

# 全球责任 和谐共赢

Global Responsibility & All-win Harmony



## 中国对外承包工程企业 社会责任优秀实践案例集

Collection of Best Corporate Social Responsibility Practices  
of Chinese International Contractors



中国对外承包工程商会  
China International Contractors Association

# 全球责任 和谐共赢

## Global Responsibility & All-win Harmony

中国对外承包工程企业社会责任优秀实践案例集

Collection of Best Corporate Social Responsibility Practices of Chinese  
International Contractors

# 目录

<b>1</b>	<b>社会责任管理</b>	<b>02</b>
1.1	构建社会责任管理体系——中国港湾工程有限责任公司	03
1.2	以社会责任危机管控促进良性发展——中铁三局集团有限公司	07
<b>2</b>	<b>质量安全—打造精品工程</b>	<b>10</b>
2.1	文化建设造就千万安全工时奇迹——中国港湾工程有限责任公司	11
2.2	优化管理流程 打造双赢样板——中国海外工程有限责任公司	14
2.3	优质工程改善居民生活——北京建工集团有限责任公司	17
<b>3</b>	<b>员工责任—成就发展动力</b>	<b>20</b>
3.1	立足长远 推行国际化员工责任——中石化南京工程有限公司	21
3.2	探索员工属地化管理新模式——上海外经集团控股有限公司	24
3.3	全方位关爱海外员工心理健康——中信建设有限责任公司	27
3.4	多层次提升员工素质——中国土木工程集团有限公司	30
3.5	大胆启用当地员工——中国河南国际合作集团有限公司	34
<b>4</b>	<b>商业伙伴—坚持共同发展</b>	<b>37</b>
4.1	开创投融资带动总承包全新模式——中国建筑股份有限公司	38
4.2	助力分包商提升技术水平——中国水电顾问集团昆明勘测设计研究院	41
<b>5</b>	<b>环境保护—追求绿色运营</b>	<b>44</b>
5.1	全周期生物多样性保护——中国路桥工程有限责任公司	45
5.2	主动引导业主关注环境保护——中地海外建设集团有限公司	48
5.3	推进清洁能源替代——中国机械进出口（集团）有限公司	51
5.4	融入当地，打造生态工程——中国水利电力对外公司	54
<b>6</b>	<b>社区关系—创造和谐共赢</b>	<b>57</b>
6.1	系统化履行社区责任——中国有色矿业有限公司	58
6.2	不仅是一条路——中国建筑股份有限公司	61
6.3	多方沟通 妥善处理工程征地补偿——中国水利水电建设股份有限公司	64
6.4	扶持海外农业 追求共赢格局——中信建设有限责任公司	67

# Contents

<b>1</b>	<b>Social Responsibility Management</b>	<b>02</b>
1.1	Establishing a social responsibility management system – China Harbor Engineering	03
1.2	Promoting benign development by controlling social responsibility crisis – China Railway No.3 Group	07
<b>2</b>	<b>Quality and Safety – To Create High Quality Projects</b>	<b>10</b>
2.1	Ten million man-hours of safe production – China Harbor Engineering (CHEC)	11
2.2	Optimizing management procedure to create a win-win model – China Overseas Engineering Group	14
2.3	Quality projects improve livelihoods– Beijing Construction Engineering Group Co., Ltd.	17
<b>3</b>	<b>Responsibility for Employees – Helping Provide Development Impetus</b>	<b>20</b>
3.1	Promoting internationalization of employees – Sinopec Nanjing Engineering & Construction Incorporation	21
3.2	Exploring new modes to better manage local staff – CHINA SFECO GROUP	24
3.3	Meticulous care for mental health of overseas employees – CITIC Construction	27
3.4	Enhancing employees quality in various ways– China Civil Engineering Construction Corporation	30
3.5	Driving local employment through localized recruitment– China Henan International Cooperation Group	34
<b>4</b>	<b>Business Partners – For Mutual Development</b>	<b>37</b>
4.1	Financing and investment drive contracting – China State Construction Engineering	38
4.2	Assisting local sub-contractors in technology development– Hydrochina Kunming Engineering	41
<b>5</b>	<b>Environmental Protection – Pursuit of Green Operations</b>	<b>44</b>
5.1	Whole life-cycle biodiversity conservation – China Road and Bridge Corporation	45
5.2	Promoting the environmental protection awareness of proprietors – CGCOC GROUP	48
5.3	Advocating the application of clean energy – China National Machinery Import & Export Corporation	51
5.4	Forging eco-projects with local experts– China International Water & Electric Corporation	54
<b>6</b>	<b>Community Relationship – Striving for Harmony and Win-Win Outcomes</b>	<b>57</b>
6.1	Fulfilling social responsibilities in a systematic way– China Nonferrous Metal Mining	58
6.2	Multiple Ways Forward – China State Construction Engineering Corporation Limited	61
6.3	Communicating multilaterally to tackle land requisition and compensation issues– SINOHYDRO Group	64
6.4	Supporting overseas agricultural projects and seeking win-win results – CITIC Construction	67



# 1

## 社会责任管理

### Social Responsibility Management

## 构建社会责任管理体系 ——中国港湾工程有限责任公司

### Establishing a social responsibility management system – China Harbor Engineering

#### 1.1

**摘要：**公司建立社会责任管理体系，制定企业履行社会责任方案，将社会责任融入战略和日常管理，为员工履行社会责任指明了方法，营造了良好的履责氛围。

**Abstract:** The Company established a social responsibility management system, worked out a plan for the performance of its corporate social responsibilities, integrated those social responsibilities into corporate strategy and daily management, specified the methods of implementation and created an atmosphere that facilitated the performance of corporate social responsibilities by employees.

中国港湾工程有限责任公司（CHEC）是中国交通建设股份有限公司的全资子公司，代表中国交建在国际工程市场开展业务，目前在世界各地设有 49 个驻外机构，业务涵盖 70 多个国家和地区，在建项目合同额约近百亿美元，全球从业人员超过 8000 人。“CHEC”已成为国际工程行业美誉度很高的知名品牌。

As a wholly-owned subsidiary of China Communications Construction Co., Ltd. (CCCC), China Harbor Engineering Co., Ltd. (CHEC) conducts operations in the international engineering market on behalf of CCCC. At present, CHEC has 49 offices overseas and engages in operations throughout the world, conducting business in more than 70 countries and regions. The Company employs over 8,000 staff across the globe and has ongoing construction contracts worth nearly 10 billion dollars. The CHEC brand is now widely-renowned and respected within the international engineering industry.

### 一、案例背景

中国港湾通过分析自身情况和外部环境，认识到社会责任是实现可持续发展的重要保障和路径选择，积极将企业社会责任核心理念植入公司的使命、愿景、价值观和战略之中，从企业生存的高度来看待企业社会责任，努力向承担社会责任的企业公民转型。

#### I. Case background

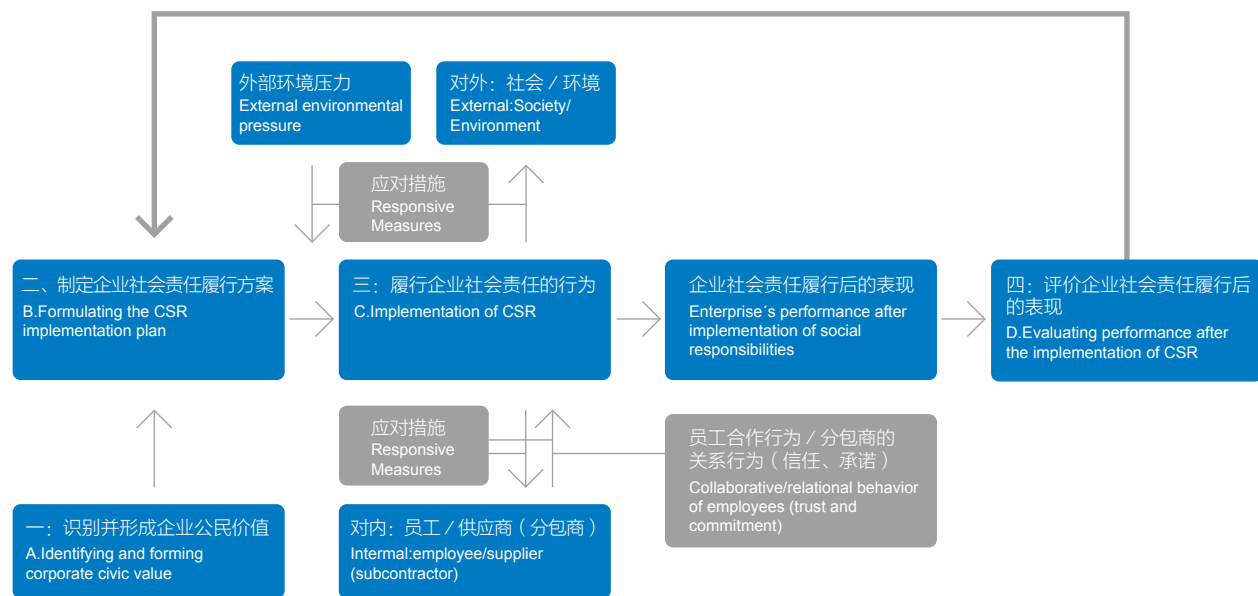
After analyzing its internal circumstances and external environment, CHEC realized that a social responsibility effort would be an important path for realizing and ensuring sustainable development. Therefore, the Company actively integrated the core concepts of corporate social responsibility into the corporate mission, vision, values and strategy, and came to treat corporate social responsibility as integral to the enterprise's existence. The company thus made great efforts to transform itself into a good corporate citizen that undertakes social responsibilities

### 二、措施

公司以“为利益相关方创造更多价值”为使命，根据利益相关方的价值期望，通过识别、规划、行动、评价和改善，构架完整的社会责任闭环管理模式，在循环积累中不断提升。

#### II. Measures

Taking the “creation of greater value for stakeholders” as its mission, the Company established a complete social responsibility closed-loop management model through identifying, planning, acting, evaluating and improving in accordance with the value expectations of stakeholders and has continuously improved this model through repeated cycles and accumulated experience.



中国港湾企业社会责任体系建设

Figure 1 Construction of the corporate social responsibility system of CHEC

## 识别并形成企业公民价值

公司基于“感知责任、优质回报、合作共赢”的价值观，识别出主要利益相关方及其价值期望，形成企业公民价值，并将其融入企业战略。公司在“十二五”战略中明确提出履行社会责任的目标：全员理解，管理有效，持续改进；守法合规，透明道德，知责回报；保护环境，生态安全，共同发展。为更好地落实和履行企业社会责任，公司将社会责任理念传递给每个员工，使其成为公司文化和管理的一部分，让社会责任变成每个员工自觉的日常行为。

## 制定企业社会责任履行方案

在企业公民价值指导下，结合业务特点和经营环境，同时依据公司在工程质量、环境、职业健康安全、安全生产、节能减排等方面的相关规章制度，公司制定了工程质量与安全、员工权益与职业发展、客户（业主）权益、供应链管理、公平竞争、环境保护以及社区参与和发展七个方面的关于履行企业社会责任的方案。

### Identifying and forming corporate civic value

Base on the value of “perception of responsibilities, high returns and win-win cooperation”, the Company identified the principal stakeholders and their value expectations, formulated the enterprise’s civic value, and incorporated it into the enterprise’s strategy. In its “Twelfth Five-Year Plan”, the Company clearly laid out its CSR goals: understanding by the entire staff, efficient management, continuous improvement, abidance by relevant laws and rules, transparency and ethical behavior, understanding responsibilities and repaying, environmental protection, ecological security, and common development. To better perform its CSR, the Company instilled the concept within every employee, making it an inalienable part of corporate culture and management by making the implementation of CSR a self-conscious and routine behavior for every employee.

### Formulating the CSR implementation plan

Under the guidance of the identified corporate civic value, with its business characteristics and operating environment, and in accordance with the relevant rules and regulations regarding project quality, environmental protection, occupational health & safety, production safety, energy-conservation and emissions reduction, the Company formulated a plan for fulfilling CSR in seven aspects, including project quality and safety, employee rights, interests and career development, client

## 履行企业社会责任的行为

根据企业社会责任履行方案，公司对外积极履行环境和社会责任，对内主动保障员工 / 供应商（分包商）合法权益。

### 应履行以下 7 个方面的企业社会责任：

**工程质量与安全：**工程质量管理机构负责工程质量的日常管理，承担相应的质量责任，创新施工工艺和流程，提高质量；负责工程安全管理工作，若发生安全事故，按安全计划应急措施的规定进行处理并及时报告。

**员工权益与职业发展：**保障中外员工合法权益，保证员工的薪酬福利；对员工进行安全施工培训，提高员工职业风险意识；指导员工规划职业生涯。

**业主权益：**提供给业主真实、公正的承包工程服务信息；及时与业主沟通工程计划和施工工艺。制订了《信息交流管理程序》、《顾客满意度管理程序》，明确了内部信息和外部信息的沟通流程和内容，以及项目执行、维修期内和维修期过后对顾客满意度进行测评的情况。

**供应链管理：**保障分包商 / 供应商的合法权益；预防和杜绝采购 / 分包过程中的商业贿赂；对供应商 / 分包商明确社会责任要求；与分包商 / 供应商建立信任的合作关系。

**公平竞争：**根据法律规定和合同约定，提高企业经营透明度，杜绝不正当竞争行为。

**环境保护：**依据环境保护相关规定，建造绿色工程，保护所在地生态环境。积极开发利用可替代资源，用于工程建设。在工程建设中积极提高工程废弃物的再利用和资源化水平，发展循环经济。

**社区参与和发展：**施工前考察项目所在社区，了解社区需求；结合项目实际，为社区提供就业岗位；尊重和保护社区文化传统和遗产；支持社区教育发展；支持社区慈善事业发展。

(proprietors) rights and interests, supply chain management, fair competition, environmental protection, and community involvement and development.

