

Completion Report for Sino-Danish Biomass Energy CDM
Provincial-Level Capacity Building Project

(Hunan Province)

Hunan International Engineering Consultation Center
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1 Introduction on the Project

With the hard work of relevant parties, the agreement on Sino-Danish CDM Capacity Building Project was signed between the Ministry of Commerce, P.R.China and the Ministry of Foreign Affairs, Kingdom of Denmark in November, 2006. The project aims at helping the Chinese Government enhance the capacity of developing and managing CDM projects in China and also enlarge the international cooperation in climate change. And the project was formally initiated at the first PSC meeting held on March 1, 2007.

1.1 Targets of the Sino-Danish Biomass Energy CDM Capacity Building Project

- a) To enhance the capacities of identifying, developing and managing CDM biomass energy projectsthe of the main Chinese project developers who are engaged in the field of biomass energy.
- b) To enhance the capacity of the Central Government of P.R.China so that they can formulate and implement CDM datums and monitoring & administering methods based on China's actual conditions, including the enhancement of the capacities of the project developers and main Chinese agencies supporting the development of CDM projects, and the developing of PDD and PIN of the biomass energy projects.
- c) To enhance the capacities of identifying and developing CDM projects of the officials and semi-official personnel in the experimental provinces and to develop PDD and PIN of the biomass energy projects.

1.2 Main Activities of the Sino-Danish Biomass Energy CDM Capacity Building Project

Main activities include the following 2 aspects:

- a)Content 1: to carry out central-level capacity building in Beijing, of which the focus will be fixed on the public and semi-public entities (biomass energy developers and Chinese consultants); to investigate on the biomass energy technologies and resources; to assess on the capacity building requirements; to formulate CDM methods based on the actual conditions of China; and to compile training materials.
- b) Content 2: To carry out the provincial-level capacity building in the 3 experimental provinces, which will fix attention on the methodology training for the public and semi-public officials and also include the developing of PDD and PIN.

1.3 Project Activities and Expected Output of the Contract Implementation Unit

Hunan Province is one of the 3 demonstrative provinces determined by Sino-Danish Biomass Energy CDM Capacity Building Project and Hunan International Engineering Consultation Center is the partner of the Energy Source Research Institute of China NDRC (National Development and Reform Commission) in Hunan. The contract was formally signed between the two parties in July, 2007 and Hunan International Engineering Center will carry out its work in line with the contract requirements.

1.3.1 Targets of the Sino-Danish Biomass Energy CDM Provincial-Level Capacity Building Project

- a) To assist the Energy Source Research Institute of China NDRC (National Development and Reform Commission) in carrying out the nation-wide investigation on the biomass

energy resources and technologies;

b) To carry out the investigation on the status of biomass energy resources in Hunan, the evaluation on CDM capacity building requirements, training of relevant CDM knowledge and technologies, formulation of the guarantee plan of biomass energy raw materials and management and training of biomass energy building projects;

c) To enhance the capacities of identifying and developing CDM projects of the officials and researchers of Hunan, including the developing of PIN and PDD of the biomass energy.

1.3.2 Activities of the Sino-Danish Biomass Energy Provincial-Level Capacity Building Project

a) To determine the potential of major biomass resources within Hunan

b) Detailed evaluation on the capacity building requirements

c) To carry out the training for the officials and relevant personnel of the research institutes, the personnel from other relevant units engaged in the biomass energy, CDM projects developers of Hunan and other local people; and to carry out the training in the management of the biomass energy building projects.

d) Opportunities of introducing CDM projects to local residents;

e) To formulate plans which can attract local residents to participate in the project and provide the projects with biomass raw materials;

f) Project identifying and screening

g) CDM projects training and developing 1 PDD and 5 PIN of biomass energy.

1.3.3 Expected Output of the Sino-Danish Biomass Energy Provincial-Level Capacity Building Project

a) Report about the status of resources

b) Evaluation report about the capacity building requirements

c) Training materials, name list for the personnel participating in the course training, questionnaire about the courses, and evaluation, investigation and analysis on the training effect 3 months after the training has been completed

d) Name list for the personnel participating in introducing CDM projects to local people

e) Report about the program of activities for encouraging local residents to take part in the project

f) Report about the application of project screening tools

g) Training materials about encouraging local residents to take part in the project; name list for the personnel participating the training for encouraging local people to take part in the project; 5 PIN and 1 PDD at least

h) Training material, name list for the personnel participating in the training, questionnaire and analysis on the questionnaire; inspect if the training effect has fulfilled the expected targets; evaluation, investigation and analysis on the training effect 3 months after the

training has been completed.

