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Final Report for:

United Nations Industrial Development Organization

Energy Conservation and GHG Emissions Reduction in Chinese TVEs

Phase II

Project No: EG/CPR/99/G31

Request for Proposal No: P.16001320

Issuance of Merit-based Awards to LPICs and Local Officials in China

Submitted By

Hongyuan Energy and Environmental Protection Technology Co. Ltd.

December 20, 2006

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1.0 Forward

This document is the Final Report of the subcontract of “Merit Based Awards to Local Policy Implementation Committee (LPICs) and Local Officials” (Contract No. 16001320). The report summarizes the criteria of selection and list of awards granted and including signed acknowledgement of receipt of such awards of recipients.

2.0 Background

Since the inception of the project “Energy Conservation and Greenhouse Gas Emissions Reduction in Chinese Township and Village Enterprises (TVEs) – Phase II” in 2001, remarkable results have been achieved. The project innovatively created a series of institutions, including the Revolving Capital Fund (RCF), Policy Implementation Committee (PIC)/Local Policy Implementation Committee (LPIC), Hongyuan Energy and Environmental Protection Co. Ltd., which are playing a significant role in assisting TVEs in these four sub-sectors to remove market, policy, technological and financial barriers to energy efficiency.

The project is on track to achieve direct project savings far beyond those projected in the project’s design documents. The positive results and their impact have been duly recognized in China and other countries.

Eight out of the nine pilot projects in the four sub-sectors have been completed, while the other one is under implementation. Pilot technology and successful experiences have been duplicating and promoting in 118 replication projects with an energy saving of 809,000 tce/a, or a total CO₂ emissions reduction of 2.018 million tones/a, far beyond the projected goals.

Beside the above mentioned activities conducted by PMO, independent replications are emerging:

- More than 200 TVE representatives participated in technical training organized by Xinjin Yongxing Shale Brick Company, a project pilot TVE
- People from more than 100 Chinese coking TVEs and over 10 foreign coking experts from Bangladesh, Thailand, India, etc. visited Gaoping Xinggao Coking Group
- People from over 50 cement companies visited the residue heat power plant at Shenhe Cement
- The new type EE brick kiln adopted by Lucun Brick Plant was widely recognized by more and more entrepreneurs in the same trade, and will be introduced by Government of Bangladesh

According to the descriptions of the ProDoc, a merit-based award is to be issued to those LPICs and local officials who made great contribution to the project, LPIC establishment and operation, and local energy efficiency improvement.

3.0 Verification of LPICs and Local Officials to be awarded

3.1 Principle

Based on the subcontracts of evaluation project social impact (Contract No. 16001066) and establish LPIC Phase I, II, III (Contract No. 2003/037, 2004/128 and 2005/070), and recommended by the PMO, PIC intends to apply the merits-based awards to 11 LPICs and 9 Local officials.

As a subcontractor, Hongyuan Company verified candidate LPICs and local officials suggested by PIC and PMO, and grant the merit-based awards on behalf of the project to qualified LPICs and local officials based on an evaluation process proposed in this document.

The following principles were taken during the verification of merits of LPICs and local officials nominated in the TOR:

- Successful establishment of LPIC
- Active participation of local government agencies
- Effectively adopted the energy efficiency VA mechanism
- Good implementation of energy conservation action plan
- Active implementation of energy conservation incentive policies
- Sound energy conservation achieved
- Significant improvement of public awareness of environment protection and GHG emission reduction

3.2 Criteria of selection for merit-based award

As the award is based on the merits of LPICs and local officials, the criteria should be set up to effectively reflect their contribution.

For Candidate LPICs

- **L1:** Support for the pilot project development
- **L2:** Effectiveness of recommendation of replication projects
- **L3:** Achievement of implementation of LPIC action plan
- **L4:** Achievement of energy efficiency VA mechanism locally
- **L5:** Improvement of local incentive policy for energy conservation
- **L6:** Impact to local sustainable development

For Candidate local officials

- **O1:** Responsibility within the LPIC
- **O2:** Personnel contribution to the TVE project and the LPIC

3.3 Verification Method

Delphi method, AHP and expert grading are widely used as effective evaluation tools for qualitative assessment. The verification procedures are as follow:

Identify the weight of each indicator

- Establish decision matrixes for LPIC indicators and Official indicators separately (Annex 1, 2)
- Invite 5 experts from PIC, PMO and project evaluation subcontracts to fill the matrixes according to the comparative importance between each indicator. The reference levels are as follows:

a_{ij}	Definition
1	indicator i is the same important as indicator j
2	indicator i is a little bit important than indicator j
3	indicator i is important than indicator j
4	Indicator i is more important than indicator j
5	indicator i is extremely important than indicator j
reciprocal	$a_{ji} = 1/a_{ij}$

- Calculate the weight of each indicator use the following formula:

$$w_i = \frac{1}{m} \frac{\sum_{j=1}^m a_{ij}}{\sum_{k=1}^m a_{kj}}$$

- Uniform examination

Collect the expert evaluation grade

- Invite the 5 experts from PIC, PMO and project evaluation subcontracts to evaluate candidate LPICs and local officials. The reference levels are as follows:

g_i	Definition
1	Outstanding
2	Good
3	Fair
4	Poor

- Calculate the average grade of each indicator between experts. (Annex 3, 4)

