

Gold Standard 2nd Round Stakeholder Consultation Report

Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District, Chongqing China

Chongqing Municipality Wanzhou Kehua Cement Co. Ltd / South Pole Carbon Asset Management Ltd.

1 Summary

Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District project held the 2nd Round Stakeholder Consultation, which dedicated for applying for a GS-CDM project. This report is the objective record and conclusion of this consultation. Project participants, Chongqing Municipality Wanzhou Kehua Cement Co. Ltd and South Pole Carbon Asset Management Ltd., conducted the 2nd Round Stakeholder Consultation dedicatedly for this project's application for a Gold Standard CDM project. The following Table.1 has basic information of this stakeholder consultation.

Table.1 Gold Standard 2nd Round Stakeholder Consultation

Date of Invitation	2 nd December 2008
Date of Consultation Meeting	17 th December 2008
Additional Consultation Meeting	5 th February 2009
Invitations Sent by	Chongqing Municipality Wanzhou Kehua Cement Co. Ltd and South Pole Carbon Asset Management Ltd.
Means of Invitation	Emails, internet, invitation posters, phone calls and house visit
Consultation Conducted by	Chongqing Municipality Wanzhou Kehua Cement Co. Ltd and South Pole Carbon Asset Management Ltd.
Venue of Consultation Meeting	Meeting Room of Chongqing Municipality Wanzhou Kehua Cement Co. Ltd., Sanzhouxi Village, Wanzhou District, Chongqing Municipality, P.R. China
Website of Consultation	http://www.southpolecarbon.com/goldstandard_consultations.htm

2 Procedures Followed to Invite Comments

Sending Invitations

Before the oral hearing for local stakeholders, an invitation was prepared for the 2nd Round Stakeholder Consultation including basic information and procedures of the meeting. This invitation, along with the non-technical description of the project, the non-technical description of the project EIA and the Appendix E of Gold standard (the checklist in both English and Chinese) and the Gold Standard Sustainable Development Assessment Matrix, in both English and Chinese, were attached for comments.

The plant owner invited head of local Environment Protection Authority (EPA), head of local residents committee, representative of villagers committee, and representatives of plant staff by phone call. The plant employees and local residents near plant site were invited by poster invitations, which were posted on the billboard of resident committee (See Figure 1), the billboard along the main street of the village (See Figure 2) and gate of Wanzhou Kehua cement plant (As Figure 3) two weeks prior to the meeting.

Those local stakeholders (local resident) who do not have phone and may not see the poster were invited by house visit.

As per DOE's request, on 5th February 2009, 4 local villagers who live in the opposite side of Chialing River were invited to attend an additional stakeholder consultation. All of them were invited by local residents committee from call.

Figure 1 Invitation on the billboard of residents committee

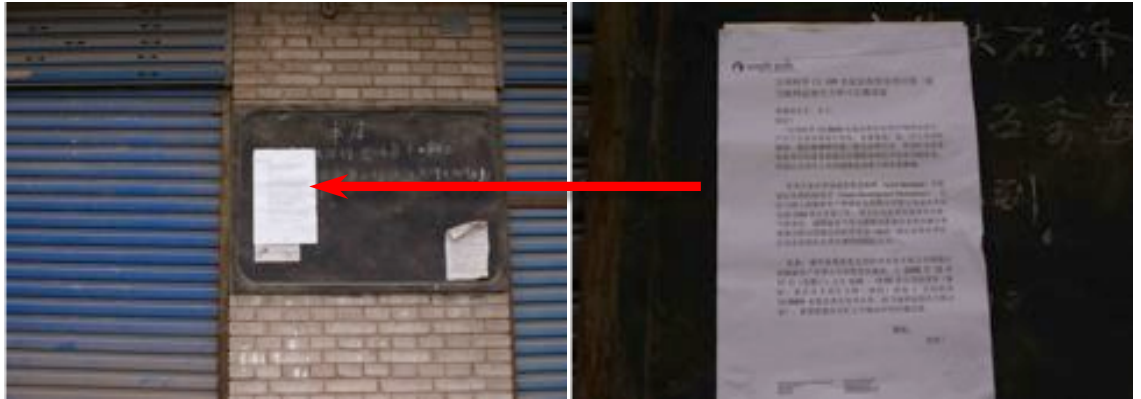
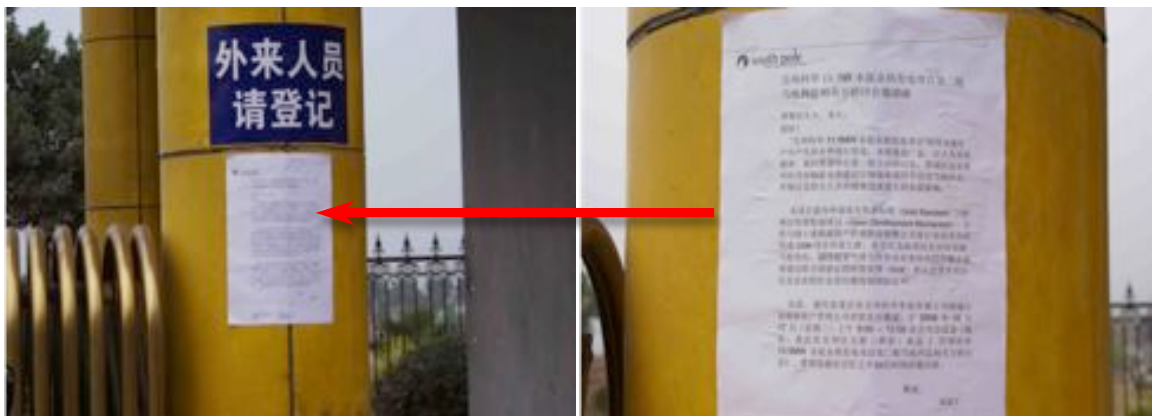


Figure 2 Invitation on the billboard along the main street of the village



Figure 3 Invitation on the gate of Wanzhou Kehua cement plant



Meanwhile, South Pole Carbon sent invitations via email on 2nd December 2008, to Gold Standard supporting organizations in China, with a copy to the Gold Standard. In the end, South Pole Carbon received manual email reply from the Gold Standard, auto-reply message from Greenpeace China and phone call from GEI China. Due to limited

resources, Greenpeace China and GEI China are not able to participate in this consultation.

The recipients' list of the email invitation is summarized in following Table.2:

Table.2 Recipients' List of Invitation

Organization Invited	Email address
Gold Standard	info@cdmgoldstandard.org
WWF	liam@wwfthai.org
WWF	mark.kenber@btopenworld.com
Greenpeace China	greenpeace.china@hk.greenpeace.org
GEI, local GS supporter	spchen@geichina.org
Gold Standard	denise@cdmgoldstandard.org
Gold Standard Local Expert	Yuran.dai@tfsbrokers.com
GEI China	gei@geichina.org
WWF China	wwfchina@wwfchina.org
WWF HK	wwf@wwf.org.hk

Internet Consultation

Simultaneously, the invitation together with all documents were uploaded to the website of South Pole Carbon Asset Management Ltd, at address of:

http://www.southpolecarbon.com/goldstandard_consultations.htm

Besides the documents uploaded to the Internet, the consulted individuals and organizations could also inquiry for more details of the project via phone (+86 10 8454 9953) or email: h.yong@southpolecarbon.com. Chongqing Municipality Wanzhou Kehua Cement Co. Ltd. contact: Mr. Gao Sheng 13668473099 or email: gaussn@163.com

The Consultation Meeting

The main meeting was held at Meeting Room of Chongqing Municipality Wanzhou Kehua Cement Co. Ltd., Sanzhouxi Village, Wanzhou District, Chongqing Municipality, P.R. China on 17th December 2008, and additional meeting was also held at the meeting room on 5th February 2009, following are the list of participants respectively:

Table.3 Attendants' List

Name participant	Gender	Organisation (if relevant)/ /Job position in the community	How to be invited	Contact
Main meeting on 17th December 2008				
Chen Nairen	Mr.	Head of Wanzhou EPA	Phone Call	023-58541257
Fu Dong	Mr.	Head of Wanzhou EPA	Phone Call	023-58541257
Chen Yunyue	Mr.	Head of residents committee	Phone Call	023-58547758
Deng Lihu	Mr.	Villager of Sanzhouxi	Invitation posters	13206277289
Zhang Yi	Mr.	Villager of Sanzhouxi	Invitation posters	13132340676
Ran Maoqiong	Ms.	Wanzhou Kehua employee	Phone Call	15870585126
Wei Guangmei	Ms.	Wanzhou Kehua employee	Phone Call	15870480862
Zheng Jiancheng	Mr.	Villager of Sanzhouxi	Phone Call	13896970155
Li Daxue	Mr.	Villager of Sanzhouxi	Invitation posters	15025563084
Mao Zhouhe	Mr.	Villager of Sanzhouxi	Invitation posters	13983535708
Lai Chengfu	Mr.	Villager of Sanzhouxi	Invitation posters	13896926006
Xiong Xuewei	Mr.	Villager of Sanzhouxi	Invitation posters	15826382728
Fang Shaocheng	Mr.	Villager of Sanzhouxi	Phone Call	13996559224
Tu Wanjiang	Mr.	Villager of Sanzhouxi	Phone Call	15823700239

Xiong Shaoping	Mr.	Villager of Sanzhouxi	Phone Call	15923891103
Hu Shiyong	Mr.	Villager of Sanzhouxi	Phone Call	13594402219
Xing Baoqi	Mr.	Wanzhou Kehua employee	Phone Call	13638265969
Xu Haoxiang	Mr.	Wanzhou Kehua employee	Phone Call	15978916148
Xiang Guanghua	Mr.	Wanzhou Kehua employee	Phone Call	15923486218
Zhang Hongwang	Mr.	Wanzhou Kehua employee	Phone Call	13594259318
He Jiancheng	Mr.	Villager of Sanzhouxi	Phone Call	15025542475
Li Si	Mr.	Wanzhou Kehua employee	Phone Call	13635356553
Zhang Guohai	Mr.	Wanzhou Kehua employee	Phone Call	13896909523
Wu Taiquan	Mr.	Wanzhou Kehua employee	Phone Call	13638297811
Jiang	Mr.	Wanzhou Kehua employee	Phone Call	13594857298
Zhang Qidan	Mr.	Villager of Sanzhouxi	House Visit	15084367038
Mu Lushi	Mr.	Villager of Sanzhouxi	House Visit	13038360987
Li Qifeng	Mr.	Villager of Sanzhouxi	House Visit	15923433330
Additional meeting on 5th February 2009				
Chen Xianglin	Male	Villager of Xiaoling	Phone Call	15023450785
Qin Xinghe	Male	Villager of Xiaoling	Phone Call	13594464700
Zhang Jianping	Male	Villager of Xiaoling	Phone Call	023 58542986
Cheng Xuwei	Male	Villager of Xiaoling	Phone Call	023 64881239

Documentation prepared and meeting held in Mandarin (Chinese official language), some documentation was also in English.

The procedure and protocols of main meeting and additional meeting are the same.

Meetings procedure

- Getting Seated and Free Talk (15 min)
- Introduction of Wanzhou Kehua Cement Co. Ltd and South Pole Carbon Asset Management Ltd. (15 min)
- Purpose of the 2nd round consultation (10 min)
- Description of the project (15 min)
- Description of the non-technical Environmental Impact Assessment of the project (15 min)
- Answering of questions and inviting for comments (60 min)
- Completing checklists, answering related questions and inviting for comments (30 min)
- General feedback and closing (20 min)

Meeting protocols

On completion of the various meetings, the following documentation was collected:

- Attendants list with name participant, organization, occupation/position and how to be invited (attested by the signatures of the stakeholders that were present)
- Filled out Appendix E of Gold Standard (checklist) (attested by the signatures of the stakeholders that were present)
- Chinese (local language) version of non-technical project description, including the Gold Standard SD Matrix (attested by the signatures of the stakeholders that were present)
- Chinese (local language) version of non-technical description of EIA of the proposed project (attested by the signatures of the stakeholders that were present)
- Photographs of the meeting

- Report of the meeting (attested by the signatures of the stakeholders that were present)

These documents are available as hardcopies and will be handed over to the Designated Operational Entity (DOE) conducting the Gold Standard validation process.

3 Comments Received

Questionnaires Collected

28 pieces of questionnaires were sent out and collected during the main meeting and 4 pieces of questionnaires were sent out and collected during the additional meeting. The questionnaires are all prepared in compliance with Appendix E of Gold Standard CER Manual. The questions all have been translated into Chinese.

From questionnaires collected in the meeting, no negative rating was found. (See Annex VI Summary of the responses to the questionnaires.)

Comments from the Meeting

Head of Wanzhou EPA Mr.Chen said that this project obviously improves the surrounding environment, especially the air quality. From local environment protection perspective, they will continue to support this project and take responsibility to monitor the relevant criteria of environment protection.

Head of local residents committee said it's a typical source recycled utilization project; this project will not only improve the environment quality, but also increase the opportunity of job and relieve the local electricity requirement problem, and contribute to local sustainable development.

One employee from Wanzhou Kehua said this project changes waste to a valuable resource and does not only improve the environment but also generate electricity. However, they are sourcing additional revenue to keep the operation of the plant properly, due to the increasing operation and maintenance cost and low electricity tariff. The CDM project application is the only way, which they can find out, to overcome the financial problem.

A Villager representative of Sanzhouxu said previously Wanzhou local residents encounter a huge electricity supply problem, power cuts had been often happened. After implementation of this waste heat recovery project, electricity consumed by Wanzhou Kehua had been sharply reduced, this can greatly relieve their power supply problem.

Many villagers said that this project shows environmental benefits and creates some additional employment. Since the construction of waste heat recovery power plant, the atmospheric pollution apparently decreased. They have no considerations against this project.

Comments from the Internet

No comment was received from the Internet.

4 Comments Taken into Account

Since all comments received are positive and encouraging comments. No negative estimate is in consultation; hence it was not necessary to make any changes to the Project Design.

Annex I Invitation and Replies*

Invitation

From: h.yong@southpolecarbon.com

Subject: Invitation for Gold Standard 2nd Round Local Stakeholder Consultation of Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District "

Date: December 2, 2008 7:41:33 PM GMT+08:00

To: info@cdmgoldstandard.org, spchen@geichina.org, denise@cdmgoldstandard.org, liam@wwfthai.org, greenpeace.china@hk.greenpeace.org, mark.kenber@btopenworld.com, Yuran.dai@tfsbrokers.com, gei@geichina.org, wwchina@wwfchina.org, ww@wwf.org.hk, Yutaka.Yoshida@tuv-sud.jp, Jia-jia.Zhang@tuev-sued.de, Shuji.lida@tuv-sud.jp

Cc: m.hirsbrunner@southpolecarbon.com, a.knill@southpolecarbon.com, l.wang@southpolecarbon.com, j.duan@southpolecarbon.com, Y.sha@southpolecarbon.com, c.chiquet@southpolecarbon.com, y.lin@southpolecarbon.com, gaussn@163.com

Dear Secretariat of Gold Standard,
Dear GS Local Supporters and GS Experts in China,
Dear Sir/Madam whoever concerns,

Chongqing Municipality Wanzhou Kehua Cement Co. Ltd. and South Pole Carbon Asset Management Ltd. are planning to conduct an 2nd round local stakeholders consultation meeting for "Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District" project. The proposed project is going to apply for Gold Standard CDM.