2 Achievements of the Project

2.1 Technological Progress and Activities Completed by the Implementation Unit

Through one year's effort, the project has been completed successfully according to the initial plan, the outputs have also been recognized and actively evaluated by the Energy Source Research Institute of China NDRC (National Development and Reform Commission) and DTI and all outputs of the project have been delivered for printing. And details for technological progress and activities of the project are presented in the following.

2.1.1 July, 2007~March, 2008

- a) According to the requirements of the working plan and tasks, we've successfully held 2 semesters of training seminar: training seminar of biomass energy CDM and that of management of biomass energy building project; and the training results include 2 sets of training materials and 2 sets of name lists for personnel participating in the training;
- b) To carry out the status investigation on the biomass resources in Hunan;
- c) To carry out the project identifying and screening, and to complete the PIN of certain project.

2.1.2 April~June, 2008

- a) To complete the compilation of the status investigation on the biomass resources of Hunan and the investigation report about the status of biomass resources of Hunan; and ask for the opinions of relevant experts from the National Development and Reform Commission;
- b) To complete the compilation of the evaluation report of the provincial-level capacity building requirements and ask for the opinions of relevant experts from the National Development and Reform Commission;
- c) To carry out the project identifying and screening, and preliminary confirm PIN and PDD developing projects;
- d) To carry out the work in relation to the supply plan of raw materials;
- e) To compile relevant promotional materials for introducing CDM project opportunities to residents of Hunan.

2.1.3 July~September, 2008

- a) To carry out the tracking investigation and analysis on the training effect and compile the tracking analysis report;
- b) To ask for the approval opinions of relevant experts from the Energy Source Research Institute of China NDRC (National Development and Reform Commission) about the investigation report on biomass resources of Hunan and opinions from DTI in English version as well;
- c) The evaluation report about the provincial-level capacity building requirements has been examined and approved by relevant experts from the Energy Source Research Institute of

China NDRC (National Development and Reform Commission) and DTI;

- d) To carry out the project identifying and screening, and complete the first draft of the application report about the project identifying and screening tools (Chinese version);
- e) To carry out the work in relation to the supply report of raw materials and complete the first draft of the supply plan of raw materials (Chinese Version);
- f) To distribute promotional materials and carry out the work in relation to introducing CDM project opportunities to residents of Hunan;
- g) To carry out the work in relation to the training of CDM projects.

2.1.4 October~December, 2008

- a) The investigation report on the biomass resources of Hunan has been examined and approved by DTI;
- b) To carry out the project identifying and screening and determine PIN and PDD developing projects; and the first draft (Chinese version) of the report about the application tools of project identifying and screening has been examined and approved by the Energy Source Research Institute of China NDRC (National Development and Reform Commission) and its English version is being asked for the opinions from DTI;
- e) To carry out the work in relation to the supply plan of raw materials; and the supply plan of raw materials has been examined and approved by relevant experts from the Energy Source Research Institute of China NDRC (National Development and Reform Commission) and DTI;
- f) Disburse promotional materials and carry out the work in relation to introducing CDM project opportunities to the resident of the project area and relevant investigation;
- g) To carry out the work in relation to the training of CDM projects, complete the compilation of 5 PIN and ask for the opinions of DTI, and revise PIN; to complete the PDD developing of 1 biomass energy project and the first draft shall be submitted to relevant experts from the Energy Source Research Institute of China NDRC (National Development and Reform Commission) for examination and approval.

2.1.5 January~March, 2009

- a) The application report about project identifying and screening tools have been examined and approved by DTI;
- d) To carry out the work in relation to the training of CDM projects and the 5 PIN and 1 PDD which have been developed, have been examined and approved by relevant experts from the Energy Source Research Institute of China NDRC (National Development and Reform Commission) and the revision has been accomplished basically;
- e) Sort out the outcome materials.

2.1.6 June~December, 2009(Subsequent projects of the Sino-Danish Biomass Energy Provincial-Level Capacity Building Project)

- a) The agreement has been signed with DTI, Denmark(CDM capacity building for Biomass projects in China Development of PDD in Hunan), and DTI will go on providing technical

assistance and support Hunan International Engineering Consultation Center to develop 1 PDD;

b) Utilize the identifying and screening tool to select the project, compile 2 PIN and submit them to DTI for check and approval; revise PIN and the revised PIN has been approved by DTI;

d) Develop PDD and submit it to DTI for check and approval; revise PDD and the revised PDD has been approved by DTI.