### Implementation of CSR

In accordance with the corporate social responsibility plan, the Company actively performs its environmental and social responsibilities and actively seeks to guarantee the legal rights and interests of employees/suppliers (subcontractors).

### Fulfilling CSR in seven aspects:

**Project quality and safety:** The project quality management division is responsible for the day to day management of project quality and thus has corresponding responsibilities. It is to engage in innovation of construction process and improve quality; it is also responsible for project safety management. All safety incidents are to be dealt with in accordance with the emergency measures laid out in the safety plan and promptly reported.

**Employee rights, interests and career development:** The Company provides guarantees for the legal rights and interests of both Chinese and local employees and seeks to ensure the provision of their salary and employment benefits. The Company conducts construction safety training and increases employees' occupational risk awareness. The Company provides guidance for employee career planning.

**Client rights and interests:** The Company provides the clients (proprietors) with accurate and candid information about project. It provides and timely communicates with clients (proprietors) in regards to project plans and construction technologies. The Company also formulates *Information Exchange Management Procedures* and *Customer Satisfaction Management Procedures*, which define the content of communications and the processes for the flow of international information and external information. The Company also established a process for the testing and evaluation of customer satisfaction after project implementation, during and after the warranty period.

**Supply chain management:** The Company provides guarantees for the legal rights and interests of subcontractors/suppliers; prevents and prohibits commercial bribes in the purchasing/subcontracting process; clarifies social responsibility requirements with suppliers/subcontractors; and establishes relationships of trust and cooperation with subcontractors/suppliers.

**Fair competition:** In accordance with legal stipulations and contractual agreements, the Company seeks to increase its operational transparency and insulate itself from unjust competition.



## 评价企业社会责任履行后的表现

在履行社会责任的基础上，公司定期开展评估工作，并依据评估结果对社会责任履行方案进行修改和完善。公司将社会责任履行中的成功案例分享到公司其他部门或项目；对社会责任履行较为薄弱的方面，找出原因并制定相应的提升计划。

## 三、成效

通过社会责任体系建设，公司更加清晰地将社会责任融入到战略和日常管理之中，提升了社会责任管理水平，增强了可持续发展能力；社会责任体系建设还为广大员工履行社会责任明确了方向，在切实保障人权以及员工的合法权益的同时，也为其他利益相关方创造了更多的价值，为公司营造了良好的内、外部经营环境，最终实现企业和社会的和谐发展。

## 四、展望

公司将继续坚持“感知责任、优质回报、合作共赢”的价值观，在实践中更好地将社会责任工作融入企业管理，不断改进和完善社会责任体系建设，努力践行“为利益相关方创造更多价值”的企业使命，走出一条具有港湾特色的社会责任管理模式。

**Environmental protection:** In accordance with the relevant stipulations of the Company in regards to environmental protection, the Company carries out projects in an environmentally-friendly way and preserves the ecological environments of the localities within which it operates. Company has developed and used alternative resources and improved the recycling of project waste to develop a circular economy.

**Community participation and development:** Investigation should be conducted before construction begins to get to know the demands of the localities; provide suitable jobs related to the project for local residents; respect and preserve cultural traditions and legacies; support local education and charity.

### Evaluating performance after the implementation of CSR

The Company regularly conducts evaluations and modifies implementation in accordance with the results of the evaluations on CSR performance and modifies implementation plan in accordance with the results of the evaluations. Successful cases are used as a reference for other departments or projects; figure out reasons for weak links and formulate a plan for improvement as reference for other departments or projects of the Company.

## III.Effect

Through the establishment of a CSR system, the Company is able to accurately integrate CSR into its strategic and routine management practices, raise the level of its social responsibility management and enhance the enterprise's long-term profitability as well as its capabilities for sustainable development. At the same time, the employees are able to have a clear guide for the performance of their social responsibilities. In such a way, more value can be created for other stakeholders while the human rights and legal rights and interests of employees can also be practically protected, thus bringing about a favorable internal and external operational environment for the Company to eventually realize the harmonious development of both the enterprise and society.

## IV.Prospects

By adhering to the values of “perception of responsibilities, high returns and win-win cooperation”, the Company is able to better integrate social responsibility into enterprise management practices, continuously improve and perfect the social responsibility system, strive to fulfill the mission of “creating more value for stakeholders” and follow a model of social responsibility management that reflects the specific characteristics of CHEC.

# 以社会责任危机管控促进良性发展 ——中铁三局集团有限公司

## Promoting benign development by controlling social responsibility crisis – China Railway No.3 Group

1.2

**摘要：**公司重视企业社会责任危机管理，制定社会责任危机管控预案，建立标准化的危机处理流程和预警机制，注重危机处理过程中的利益相关方沟通，通过设立对外新闻发言人，有效控制危机事件的传播，维护公司良好形象。

**Abstract:** The Company attached great importance to corporate social responsibility crisis management, worked out a social responsibility crisis control plan, established a standardized crisis handling process and warning mechanism, emphasized communication among stakeholders during crisis handling, and effectively controlled critical event communication and maintained the Company's favorable image via a spokesman.

中铁三局集团有限公司的前身是铁道部第三工程局，成立于 1952 年，2000 年 11 月改制为有限责任公司，2007 年作为世界“双五百强”中国中铁股份有限公司的全资子公司同步在沪港上市。公司主要从事交通基础设施工程建设施工，是全国首批工程总承包建筑企业，具有铁路工程施工总承包特级资质。

## 一、案例背景

在全球化日益加剧的时代，企业一个小小的意外或事故很容易被扩大到全国、甚至更大的范围，如果处理不当，可能会十倍百倍的放大，引起无法估量的后果。随着“走出去”步伐的加快，以及承接承包工程项目的增加，公司可能涉及的各类风险也日益增多。一旦发生危机事件，如何实现有效处理，同时将损失降低至最低限度是公司需要迫切解决的问题。

## 二、措施

为有效防范和应对因突发事件而产生的危机，如自然灾害、事故灾难、公关危机以及员工集体罢工、内部毁誉及贪污事件等内部危机，减少危机对公司的危害，维护公司在政府、社会公众及员工中的信誉与形象，公司制

China Railway No.3 Group Co., Ltd., formerly the No. 3 Engineering Bureau of the Ministry of Railways, was established in 1952 and became a limited liability company in November of 2000. It was placed on the Shanghai and Hong Kong stock exchange markets in 2007 as a wholly-owned subsidiary of China Railway Group Limited within both the Fortune 500 and the World Brand Lab. Primarily engaged in the construction of transportation infrastructure projects, the Company was among China's first batch of engineering contracting enterprises and has a special-grade qualification in railway project construction contracting.

## I.Case background

In an era of increasing globalization, the effects of a small accident or incident within an enterprise may be felt across the whole nation or even further. In the case of any improper handling, such incidents may be amplified 10 to a 100 times and cause unexpected consequences. As the Company accelerates its pace of “Going Global” and undertakes an increasing number of contracting projects, it is also faced with a larger range of various potential risks. The question of how to prevent crises and overcome crises the Company encounters through smooth and effective handling of the crisis while also minimizing loss is a pressing question for the Company.

## II.Measures

To effectively prevent and cope with any crisis caused by any unforeseen circumstances, such as a natural disaster, accident, PR crisis, employee strike, internal denigration, corruption or other internal crises, and to minimize the

定社会责任危机管理预案，通过调查与情报分析，确定公司潜在的危机问题，设计解决问题的可能性方案。

### 成立危机处理小组

危机发生后，由公司高层负责人在第一时间组建危机管理小组，并设立“首席风险官”统一部署应对突发状况，组织当事分支负责人在其职责范围内做好危机处理的有关工作，确保公司在处理危机时表现出对社会负责任的行为，增强社会公众对公司处理危机的信任度。

### 设立对外新闻发言人

危机管理小组指定对外新闻发言人，根据危机信息发布制度，统一管理信息的流入和流出；同时，公司设立新闻中心，接受媒体和公司内外部人员的咨询。在危机传播过程中，秉承坦诚和开放的态度，避免使用专业术语，及时、准确、全面地做好危机发生后的良性信息传播工作，保持信息管道的双向畅通。

### 标准化危机处理流程

发生突发事件，危机处理小组在第一时间召开危机处理会议，在最快时间内获得不良信息，针对事件的起因、可能趋向及影响做出评估，确定危机等级，并参照企业文化和价值观，明确自己的“核心立场”，并根据危机等级确定处理该类事件的关键以及针对性的预案。

“首席风险官”在获悉危机发生后的 24 小时内填写《突发事件报告单》，启动危机管理机制。“首席风险官”以最快的速度部署好每一位危机处理小组成员的工作，缩短危机处理时间，积极应对减少损失。在该环节，“首席风险官”搜集各方言论，确认基本立场、拟定“官方”声明，协调相关资源确保到位。

从危机发生之后到处理结束期间，“首席风险官”及时总结公司在危机处理中的不足之处，并于事后组织危机处理小组成员甚至全公司员工召开总结会议，听取各方关于处理该类事件的建议，跟踪填写完整的《突发事件报告单》并存档，作为今后完善危机处理预案、制定更详细全面预防政策的基础和系统经验。

influence of such crises on the Company and maintain its reputation and image, the Company formulated a social responsibility crisis management plan, confirmed the potential crisis through investigation and information analysis and designed a problem solving method and selection scheme.

#### Setting up a crisis management team

In the event of any crisis, the Company's senior head establishes a crisis management team and “CRO” to provide for uniform deployment and organization to cope with any emergencies that arise and organize the concerned division leaders to handle the crisis within its scope of responsibilities. Taking socially responsible action when handling crises will strengthen the public's trust in the Company in terms of crisis handling.

#### Appointing a foreign news spokesman

The crisis management team appoints a foreign news spokesman to centralize the inflow and outflow of information according to the crisis information distribution system. A press center is set up to act as a bridge between the media and the Company's internal and external personnel. During the process of crisis communications, an honest and open attitude is adopted; the use of technical terms is avoided, and the company promptly, accurately and comprehensively releases information while also maintaining a two-way flow of information.

#### Standardizing the crisis management process

In the event of an emergency, the crisis management team first holds a crisis management meeting to obtain information as quickly as possible, evaluate the cause, development trends and impact of the emergency, determine the crisis grade, define a “core position” in accordance with the corporate culture and values, and provide key specific proposals to manage the situation according to the grade of the crisis.

The “Chief Risk Officer” fills in a Report of Emergency within 24 hours after learning about the crisis and activates the crisis management mechanism. Demonstrating strong leadership, the CRO quickly assigns work to all members of the crisis management team and reduces the time required to deal with the crisis. Immediate action and active response are the only way to reduce losses. At this point, the CRO collects various opinions, determines a basic standpoint, drafts an “official” statement and coordinates relevant resources to ensure that they are in place.

From the time the crisis begins to the point when the crisis management task has been completed, the CRO promptly summarizes shortcomings that occurred during the process and organizes team members and even all employees to take part in a briefing meeting after the crisis has been resolved. During this meeting, the CRO listens to advice from various

### 建立良性危机预警机制

针对性地制定预防各类危机的对策，尽可能地降低危机发生的机率，减少导致危机存在的漏洞。同时，对公司所有员工进行危机处理常识培训，使公司上下树立危机警钟长鸣、常抓不懈的意识，特别是对危机管理要有清醒的认识，树立“危机是危也是机”的意识，并提高戒备性。

## 三、成效

标准化的危机处理流程和预警机制的建立，增强了公司在海外的危机处理能力，降低了潜在危机的发生概率，同时也在员工中树立了良好的危机意识；通过设立新闻发言人，提升了公司对外沟通的主动性和透明度，有助于在危机事发的第一时间告知利益相关方，在降低损失的同时，也能够赢得利益相关方的理解与支持，提升公司负责的品牌形象。例如，2008 年 5 月，公司在加纳首都阿克拉布置 MTN 光缆主干网，根据施工合同，由市政部门负责铺设的人行道路路面迟迟得不到修复，最终被加纳电视台曝光。公司加纳区经理立刻组成社会责任危机领导小组，一组与加纳电台澄清事实并表明公司将代替阿克拉市恢复道路，另一组协同当地分包商紧急恢复路面。迅速、有效和积极的危机处理方式，赢得了利益相关方的信任，也提高了公司在当地的知名度。

## 四、展望

公司的社会责任危机制度及预案仍处于设立初期，尚不成熟，还有一个很长的成长过程。在未来实施过程中需要不断结合各国实际情况，使各项制度和预案更具有本地化特点、更符合当地国情。

sides on how to deal with the relevant type of emergency, completes the Report of Emergency, and stores it in the archives. The report will serve as a base and systematic framework for improving and perfecting crisis management planning and for preparing a more detailed and comprehensive prevention policy.