Enclosed you will see some introduction documents in English and local language (Simplified Chinese). They are:

1. Invitation (in Chinese)

- 1.1. Non-technical Project Description (in Chinese)
- 1.2. Description of Environmental Impacts (in Chinese)
- 1.3 Appendix E Checklist (in Chinese and English)

2. Non-technical Project Description with Sustainable Development Assessment Matrix (In English)

2.1 Leaves from FSR of the project, as reference for description of sustainable development and environmental impacts (Scanned, In Chinese)

With this invitation letter, the project participants would like to invite you to participate/witness this initial stakeholder consultation meeting.

The meeting is going to be held on 17th December 2008 (Wednesday) from 9:00 am to 12:00 am.

The venue:

Meeting Room of Chongqing Municipality Wanzhou Kehua Cement Co. Ltd., Sanzhouxi Village, Wanzhou District, Chongqing Municipality, P.R. China

The contact person,

Mr. Hanlin Yong

Assistant Project Manager, South Pole Carbon Asset Management Ltd.

Phone: 010-8454 9953

Mobile: 13693631231

Auto-reply message from Greenpeace China 綠色和平自動回覆訊息

From: greenpeace.china@hk.greenpeace.org

Subject: Auto-reply message from Greenpeace China 綠色和平自動回覆訊息

Date: December 2, 2008 8:01:03 PM GMT+08:00

To: h.yong@southpolecarbon.com

(中文版本在後)

Dear Sir/Madam,

Thank you for your email. This auto-reply message is to acknowledge the receipt of your email and it will be processed as soon as possible.

In all but a few exceptional cases, we work on a global scale and does not address individual pollution cases one by one. Due to limited resources, we have to focus our manpower and resources on issues that pose major threats to ecosystems and species like climate and energy, food safety, toxic chemicals and forests. As a result, we might not be able to respond to all public requests and opinions shortly. Thank you for your patience and understanding.

For more, please visit our website What We Do (<http://www.greenpeace.org/china/en/campaigns>) and FAQs (<http://www.greenpeace.org/china/en/faqs>) for further information.

Best Regards,
Greenpeace China

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Greenpeace exists because this fragile earth deserves a voice.  
It needs solutions. It needs change. It needs action.

Website: [www.greenpeace.org.cn](http://www.greenpeace.org.cn).

Join us and take action: <http://www.greenpeace.org/china/en/SupportUs>

敬啟者：

我們已經收到你的電子郵件，謝謝，我們會盡快處理。

由於資源所限，在一般情況下，綠色和平只可集中處理全球性環境問題，而不會處理個別地區上的污染個案。現時，我們把人力和資源集中在嚴重威脅全球環境生態的問題如氣候與能源、食品安全、有毒化學物污染防治和森林砍伐等。因此，我們或許未能在短時間內逐一回應市民的查詢和意見，謝謝你的耐心等候和諒解。

