------------|
| Social        | 0.0%     | 57.1%      | 42.9%       | 4.3     | Satisfactory        |
| Human         | 25.0%    | 25.0%      | 50.0%       | 4.1     | Satisfactory        |
| Financial     | 0.0%     | 25.0%      | 75.0%       | 4.1     | Satisfactory        |
| Natural       | 33.3%    | 0.0%       | 66.7%       | 4.2     | Satisfactory        |
| Technological | 33.3%    | 50.0%      | 16.7%       | 3.1     | Satisfactory        |
| Carbon        | 20.0%    | 0.0%       | 80.0%       | 5.1     | Sustainable         |
| Total         | 19%      | 18%        | 55%         | 4.1     | Satisfactory        |

**Table 3 – Performance by Resource – Point Two**

| Resource     | Critical | Transitory | Sustainable | Average | General Performance |
|--------------|----------|------------|-------------|---------|---------------------|
| Social       | 0.0%     | 42.9%      | 47.1%       | 4.4     | Sustainable         |
| Human        | 0.0%     | 25.0%      | 75.0%       | 4.5     | Sustainable         |
| Financial    | 0.0%     | 25.0%      | 75.0%       | 4.4     | Sustainable         |
| Natural      | 0.0%     | 33.3%      | 66.7%       | 4.8     | Sustainable         |
| Technology   |          |            |             |         |                     |
| Biodiversity | 16.7%    | 66.7%      | 16.7%       | 3.4     | Satisfactory        |
| Carbon       | 20.0%    | 0.0%       | 80.0%       | 5.1     | Sustainable         |
| Total        | 6%       | 32%        | 62%         | 4.4     | Sustainable         |



## 1.6 Verification of the Social Carbon project criteria including continuous improvement

As defined in the Social Carbon Methodology <sup>/5/,/6/</sup>, the criteria for Verification and the conclusion based on evidences are:

1) All carbon credits issued and included as Social Carbon should be registered in the Voluntary Carbon Standard (VCS)

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**Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.China<sup>/1/,/3/,/10/,/14/</sup>. The criterion is fulfilled.**

2) Annual verification must be carried out using Social Carbon Methodology, with Point Zero as the baseline, to assess the contribution of the project to sustainable development. The monitoring reports must be presented according to the Social Carbon template.

**Evaluation: The Point Zero<sup>/7/,/9/</sup> was validated and indicates Sustainability Performance as satisfactory. The report was presented according of the Social Carbon template and rules<sup>/5/,/6/</sup>. This report is related to Point Two and covers the annual evaluation required by the criteria. The criterion is fulfilled.**

3) For evaluation of continuous improvement the project should not present decrease in the performance of the same resource for two consecutive periodic evaluations.

**Evaluation: These criteria is fulfilled. There is no decrease in the performance from Point One to Point Two.**

4) The criteria of continuous improvement are only applied after the first Commercialization of carbon credits.

**Evaluation: Some of the Credits from the 2<sup>nd</sup> insurance were sold.**

## 2 METHODOLOGY

The verification of the project was carried out on November 2013.

Draft Reporting: 6<sup>th</sup> December 2013

Final Reporting: 10<sup>th</sup> December 2013

The verification consisted of the following steps:

- Desk review of the project design and Social Carbon reference documents as indicated in item 1.2 above.
- Review evidences of the social activity and follow-up interviews
- Resolution of outstanding issues and the issuance of the Final Verification Report and Opinion.

### 2.1 Review of Document

Social Carbon Report Point Two and proof of title submitted by South Pole Carbon Asset Management Ltd., as well as the supporting documents were reviewed. Refer to Table 5-1.

The Social Carbon Report submitted by South Pole Carbon Asset Management Ltd. and background documents related to the project design were reviewed.

This report show the documents considered during the verification process and listed as follows:

- Documents provided by the project proponent (Table 5-1)
- Background investigations and assessment documents (Table 5-2)

- Websites consulted (Table 5-3)

## 2.2 Follow-up Interviews

The verifier of CEC performed interviews with the project participants to confirm selected information and to resolve issues identified in the document review.

South Pole Carbon Asset Management Ltd., YINGOS and JGI China were interviewed. The main topics of the interviews are summarized in Table 5-4 and the participant's information is addressed in table 5-5.