#### Establishing an optimum crisis warning mechanism

The Company takes targeted countermeasures to prevent all kinds of crises, reduce the possibility of crises and the deficiencies that lead to crises. Moreover, the Company trains all employees on general knowledge about crisis management, alarm system awareness, and especially on having a level-headed approach to crisis management. The company establishes awareness that “a crisis is not only a crisis but also an opportunity” and works to improve vigilance.

### III.Effect

Through establishing a standard crisis management process and early warning mechanism, the Company enhanced its overseas crisis management capacity, reduced the probability of potential crises, and established good crisis consciousness among employees. By designating a news spokesperson, the Company improved the active and transparent nature of its external communications, which ensures the notification of concerned parties as soon as any problems occur, generates understanding and support from stakeholders while reducing losses, and improves our responsible brand image. For example, in May of 2008, we established an MTN optical fiber backbone network in Accra, the Ghanaian capital. According to the construction contract, the municipal government was responsible for repaving the pedestrian. They did not do this, and this fact was exposed by Ghanaian TV. The company's Manager in Ghana immediately formed social responsibility crisis leadership teams; one team went to Ghana TV to expose what happened and indicated that the Company would repair the road on behalf of the Accra government, and the other coordinated with local sub-contractors to repair the road. This rapid, effective and active crisis management won the trust of stakeholders and improved our local reputation.

### IV.Prospects

There is still a long way to go for the Company's social responsibility crisis system and planning, as they are immature and still in the initial stages. In the future, the Company will continuously work to combine the implementation efforts with the actual conditions of different countries to make the system and planning more localized and more appropriate to local conditions.





## 质量安全

### ——打造精品工程

#### Quality and Safety

#### – To Create High Quality Projects



## 文化建设造就千万安全工时奇迹 ——中国港湾工程有限责任公司

### Ten million man-hours of safe production – China Harbor Engineering (CHEC)

## 2.1

**摘要：**公司在多哈新港码头及内防波堤项目中，通过组建专职 HSE 管理团队，完善 HSE 管理体系，对作业人员进行专业的 HSE 培训，建立 HSE 作业环境，规范员工作业行为，保障安全生产，进一步提升了公司在当地的品牌影响力和竞争力。

**Abstract:** In the New Doha Port project and the interior breakwater, based on HSE culture building, by creating a spirit of safety, establishing a safety management system, cultivating a safety behavior culture and building a safety substance culture, the Company comprehensively enhanced employees' awareness of safety and skills, thus working a miracle of tens of millions of safety hours and effectively ensuring the safety of employees.

中国港湾工程有限责任公司是中国交通建设股份有限公司的全资子公司，代表中国交建在国际工程市场开展业务，目前在世界各地设有 49 个驻外机构，业务涵盖 70 多个国家和地区，在建项目合同额近百亿美元，全球从业人员超过 8000 人。“CHEC”已成为国际工程行业美誉度很高的知名品牌。

As a wholly-owned subsidiary of China Communications Construction Co., Ltd. (CCCC), China Harbor Engineering Co., Ltd. (CHEC) develops its business in the international engineering market on behalf of CCCC. At present, CHEC has set up 49 overseas resident offices and operations across the world, conducting business in more than 70 countries and regions, employing over 8,000 staff globally, and has ongoing construction contracts worth almost 10 billion dollars, CHEC has become a well-known enterprise that enjoys a great reputation in the international engineering industry.

### 一、案例背景

公司承建的多哈新港码头及内防波堤合同包，是整个多哈新港的起步项目，事关整个项目成败，而且业主对项目的 HSE 管控非常严格；同时该项目工期紧、规模宏大、施工组织复杂、分包施工接口多，项目参建者来自不同国家和地区。如何在保证项目质量的同时，对 3000 名参建者进行有效的 HSE 行为规范，保障安全生产，是公司面临的巨大挑战。

#### I. Case background

The New Doha Port wharf and interior seawall undertaken by CHEC are the initial projects for the entire New Doha Port Project, and they are very important to the success of the entire project. The Owner has strict requirements for HSE control of the project. In addition, the project has a limited construction period, a large scale, a complicated construction organization, many different subcontracting interfaces, and those participating in the project construction are from different countries and regions. It is a great challenge for the Company to develop effective HSE behavior rules and guarantee the work safety of 3,000 construction workers.

### 二、措施

作为项目执行的组织者和领导者，公司充分发挥在管理和企业文化方面的优势，成立专门的 HSE 领导小组，以 HSE 文化建设为抓手，将 HSE 文化建设充分融入

#### II. Measures

As the organizer and leader of the project, the Company has given full play to its advantages in management and enterprise culture, established a HSE leading group, focused on HSE culture construction and fully integrated the HSE



HSE 管理，实现 HSE 管理目标执行力由强制性到自觉性的转变。

## 营造精神文化

公司提出“创造奇迹，有你有我”的响亮口号，激发员工斗志和集体荣誉感，使人人都能积极主动参与到项目 HSE 管理的各个方面。通过板报、宣传栏、日安全会、安全周、安全月等活动形式，宣传安全意识和安全知识，使员工得到从“要我安全”到“我要安全”的意识提升，最后达到“我会安全”的境地。

## 完善制度体系

公司按照 QCS2010 、项目技术规格书 HSE 要求，结合自身生产资源，编制了一整套 HSE 管理体系文件；按照国际标准组建了专职 HSE 管理团队，管理队伍呈三级安全管理组织模式，分别设置安全总监 /HSE 经理、HSE 主管和安全员；依据公司安全责任考核制度，建立安全生产责任制，责任划分明确，形成了自上而下、由内及外的网络化管理体制。

公司还运用安全管理信息系统开展安全检查与隐患整改，实现安全风险控制。通过定期组织开展危险源辨识会议，形成年度重大危险源、重要影响环境因素清单与预控措施，指导现场安全施工，同时在施工过程中持续监控，保证重大危险源的有效控制。

## 培育行为文化

公司把人作为培育 HSE 文化的对象和立足点，提高员工 HSE 文化素质，坚持“安全第一、预防为主、综合治理”的方针，引导员程序化和标准化的作业方式，使员工遵章守纪，形成良好的 HSE 行为习惯。

公司共编制 21 项专项 HSE 培训课件，配备专业的 HSE 培训工程师对所有作业人员在进场前开展进场安全培训和来访者的安全培训，告知项目存在的主要风险、预防措施、安全管理要求，对于特殊作业的工种除要求满足当地法律要求外，还需参加第三方专业培训机构的专业安全技能培训，力求做到全覆盖无遗漏。

culture construction into HSE management, so as to realize the transformation in regards to HSE management objectives from compulsory execution to conscious implementation.

### Creating an energetic culture

The Company put forward the slogan “to create a miracle together”, to inspire the employees' fighting spirit and sense of group honor, and to ensure that all employees participate in the project's HSE management actively. Via blackboard newspapers, bulletin boards, daily safety meetings, a safety week, a safety month and other sorts of activities, the Company spread safety awareness and knowledge and ensured that employees' awareness changed from “I am required to pay attention to safety”, to “I need to pay attention to safety”, and finally to “I am skillful at maintaining safety”.

### Improving the institutional system

The Company compiled a full set of HSE management system documents in accordance with QCS2010 HSE requirements and project technical specifications, and in combination with its own resources; set up a full-time HSE management team on a three-level safety management organizational model (safety director general/HSE manager, HSE supervisor and safety officer) in accordance with international standards; and established a work safety responsibility system in accordance with the Company's safety assessment system, which clearly defined responsibilities, and formed a holistic network-based responsibility management system.

Moreover, the Company carried out safety inspection and potential hazard rectification with the safety management information system, so as to achieve the goal of risk control. By regularly organizing and developing meetings for hazard identification, the Company sorted out a list of major hazards for the particular year and important factors affecting the environment and also worked out corresponding hazard prevention and control measures to guide on-site construction safety. On top of this, the Company continuously monitored safety during the construction process to guarantee the effective control of major hazard sources.

### Cultivating behavioral culture

The Company takes people as the object and basis to cultivate HSE culture and persists in improving the employees' HSE cultural level. With “safety foremost, prevention first and comprehensive management” as the guidelines, the employees are trained to follow the programmed and standardized operation mode, abide by discipline, and solidify their positive HSE behaviors.

The Company created and compiled 21 professional HSE training courses and arranged for professional HSE training engineers to train all workers on safety before entering the construction site as well as provide safety training for visitors in order to notify them

## 打造物质文化

以文化口号为依托，公司还在施工生产作业区及辅助生产区设置警示标识、规范现场人员佩戴安全帽和其他安全防护用品、规范机械设备合理停放；在项目部办公区张贴 HSE 保证体系、设置火灾消防应急集合点；在员工生活区维持房屋内和营区环境整洁、提供休闲体育设施、设立安全板报等，统一、规范地利用公司标准的标识系统打造营区物质文化，创建具有公司标志的 HSE 文化氛围。

## 三、成效

公司以文化建设为引领，有效地建立了 HSE 作业环境和自我约束的管理体系，提高了全员的 HSE 意识和技能，规范作业行为，减少违章引发的安全事故。2013 年 8 月 28 日，多哈新港项目顺利实现了 10005695 个安全工时，有力地保障了员工的生命安全；在提升员工凝聚力和归属感的同时，进一步提升了公司在卡塔尔和海湾地区的品牌影响力和竞争实力。

## 四、展望

展望未来，公司将继续秉承“安全至上”的管理责任理念，在实践中不断探索和完善具有港湾特色的安全管理体系，固基修道，履方致远，力争实现项目竣工零事故的安全目标。

about major risks, preventative measures and safety management requirements for the project at hand. Those engaging in special jobs are required to participate in professional safety skills training organized by third-party training institutes in addition to satisfying local laws so as to ensure that all safety aspects are covered.

### Creating tangible cultural items

Utilizing cultural slogans to support its objectives, the Company placed warning signs in the construction and production operations areas and auxiliary production areas, regulated the wearing of safety helmets and other safety equipment, and regulated the placement of mechanical equipment. The company also put up HSE guarantee system information in the office area of the project department, established emergency rally points for use in the event of a fire, maintained the tidiness of the rooms and camp, provided leisure and sports facilities and located safety bulletin boards in the employee living areas, among other such actions. As such, the Company established a uniform and standardized tangible culture through the use of a standardized signage system, so as to create an HSE cultural atmosphere among the signage provided by the Company.

## III. Effect

Guided by cultural construction, the Company effectively established an HSE working environment and a self-discipline management system, improved all employees' HSE awareness and skills, and regulated their operations, so as to reduce the violations that lead to accidents. On August 28, 2013, those involved with the New Doha Port Project successfully completed 10,005,695 working hours on safety, greatly protecting the employees' security, which then enhanced the employees' cohesion and sense of belonging, and further improved the Company's brand influence and competitive strength in the State of Qatar and the Persian Gulf areas.

## IV. Prospects

Looking forward to the future, the Company will continuously uphold the management responsibility idea of “safety first”, explore, and perfect the featured safety management system, engage in project construction, and strive to realize a safety target of zero accidents during the completion of the project.

# 优化管理流程 打造双赢样板 ——中国海外工程有限责任公司

## Optimizing management procedure to create a win-win model – China Overseas Engineering Group

### 2.2

**摘要:** 公司在南非卡拉盖迪锰矿项目中, 面临施工周期短、拖期风险大的困难, 建立科学的管理体系, 优化施工工艺流程, 创新施工工艺和工法, 不断提高生产效率, 最终项目如期完工, 赢得了南非政府和社会各界的好评。

**Abstract:** In its manganese ore project in Kalagadi, South Africa, facing a tight construction schedule and heavy risk of project delays, the Company established a scientific management system, optimized the construction process, improved construction processes and methods, and persisted in increasing production efficiency, thus completing the project as scheduled and earning high praise from the South African government, locals and other parties.

中国海外工程有限责任公司隶属于中国中铁股份有限公司, 正式成立于 1991 年, 主营国际承包工程、对外经援、境外实业投资、大型工程机械设备租赁、外派劳务、进出口贸易和房地产的开发经营及物业管理等业务。公司国际工程承包业务覆盖整个非洲大陆、南太平洋、东南亚和欧盟成员国——波兰等区域市场。

Founded in 1991, China Overseas Engineering Group Co., Ltd. is affiliated with China Railway Group Limited (CREC) and primarily specializes in international project contracting, foreign economic aid, overseas industrial investment, large engineering machinery and equipment leasing, overseas labor service, import & export trade, real estate development and property management. Its international project contracting business primarily serves the markets in the whole of the African continent, the South Pacific, Southeast Asia, and EU members such as Poland.