我們建議你參考本會網站的項目簡介

(<http://www.greenpeace.org/china/ch/campaigns>)和常見問題

(<http://www.greenpeace.org/china/ch/faq>)，以進一步了解本會工作。

綠色和平謹啟

~~~~~  
綠色和平存在，因為脆弱的地球需要呼喊、需要行動、需要改變。

網址：www.greenpeace.org.cn

加入我們，一起行動：<http://www.greenpeace.org/china/ch/SupportUs>

Reply from GS, Denise Welch

From: denise@cdmgoldstandard.org
Subject: Re: Invitation for Gold Standard 2nd Round Local Stakeholder Consultation of Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District
Date: December 13, 2008 3:39:57 AM GMT+08:00
To: h.yong@southpolecarbon.com
Cc: meinrad@cdmgoldstandard.org, ayse@cdmgoldstandard.org, a.knill@southpolecarbon.com

Dear Harry,

Many thanks for letting us know about this stakeholder consultation.

Please kindly indicate how the local stakeholders who don't have internet access have been invited to provide comments.

Kind regards,

Denise

--

Denise Welch
Information & Communications

The Gold Standard Foundation
Avenue Louis Casai 79
CH-1216 Cointrin
Tel 0041 (0)22 788 7080
Fax 0041 (0)61 271 10 10
denise@cdmgoldstandard.org

<http://www.cdmgoldstandard.org>
The Gold Standard - Premium quality carbon credits

From: h.yong@southpolecarbon.com
Subject: Re: Invitation for Gold Standard 2nd Round Local Stakeholder Consultation of Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District
Date: December 15, 2008 4:42:15 PM GMT+08:00
To: denise@cdmgoldstandard.org
Cc: meinrad@cdmgoldstandard.org, ayse@cdmgoldstandard.org, a.knill@southpolecarbon.com, m.hirsbrunner@southpolecarbon.com, l.wang@southpolecarbon.com, Y.sha@southpolecarbon.com

Dear Denise,

Thanks very much for your remind.

Local stakeholders who don't have internet access will be invited by poster, phone and visit. We have already posted the invitation posters in the entrance of Wanzhou Kehua and in the local village. Local EPA officer, head of village, representative of villagers committee and representatives of plant staff will be invited by call. Those local stakeholders (local resident) who do not have phone and may not see the poster will be invited by house visit.

All of the invitation information will be recorded in the LSC report and the evidences will also be shown to DOE in the site visit on 18th~19th Dec.

If you have further question, please let me know!

Best Regards

Harry

From: denise@cdmgoldstandard.org

Subject: Re: Invitation for Gold Standard 2nd Round Local Stakeholder Consultation of Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District

Date: December 16, 2008 5:42:41 AM GMT+08:00

To: h.yong@southpolecarbon.com

Cc: meinrad@cdmgoldstandard.org, ayse@cdmgoldstandard.org, a.knill@southpolecarbon.com, m.hirsbrunner@southpolecarbon.com, l.wang@southpolecarbon.com, Y.sha@southpolecarbon.com

Dear Harry,

Thanks for your prompt response and best wishes for a successful meeting.

Kind regards,

Denise

--

Denise Welch
Information & Communications

The Gold Standard Foundation
Avenue Louis Casai 79
CH-1216 Cointrin
Tel 0041 (0)22 788 7080
Fax 0041 (0)61 271 10 10
denise@cdmgoldstandard.org

<http://www.cdmgoldstandard.org>
The Gold Standard - Premium quality carbon credits

Annex II Documents Sent to Local Stakeholders**

万州科华13.5MW水泥余热发电项目第二轮当地利益相关方研讨会邀请函 Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District The Second Round of Local Stakeholder Consultation Meeting Invitation

尊敬的先生、女士：

您好！

“万州科华13.5MW水泥余热发电项目”利用水泥生产中产生的余热进行发电。本着集思广益，以人为本的精神，我们希望举行第二轮公众研讨会，咨询社会各界对此项目的意见和建议以确保本项目不会对当地社会、环境以及相关人员的健康造成重大的负面影响。

本项目意向申请成为黄金标准（Gold Standard）下的清洁发展机制项目（Clean Development Mechanism），已经与瑞士南极碳资产管理股份有限公司签订协议并共同完成CDM项目开发工作。双方认为此项目在应对全球气候变化，减排温室气体方面作出企业应有的贡献并希望通过联合国指定的经营实体（DOE）的认证使本项目以及企业的社会责任感得到国际认可。

在此，谨代表重庆市万州科华水泥有限公司和瑞士南极碳资产管理公司对您发出邀请，于2008年12月17日（星期三）上午9:00 – 12:00在公司会议室（地址：重庆市万州区五桥三州村）参加《万州科华13.5MW水泥余热发电项目第二轮当地利益相关方研讨会》。希望您能在百忙之中抽出时间应邀出席。

顺祝，

安好！

瑞士南极碳资产管理公司

联系人：雍翰林（先生）

固定电话：010-84549974

移动电话：13693631231

电子邮件：h.yong@southpolecarbon.com

万州科华13.5MW水泥余热发电项目非技术性简介 Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District Non-technical Description

1 项目概况 Summary

下表综述了本项目的基本信息。

表1 项目概况

项目名称	万州科华13.5MW水泥余热发电项目
项目业主	重庆市万州科华水泥有限公司
项目位置	中国重庆市万州区百安坝街道办事处三洲村
装机容量	一期：4.5MW 二期：9MW
预计年发电量	8196.94万千瓦时
开工日期	一期：2007年10月 二期：2009年3月
寿期	至2027年

2 业主简介 Introduction of the Project Owner

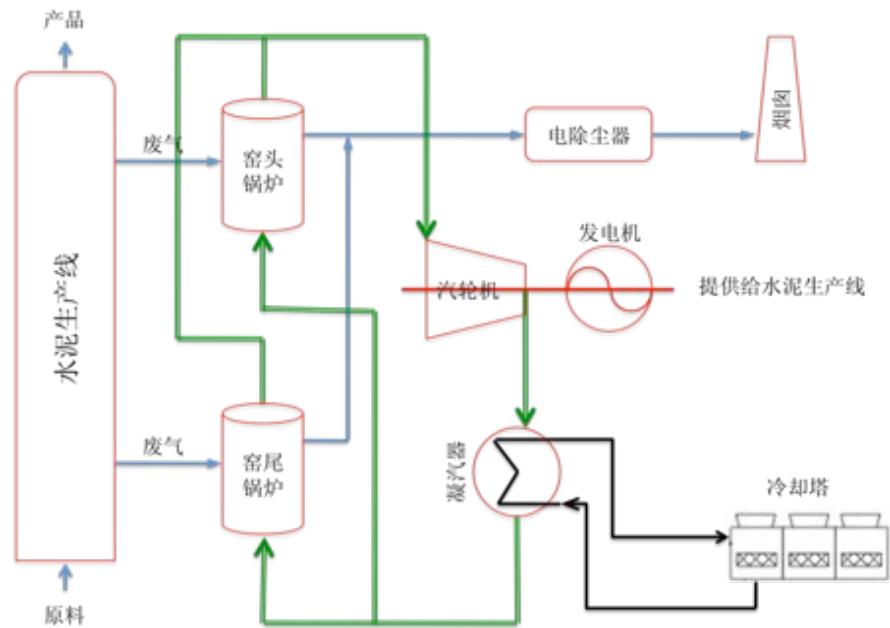
重庆万州科华水泥有限公司隶属于科华集团，是科华集团挺进西部、对口三峡库区建设的重点投资项目。

重庆市万州科华水泥有限公司位于万州区五桥三洲溪村，距万州主城区10公里、五桥3公里，离渝万高速公路入口约3.5公里，离318国道3公里，距目前万州铁路货场9公里，正在新建的万宜铁路途经三洲，并设有货运站，厂区东南紧靠万石高等级公路，西北紧邻长江并建有自备码头，故工厂水陆交通运输十分方便。万州科华水泥有限公司占地300多亩，注册资金10800万元，拥有固定资产19800万元，员工300人，其中工程技术人员23人。公司所产“科华牌”各品种水泥广泛用于国家和地方的重点工程、公路、桥梁、水库、大厦等主体工程建设，是万州区重点骨干企业和三峡库区实力最强、规模最大、品质最好的水泥生产企业。

3 项目技术与规模 Technology Description

本项目低温纯余热发电系统的余热回收分为两部分：其一是窑尾预热器出口的废气余热；其二是窑头冷却机（篦冷机）出口的废气余热。两条生产线的窑头烟气采用从篦冷机中部另开口引出，作为窑头余热锅炉（AQC）锅炉的取风口；在窑尾五级预热器最后一级预热器和窑尾主排风高温风机之间设置窑尾余热锅炉（SP）。AQC锅炉与SP余热锅炉产生的过热蒸汽在汽机房的汇汽集箱混合后进入汽轮机作功发电提供水泥生产线；废气在锅炉中降温后导入电除尘器，然后经过烟囱排入大气。

工艺流程示意图如下图所示。



项目发电总装机容量为13.5MW，采用“并网不上网”的运行方式，为本厂的水泥生产线提供电量，代替部分从电网的购电，减少了项目业主对以火电为主的华中电网的电力需求。本项目估计年发电小时数为7,200小时，项目预计年发电量为86,832MWh，减去电厂自用电，每年减少从华中电网购电电量为81,969MWh。

4 自然环境与社会影响 Environmental and Social Impacts

表2所述，本项目在如下方面对当地的自然环境以及社会面貌产生积极影响：

表2 自然与社会环境影响

环境保护	本工程利用水泥窑废气余热进行发电，不产生其它有害废弃物，反而可以有效的减少水泥生产产生的废热和粉尘对环境的影响，起到很好的环境保护的作用
循环经济	水泥窑低温余热发电项目能够最有效利用资源和保护环境、实现可持续发展，将经济活动组织成“资源-生产-二次资源”的循环过程，使资源和能源得到最合理和持久的利用，并使经济活动对环境和人的不良影响降低到尽可能小的程度
节能降耗	三峡库区电力供应相对紧张，因此，回收水泥生产过程中的低温余热进行发电，不但可以进一步降低水泥生产能耗，同时还可以进一步减轻库区供电压力，是企业目前迫切需要的一项高效、环保的节能降耗工作。

5 附：清洁发展机制简介 Introduction to CDM

清洁发展机制（Clean Development Mechanism -CDM）系京都议定书第12条确立的机制，核心内涵是：发达国家通过提供资金和技术的方式，与发展中国家合作，在发展中国家实施具有温室气体减排效果的项目，项目所产生的温室气体减排量作为发达国家履行京都议定书所规定的一部分义务。通过与发达国家的合作途径，特别是国际碳交易，发展中国家可以获得有利于可持续发展的先进的环保技术以及资金，而发达国家也可以大幅度降低其在国内实现减排所需的高昂费用，实现发展中国家节能减排获得技术资金和发达国家在碳排放交易市场购买减排指标的双赢。

“黄金标准”（Gold Standard）是诸多减排标准的一种，是项目产生优质可信赖的减排额度的保证。

万州科华13.5MW水泥余热发电项目环境影响简介 Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District Environmental Impacts Non-technical Description

1 环境现状 Current Environmental Conditions

在水泥生产过程中，水泥窑头窑尾分别产生大量的废气，这些废气温度达到350℃左右。如果这些含有大量余热的废气直接对空排放，将造成较大的环境热污染。而实施本工程则可回收大量余热用于发电，不仅减少了对环境的热污染，还降低了以化石能源为主要燃料的华中电网的发电量，相应的减少了SO₂，NO_x和烟尘的排放以及固体废弃物的产生。

2 环境标准 Environmental Regulations

《环境空气质量标准》（GB3095-1996）二级
《污水综合排放标准》（GB8978-1996）一级
《城市区域环境噪声标准》（GB3096-93）2类标准

3 空气 Air Impacts

本项目为节能工程，采用纯低温余热发电技术，不增加新的大气污染源，而且通过余热发电系统的沉降作用，窑头、窑尾的粉尘排放量还将比技改前有所降低，更有利于提高收尘效率，降低粉尘的最终排放浓度和排放量。因此拟建工程对大气环境的影响是有利的。

4 水环境 Water Impacts

拟建工程新增生活污水量极小，现有生活废水处理设施完全可以容纳。化学处理废水、锅炉排污水采取综合沉淀处理。本工程新增废水的污染物浓度不高，污染物排放量较小，通过有效的措施治理后，可达到《污水综合排放标准》（GB8978-1996）一级标准限值，因此外排废水对水环境的影响不大。

5 噪声 Noise Impacts

本工程主要噪声污染源为动力设备（如汽轮机、发电机、水泵等），通过隔音后，其声源源强值在70dB左右。通过预测，拟建工程噪声源与现有工程、二期工程水泥粉磨车间声源叠加后，对西厂界噪声和环境敏感点噪声影响不大，预测值符合《工业企业厂界噪声标准》（GB12348-90）II类标准和《城市区域环境噪声标准》（GB3096-93）2类标准（昼间60dB、夜间50dB）。

6 固体废物 Waste Solid Impact

固体废物主要是余热锅炉的积灰和生活垃圾和机械过滤杂质和污泥，积灰年产生量14.1吨，清下后通过螺旋输送机回到生产线；生活垃圾年产生量1.95吨，机械过滤杂质和污泥年产生量1.05吨；集中收集后运到生活垃圾填埋场处置。所有的固体废物得到妥善处置后对环境的影响极小。

7 建议 Recommendation

- 加强职工培训，提高职工安全环境意识，防止安全事故的发生。
- 加强现有厂区的绿化工作。
- 定期对锅炉设备进行检修维护。

Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District

Project Name:

Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District

Name in local language:

万州科华13.5MW水泥余热发电项目

Host country: China

Region/State/Province: Chongqing

City/Town/Community: Wanzhou

Coordinates: 30°41'34"N 108°24'46"E