## 2.3 Resolution of any material discrepancy

The report includes Corrective Action Requests and Clarification Requests (CAR and CL) identified in the course of this validation.

A Corrective Action Request is established if:

- Mistakes have been made in assumptions or the project documentation which directly will influence the project results,
- The requirements deemed relevant for validation of the project with certain characteristics have not been met or

A Clarification Request is issued where information is insufficient, unclear or not transparent enough to establish whether a requirement is met.

# 3 VERIFICATION FINDINGS

## 3.1 Project Design Point One

| CAR/CL                                                                                           | Reference             | Summary of project owner response                                                                      | Conclusion               |
|--------------------------------------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------------|--------------------------|
| CAR 1 Please correct the performance results, the cells from R5 to R11.                          | Results of excel file | The cells from R5 to R11 have been corrected.                                                          | OK<br>The CAR is closed. |
| CAR 2 Please correct the score of benefit sharing.                                               | SCR Section 4.1       | The score of benefit sharing has been corrected to 4.5                                                 | OK<br>The CAR is closed. |
| CL 1 Please provide the raw video materials as the evidences of interviews and social activities |                       | The raw video materials as the evidences of interviews and social activities have been provided to DOE | OK<br>The CL is closed.  |

### 3.2 Indicators of the Social Carbon Point One

| CAR/CL                                                                                                          | Reference       | Summary of project owner response                                                                                              | Conclusion              |
|-----------------------------------------------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| CL 2 Please describe more about the impacts on the indicator of Additional Environmental Programs               | SCR Section 4.4 | More description about the impacts on the indicator of Additional Environmental Programs has been provided in SCR Section 4.4. | OK<br>The CL is closed. |
| CL 3 Please describe more about the impacts on the indicator of Additional Technology and Biodiversity Programs | SCR Section 4.5 | More description about the impacts on the indicator of Additional Environmental Programs has been provided in SCR Section 4.5. | OK<br>The CL is closed. |

### 3.3 Results Point Two

This information of the results is correct.

### 3.4 Resolution of any material discrepancy

South Pole Carbon Asset Management Ltd. is responsible for monitoring the parameters as described in SCR Methodology.

### 3.5 Accuracy of the Social Carbon Monitoring

It was verified in the course of this verification that the above-mentioned methodology has been correctly and accurately applied in the indicators of the Social Carbon.

### 3.6 Quality of Evidence

The project proponent as evidence to determine Point Two verification submitted several documents. Refer to Table 5-1. The evidences were assessed as of sufficient quantity and appropriate quality.



## 4 VERIFICATION CONCLUSION

Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.China is based on VCS and Social Carbon Standard. The review of the Social Carbon Report Point Two, the subsequent on-site interviews, which is completed by YINGOS, and the further cross-check of references have provided CEC with sufficient evidences to determine the fulfillment of stated criteria in the guideline. In our opinion, the project meets all relevant Social Carbon Standard requirements. Hence, CEC will recommend the project for issuance by Social Carbon Stanard.

China Environmental United Certification Center Co., Ltd.

2014-03-10

A handwritten signature in black ink that reads 'Du Wei'. The signature is written in a cursive, flowing style.

DU Wei

Verification Team Leader

## 5 REFERENCES

**Table 5-1:** Documents provided by the project proponent

| Reference | Document                                                                                                                                                                                  |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.        | VCS Project Description of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou provinces, P.R.China, 13 <sup>th</sup> October 2009                                        |
| 2.        | Final Validation Report by TUV Rheinland Japan Ltd. Version 03, 25 <sup>th</sup> November 2009                                                                                            |
| 3.        | 1 <sup>st</sup> Monitoring Report of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou provinces, P.R.China, Version 5.0, 6 <sup>th</sup> June 2010                     |
| 4.        | 1 <sup>st</sup> Final Verification Report by TUV Rheinland Japan Ltd. Version 01, 8 <sup>th</sup> June 2010                                                                               |
| 5.        | Guide for Completing Social Carbon Reports, Version 03.1, September 2010                                                                                                                  |
| 6.        | Indicators for Micro and Small Scale Hydropower Grouped Project, Version 1.0, August 2010                                                                                                 |
| 7.        | Point Zero Social Carbon Report of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou provinces, P.R.China, 15 <sup>th</sup> October 2010;                               |
| 8.        | Additional information for auditors of SOCIALCARBON Reports, Version 1.0                                                                                                                  |
| 9.        | Final Validation Social Carbon Report by TUV Rheinland Japan Ltd. 15 <sup>th</sup> October 2010                                                                                           |
| 10.       | 2 <sup>nd</sup> Monitoring Report of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou provinces, P.R.China, Version 2.2, 12 <sup>th</sup> June 2012                    |
| 11.       | 2 <sup>nd</sup> Final Verification Report by TUV Rheinland Japan Ltd. Version 02, 25 <sup>th</sup> June 2012                                                                              |
| 12.       | Point One Social Carbon Report of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou provinces, P.R.China, 25 <sup>th</sup> July 2012                                    |
| 13.       | Point Two Social Carbon Report of Grouped Hydropower Plants in Chongqing                                                                                                                  |
| 14.       | 3 <sup>rd</sup> Monitoring Report of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou provinces, P.R.China, draft version, 3 <sup>rd</sup> December 2013               |
| 15.       | 3 <sup>rd</sup> Monitoring Report of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou provinces, P.R.China, version 2.0, 3 <sup>rd</sup> 17 <sup>th</sup> January 2014 |