### 一、 案例背景

2010 年, 公司承接南非卡拉盖迪锰矿项目。合同规定总工期为 161 天, 但根据南非《劳动法》要求, 实际有效工作日仅有 118 天。施工周期如此短, 同时业主还在合同中特别规定, 工期每延期一周, 按合同总额的 1% 罚款。一时间, 公司倍受压力, 困难重重。

### 二、 措施

针对施工周期短, 拖期风险大这一主要问题, 指挥部提出: 以节点工期确保总工期, 以安全、质量保证节点实现。

#### 管理规范化

公司重视合同要求, 严格遵守各项程序, 通过科学组织

#### I. Case background

In 2010, the Company undertook the Kalagadi Project of South Africa. According to the contract, the total construction period should have been 161 days, but only 118 were actual effective work days in accordance with the Labor Law requirements of South Africa. With such a short construction period, and the additional stipulation in the contract that stated that the Company would be fined 1% of the contract value for each delayed week, for a time, the Company faced immense pressure and was beset with difficulties.

#### II. Measures

Facing the principle challenge of having a short construction period and a high risk of delays, the Company's headquarters emphasized that the project should apply segmented construction periods to ensure timely construction and applied safety and quality guarantees to guarantee the successful achievement of the segmented construction periods.

建立了质量、进度、安全、环保、应急五大管理体系。在质量管理上, 构建三检质量保证体系框架, 保证质量目标实现; 在进度管理上, 分解目标设置节点工期, 以流程控制和劳动竞赛确保节点工期, 以节点工期确保总工期; 在安全管理上, 从制度建设、人员配置、资金运用、物资储备等多方面向安全倾斜, 避免安全事故发生, 以安全和质量为加快进度奠定基础。

#### 作业流程化

公司实行首件样品示范制度, 在每项工序中, 首件样品经业主检查审核通过后, 优化工艺流程, 明确施工工艺, 后续产品按照施工工艺施工, 杜绝不合格产品, 加快工程施工进度; 科学组织流水施工作业, 严格控制作业循环时间, 实行工序计时, 做到工序无缝链接。

#### 施工创新化

总结施工经验和技巧, 创新施工工艺和工法, 不断提高生产效率。在施工过程中, 公司开创了分段、分区、分层的“三分开挖”工法和填料、摊铺、洒水、翻拌、碾压、检测紧跟的“六步填筑”工法。

#### 现场可控化

以现场管理为核心, 成本控制为基本手段, 实行管理的扁平化, 管理人员深入一线, 现场办公, 解决施工难点问题, 形成信息通畅、协调一致、运转高效的工作机制, 保证问题的及时解决和工作的快速推进。

#### 员工属地化

公司超越政府和合同对劳工使用相关法律的规定, 雇佣大量当地员工, 员工本土雇佣率达到 90% 以上, 其中女性员工雇佣率超过 50%。通过对当地工人进行技术培训, 使工人施工能力大大提升, 从而加快工程施工进度。

### 三、 成效

项目通过科学配置, 合理利用现有设备, 提高生产效率, 最终达到工期控制、成本控制的目的。公司将先进的资

#### Standardized management

The Company attached great importance to contract requirements, strictly abided by various procedures, and established five major management systems for quality, schedule, safety, environment and emergency in a very rational way. In regards to quality management, it established a three-inspection quality guarantee system framework, to guarantee the realization of quality objectives; in regards to schedule management, it delineated the goals and set the segmented construction periods, ensured the successful implementation of the segmented construction periods via a process control and competitive labor system, and guaranteed the overall construction time through the segmented construction periods; in regards to safety management, it paid attention to safety aspects such as institutional improvement, personnel allocation, funds application, and material reserves in order to avoid accidents, and thereby leverage safety and quality controls to lay a foundation for speeding up the construction progress.

#### Process-based operation

The Company carried out the first sample demonstration system. In each process, after the first sample was approved by the owner, the process would be optimized, the construction technology would be clearly determined, and then the subsequent products would be produced subject to the determined construction process, so as to reduce the occurrence of nonconforming work and accelerate the construction schedule. In addition, the Company organized the flow of construction operations in a very rational way, strictly controlled operation period, and carried out process timing to achieve seamless progress.

#### Innovative construction

The Company summarized its construction experience and skills, innovated construction processes and methods, and continuously improved the production efficiency. During the construction, it created the “segmented, sectionalized and layered” excavation method and the “padding, paving, watering, stirring, rolling, and immediate check” six-step filling method.

#### Controlled construction site

With on-site management at the core and cost control as the basic means, the Company carried out flat management. The management personnel went to the construction site to work and solve the construction difficulties, thereby forming a coordinated and effective work mechanism with smooth communications and guaranteeing the prompt solving of problems and rapid work progress.



源开发技术和现代的经营管理经验延伸至当地，提高海外项目员工本地化水平，不仅增加当地就业机会，还为当地培养大量技术、管理人才，增强项目运营的可持续性。

中海外公司得到南非政府、议会、我国使馆、经参处、项目业主、南非社会各界、同行业公司、当地媒体和国内媒体的普遍赞誉，成为南非国际工程承包商的榜样，为中国公司赢得了广泛信誉。

## 四、展望

南非项目的成功实施，为公司在南非地区承揽大型项目和铁路、公路等优势项目打开了市场。公司将继续以“工期至上”为目标，以质量和安全为保障，满足业主个性化需求，进一步加强本土化、区域化经营管理，提高市场竞争力。

### Localized recruitment of labor

The Company exceeded the related labor provisions and regulations defined by the government and in the contract by employing many people locally. 90% of employees were locals and more than 50% were female workers. By giving local workers technical training, construction capabilities were greatly improved, and the construction schedule was accelerated.

### III.Effect

Through scientific allocation, reasonable utilization of existing equipment, and improvement of work efficiency, the project achieved the goals in regards to the construction period and cost control. The Company brought advanced resource development technology and modern business management experience to the local area and improved the localization level of overseas project employees, not only increasing local employment opportunities but also cultivating lots of technical and management talents locally, thereby enhancing the sustainability of project operation.

China Overseas Engineering Group Co., Ltd. was widely praised by the government and parliament of South Africa, the Chinese embassy, the economic and commercial counselor's office, the project client as well as all sectors of society, peers, South Africa's local media, and the Chinese media. This project became an example for international project contractors in South Africa to follow, and won wide-ranging respect for Chinese companies.

### IV.Prospects

With the success of this project in South Africa, the Company has opened up opportunities to undertake further large projects, railway and highway construction, and other advantageous projects in the South African market. The Company will continuously focus on the goal of "striving to meet construction deadlines", guaranteeing quality, satisfying the individual demands of different clients, further strengthening local and regional operational management, and improving its market competitiveness.

# 优质工程改善居民生活 ——北京建工集团有限责任公司

## Quality projects improve livelihoods– Beijing Construction Engineering Group Co., Ltd.

2.3

**摘要：**公司承建安巴电厂项目，充分考虑当地淡水资源缺乏的条件，优化工艺设计和流程，制定节水方案，促进环境保护和资源综合利用。电厂运营改善当地的电网系统，专业技术人才的培养提高了当地现代化电厂运行技术水平，为电厂在当地的可持续运行提供了保障。

**Abstract:** On the spot of a power plant project in Antigua and Barbuda, the Company took the scarcity of local freshwater resources fully into account, optimized the process design and technological processes, and worked out a water conservation plan to promote environmental protection and the comprehensive utilization of resources. The operation of the plant improved the local power grid system and the professional training provided enhanced the technical level of plant operations, thus ensuring the sustainability of the plant.

北京建工集团有限责任公司是以工程建设、房地产开发为主业，集建筑设计、建筑科研、设备安装、装饰、市政路桥、环境保护、物流配送等为一体的大型集团企业，成立于1953年，2010年正式组建北京建工国际建设工程有限公司，开展国际业务，主要包括施工总承包、EPC工程总承包、中国政府对外援助工程、融资型项目总承包、海外房地产开发、境外投资和国际贸易等。

## 一、案例背景

安提瓜和巴布达（简称“安巴”）位于加勒比海小安的列斯群岛的北部，是一个矿产资源和水资源匮乏的国家，加之生产技术和相关技术人才的缺乏，导致安巴政府电厂发电能力与私人电厂合计发电能力达不到日常用电峰值，经常性断电、限电的状况引起居民的强烈不满，政府面临很大压力，在一定程度上对社会稳定形成隐患，严重影响国民生活质量。

## 二、措施

为保证项目设计功能的实现、保证设备产品的运行质量、促进环境保护和资源的综合利用，公司在项目设计和建设过程中采取了一系列措施。

Established in 1953, Beijing Construction Engineering Group Co., Ltd. is a large business group mainly specializing in engineering construction and real estate development and integrating architectural design, building research, equipment installation, decoration, municipal road and bridge construction, environment protection, logistics distribution, etc. It officially established BCEG International Co., Ltd. in 2010 to undertake international business, including general constructing, EPC constructing, foreign aid projects of the Chinese Government, general construction in regards to financial projects, overseas real estate development, overseas investment and international trade.

### I.Case background

Antigua and Barbuda (abbreviated as Anba), located in the north of the Lesser Antilles in the Caribbean, is a country short of mineral and water resources. Moreover, with a shortage of production technology and related technical personnel, the generating capacity from government and private power plants cannot meet daily electricity needs. Great pressure is exerted on the government because the residents are dissatisfied with the situation of regular power failures and the rationing of power. This, to some extent, has caused potential danger to social stability and seriously hindered improvements to the national quality of life.

### II.Measures

In order to guarantee the realization of the project design function, the operating quality of equipment products, and promote environmental protection and the comprehensive utilization of resources, the Company has adopted a series of measures in the project design and the construction process.

## 充分考虑当地环境要求，优化工艺设计和流程

在项目建设过程中，公司本着实事求是的精神修改完善原设计。由于安巴所在位置易受飓风影响，电厂所有构筑物均按风速 250KM/ 小时进行设计和建造；考虑到当地淡水资源缺乏，公司制定了多种循环用水、节约用水方案。其中，全场消防水淡水来源以收集厂区雨水为主，海水淡化补充为辅；锅炉用水以凝结水回收为主，锅炉放水二次软化处理重复使用、雨水、淡水补充为辅；生活用水以雨水为主，收集污水处理水为辅。

## 说服业主改变方案， 规避技术和成本风险

原 EPC 合同技术附件中明确电厂整体运行冷却方式为海水引入，并在电厂内进行处理后进入循环系统，完成热交换后重新排入海中。根据前期工作分析，公司发现该方式海水引入距离过远，且自然高差不理想，对于穿越区域的施工成本及可实现性均存在着很大的不确定性及成本风险。因此，说服业主选用电厂发动机配套厂商生产的空冷平台模块集中形成电厂的冷却处理系统，规避了原系统实施过程中技术、成本风险。

## 加强业务技能培训，实现负责任交付

由于安巴运行现代化电厂的基础技能薄弱，公司在 2011 年 5 月与业主正式签订了交付期后的两年正式运营合同，在运行服务期间，加强对业主方的技能培训并保证业主切实掌握现代化电厂运行技术。同时，为保障后续零部件稳定供应，公司承担了项目设计使用周期（50 年）设备零部件的供应保障。

## 三、成效

### 社会效益显著

电厂的投入运营完善了安巴国家电网系统、满足岛内电力供应，改善了经常性断电、限电的情况，有助于社会稳定和国民生活质量的提高。在项目的规划、实施和交付中，充分考虑了安巴的经济技术条件和自然

### Fully taking into consideration the local environmental requirements, and optimizing the process design and flow

In the process of project construction, the Company modified and perfected the original design based on the spirit of seeking the truth from facts. As Anba is located in an area easily influenced by hurricanes, all the power plant's buildings were designed and constructed with possible wind speeds of 250km/h in mind. Considering the lack of local fresh water resources, the Company formulated a variety of water recycling and water conservation schemes. Among these, the entire plant's fresh water source for firefighting will come primarily from rainwater collected in the plant area, supported by a supplement of desalinated sea water. The boiler water will come mainly from recycled water condensation, supported by the repeated use of secondary softening processing of boiler drainage, rainwater and fresh water. Domestic-use water will be obtained from rainwater, supplemented by collected sewage water after treatment.

### Persuading the owner to change the original scheme to avoid technical and cost risks

It is specified in the technical annex of the original EPC contract that seawater should be used in the general operating cooling mode of the power plant. The water would enter the circulating system after having been processed in the power plant and would then be discharged back into the sea after completion of the heat exchange. According to the analysis of preliminary work, the Company found that the sea water intake point was too far away for the original mode of cooling to work, that the natural height difference is unsatisfactory, and that there is large amount of uncertainty and cost risk in both the cost and reliability of cross-region construction. Therefore, the Company persuaded the owner to select an air cooling platform module produced by the manufacturers of the engines of the power plant to form the concentrated cooling system of the power plant, and therefore avoid the technical and cost risks in the implementation process of the original system.