Scope: 01 Energy Industries (renewable), 04 Manufacturing industries

Standard: Gold Standard CDM

Gold Standard Eligible Category: A.2 Energy Efficiency

Methodologies: ACM0012

tCO₂e/a: 81,719

Starting date of the project activity: Unit I (4.5MW) started construction in October 2007, Unit II (9MW) will start construction in March 2009.

Starting date of the first crediting period: 1st June 2009

First Crediting period: 7 years

Short Description:

The proposed project applies for Gold Standard CDM. The project activity is a waste heat utilisation power generation project that will be implemented at the clinker production line at the cement factory of Chongqing Municipality Wanzhou Kehua Cement Co. Ltd. The waste heat shall be used as thermal energy for electricity generation, displacing part of the electricity requirement of cement production line from the Central China Power Grid (CCPG). The project developer plans to construct 4.5 MW and 9 MW captive power stations based purely on waste heat recovery from the 2,500t/d clinker line and the 5,000t/d clinker line respectively. This will lead to CO₂ emission reductions attributed to reduced electricity consumption from fossil fuel based power plants connected to the Central China Power Grid. After the construction is completed, the annual CO₂ emission reductions will reach 81,719t.

The project activity implies a series of sustainable development aspects including technological, environmental and social benefits. By substituting a part of the electricity supply from CCPG, the project activity will save fossil fuel sources and reduce GHGs emissions, e.g. CO₂, SO₂ and NO_x, thereby mitigating the negative impact that incurred by the excessive exploitation and depletion of natural resources like coal. Project activity also will provide working places for skilled labour and professionals in the region by offering direct and indirect employment for power plant construction and operation. It is firmly believed by the project participants that the project activity will promote sustainable economic and industrial growth in the long run, help conserving natural resources, and consequently contribute to a cleaner and healthier environment.

Contribution to Sustainable Development

Besides its contribution to climate change mitigation, the Project contributes to sustainable development in China as follows:

- Leaves from Feasibility Study Report of these two phases are provided as reference to the justification here. Please see following documents attached for details.
2.1-300087_Wanzhou_Cement_WHR_Contribution in Sustainable D and EI Description in FSR and EIA.pdf
- Asterisk * marks the indicators will be monitored in monitoring plan additionally to those monitored for ER calculation.

Component • Indicators	Score (-2 to +2)	Rational
<i>Local / Regional / Global Environment</i>		
• <i>Water quality and quantity</i>	0	The waste water sources of the Project Activity include the waste water from the cooling tower, the chemistry water treatment workshop, the periodic flashing of the boilers, etc. The waste water from project activity contains no toxic or poisoning materials, and is pre-treated and recycled, and the recycled ratio can reach 97.6%. From the waste water treatment proposal conducted by project owner, the waste water will be gathered in the preclarificator. After the precipitation, water could be recycled. And each year, the preclarificator will be cleaned; the precipitate could be utilized as raw material of cement. Therefore, the impact of the project activity on water environment will be insignificant and meet the nation standard “ <i>Integrated Wastewater Discharge Standard</i> ” (GB8978) Source: EIA Table 8-1, 11-1 and 11-2; FSR page 41~45
• <i>Air quality (emissions other than GHG)</i>	+1	Besides GHG emission reductions, implementation of the project also has other advantages over baseline scenario in terms of impacts on air quality. Electrostatic precipitators collect the dust from the SP and AQC exit gas in the absence of the project activity. Once the project activity is implemented, it is expected to lead to reductions in particles in the flue gas as the dust will be settled in SP boiler and AQC boiler before vented to electrostatic precipitator for further settlement. And it is expected to reduce the SO ₂ 1273t annually and NO _x emissions by reducing combustion of fossil fuel in Central China Power Grid after implementation of the project activity. Source: EIA Table 11-1 and 11-2; FSR page 41~45
• <i>Other pollutants (including, where relevant, toxicity, radioactivity, POPs, stratospheric ozone layer depleting gases)</i>	0	There is no significant difference between the project baseline and the project activity.
• <i>Soil condition (quality and</i>	+1	In the absence of project activity, the cement production factory uses the electricity from the

<i>quantity)</i>		power grid. In Central China Power Grid, most of the electricity is generated by coal; in this process waste solid is generated. But a waste heat recovery based power station would not have any significant solid waste generated. According to EIA, the quantity of waste solid generation is 17.1t/a in project activity and save coal 53028t/a, therefore in baseline scenario coal is used to generate electricity and waste solid (coal slag) production will at least reach 10000t/a. Source: EIA Table 8-1, 11-1 and 11-2; FSR page 41~45
• <i>Biodiversity (species and habitat conservation)</i>	0	As compared to the baseline, no significant change in biodiversity is expected since the project only takes place within the plant boundary, i.e. the factory site.
<i>Sub Total</i>	+2	
<i>Social Sustainability and Development</i>		
• <i>Employment (including job quality, fulfilment of labour standards)</i>	+1	The enterprise will pay more attention on the project activity, because it's a new technology, therefore the quality of the job will be improved, most of the work is automatic and controlled by computer, and the sophisticated monitoring data is also recorded by computer continuously. Compared with baseline, there is a big advance. Project manager and operators in the plant will learn new knowledge of sophisticated monitoring equipments and computer operations. Source: FSR page 59
• <i>Livelihood of the poor (including poverty alleviation, distributional equity, and access to essential services)</i>	+1	Wanzhou Ditric is a low developed place, the employment rate is less than 50% ¹ and the average annual income per capita is RMB 8540 in 2005 ² . The project will increase income to average 34200RMB per year for people involved. Source: CNKI Data Search, FSR page 57
• <i>Access to energy services</i>	+1	Chongqing, especially Wanzhou District has been in lack of power for years due to its fast economy development. Big amount of enterprises have to give up their investment plan in Wanzhou due to the lack of electricity, this also causes the increase of unemployment rate, furthermore at least 10 enterprises with huge quantity of electricity requirement are under construction ³ , therefore the situation of local grid is more and more serious. The project activity will add new capacity to grid and


¹ http://news.xinhuanet.com/focus/2004-03/19/content_1371783.htm

² http://number.cnki.net/show_result.aspx?searchword=%E4%B8%87%E5%B7%9E%E5%8C%BA%E4%BA%BA%E5%9D%87%E6%94%B6%E5%85%A5