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|     |                                                                                                                                                                     |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 16. | 3 <sup>rd</sup> Final Verification Report by TUV Rheinland (China) Ltd. Version 02, 28 <sup>th</sup> February 2014                                                  |
| 17. | Point Two Social Carbon Report of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou provinces, P.R.China, version 3.0, 5 <sup>th</sup> March 2014 |

**Table 5-2:** Background investigation and assessment documents

| Reference | Document                                                                                                       |
|-----------|----------------------------------------------------------------------------------------------------------------|
| 18.       | AMS I.D. – Grid connected renewable electricity generation (Version 13, 14 <sup>th</sup> December 2007, EB 36) |
| 19.       | “Tool to calculate the emission factor for an electricity system” (Version 01.1, EB 35)                        |

**Table 5-3:** Websites used

| Reference | Link                                                                          | Organization                                             |
|-----------|-------------------------------------------------------------------------------|----------------------------------------------------------|
| 20.       | <a href="http://www.socialcarbon.org">http://www.socialcarbon.org</a>         | Social Carbon Standard                                   |
| 21.       | <a href="http://v-c-s.org">http://v-c-s.org</a>                               | Verified Carbon Standard                                 |
| 22.       | <a href="http://unfccc.int/2860.php">http://unfccc.int/2860.php</a>           | United Nations Framework Convention on Climate Change    |
| 23.       | <a href="https://www.southpolecarbon.com">https://www.southpolecarbon.com</a> | South Pole Carbon Asset Management Ltd.                  |
| 24.       | <a href="http://www.yingos.net">http://www.yingos.net</a>                     | Yunnan International Non-government Organization Society |
| 25.       | <a href="http://www.jgichina.org/cn/">http://www.jgichina.org/cn/</a>         | Jane Goodall Institute China                             |

**Table 5-4:** Interviewed persons and interview topics

| Interviewed Persons / Entities                                             | Interview topics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mr. Yi Lin<br>South Pole Carbon Asset Management Ltd.                      | <ul style="list-style-type: none"> <li>▪ Desk review findings</li> <li>▪ General aspects of the project</li> <li>▪ Project design, Commissioning and implementation</li> <li>▪ Plan of the Social Activities</li> <li>▪ Implementation of the Social Activities</li> <li>▪ Participants of the Social Activities</li> <li>▪ Impacts of the Social Activities</li> <li>▪ Involved personnel and responsibilities</li> <li>▪ Implementation of the monitoring plan</li> <li>▪ Monitoring Procedure</li> </ul> |
| Mrs. Ruilu Sun<br>Yunnan International Non-government Organization Society |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Ms. Zhen Zhu                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

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|                                 |  |
|---------------------------------|--|
| Jane Goodall<br>Institute China |  |
|---------------------------------|--|

**Table 5-5:** List of interviewed people

| Means of Interview | Name           | Organization/Function                                    |
|--------------------|----------------|----------------------------------------------------------|
| Telephone, Visit   | Mr. Yi Lin     | South Pole Carbon Asset Management Ltd.                  |
| Telephone, Visit   | Ms. Zhen Zhu   | Jane Goodall Institute China                             |
| Telephone          | Mrs. Ruilu Sun | Yunnan International Non-government Organization Society |