### Strengthening professional skill training to realize responsible delivery of project

Due to the weakness of basic skills in operating modernized power plants in Anba, the Company formally signed a two-year formal operations contract after delivery with the owner in May 2011, so as to strengthen the skill training of the owner and guarantee that the owner can fully master the operation technology of modernized power plants during the operation service period. At the same time, in order to guarantee the steady supply of follow-up parts and components, the Company undertook the supply guarantee of equipment parts and components in the project design life cycle (50 years).

环境，使项目在安巴的其他地区具有可复制性，可在全国范围内推广。电厂的建成也带动了旅游业的发展，带动了国民经济的增长。

### 有效保护当地环境

项目实施充分考虑了当地淡水资源缺乏这一因素，在项目实施过程中，循环用水，节约用水；采用先进的模块设计和设备集成，并对产生的污水进行收集和处理，有效地避免了对当地环境的破坏。

### 业主评价较高

项目得到了业主方的高度认可和赞赏，安巴斯潘塞总理高度评价了公司安巴电厂项目部所做的努力和卓越工作。安巴政府又与公司签署了安巴 CRABBS 变电站升级改造合同，该变电站升级后将为在该区域的安巴 30MW 新电厂及现有 APC 电厂在内的电厂正常满负并网发电工作提供坚实保障，全面发挥新电厂的发电能力，同时为公司带来经济收益。

## 四、展望

公司将会更加积极地开展更多的诸如电厂、机场、煤矿等能源类、基础设施类等建设的 EPC 项目，通过开展项目，改善当地环境，为当地培养各类型人才，拉动当地经济的发展，实现公司与安巴经济、社会、环境的共同发展。

## III.Effect

### Remarkable social benefits

The power plant's completion has improved the state grid system of Anba, satisfied the power supply within the island, and improved on the situation of regular power failure and limited power, which contributes to threaten social stability and hinder improvements in the national quality of life. In the planning, implementation and delivery phases of the project, adequate consideration has been given to the economic and technical conditions as well as the natural environment of Anba, and there is the possibility of replicating this project in other regions of Anba. This sort of model could be promoted all around the country. The completion of the power plant has also driven the development of the tourism industry and the growth of the national economy.

### Effective protection of local environment

The Company has taken the factor of a lack of local fresh water resources fully into account, with water recycling and water conservation having been achieved in the project implementation process; advanced module design and equipment integration have been adopted, and the collection and processing of wastewater produced has been conducted to effectively avoid damage to the local environment.

### Relatively high evaluation by the owner

The project has received high recognition and appreciation from the owner. Even Prime Minister Spencer of Anba once highly praised the efforts and excellent work the Anba Power Plant Project Department had done. The Anba Government also signed the Anba CRABBS Substation Upgrading and Reconstruction Contract, and after the upgrading, this substation will provide solid assurances for the normal full-load grid-generation work of power plants within the area including the 30MW new power plant of Anba and the existing APC Power Plant, so as to give full play to the power generation capacity of the new plant and bring economic benefits to the Company.

## IV.Prospects

The Company will more actively develop other EPC projects, such as the construction of power plants, airports, and energy resources, including coal mines and infrastructure. It will also improve the local environment, cultivate various local talents, boost the development of the local economy, and realize the joint development of the economy, society and environment of Anba through the projects developed.



## 员工责任

### ——成就发展动力

#### Responsibility for Employees

#### – Helping Provide Development Impetus

## 立足长远 推行国际化员工责任 ——中石化南京工程有限公司

### Promoting internationalization of employees – Sinopec Nanjing Engineering & Construction Incorporation

## 3.1

**摘要：**公司在沙特开展项目过程中，从多渠道引进和聘用各类外籍管理人员，通过搭建多种平台，推进员工国际化进程，改善当地就业状况，实现了经济效益与社会效益的双丰收。

**Abstract:** During constructing a project in Saudi Arabia, the Company recruited foreigners as managers via various channels, built diverse platforms to smooth career development, effectively promoted employee internationalization through cultural integration and humanistic care, persistently raised management levels and enhanced local employment, thus yielding substantial economic and social benefits.

中石化南京工程有限公司是中国石化集团公司直属企业。公司是以设计为先导，专利、专有技术、工艺包开发为核心，以工程总承包和项目管理、专业施工为主体，面向国内外市场提供技术和管理服务的综合性、一体化国际工程公司。

A direct subordinate of the Sinopec Group, the Sinopec Nanjing Engineering & Construction Incorporation is a comprehensive integrative international corporation. The Company is a pioneer in the design field focusing on the development of patents, proprietary technologies and process packages. It specializes in EPC, project management and professional construction, and providing technology and management services to both domestic and overseas markets.

### 一、案例背景

2005年，公司进入沙特市场，随着本土化经营不断深入，员工本土化和国际化成为公司实施海外人才战略的重要环节。2011年，沙特政府为解决本国劳动人口就业问题开始推行严格的“沙特化”政策，公司实施员工本土化战略形势紧迫。如何能够让沙特籍员工认同企业文化，增强员工队伍稳定性，并发挥本土员工的作用，成为公司在沙特的首要难题。

### I. Case Background

In 2005, the Company entered the Saudi Arabian market. With localized operational elements increasing, employee localization and internationalization have become a significant element of implementing the Company's overseas talent strategy. In 2011, in order to add jobs for the domestic working population, the Saudi Arabian government started promoting a strict "Saudi Arabization" policy no. , which demonstrated the urgency for implementing the Company's employee localization strategy. How to get Saudi Arabian employees to recognize the Company's enterprise culture, increase workforce stability, and develop local employees have become the preliminary problems confronting the Company in Saudi Arabia.

### 二、措施

公司坚持“人才是第一资源”的战略思想，把引进、培养和使用国际人才作为推动国际化经营战略的重要举措。国际化人才战略正以多层次、立体化的模式在海外项目上加快实施。

### II. Measures

The Company has a "talent is the first resource" strategic concept, which holds that cultivating, introducing and employing international talent are crucial measures for driving its international operations strategy. Implementation of the international talent strategy based on a multilevel and multidimensional model is being accelerated in regards to overseas projects.





## 以人才结构优化为平台 吸引人才

公司从多渠道引进和聘用各类外籍管理人员，改善人才结构，建设国际化员工队伍。到 2012 年，沙特分公司从第三国招聘专业技术人才和技能操作人员 300 余人，从当地引进各类成熟人才 200 余人，雇佣沙特员工 200 余人。外籍管理人员占到海外管理人员总数的 1/3 以上，一些重点管理岗位的外籍员工比例已达到 50%。

## 以畅通晋升通道为激励 促进成长

公司注重外籍员工管理，帮助其进行职业生涯规划，为其提供自我发展空间。通过开展中外籍员工师徒结对、边学边练和创新创效等活动，外籍员工迅速成长；制定《非中国籍员工成长通道建设实施办法（试行）》、《国外工作人员薪酬待遇实施办法》等多项管理制度，畅通外籍员工晋升通道。

## 以文化建设为引领 增进共识

为提高文化融合度，公司开办了英语学社。英语学社以公司项目实际情况为出发点，以服务于工程项目为落脚点，探索实用有效的英语学习方式。通过开展口语互动类型的活动，提高了员工口语能力，加强了员工之间的交流和沟通。

为提高文化认同感，公司以中英文版的形式出版《沙特工程简讯》，记载公司海外工程建设艰苦历程、展示海外工作业绩以及反映海外员工精神风貌。使广大外籍员工真切感受公司的企业文化，感悟工作于公司的成就，增强服务于公司的忠诚度，有助于缔造“一个团队，一个目标”的团队精神。

## 以人文关怀为契机 拉近距离

公司将西方管理模式与东方“人情味”有机结合，创造和谐的内外环境。通过开展“面对面，心贴心”交流活动、定期走访宿舍、召开座谈会等形式，及时了解外籍员工的思想动态；尊重外籍员工饮食习惯，聘用“洋厨师”

## Using talent structure optimization as the platform to attract more talents

The Company introduces and employs different types of foreign administrative staff via various channels in order to improve talent structure and build the internationalized workforce. As of 2012, its branch in Saudi Arabia has hired more than 300 professional technicians and technical personnel from third-party countries for operations and 200 mature talents from the local population as well as over 200 employees from Saudi Arabia. The share of foreign administrative staff among all of the company's overseas management personnel has exceeded 1/3, and has even surpassed 50% in some key management positions.

## Unblocked promotion access as the motivation to accelerate development

The Company attaches great importance to foreign employee management, helps them make a career plan, and provides them with space for self-development. By having Chinese masters and foreign apprentices working together, the apprentices are practicing while learning, participating in innovation and efficiency improvement activities among other activities. As such, foreign employees are able to develop quickly; through crafting *Implementation Methods of Building of Development Access for Non-Chinese Employees (Trial Implementation)*, *Implementation Methods of Remuneration for Foreign Employees*, etc., the Company clears the way for foreign staff to have access to promotions.

## Cultural building as the guide to enhance consensus

The Company runs an English learning society to increase cultural blending. Based on the Company's practical projects and aimed at serving the construction projects, the English learning society is designed to explore effective and practical English studying methods. It improves employees' spoken English and enhances communication among employees through interactive activities using spoken English.

To increase cultural identity, the Company publishes its Saudi Arabia Project Newsletter in both Chinese and English, recording the arduous processes of its overseas project construction, demonstrating its overseas work achievements, and reflecting on the spirits of its overseas employees. Thereby, foreign employees can truly experience the enterprise culture, have a sense of achievement when working for this company, and show more loyalty to the Company. These measures are all conducive to creating a spirit of "one team and one goal".

为其烹制家乡食物；当外籍员工生病或者遇到困难时，公司主动送去关心和祝福，增强了企业与员工之间的和睦关系。

## 三、成效

公司在沙特的人才战略实现了经济效益与社会效益的双丰收。

通过制定国际化人才战略，推行国际化员工责任，员工的满意度不断上升，员工流失率逐年降低。在保证员工队伍稳定的基础上，人才结构进一步改善，海外项目管理团队和执行团队不断成熟和强大，公司的对外承包工程国际化经营程度和管理水平也有了迅速提升。

公司的国际化人才战略在一定程度上缓解了沙特当地的就业压力，为当地提供了更多的就业机会，助力当地经济的发展和社会的稳定。

## 四、展望

展望未来，公司将进一步坚持以人为本，更加注重为本土员工和外籍员工提供发展空间和职业生涯规划，充分发挥人才优势这一核心竞争力，使公司在激烈的市场竞争中获得主动权。同时，将社会责任融入企业文化，继续履行公司对员工的责任，使员工个人价值与公司发展实现共赢。

## Humanistic care as the opportunity to strengthen relationships

Through the Integration of Western management models and an Eastern "human touch", the Company hopes to create a harmonious internal and external environment. By holding activities, like "face to face, heart to heart" communication activities, visiting employees' dormitories, and holding discussions, the Company can better understand the hearts and minds of its foreign employees. Out of consideration for foreign employees' dietary habits, "foreign chefs" are hired to cook traditional foods. Through actively showing its care and support for foreign employees when they are sick or facing some personal difficulties, the Company creates a better rapport between the enterprise and the employee.

## III.Effect

The talent strategy in Saudi Arabia earns the Company both economic benefits and social benefits.

Since the international employee responsibility system was put into practice through the formulating of an international talent strategy, employee satisfaction has continued to increase, and staff turnover has decreased year by year. On the basis of a stable workforce, the talent structure has further improved. The oversea project management team and implementation team have grown more mature and stronger, and the international operational and management levels of overseas contracted projects have increased quickly as well.

The international talent strategy has eased employment tension in Saudi Arabia to some extent and offered more jobs and facilitated economic development and social stability there.

## IV.Prospects

Looking ahead, the Company will continue to put people first, attach more importance to the provision of development and career planning for Chinese employees and overseas staff, and fully develop the core competitiveness of the capabilities of its human talent to gain the initiative in this fiercely competitive market. At the same time, it will blend social responsibility with its enterprise culture and continue to fulfill its responsibility to employees, thus creating a win-win situation whereby the employees can realize their personal value and the Company continues to develop.



# 探索员工属地化管理新模式 ——上海外经集团控股有限公司

## Exploring new modes to better manage local staff – CHINA SFECO GROUP

3.2

**摘要：**公司在马拉维国际会议中心项目中，通过专业考核等聘用当地劳动力，组织专业技能培训，制定各项管理制度规范化和人性化管理，为当地培养大量技术人才，促进当地就业，为自身推行属地化战略积累了丰富的管理经验。

**Abstract:** In the Malawi International Conference Centre project, through a standardized employment system and management system as well as the improvement of skill trainings, the Company effectively improved employees' skills and qualities, ensured the smooth completion of the project, promoted local employment and accomplished the unity of economic and social interests.