³ http://news.xinhuanet.com/focus/2004-03/19/content_1371783.htm

		help improving electricity availability. Source: News form www.news.cn (Managed by government), FSR page 9
<ul style="list-style-type: none"> • <i>Human and institutional capacity (including empowerment, education, involvement, gender)</i> 	0	People involved are trained with skills for operation of the power generation facility and knowledge of Kyoto Protocol. This is the first time local people are organised to work on a project under the Kyoto Protocol. Success of the project will contribute a team with experience of waste heat recovery to Chinese cement industry.
<i>Sub Total</i>	+3	
<i>Economic and Technological Development</i>		
<ul style="list-style-type: none"> • <i>Employment (numbers)</i> 	+1	The project activity generates 65 employment opportunities during the project's construction and operation period. Preliminary design and feasibility study of the project also involved a lot of manpower. Project participants will monitor and record how much manpower demand is generated by construction and operation of the project. Source: FSR page 50~51
<ul style="list-style-type: none"> • <i>Balance of payments (sustainability)</i> 	0	All equipments of the proposed project are purchased from domestic manufactures. No import and export is involved in the project activity. Hence, compared with baseline scenario there is no significant difference in terms of balance of payments.
<ul style="list-style-type: none"> • <i>Technological self reliance (including project replicability, hard currency liability, institutional capacity, technology transfer)</i> 	0	Implementation of the project does not involve technology transfer. While the success of the project surely will encourage more clean production practice in cement production plants in China. Currently most of the cement production plants in China are still running with conventional technology and the waste heat is emitted into atmosphere directly without waste heat recovery. The proposed project will contribute in shifting the standard within the less developed cement industry in China.
<i>Sub Total</i>	+1	
<i>Total</i>	+6	

Annex III Attendants List and Signatures for Main LSC



当地利益相关方研讨会签到表
Attendance List of 2nd Round Local Stakeholder Consultation

项目名称	万州科华 13.5MW 水泥余热发电项目
Project Name	Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District
项目参与方	重庆市万州科华水泥有限公司 Chongqing Municipality Wanzhou Kehua Cement Co. Ltd
Project Participants	瑞士南极碳资产管理股份有限公司 South Pole Carbon Asset Management Ltd.
时间	2008年12月17日上午9:00至12:00
Time	9:00 a.m. – 12:00 a.m., 17th December 2008
地点	会议室
Venue	Meeting Room

签到表
Attendants and Signatures

姓名/职位 Name participant, job/position in the community	性别 Male/Female	单位/公司 Organisation (if relevant)	联系方式 Contact	被邀请方式 How to be invited	签字 Signature
陈彬仁	男	万州环保局	38561257	电话	陈彬仁
付可东	男	万州环保局	58541257	电话	付可东
陈之洪	男	三洲居委会	58247758	电话	陈之洪
邓礼彪	男	三洲村居民	13206277289	海报	邓礼彪
诺毅	男	三洲居民	13192320276	海报	诺毅
傅茂琦	女	员工	15870585126	电话	傅茂琦
魏光梅	女	员工	15870480802	电话	魏光梅
郑建兵	男	三洲居民	13896970155	电话	郑建兵


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Technoparkstrasse 1
8009 Zurich
Switzerland

Phone +41 44 633 79 70
Fax +41 44 633 74 33
info@southpolecarbon.com
www.southpolecarbon.com

姓名/职位 Name participant, job/position in the community	性别 Male/Female	单位/公司 Organisation (if relevant)	联系方式 Contact	被邀请方式 How to be invited	签字 Signature
李才学	男	三洲居委会	1502956980	海报	李才学
毛世河	男	三洲居委会	1382535708	海报	毛世河
魏建刚	男	三洲居委会	1389692606	海报	魏建刚
熊子伟	男	三洲居委会	1580682728	海报	熊子伟
孙少峰	男	三洲居委会	12996559204	电话	孙少峰
涂万江	男	三洲居委会	15823700239	电话	涂万江
孙少平	男	三洲居委会	15927891107	电话	孙少平
胡世勇	男	三洲居委会	13594402219	电话	胡世勇
李宝奇	男	员工	13638265969	电话	李宝奇
徐好祥	男	员工	15978916148	电话	徐好祥
向光华	男	员工	15923096219	电话	向光华
洪洪洪	男	员工	13596279308	电话	洪洪洪
何建强	男	三洲居委会	15025540295	电话	何建强
李思	男	员工	1363556553	电话	李思
叶国河	男	员工	1389691623	电话	叶国河
吴太全	男	员工	13638297811	电话	吴太全
李如东	男	员工	1598057098	电话	李如东

姓名/职位 Name participant, job/position in the community	性别 Male/Female	单位/公司 Organisation (if relevant)	联系方法 Contact	被邀请方式 How to be invited	签字 Signature
张明	男	三州村委会	1508436028	登门拜访	张明
张纪伦	男	三州村委会	33038360987	登门拜访	张纪伦
李奇兵	男	三州村委会	15923433330	登门拜访	李奇兵

Attendants List and Signatures for Additional LSC



当地利益相关方研讨会签到表
Attendance List of 2nd Round Local Stakeholder Consultation

项目名称	万州科华13.5MW风电余热发电项目
Project Name	Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District
项目参与方	重庆市万州科华水泥有限公司 Chongqing Municipality Wanzhou Kehua Cement Co. Ltd
Project Participants	瑞士南纬资产管理股份有限公司 South Pole Carbon Asset Management Ltd.
时间	2009年2月15日上午 9:00至12:00
Time	9:00 a.m. - 12:00 a.m., 5th February 2008
地点	会议室
Venue	Meeting Room


签到表
Attendants and Signatures

姓名/职位 Name participant, job/position in the community	性别 Male/Female	单位/公司 Organisation (if relevant)	联系方式 Contact	被邀请方式 How to be invited	签字 Signature
陈祥林	男	新田镇小合村民	15023450785	居委会 电话	陈祥林
秦兴和	男	新田镇小合村民	1359446670	居委会 电话	秦兴和
张建平	男	新田镇小合村民	023-58520906	电话	张建平
程学伟	男	新田镇小合村民	023-6989739	电话	程学伟

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2000, St. John

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Fax +41 41 83 14 33
www.southpole.com

Annex IV Document list and Receipt with Signature (Sample)



附件清单及回执 Documents List and Receipt:

1	万州科华 13.5MW 水泥余热发电项目非技术性简介 Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District Non-technical Description
2	万州科华 13.5MW 水泥余热发电项目环境影响简介 Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District Environmental Impacts Non-technical Description
3	万州科华 13.5MW 水泥余热发电项目环境社会影响核对表 (黄金标准手册附录 E) Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District Consultation Checklist (Appendix E of the Gold Standard Voluntary Emission Reductions Manual for Project Developers)

签字(Your Signature Here)

姓名: 冉贵斌 Name: _____

日期: 12月17日 Date: _____

3

Annex V Sample of Questionnaire

Meeting in 17th December 2008

万州科华 13.5MW 水泥余热发电项目环境/社会影响核对表（黄金标准手册附录 E）
Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District Consultation Checklist (Appendix E of the Gold Standard Manual for Project Developers)

说明 Introduction:

- 此表应被用于利益相关方研讨会并由利益相关方填写;
- 表格的第一栏指参照对象为: 有或没有此项目, 当地情况的对比;
- 请就您认为存在的环境/社会影响填写, 或留空白表示您认为不存在相关的影响。

日期 Date: 2008年 12 月 17 日
年龄 Age: 52 性别 Gender: 男 职业 Occupation: 工人 签名 Signature: 李宝杰

环境影响 Environmental Impacts	是/否, 请简单阐述 Yes/No? Briefly describe	是否可能严重影响当地环境, 是/否? 为什么? Is this likely to result in a significant effect? Yes/No? - Why?
1. 项目工程、运营或项目结束是否对自然资源和生态系统造成影响, 比如土地、水、森林、动物栖息地、原材料供应; 特别是不可再生资源 and 稀少资源? Will construction, operation or decommissioning of the Project use or affect natural resources or ecosystems, such as land, water, forests, habitats, materials or, especially any resources which are non-renewable or in short supply?	否	否
2. 项目是否使用、存放、运输、排放或处理对环境有害物质 (包括固体废物)? Will the Project involve use, storage, transport, handling, production or release of substances or materials (including solid waste) which could be harmful to the environment?	否	否
3. 项目是否向大气排放污染物、有潜在危险或有毒物质? Will the Project release pollutants or any hazardous, toxic or noxious substances to air?	否	否
4. 项目是否制造噪音、震动、光热源污染或电磁辐射? Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation?	否	否
5. 项目是否因向土地、地上/地下水、海/河排放废物而导致污染? Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?	否	否
6. 项目周围是否有国际、国家或地区立法保护的生态保护区? 是否受项目影	否	否