2.1.7 Summary for Project Expenses

While we carry out relevant project activities, we've been sticking to the principles of frugality and strict implementation of budget, persisting in performing the financial process strictly and trying to improve the use of funds, therefore, the expense for all activities involved in the project is basically consistent with the budget. And for details of the project expenses are presented in Table 2-1.

Table 2-1**Summary for Project Expenses**

| No. | Activities | Budgetary Expenditure | Percentage | Actual Expenditure | Remark |
|-------|---|-----------------------|------------|--------------------|--------|
| 1 | To become the partner of the energy source research institute | 5.6 | 3.8% | 5.64769 | |
| 2 | To carry out the training for government officials, training of CDM senior courses and training for management of CDM building projects | 23.8 | 16.2% | 25.45608 | |
| 3 | Investigation on biomass resources within Hunan Province | 11.2 | 7.6% | 12.16585 | |
| 4 | Evaluation on the capacity building requirements | 11.2 | 7.6% | 11.44 | |
| 5 | Project identifying and screening | 7.0 | 4.8% | 7.536 | |
| 6 | CDM project training | 56.0 | 38% | 502,796.95 | |
| 7 | Supply plan scheme of raw materials and propagation of CDM | 32.2 | 22% | 336,745.97 | |
| 8 | PDD developing supported by DTI (subsequent projects) | 16.8 | | 13.6288 | |
| Total | | 163.80 | | 159.8287 | |

2.1.8 Effect Brought about by the Project Implementation

The project implementation process is also our process of incessant studying and progress. During this period, the scientific methods and serious attitude of foreign experts used in their project study are all worthy of us to learn, which have been fed back to our working results and are very good for our future work. Through the implementation of the project, we've deepened our understanding about the biomass energy CDM projects, accumulated knowledge relevant to the organization and implementation of CDM projects and experience in CDM project training and developing, trained and enhanced our capacity of developing CDM projects and fulfilled the expected targets of this project, all of which will pave a good way for the future developing of CDM projects.

The status investigation on biomass resources of the whole province gave us an all-around understanding about the biomass resources of Hunan; implementation of the work relevant to the supply plan of biomass raw materials made us know the supply system of biomass raw materials in Hunan objectively, all of which have been presented in our working results. And all the outputs of the project such as the resource investigation report, biomass

raw material supply plan report and project screening software application report can be used for reference in our future work, especially the propagation of biomass energy CDM projects and introducing CDM project opportunities to local residents will play an active role in the implementation of future CDM projects.

The project implementation made the government officials of all levels in Hunan have a basic understanding about the CDM projects; relevant consultation agencies and scientific & research institutes have also carried out relevant study and project developing in the CDM field; the project implementation has greatly promoted the development of CDM project developing market of Hunan. Currently, a good developing tendency of "one hundred flowers blossom and one hundred thoughts contend" has come into being in the CDM project developing market of Hunan. Meanwhile, the basic understanding about relevant knowledge of CDM will also be good for promoting the energy saving and emission reduction affair of Hunan and the development of the construction of the "two-oriented" society.

It is particularly worth mentioning is that through the project implementation, by now, we've developed 3 CDM projects by utilizing the relevant knowledge learnt from the developing of this CDM project, one of which have been uploaded to the web-site of UN for publicity; additionally, the other project developed with the help of DTI have also received the approval letter of the National Development and Reform Commission successfully; at present, another 3 projects have also stepped into the PDD developing phase.

The training and propagation of relevant CDM knowledge made the governments of all levels of the whole province have a basic understanding about CDM projects; relevant consultation agencies and scientific & research institutes have also carried out relevant study and project developing in the CDM field; And a good developing tendency of "one hundred flowers blossom and one hundred thoughts contend" has come into being in the CDM project developing market of Hunan.

3 Recommendations

During the project implementation process, especially in the initial stage of the project implementation, we did meet with some difficulties, for instance, lots of government officials did not understand CDM, which result in the their insufficient support for the project implementation, and relevant enterprises and personnel also did not believe the project since they did not understand CDM. However, with the deepening of the project, multiple-channel publicity of the project including training and propagation, together with our great promotion, all these difficulties have been readily solved. With respect to the successful implementation of the project, we've paid hard work and also got substantial achievements. Here we recommend that similar activities in the field of climate change shall be carried out as much as possible in the future and inter-national cooperation and communication shall be strengthened especially to strengthen the international cooperation and communication with such outstanding agencies and teams as DTI. Based on this, in the future, we will actively and effectively carry out the developing of CDM projects, greatly publicize the thought of energy saving, emission reducing and environmental protection so as to make our contribution to the global climate change.