Calculate the weighted average grade of each nominee

- Calculate the final weighted average of each candidate by integrating the weighted average of each indicator.

$$V = \sum_{i=1}^m w_i \bar{g}_i$$

- Make the priority list of LPICs and local officials to be awarded

3.4 Result of Verification

Subcontractor invited 5 external experts as resource persons:

- **Mr. Wang Xiwu, Policy Expert**, Senior Administrator of PIC
- **Ms. Wang Guiling, Policy Expert**, Executive Director of PMO
- **Prof. Zou Ji, Prominent Social Expert**, team leader of Contract 16001066.
- **Ms. Zhou Hong, Social Expert**, chief expert of Contract 2003/037, 2004/128 & 2005/070
- **Mr. Tian Yishui, Energy Efficiency Expert**, the team leader of of contract No. 16001067

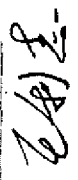
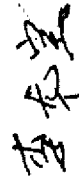

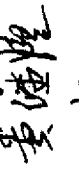
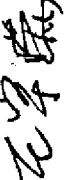
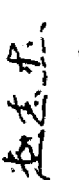

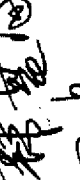
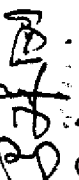
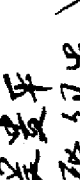

The resource persons evaluated proposed LPICs and Local Officials fully following the verification method. The conclusion shows that all the proposed LPICs and Local Officials are qualified for merit-based award.

4.0 Grant Awards

According to the decision done by TPR meeting 2007, the subcontractor granted the awards to qualified LPICs and Local Officials during the PIC meeting 2007 in May 15, 2007.

Detail lists of LPICs and Local Officials awarded see annex 1 and 2.

1. List of LPICs Awarded

No.	LPIC	Sub-sector	Host Agency	Award	Signature
1	LPIC in Xinjin County of Sichuan	Brick making	Xinjin Small and Medium Enterprise Bureau	US\$ 1,500	
2	LPIC in Jiangning district of Nanjing of Jiangsu	Foundry	Jiangning TVE Bureau	US\$ 1,500	
3	LPIC in Tongxiang of Zhejiang	Cement	Tongxiang Economic and Trade Bureau	US\$ 1,500	
4	LPIC in Yingde City of Guangdong	Cement	Yingde Small and Medium Enterprise Bureau	US\$ 1,500	
5	LPIC in Baqiao District of Xi'an of Shaanxi	Brick making	Xi'an Baqiao Economic and Trade Bureau	US\$ 1,500	
6	LPIC in Shanxi Province	Coking	Shanxi Small and Medium Enterprise Bureau	US\$ 1,500	
7	LPIC in Jinnan District of Tianjin City	Foundry	Jinnan Industrial Economic Commission	US\$ 1,500	
8	LPIC in Jinzhou District of Dalian City	Foundry	Jinzhou Economic Development Bureau	US\$ 1,500	
9	LPIC in Xianyang City of Shaanxi Province	Brick making	Xianyang Leading Group of Rectification of Brick Production Order	US\$ 1,500	
10	LPIC in Nanjing City of Jiangsu Province	Foundry	Nanjing Suburb Small and Medium Enterprise Bureau	US\$ 1,500	
11	LPIC in Liaoning Province	Brick making	Liaoning Wall Materials Reform Office	US\$ 1,500	
<i>Total</i>				US\$ 16,500	

2. List of Local Officials Awarded

No	Nominees	Organization and Position	LPIC	Award	Signature
1	Wang Lizhi	Director General, Xinjin Small and Medium Enterprise Bureau	LPIC in Xinjin County of Sichuan	US\$ 388	王立志
2	Li Longbao	Director General, Jiangning TVE Bureau	LPIC in Jiangning district of Nanjing of Jiangsu	US\$ 388	李龙宝
3	Wang Yuman	Director General, Xian Baqiao Economic and Trade Bureau	LPIC in Baqiao District of Xi'an of Shaanxi	US\$ 388	王宇曼
4	Wang Zhimin	Deputy Director, Jinnan Industrial Economic Commission	LPIC in Jinnan District of Tianjin City	US\$ 388	王志民
5	Han Jigang	Section Chief, Jinzhou Economic Development Bureau	LPIC in Jinzhou District of Dalian City	US\$ 388	韩基刚
6	Chen Xiaoping	Director General, Shuangliu SME Bureau	LPIC in Shuangliu County of Chengdu City	US\$ 388	陈小平
7	Ma Jiangang	Office Director, Xianyang Leading Group of Brick Production Rectification	LPIC in Xianyang City of Shaanxi Province	US\$ 388	马建刚
8	Zhang Shaoxian	Deputy Director, Liaoning Wall Materials Reform Office	LPIC in Liaoning Province	US\$ 388	张绍先
9	Shen Xironglong	Division Chief, Zhejiang SME Bureau	LPIC in Zhejiang Province	US\$ 388	沈兴龙
Total				US\$ 3,492	