<p>响?</p> <p>Are there any areas on or around the location which are protected under international or national or local legislation for their ecological value, which could be affected by the project?</p>	否	否
<p>7. 项目附近是否有重要的或者脆弱的生态区域? 比如湿地、河道或河流、海滨地区、山地、森林或林地。是否受项目影响?</p> <p>Are there any other areas on or around the location, which are important or sensitive for reasons of their ecology, e.g. wetlands, watercourses or other water bodies, the coastal zone, mountains, forests or woodlands, which could be affected by the project?</p>	否	否
<p>8. 项目是否影响附近受保护、重要的或脆弱的动植物品种的活动? 比如繁殖、筑巢、觅食、休息、过冬或迁徙?</p> <p>Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the project?</p>	否	否
<p>9. 附近是否有内陆、沿海、地下或海水收到项目影响?</p> <p>Are there any inland, coastal, marine or underground waters on or around the location which could be affected by the project?</p>	否	否
<p>10. 项目位置是否收自然灾害威胁而影响环境? 比如地震、地陷、滑坡、侵蚀、洪水? 或受极端天气威胁而影响环境, 比如气温异常反常、大雾、烈风?</p> <p>Is the project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present environmental problems?</p>	否	否
<p>社会经济及卫生影响</p> <p>Socioeconomic and Health Impacts</p>	是/否, 请简单阐述	是否可能严重影响当地环境。是/否? 为什么?
<p>11. 项目是否会使用、储存、运输、处理、生产或排放对人体有害的或可能引起健康风险的物质物料(包括固体废物)?</p>	否	否

<p>Will the Project involve use, storage, transport, handling, production or release of substances or materials (including solid waste) which could be harmful to human health or raise concerns about actual or perceived risks to human health?</p>	否	否
<p>12. 项目是否排放污染或其他可能影响人体健康的有毒物质到大气?</p> <p>Will the Project release pollutants or any hazardous, toxic or noxious substances to air that could adversely affect human health?</p>	否	否
<p>13. 项目是否制造可能影响人体健康的噪音、震动、光害、热能或电磁辐射?</p> <p>Will the Project release pollutants or any hazardous, toxic or noxious substances to air that could adversely affect human health?</p>	否	否
<p>14. 项目是否排放可能影响人体健康的污染到土地、地表水、地下水、海岸水或海水?</p> <p>Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea that could adversely affect human health?</p>	否	否
<p>15. 项目建设和运行期是否可能发生影响人体健康的意外事件?</p> <p>Will there be any risk of accidents during construction or operation of the Project which could affect human health?</p>	否	否
<p>16. 项目会带来社会变化? 比如, 人口、传统生活方式或就业?</p> <p>Will the Project result in social changes, for example, in demography, traditional lifestyles, employment?</p>	<p>是: 可能增加本地就业</p>	<p>否: 对当地经济有积极促进作用</p>
<p>17. 项目附近是否存在不受国际或当地政策保护, 而又比较重要的风景、具历史人文价值的地点? 这些地点会受到项目影响?</p> <p>Are there any areas on or around the location, protected or not under international or national or local legislation, which are important for their landscape, historic, cultural or other value, which could be affected by the project?</p>	否	否
<p>18. 附近是否有公共通道或设施因为项目的建设运行而变得拥挤或不便?</p> <p>Are there any transport routes or facilities on or around the location which are used by the public for access to recreation or other facilities and/or are susceptible to congestion, which could be affected by the project?</p>	否	否

Comments of question No.16 in English in this page:
 Left Blank: Yes, the job opportunity could be increased
 Right Blank: No, There are positive impacts for local economy

19. 项目是否处在一个容易被很多人看见的地方? Is the project in a location where it is likely to be highly visible to many people?	否	否
20. 项目附近是否有受到项目影响的住宅、花园、其他私人用地、工商业、娱乐、公众开放地区、社区设施、农田、森林、旅游点、矿区或采石场? Are there existing or planned land uses on or around the location e.g. homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying which could be affected by the project?	否	否
21. 项目附近是否有受到项目影响的人口高密度地区或敏感的地区? 比如医院、学校、宗教场所、社区设施? Are there any areas on or around the location which are densely populated or built-up, or occupied by sensitive uses e.g. hospitals, schools, places of worship, community facilities, which could be affected by the project?	否	否
22. 项目附近是否有受到项目影响的重要地区、高质或稀有资源区? 比如地下、地上水源、森林、农业、海产、旅游和矿物区? Are there any areas on or around the location which contain important, high quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries, tourism and minerals, which could be affected by the project?	否	否
23. 项目位置是否容易受到地震、沉降、泥石流、腐蚀、洪水或其他极端气候的影响而成为社会经济问题? 比如气温反常、大雾、强风等。 Is the project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present socioeconomic problems?	否	否

其他任何意见 Other Comments:

Meeting in 5th February 2009

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万州科华13.5MW水泥余热发电项目环境/社会影响核对表（黄金标准手册附录E）
Wanzhou Kehua Cement WHR to 13.5MW Electricity Project in Wanzhou District Consultation Checklist (Appendix E of the Gold Standard Manual for Project Developers)

说明 Introduction:

- 此表应被用于利益相关方研讨会并由利益相关方填写；
- 表格的第一栏指参照对象为：有或没有此项目，当地情况的对比；
- 请就您认为存在的环境/社会影响填写，或留空白表示您认为不存在相关的影响。

日期 Date: 2009年 2月 5日
年龄 Age: 性别 Gender: 男 职业 Occupation: 村民 签名 Signature: 陈祥林

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south pole

环境影响 Environmental Impacts	是/否，请简单阐述 Yes/No? Briefly describe	是否可能严重影响当地环境。是/否？为什么？ Is this likely to result in a significant effect? Yes/No? - Why?
1. 项目工程、运营或项目结束是否对自然资源和生态系统造成影响，比如土地、水、森林、动物栖息地、原材料供应；特别是不可再生资源 and 稀少资源？ Will construction, operation or decommissioning of the Project use or affect natural resources or ecosystems, such as land, water, forests, habitats, materials or, especially any resources which are non-renewable or in short supply?	否	否
2. 项目是否使用、存储、运输、排放或处理对环境有害物质（包括固体废物）？ Will the Project involve use, storage, transport, handling, production or release of substances or materials (including solid waste) which could be harmful to the environment?	否	否
3. 项目是否向大气排放污染物，有潜在危险或有毒物质？ Will the Project release pollutants or any hazardous, toxic or noxious substances to air?	否	否
4. 项目是否制造噪音、震动、光热辐射或电磁辐射？ Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation?	否	否
5. 项目是否因向土地、地上/地下水、海/河排放废物而导致污染？ Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?	否	否
6. 项目周围是否有国际、国家或地区立法保护的生态保护区？是否受项目影响？	否	否

2

<p>Are there any areas on or around the location which are protected under international or national or local legislation for their ecological value, which could be affected by the project?</p> <p>7. 项目附近是否有重要的或者脆弱的生态区域? 比如湿地、河道或河流、海湾地区、山地、森林或林地, 是否受项目影响?</p>	否	否
<p>Are there any other areas on or around the location, which are important or sensitive for reasons of their ecology, e.g. wetlands, watercourses or other water bodies, the coastal zone, mountains, forests or woodlands, which could be affected by the project?</p> <p>8. 项目是否影响附近受保护、重要的或脆弱的动植物品种的活动? 比如繁殖、筑巢、觅食、休息、过冬或迁徙?</p>	否	否
<p>Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the project?</p> <p>9. 附近是否有内陆、沿海、地下或海水受到项目影响?</p>	否	否
<p>Are there any inland, coastal, marine or underground waters on or around the location which could be affected by the project?</p> <p>10. 项目位置是否受自然灾害威胁而影响环境? 比如地震、地陷、滑坡、侵蚀、洪水? 或受极端天气威胁而影响环境, 比如气温异常反常、大雾、烈风?</p>	否	否
<p>Is the project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present environmental problems?</p>	是/否, 请简单阐述	是否可能严重影响当地环境。是/否? 为什么?
<p>社会经济及卫生影响 Socioeconomic and Health Impacts</p>		
<p>11. 项目是否会使用、储存、运输、处理、生产或排放对人体有害的或可能引起健康风险的物质物料 (包括固体废物)?</p> <p>Will the Project involve use, storage, transport, handling, production or release of substances or</p>	否	否

<p>materials (including solid waste) which could be harmful to human health or raise concerns about actual or perceived risks to human health?</p> <p>12. 项目是否排放污染或其他可能影响人体健康的有毒物质到大气?</p> <p>Will the Project release pollutants or any hazardous, toxic or noxious substances to air that could adversely affect human health?</p>	否	否