中国上海外经（集团）有限公司是经国家商务部和上海市人民政府批准成立的综合涉外国有企业。公司以国际工程承包为核心业务，经营领域主要包括民用房屋土木工程、工业成套设备工程、现代农业工程、工程配套咨询和工程配套服务贸易，业务涉及 138 个国家和地区，分别承接了缅甸照济电站、蒙古都日根电站、越南山洞电站、泰国 BNS 钢厂、巴基斯坦液化气储罐等超过 600 个项目。

### 一、案例背景

公司承建马拉维国际会议中心项目，该中心集国际会议、大型宴会、宾馆及相应配套服务等多功能于一体。如何在落后国家和地区充分利用当地劳动力资源，进行有效的属地化管理，以有效保证质量和工期，成为公司的首要难题。

### 二、措施

公司在当地聘用了 900 多名员工，高度重视当地劳动力资源的开发和使用，并就如何有效使用和管理、尊重、保障和维护当地员工的正当权益进行了积极探索。

China Shanghai (Group) Corporation for Foreign Economic & Technological Cooperation (CHINA SFECO GROUP) is a state-owned foreign-related conglomerate approved by the Chinese Ministry of Commerce and the Shanghai Municipal People's Government. Focusing on international project contracting, the Company is engaged in civil works, complete industrial equipment engineering, modern agricultural engineering, and comprehensive trade project consultation and engineering services. With business in more than 138 countries and regions, the Company has undertaken over 600 contracting projects, including the Burma Zawgyi Hydropower Station, the Mongolia Durgun Power Station, the Vietnam Cave Power Station, the Thailand BNS Steel Plant, and the Pakistan Liquefied Gas Tank project.

### I. Case Background

The Company undertook the Malawi International Conference Centre project. The Centre integrates various functions such as international meetings, banquet holding, and a hotel equipped with corresponding services. How to make full use of the local labor force in an undeveloped country or region to realize effective localized management and maintain project quality and construction speed were the preliminary problems facing the Company.

### II. Measures

The Company hired more than 900 local employees, paying significant attention to the development and use of local labor resources, and devoted great efforts to exploring how to effectively use and manage local employees and how to

### 聘用规范化

公司通过当地劳动力市场公开发布招聘信息，按照程序择优聘用：对泥工、木工等技术工人进行实际能力测试，按成绩评定技术等级后进行雇佣；对土方车、翻斗车驾驶员等特殊工种工人严格按照要求持证上岗，经测试达标后雇佣；对普通工则根据个人表现按需使用。

公司按工种统一编制工号，并将员工分成木工组、泥工组、钢筋组、保安组、机施组、后勤组等八个工种班组。每个班组安排中国工人师傅带班，并负责对他们的实际操作技能培训。对有一定工作年限的工人，按期进行技术等级考核评定，以此作为工资增长的依据。

### 管理制度化

公司制定了 10 项系列管理制度，其中包括聘用制度、工地进出制度、评定制度、奖励、惩罚制度、工资发放制度及公告栏制度等，切实做到对当地雇员的管理有章可循，有法可依。

公司实施奖勤罚懒和优胜劣汰制度，由班组长对所带雇员按出勤率、劳动态度、技能、品行等按月进行评比，分为优、良、一般、较差、非常差五个等级，作为奖惩的依据。班组评选每日优秀员工若干名，予以小额现金奖励；每周最佳员工 2 名，予以公开颁奖表扬。对不按时上班、工作懒散的员工进行一次警告，二次辞退；对有偷窃等品行严重不端的人予以辞退。奖罚分明的机制，充分调动了当地员工的积极性，提高了劳动生产率，工程进度得到了保证。

### 待遇人性化

公司对当地雇员的工资按周结算，总包单位定期对各分包单位使用的当地雇员工资结算和发放进行严格检查，确保所有当地雇员工资按期按量足额发放。公司还同优秀的、有特殊技能的员工签订长期劳动合同。

respect, ensure and safeguard local employees' legal rights and interests.

### Standardized recruitment

The Company published recruitment information on the local labor market, and recruited excellent candidates from among those who applied. It tested the practical abilities of technicians like masons and carpenters and rated their skill levels before hiring them. The Company was especially strict with the work licenses of earthwork vehicles and tipper drivers and only employed those who could pass further tests. The employment of unskilled workers was based on personal performance and the Company's needs.

The Company compiled Worker Identification Numbers in a unified manner based on work type and classified employees into eight teams – a carpenter team, mason team, steel bar team, security team, mechanical construction team and logistics team. Each team was led by a Chinese worker who was also in charge of mentoring the staff and for overseeing their practical operational skills training. Technical examinations and grade ratings were conducted regularly on workers with a certain degree of experience, and these results served as the basis for salary increase.

### Systematic management

The Company laid down 10 management systems, including an employment system, a system for entering and exiting the site, a rating system, a reward system, a punishment system, a salary payment system, and a bulletin board system. This series of systems meant that the management had a practical set of rules and laws to work from when dealing with local employees.

The Company rewards the diligent and punishes the lazy in line with the principle of "selecting the superior and eliminating the inferior". The head of the team assesses the employees' performance on the basis of their attendance rate, work attitude, skill and conduct and rates it as "excellent", "good", "not bad", "bad" or "very bad", which serves as the basis for their reward or punishment. Every day, several workers are selected from among the team as the outstanding employees and receive small cash rewards; every week, two workers are recognized as the top 2 employees and receive a public praise and an award. Workers who don't get to work on time or don't work hard will receive a warning the first time and be fired the second time; workers involved in serious misconduct, like stealing, will be dismissed. The strict rules for reward and punishment

公司注重保障和维护当地员工的正当权益，比如为每位当地雇员配备上锁的衣帽箱，搭建专用的厕所、烧饭炉灶和休息间；为中午和晚上加班的当地员工提供免费伙食；为临时加班的当地员工提供食品和住宿等。

### 三、成效

公司在马拉维项目中积极开发和使用当地劳动力资源，规范化、制度化、人性化管理的管理模式取得了明显成效。一是员工业务技能和素质迅速提升，员工自身价值得以体现；二是员工的工作积极性得以提高，保证了整个项目在缺水少电的情况下仅耗时两个月就完成大部分基础工程；三是促进了当地劳动力就业，推动了当地经济的发展。公司的海外经营业务逐年盘升，实现了经济效益和社会效益的统一。

### 四、展望

公司将继续提升员工的属地化管理水平，在马拉维项目的属地化管理取得良好社会 and 经济效益的同时，积极推进其他项目的员工属地化，尝试和探索中高级管理人员的属地化管理。公司还将积极履行对员工的社会责任，更好地实现员工的个人价值与公司可持续发展的统一。

have fully mobilized the initiative of employees, raised their productivity and ensured adherence to the project schedule.

#### Humanized treatment

The Company pays the local employees a weekly salary. At regular intervals, the general contractor conducts a strict examination of salary calculations and payments that the sub-contractors make to their local employees in order to ensure that local staff is paid on time and in full. It also signs long-term labor contracts with outstanding employees with special skills.

The Company lays emphasis on guaranteeing and safeguarding local employees' legitimate rights and interests. For example, it equips each employee with a locker for storing clothing, provides toilets, kitchens and lounges, offers free food for local employees who have to work extra hours at noon or in the evening, and supplies workers that temporarily work overtime with food and accommodation.

#### III.Effect

The Company actively developed and employed local labor resources in the Malawi project. Its standardized, systemized and humanized management model has achieved significant results. First, the skills and quality of employees have increased, and their individual values have been realized; second, the work enthusiasm of employees grew, which allowed for the completion of the major foundational work within just two months, despite the lack of water and electrical power; third, local employment has risen and the economy has developed somewhat as a result. The operational business of the Company has grown year by year, realizing the full integration between economic and social interests.

#### IV.Prospects

The Company will keep on raising the localized management level of its employees. Having achieved good social and economic benefits in regards to localized management in the Malawi project, the Company will actively encourage employee localization in other projects and experiment and explore localized management at senior management levels. The Company also earnestly fulfills its social responsibilities to employees, having achieved a greater unity between value realization by employees and the sustainable development of a company.

## 全方位关爱海外员工心理健康 ——中信建设有限责任公司

### Meticulous care for mental health of overseas employees – CITIC Construction

3.3

**摘要：**公司重视海外员工的心理健康问题，通过员工帮助计划、心理培训与双向沟通机制，辅以系统的项目所在国认知培训和全方位的员工家属关怀行动，让海外员工能够舒心、安心和放心工作，增强了员工的凝聚力和向心力。

**Abstract:** The Company attached great importance to the mental health of overseas employees and reassured them and enhanced their cohesion through the employee assistance program, mechanism of mental training, two-way communication, systematic cognitive training, and all-round employee family care actions in countries where projects are located.

中信建设有限责任公司（以下简称“中信建设”）成立于 1986 年 3 月，是大型综合性跨国企业中信集团全资一级子公司。截至 2011 年 11 月，中信建设员工总数达 928 人，包括劳务派遣制人员 172 人，公司直接聘用人员 756 人。中信建设在 2011 年 ENR( 美国《工程新闻纪录》) 225 家全球最大国际工程承包商中排名第 32 位。

### 一、案例背景

中信建设在安哥拉、南非、巴西、伊朗等地拥有多家分支机构，有超过 47% 的员工在海外工作和生活。因长期远离祖国、家庭和朋友，生活环境艰苦，海外工程人员易受孤独、沮丧等心理问题困扰。这些问题严重影响员工职业健康，制约工程项目团队的成长。如何真正促进海外员工心理健康，强化企业责任竞争力是中国海外工程承包企业面临的共同难题。

### 二、措施

中信建设高度重视海外员工的心理健康和家庭情感生活，制定员工帮助计划、心理培训与双向沟通机制，辅

CITIC Construction Co., Ltd. (hereafter referred to as CITIC Construction), established in March 1986, is a wholly owned first-class subsidiary of the CITIC Group, a multinational conglomerate. As of November of 2011, the number of employees at CITIC Construction had reached 928, including 172 outsourced employees and 756 directly hired personnel. It ranked No. 32 in the top 225 international engineering contractors list of ENR (Engineering News Record) in 2011.

#### I.Case Background

The Company has branches in Angola, South Africa, Brazil, Iran, and many other locations. Over 47% of its workforce is currently working and living overseas. Overseas engineering personnel are easily troubled with loneliness and depression due to being far away from their homeland, family and friends. These problems have an impact on employees' occupational health and can become obstacles that hinder a project's success. How to fundamentally improve mental health of overseas employees and strengthen company competitiveness in regards to the responsibilities of the enterprise are common problems facing Chinese overseas project contracting enterprises.

#### II.Measures

CITIC Construction pays a great deal of attention to mental health, family, emotions and the lives of its overseas employees. It offers an employee helping plan, mental training and a two-way communication system, as well as systematic training for employees so that they understand the country the project is taking place in, and undertakes all-round family care actions.



以系统的项目所在国认知培训和全方位的员工家属关怀行动，让海外员工能够舒心、安心和放心工作。

### 开展外派员工出境前培训，增强员工自信心

公司在国内工程行业率先引进员工帮助计划，聘请外部专业咨询机构开展员工帮助计划系列讲座。每年对海外员工开展出境前的心理、语言、文化、法律、社会安全等方面培训，覆盖率达到 100%，具体内容包括项目所在国概况、安全注意事项、文明礼仪常识等，并建立起企业与员工双向沟通机制。

### 关心员工家属，解除员工后顾之忧

公司实施温馨工程，关怀员工家属，打消员工的后顾之忧。2010 年起，中信建设已连续三年组织海外员工子女夏令营活动。各项目驻北京办事处及时将项目进展及员工生活状况告知员工家属，还协力解决员工国内家属的各种困难。

### 开展各类文体活动，平衡员工工作和生活

公司海外项目部通过举办篮球赛、羽毛球赛等文体活动，缓解海外员工工作压力和寂寞之情。公司还从国内组织广受员工喜爱的明星组成慰问团，开展“爱与信念的跨国传递”主题文化活动，慰问在安哥拉社会住房项目工程一线的劳务人员。

## 三、成效

通过培训学习和各类文体活动增强了员工对项目所在地的系统认知，促进了不同文化背景员工间的相互融合，强化了海外员工在对外交往时的自信，为员工营造了舒心的工作环境；关心员工家属的活动，使身在海外的员工大受鼓舞和感动，争取到了国内亲属和家庭对海外员工的支持，调动了员工的工作积极性和主动性，增强了员工队伍的凝聚力和向心力。2011 年上半年，中信建设“员工满意度调查”显示，员工满意及较满意率在 90% 以上。2011 年员工流失率 12%，同比降低 5 个百分点，员工签订劳动合同率 100%，位居同行业前列。

### Carrying out training before expatriates leave their home countries to increase their self-confidence

The Company takes the lead in introducing an employee helping plan and outsourcing professional consultation institutes to deliver lectures about employee helping plans in the domestic engineering industry. Every year, it gives training in regards to mentality, language, culture, law, and social security before its employees leave China. The training is attended by all expatriates and has content that includes the country profile, safety precautions, etiquette, common sense, and other aspects in regards to the host country. The Company has also established an enterprise-employee two-way communication system.

### Showing care for employees' families and relieving them of worries from back home

By carrying out the “warm and sweet” project and thereby showing concern for employees' families, the Company helps to relieve the employees' worries about their homes. Since 2010, CITIC Construction has held annual summer camps for the children of expatriates. The office of each project in Beijing informs families of the project's progress and the living conditions of employees overseas and helps families solve various difficulties.