<p>13. 项目是否制造可能影响人体健康的噪音、震动、光源、热能或电磁辐射?</p> <p>Will the Project release pollutants or any hazardous, toxic or noxious substances to air that could adversely affect human health?</p>	否	否
<p>14. 项目是否排放可能影响人体健康的污染到土地、地表水、地下水、海岸水或海水?</p> <p>Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea that could adversely affect human health?</p>	否	否
<p>15. 项目建设和运行期是否可能发生影响人体健康的意外事件?</p> <p>Will there be any risk of accidents during construction or operation of the Project which could affect human health?</p>	否	否
<p>16. 项目是否会带来社会变化? 比如, 人口, 传统生活方式或就业?</p> <p>Will the Project result in social changes, for example, in demography, traditional lifestyles, employment?</p>	否	否
<p>17. 项目附近是否存在不受国际或当地政策保护, 而又比较重要的风景、具历史人文价值的地点? 这些地点会受到项目影响?</p> <p>Are there any areas on or around the location, protected or not under international or national or local legislation, which are important for their landscape, historic, cultural or other value, which could be affected by the project?</p>	否	否
<p>18. 附近是否有公共交通道路或设施因为项目的建设运行而变得拥挤或不便?</p> <p>Are there any transport routes or facilities on or around the location which are used by the public for access to recreation or other facilities and/or are susceptible to congestion, which could be affected by the project?</p>	否	否
<p>19. 项目是否处在一个容易被很多人看见的地方?</p>	否	否

<p>Is the project in a location where it is likely to be highly visible to many people?</p> <p>20. 项目附近是否有受到项目影响的住宅、花园、其他私人用地、工商业、娱乐、公众开放地区、社区设施、农田、森林、旅游点、矿区或采石场？</p> <p>Are there existing or planned land uses on or around the location e.g. homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying, which could be affected by the project?</p>	否	否
<p>21. 项目附近是否有受到项目影响的人口高密度地区或敏感的地区？比如医院、学校、宗教场所、社区设施？</p> <p>Are there any areas on or around the location which are densely populated or built-up, or occupied by sensitive uses e.g. hospitals, schools, places of worship, community facilities, which could be affected by the project?</p>	否	否
<p>22. 项目附近是否有受到项目影响的重要地区、高质量稀有资源区？比如地下、地上水源、森林、农业、矿产、旅游和矿物区？</p> <p>Are there any areas on or around the location which contain important, high quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries, tourism and minerals, which could be affected by the project?</p>	否	否
<p>23. 项目位置是否容易受到地震、沉降、泥石流、腐蚀、洪水或其他极端气候的影响而成为社会经济问题？比如气温反常、大雾、强风等。</p> <p>Is the project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present socioeconomic problems?</p>	否	否

其他任何意见 Other Comments:

Annex VI Summary of the responses to the questionnaires.

Environmental Impacts	Yes/No/?. Briefly describe	Is this likely to result in a significant effect? Yes/No/? – Why?
1. Will construction, operation or decommissioning of the Project use or affect natural resources or ecosystems, such as land, water, forests, habitats, materials or, especially any resources which are non-renewable or in short supply?	32 No 0 Yes	32 No 0 Yes
2. Will the Project involve use, storage, transport, handling, production or release of substances or materials (including solid waste) which could be harmful to the environment?	32 No 0 Yes	32 No 0 Yes
3. Will the Project release pollutants or any hazardous, toxic or noxious substances to air?	32 No 0 Yes	32 No 0 Yes
4. Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation?	32 No 0 Yes	32 No 0 Yes
5. Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?	32 No 0 Yes	32 No 0 Yes
6. Are there any areas on or around the location which are protected under international or national or local legislation for their ecological value, which could be affected by the project?	32 No 0 Yes	32 No 0 Yes
7. Are there any other areas on or around the location, which are important or sensitive for reasons of their ecology, e.g. wetlands, water-courses or other water bodies, the coastal zone, mountains, forests or woodlands, which could be affected by the project?	32 No 0 Yes	32 No 0 Yes
8. Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the project?	32 No 0 Yes	32 No 0 Yes
9. Are there any inland, coastal, marine or underground waters on or around the location which could be affected by the project?	32 No 0 Yes	32 No 0 Yes
10. Is the project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present environmental problems?	30 No 0 Yes	30 No 0 Yes
Socioeconomic and Health Impacts	Yes/No/?. Briefly describe	Is this likely to result in a significant effect?

		Yes/No/? – Why?
11. Will the Project involve use, storage, transport, handling, production or release of substances or materials (including solid waste) which could be harmful to human health or raise concerns about actual or perceived risks to human health?	32 No 0 Yes	32 No 0 Yes
12. Will the Project release pollutants or any hazardous, toxic or noxious substances to air that could adversely affect human health?	32 No 0 Yes	32 No 0 Yes
13. Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation that could adversely affect human health?	32 No 0 Yes	32 No 0 Yes
14. Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea that could adversely affect human health?	32 No 0 Yes	32 No 0 Yes
15. Will there be any risk of accidents during construction or operation of the Project which could affect human health?	32 No 0 Yes	32 No 0 Yes
16. Will the Project result in social changes, for example, in demography, traditional lifestyles, employment?	12 No 20 Yes All stakeholders who put 'yes' in this blank believe the WHR project has positive impact on employment, job opportunities will increase.	22 No 0 Yes
17. Are there any areas on or around the location, protected or not under international or national or local legislation, which are important for their landscape, historic, cultural or other value, which could be affected by the project?	32 No 0 Yes	32 No 0 Yes
18. Are there any transport routes or facilities on or around the location which are used by the public for access to recreation or other facilities and/or are susceptible to congestion, which could be affected by the project?	32 No 0 Yes	32 No 0 Yes
19. Is the project in a location where it is likely to be highly visible to many people?	32 No 0 Yes	32 No 0 Yes
20. Are there existing or planned land uses on or around the location e.g. homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying which could be affected by the project?	32 No 0 Yes	32 No 0 Yes
21. Are there any areas on or around the location which are densely populated or built-up, or occupied by sensitive uses e.g. hospitals, schools, places of worship, community facilities, which could be affected by the project?	32 No 0 Yes	32 No 0 Yes

22. Are there any areas on or around the location which contain important, high quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries, tourism and minerals, which could be affected by the project?	32 No 0 Yes	32 No 0 Yes
23. Is the project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present socioeconomic problems?	30 No 0 Yes	30 No 0 Yes

From above summary and from the discussion it can be concluded that no additional issues were raised by the stakeholders. The technology of the proposed project brings only advantages in the perception of the stakeholders.

Annex VII Photos of the 2nd Round Local Stakeholder Consultation main Meeting on 19 December 2008







Photos of the 2nd Round Local Stakeholder Consultation additional Meeting on 5th February 2009