### Holding recreational and sports activities to help employees strike a balance between work and life

Through recreational and sports activities, such as basketball and badminton competitions, the overseas project department manages to help employees relieve pressure and ease loneliness. It has also invited domestic singers and actors that are popular among employees to carry out the “Cross-country Transit of Love and Faith” themed cultural activity and convey greetings to frontline construction workers of the Angola social housing project in Angola.

## III.Effect

Those training, recreational and sports activities have enhanced employees' awareness of the host countries, boosted the blending of employees of different cultural backgrounds, improved self-confidence of expatriates in terms of communications, and created a more comfortable work environment for them. The family care activities have inspired and moved the expatriates, won support for them from families, increased their work enthusiasm and enhanced team cohesion. In the first half of 2011, an “employee satisfaction survey” of CITIC Construction showed that the rate of “satisfaction” and “relative satisfaction” of employees was above 90%. The staff turnover rate was 12% in 2011, down 5 percentage points, and the employee contract-signing rate hit 100%, putting it at the forefront of this industry.

强大的员工凝聚力和向心力也为公司在当地项目的顺利开展奠定了坚实基础。2010 年、2011 年公司项目一次交验合格率均为 100%。各海外项目工程及时有效运作，也进一步增强了中信建设在当地工程建设领域的品牌效应。

## 四、展望

公司努力将提高人才的使用效率作为挖掘人才潜能，实现人才保值增值的重要突破口。公司致力于为员工提供一个安全、健康的工作环境，未来将更加注重提升员工满意度，优化人才效益，尽快形成公司在人才使用效率方面的优势地位，提供行业人才利用的借鉴。

Its powerful staff cohesion also lays a stable foundation for the Company in its projects overseas. The one-time inspection pass rate of its projects hit 100% in both 2010 and 2011. The timely and efficient operations of each overseas project have further strengthened the Company's brand reputation in the local construction field.

## IV.Prospect

The Company will improve its talent utilization rate in order to bring out the best in its staff and realize the maintaining and increasing of the value of its human talent. The Company is committed to providing every employee with a safe and healthy work environment. And it will pay more attention to raising employee satisfaction and optimizing human talent in the future, so as to achieve a dominant position in regards to talent utilization and set a good example for talent utilization in this industry.

# 多层次提升员工素质 ——中国土木工程集团有限公司

## Enhancing employees quality in various ways— China Civil Engineering Construction Corporation

3.4

**摘要：**公司在海外经营中，积极开展培训工作，提高当地雇员素质和归属感，特别注重聘用和培养当地女性员工以及高层次、高素质的技术管理人才，为推进属地化管理提供了人力资源保障。

**Abstract:** In overseas operations, the Company actively carried out training to enhance the qualities of local employees' and their sense of belonging and paid special attention to recruiting and training local female employees and high-caliber technical management talents, thus providing human resources support for the advancement of localized management.

中国土木工程集团有限公司（以下简称“中土集团”）成立于 1979 年，前身为中华人民共和国铁道部援外办公室，是 20 世纪 60-70 年代中国最大的援外项目——著名的非洲坦赞铁路工程（坦桑尼亚至赞比亚）的组织者、实施者，是中国最早进入国际市场的四家外经企业之一。目前，中土集团已成为年在建合同额超过 800 亿人民币，营业额超过 100 亿人民币、海外业务达 90% 以上，全球最大 225 家国际承包商百强公司之一。

China Civil Engineering Construction Corporation (hereafter referred to as CCECC) was founded in 1979 and formerly functioned as the Foreign Aid Department of the Ministry of Railways of PRC. CCECC was the organizer and implementer of the largest Chinese foreign aid project in the 1960 and 70s: the well-known Tanzania-Zambia Railway (from Tanzania to Zambia). CCECC was also one of the first four overseas economic corporations to have entered the international market. Presently, CCECC ranks among the top 225 international contractors, with a contract value of ongoing projects exceeding RMB80 billion and a business volume of over RMB10 billion, of which 90% is overseas business.

## 一、案例背景

在尼日利亚，失业问题极为严重，无业青年人数居非洲第一，促进就业以及就业能力的提升是当地面临的重大挑战。目前，尼日利亚已经成为中土集团在非洲的最大市场，但当地工人技术水平和受教育水平相对较低，随着业务的逐步扩大，提升当地员工素质和员工的属地化管理能力成为中土集团需要解决的现实问题。

## 二、措施

中土集团积极实施员工本土化战略，通过积极开展培训工作，提高当地雇员素质和归属感，特别注重聘用和培养当地女性员工以及高层次、高素质的技术管理人才。

## 集中化、专业化培训

在抓好现场培训的基础上，做到分期分批集中培训。项目部还针对自身实际，制定当地语言版本的培训教程。

当地工人上岗前，必须由主管招工对当地高级雇员进行质量管理方面的说明与培训。项目部中方人员对当地员工进行包括电脑操作、机械操作、土木实验、施工监测等覆盖多个工种的全方位培训，使他们的专业技术能力得到快速增强，半年后基本都能独立开展工作。

根据自身项目的实际情况，制定了各工种、各施工机械及各施工工序的安全技术操作规程，并依据这些操作规程定期对当地员工进行培训。由质管小队牵头，对各施工工序进行技术交底，使工长充分了解各分部分项工程的重点和难点，明确施工质量标准与质量责任，做到上一道工序验收不合格，下一道工序不开工。通过技术交底，当地员工的施工技能及操作熟练程度得到了全面的提高。

为进一步扩大培训规模，中土尼日利亚公司在首都阿布贾 IDU 工业区成立了培训中心，专门负责大批量地培训当地员工，实现了培训的集中化、专业化。培训中心编写了英文培训教材，对当地专业人才包括高级雇员、工长、机修、化验、操作手进行培训，推进属地化经营。

公司还制定了雨季赴中国培训计划，安排有潜力的当地员工来中国实习，通过系统培训，帮助他们掌握中国近年在铁路、公路等工程领域的前沿技术，加强当地员工对企业的认同感和归属感。

## 积极聘用女性员工

公司不仅提供大量适合女性工作的岗位，还对其进行认真培训和指导，使用英语教材，从设备操控到手把手帮带，不断提供操作水平，逐步从生疏到熟练。同时班组针对当地员工特点，不断改进工装及设备操控，提高操控安全性，使之更加适合当地雇员操作习惯，降低劳动强度。

## Centralized and professional training

Besides centralized training in stages and groups and on-site training, , the project department also designs targeted training programs in the local language.

Local workers must be instructed and trained in regard to quality management by the local senior employee in charge of recruitment before taking their posts. Chinese workers of the project department give all-round training to the local employees in terms of computer operation, mechanical operation, construction testing, and construction monitoring, enabling them to rapidly grow in regards to professional techniques and generally be able to work independently within half a year.

Safety operation rules for each work type, construction machinery and construction procedure are developed in accordance with the characteristic of the project, and the local staff are trained regularly in regards to those rules. The quality management team takes the initiative to conduct technical clarification for each construction procedure. Thus, the foreman becomes fully aware of the crucial and difficult links of each part of the construction and is clear about the construction quality standards and quality responsibility. As a result, the next procedure won't start before the previous procedure has been checked and approved. Through technical clarification, local employees made significant progress in terms of construction skill and operational proficiency.

To further expand the training scale, CCECC Nigeria Ltd. has established a training center in the IDU Industrial Zone in Abuja. It is aimed at training large numbers of local workers and realizing centralized and professional training. The training center has compiled training materials in English for tutoring local professional talents, including senior employees, foremen, machine maintenance personnel, inspection personnel and operation personnel while simultaneously promoting localized operation.

The Company also makes plans to come to China and receive training during the rainy season and arranges for employees with potential to practice their skills in China. The systematic training helps them to master cutting-edge technologies in railway, highway and other fields in China. In this way, the local employees' sense of identity and sense of belonging toward the enterprise increases.

## Recruitment of female workers

Besides offering a large number of positions suitable for women, the Company trains them carefully, uses English teaching materials, provides step-by-step directions in regards to equipment operation, and so on in order to constantly and progressively improve their proficiency. At the same time, the



## 高端劳务本地化

为全面推进属地化管理，公司不断推进高端劳务的本地化，招聘了大量当地大学生毕业生，并聘用了素质较高的当地人员担任重要管理岗位。公司规定，新签和在建的工程项目招工用工、劳工关系及社区关系处理，必须由公司聘用的当地人事经理负责。

在尼日利亚 ABA50 公里项目地处尼日利亚阿比亚阿巴（ABA）市，公司聘用了大量当地高级雇员，现场施工和技术管理完全交给当地高级雇员负责，包括项目工程技术部主要人员。项目部制定了当地人选聘办法、安全管理细则、当地高级雇员分级工资待遇办法、现场监控办法，质量监控办法等内部管理制度，基本实现项目施工的本地化运作。

## 三、成效

### 促进当地就业

截至 2012 年，中土尼日利亚公司雇佣当地员工近 1.3 万人，为尼日利亚的扩大就业、社会稳定和经济发展贡献了力量。中土尼日利亚公司当地员工的工资水平在尼日利亚属于中高等收入标准，为当地员工家庭提供了稳定的收入来源，也相应提升了他们的生活质量和幸福感。尼日利亚总统乔纳森曾在不同场合和媒体上表示：“CCECC（中土英文简称），good”、“中土集团公司不愧为有责任感的国际化大公司，中国人是尼日利亚人最值得信赖的朋友”。

### 助力企业发展

在尼日利亚，中土集团已培养出了一支测量、管理、咨询、报表等一条龙的全部当地化管理队伍。在提高当地劳动力素质的同时，也凝聚了一批致力于公司长期发展的当地骨干力量。

大量当地员工的雇佣与培训，极大地降低了企业人工成本。高级管理人员的本地化聘用与扩大化不仅可以提高办事效率，为企业运营带来良好的经济效益，更能够在

team adapts tooling and manipulation of equipment to suit the characteristics of local employees and raises operational safety through better adherence with local operational behavior and reducing labor intensity.

### Localization of high-end labor service

To comprehensively promote localized management, the Company constantly advances the localization of high-end labor by hiring a great deal of local undergraduates and employing highly competent local people in important positions. The Company has stipulated that recruitment, labor relations and community relations for newly-signed and ongoing projects must be in the charge of locally employed managers.

The Company hired a large number of local senior employees for the Nigeria ABA 50-Kilometer Project in ABA city. These employees, including key personnel in engineering and technical departments, take full responsibility for the on-site construction and technical management. The project department draws up some internal management systems, like the local personnel election methods, detailed safety management rules, graded salary methodology for local senior employees, site monitoring methods, quality monitoring methods, and has basically realized the localized operation of the project.

## III.Effect

### Promoting local employment

By 2012, CCECC Nigeria Ltd. had nearly 13,000 local employees, thus contributing a great deal to social stability and economic development in Nigeria. The salary of employees of CCECC Nigeria Ltd. is at the mid-high level of incomes in Nigeria, which means that employees and their families are provided with a stable source of income and significantly increased living standards. As the Nigerian president Goodluck Jonathan has said to the media on several occasions: “CCECC, good!” and “CCECC is worthy of the name of an international corporation of responsibility, and Chinese people are the most reliable friends of the Nigerian.”

### Facilitating the development of the enterprise

In Nigeria, CCECC has developed an entirely localized management team capable of conducting measurements, management, consultation and reporting. While improving local labor quality, it has also gained a backbone of staff committed to the long-term development of the Company.

The large number of local employees and frequent training has greatly reduced the labor costs of the Company. Increasing the employment of local people in senior management position not only raises efficiency, but also brings economic benefits for the Company, enabling its influence and credibility in local government and society to expand quickly.

融入当地社会的过程中，迅速扩大公司在当地政府和社

会的影响力和公信力。

## 四、展望

为谋求新的发展，中土集团计划在工程领域之外，逐步扩大对尼日利亚投资，实现从建筑企业向投资企业的转型。中土集团将全力提升海外项目本地化经营水平，继续保持既有人力资源优势，将通过为尼技术人员赴华培训提供奖学金，与中国铁道学院合作帮助尼日利亚培训铁路交通专业人员等人力资源开发项目，为企业的海外经营提供坚强支撑。

## IV.Prospect

To pursue continued development, CCECC plans to gradually expand investment in Nigeria (including investment outside of the construction industry) and finish its transformation from a construction enterprise to an investment enterprise. CCECC will enhance the level of localized operations of overseas projects as a whole in order to maintain its pre-existing human resource advantage. It will cooperate with Chinese railway academies to help Nigeria to cultivate rail transportation professionals and pursue developments in regards to other types of human resources. It will also offer stipends to Nigerian technicians to go to China to receive training. All of this will provide great support for its overseas operations.

# 大胆启用当地员工 ——中国河南国际合作集团有限公司

Driving local employment through localized recruitment—  
China Henan International Cooperation Group

3.5

**摘要：**公司在海外经营中，雇佣大量当地居民，积极开展培训工作，注重当地员工职业发展，培养了一批当地技术管理人才，为实现与当地共同发展的本土化经营奠定了基础。

**Abstract:** In its overseas operations, the Company employed many local residents, actively carried out training, paid attention to the career development of local employees and trained a group of local technical management talents, thus laying a solid foundation for accomplishing localized operations while simultaneously promoting local development.

中国河南国际合作集团有限公司是专门从事国际经济技术合作的国有独资企业，主要经营国际承包工程、国际工程咨询、矿产投资与管理、农业投资与管理、承担国家对外经济援助项目、进出口贸易、信息技术服务等业务。目前，公司在亚洲、非洲等 20 多个国家和地区设有驻外机构，先后成功实施了 400 多个国际承包工程项目。

## 一、案例背景

随着国内劳动力成本、原材料价格和国际运输价格的持续攀升，以及金融危机带来的国际市场需求不振、竞争激烈等不利因素的影响，中国国际承包商面临的形势日趋严峻。加之各个国家对外资企业本土化要求日趋严格，充分利用当地资源，实现与当地共同发展的本土化经营已成为企业在海外谋求生存和发展的重要出路。

## 二、措施

公司始终将打造具有跨国经营能力的高效团队作为经营首要任务，通过区域化改革，大力推进境外经营属地化。目前各驻外分公司大力启用当地员工，在经营过程中始终把解决当地居民就业、提高当地员工职业技能放在重要位置。

Specializing in international economic and technological cooperation, China Henan International Cooperation Group Co. Ltd. (hereafter referred to as CHICO) is a solely state-owned enterprise that is primarily engaged in international contract projects, international engineering consulting, mining investment and management, agricultural investment and management, undertaking state foreign economic-aid projects, and import and export trade and information technology services. Up to the present, the Company has established active offices in more than 20 countries and regions in Asia, Africa, and other locations. It has successfully implemented over 400 international contracting projects.

### I. Case Background

The situation that international contractors in China face is getting increasingly serious as domestic labor, raw material and international transport costs continue to rise. Furthermore, the financial crisis has brought many unfavorable effects, such as sluggish demands and fierce competition in international markets. In addition, because countries and regions have become increasingly strict in requiring foreign investment enterprises to meet conditions in regards to localization, making full use of local resources and realizing the localization of operations and mutual development along with the local area has become an important way for enterprises to survive and develop overseas.

### II. Measures

The Company consistently gives priority to creating a high performance team with transnational operation abilities though regionalized reform and by striving hard to drive the localization of overseas operations. All overseas branches devote major

### 保障基本生活

公司所有的驻外公司在生产经营过程中，大批雇佣当地居民，把提高当地员工的生活水平放在重要位置。同时，公司按时发放工人劳动报酬和劳保用品，积极主动地为当地员工缴纳各种社会保险，免费提供各类医疗服务，尊重当地居民的各项人权。

驻利比里亚公司针对当地艾滋病频发的情况，多次组织以艾滋病防治为主题的文艺演出，宣传艾滋病预防的重要性；出资邀请当地艾滋病预防组织（NACP）的专家或负责人挨家挨户发放艾滋病预防用品，提高当地员工和居民的艾滋病防护意识。

### 提升职业技能

公司注重提高员工的职业技能和就业能力，针对当地员工的知识结构和技能水平，结合个人意愿和施工需要开展了机械加工、机械修理、特种机械操作、各种实验 / 测量仪器的使用、施工设计等方面的培训。

驻莫桑比克公司 131 项目部机修队长——阿普达拉原为乌干达普通技校毕业生，9 年前就职于公司，随公司转战非洲 3 个国家 4 个项目部，通过公司多年的培养和自身努力，目前可以熟练修理大货车、挖掘机、装载机、平地机等工程类各种大型机械，工作技能得到了大幅提升。

### 规划职业发展

公司十分注重当地员工的职业发展，针对当地雇员的知识结构和技能水平，为之制定切实可行的职业生涯规划，设立适当的职业生涯规划目标，及时给予奖励和晋升，真正提高了员工的幸福感。

驻塞内加尔公司的当地职员萨内 30 年前受雇于河南国际，工作伊始仅为普通技术人员，该员工在工作中以其认真、高效、严谨的工作作风从众多当地雇员中脱颖而出。公司结合企业发展需要和个人意愿，大胆提拔萨内走上管理工作岗位。目前该名员工为塞内加尔公司副总经理，在该分公司经营管理、商务活动中发挥了重要的作用。

efforts to the localized recruitment of labor and place great emphasis on solving employment difficulties for local residents and improving the professional skills of local staff during the course of their operations.

### Guaranteeing daily necessities

All the overseas branches of the Company employ a large number of local residents and place great emphasis on improving the living standards of local staff during the course of their operation. At the same time, the Company pays employees timely and furnishes labor protection appliances for the workers, actively pays for various social insurances for local staff, provides a wide range of medical services free of charge and demonstrates respect for all the human rights of local residents.

The branches in Liberia have organized many theatrical performances with the theme of AIDS Prevention and Control and publicized the importance of AIDS prevention due to the high rates of AIDS in the local region. These branches have also funded visits by local experts or directors of the AIDS Control Project (NACP) to provide AIDS prevention products door-to-door in order to improve the AIDS prevention awareness of local staff and residents.

### Improving professional skills

The Company attaches great importance to improving employees' professional skills and employability. In accordance with local staffs' knowledge and skill levels, while simultaneously balancing employees' personal aspirations and the construction needs, the Company has carried out trainings in various aspects such as machining, machine repairing, special mechanical operations, using various experimental/measuring instruments, construction design, and other topics.

Apudara, the team leader of the machine maintenance team in Project Department 131 of the branch in Mozambique and a graduate from a general technical school in Uganda, has been working in the Company for 9 years and has worked with the Company in 4 project departments in 3 countries in Africa. Through cultivation by the Company over several years and his own efforts, he has now substantially improved his job skills and is very good at repairing a number of large engineering machines such as trucks, excavators, loaders and graders.

### Planning for employee career development

The Company has paid so much attention to the local staffs' professional development that it has worked out achievable career planning for them with respect to their knowledge structure and skill level, set appropriate career planning goals and granted timely rewards and promotions to really improve staffs' well-being.



### 三、成效

秉承“开辟一片市场，富裕一片人民”的原则，公司为当地员工提供就业岗位近万个，当地员工的雇佣比例已达 90% 以上，大大提高了当地居民的就业率和收入水平。通过职业技能培训，公司为当地培养了一大批懂技术、懂管理的专业技术人才。据统计，仅 2012 年一年各驻外公司开展不同形式的培训班 300 多次，培训当地员工 5000 多人次。

通过职业发展规划，很多非洲籍员工已经走上了管理岗位，分别担任了秘书、部门经理、项目工程师等重要职位，职务的提升和收入的增加使他们对河南国际产生了很深的认同感和归属感，真正提高了员工的幸福感和忠诚度。

公司的经营效率显著提升，市场份额不断扩大，更赢得了当地政府和人民的信任、尊重和支持，获得社会舆论的好评，也获得了更多的合同与市场，实现了经济效益和社会效益的双丰收。

### 四、展望

公司始终秉承“以人为本”的经营理念，进一步完善社会责任管理制度，从组织、人员、经费等方面健全和加强工作机制，更加主动地履行对员工的社会责任。针对每一个国际工程承包项目和项目所在国家、地区的特点，制定相应的社会责任履行计划，认真执行，并在实践中不断总结、不断创新、不断深化，真正使企业的发展惠及当地员工。

Sanei, a local worker of the branch in Senegal who has been working for CHICO for 30 years, was only an ordinary technician at the beginning, but he stood out from other numerous local staff due to his serious, efficient and rigorous style of work. The Company boldly promoted Sanei to a management position according to the needs of business development and his personal desires. Now, as the vice-general manager of the Senegal branch, Sanei plays an important role in operational management and business practices for the branch.

#### III.Effect

Adhering to the principle of “open up a market and enrich the peoples living there”, the Company has provided approximately ten thousand jobs for local staff, and the proportion of local staff among those employed has reached over 90%. Thus, the employment rate and income level of local residents has greatly improved. The Company has cultivated a large number of professional technical talents proficient in technology and management through vocational skills training. According to statistics, overseas branches carried out over 300 different training classes and trained more than 5,000 people in the year 2012 alone.

Many African employees have been promoted to managerial positions such as secretary, department manager and project engineer through professional development planning. To this end, their promotions and increases in income have led them to generate a deep commitment and sense of belonging to CHICO and improved the employees' well-being and loyalty.

The remarkable promoting of operating efficiency by the Company and the continuous expanding of market share demonstrates that the Company has gained the trust, respect and support from the local government and people, won accolades from public opinion, obtained more contracts and markets, and achieved both the goals of economic and social benefits.

#### IV.Prospects

Through consistently adhering to a “people-oriented” principle of operation, the Company has further improved its management system of social responsibility, perfected and strengthened the operational mechanisms of the organization and in regards to people and expenses among other areas. It has also proactively fulfilled its social responsibility to employees. The Company develops a corresponding plan for fulfilling social responsibility that is in accordance with the characteristics of the countries and regions where the projects are located in and the international engineering contracts themselves. Furthermore, it implements these plans earnestly and through continuous review. It also engages in ongoing innovation and ever-increasing depth of execution, in order to truly realize the benefits for local staff in regards to business development.

## 商业伙伴 ——坚持共同发展 Business Partners – For Mutual Development





# 开创融投资带动总承包全新模式——中国建筑股份有限公司

## Financing and investment drive contracting – China State Construction Engineering

### 4.1

**摘要：**公司在巴哈马大型海岛度假村项目中，通过联合银行融投资带动工程总承包的全新运作模式，依托国际水准精英团队，保障项目运作顺利推进，赢得了社会各界的认可和赞誉，为当地就业和经济发展做出了积极贡献。

**Abstract:** In the Bahamas Large Island Resort Project, through the new operation model of bank-financed EPC, and on the basis of a world-class team, the Company advanced the project smoothly and earned wide praise from those in many fields while making a positive contribution to local employment and economic development.

中国建筑股份有限公司由中国建筑工程总公司、中国石油天然气集团公司、宝钢集团有限公司、中国中化集团公司 4 家企业共同发起，于 2007 年 12 月 10 日正式成立，公司承袭了中国建筑工程总公司的优良资产，主营业务涉及房屋建筑工程、国际工程承包、房地产开发与投资、基础设施建设与投资、勘察设计等领域，累积在 100 多个国家和地区承建项目 5000 余项。

## 一、案例背景

巴哈马大型海岛度假村项目是占地 1000 英亩、建筑面积 32 万多平方米的大型综合海岛度假村项目。2008 年 2 月，业主方已决定将该标段正式授标中国建筑。就在此时，次贷危机所引发的金融风暴迅速波及全球，项目主要投资人之一黯然宣布放弃该项目的投资。业主无奈地通知建筑师和专业工程师暂停项目前期工作，很多人都认为这个项目已经走到尽头。

## 二、措施

就在“山穷水复疑无路”的情况下，中建美国公司创造性的运作使整个项目迎来“柳暗花明又一村”。

Through joint investments by four companies, namely China State Construction Engineering Corporation, China National Petroleum Corporation, Baosteel and SINOCHEN GROUP, China State Construction Engineering Corp. Ltd. (CSCEC) was founded on December 10, 2007. The newly-founded Group inherited the desirable assets of the China State Construction Engineering Corporation. With a primary scope of business ranging from housing construction projects, international project contracting, real estate development and investment, infrastructure construction and investment to survey and design, the Company has undertaken more than 5,000 construction projects in more than 100 countries and regions.

## I. Case Background

The Bahamas Large Island Resort Project is a large comprehensive island resort project covers 1,000 acres and has a building area of 320,000 square meters. The owners decided to formally award the contract to CSCEC in February, 2008. At that time, as the financial crisis spread through the world, one of the major investors sadly announced to abandoning their investment in the project. The owners had informed the architects and professional engineers to suspend the preliminary work, and it was thought that this project had come to an end.

## II. Measures

When at its wits' end, the American branch of CSCEC applied innovation to its operations and turned the whole project around.

## 充分发挥资金优势，善于利用银行资源

在项目运作前期（当时业主并无融资压力），公司建议中国进出口银行接触巴哈马项目，并促成 2007 年 11 月银行高层领导访问巴哈马。2008 年 4 月，银行专门负责项目融资的总经理与巴方负责人开始巴哈马大型海岛度假村项目的融资谈判。公司先行一步展现了在资金资源优势，赢得项目中的主动地位，从根本上改变了项目的推进模式。

## 改变项目运作模式，挽救项目于危难

中国进出口银行的政策导向决定其贷款是以中国建筑总承包该项目为必要前提。在进一步分析后，公司决定对该项目进行少量投资，一方面促成项目融资模型的成功，另一方面可分享项目运营期的稳定收益，并通过资本话语权改变在项目承包工程中的被动地位。2009 年 3 月，公司与巴哈马大型海岛度假村正式在北京签订工程总承包协议；2009 年 9 月，签订项目投资的框架协议，并与中国进出口银行签订了项目贷款框架协议。中国建筑以融投资带动工程总承包的模式全面介入该项目的运作。

## 依托国际水准精英团队，保障项目运作顺利推进

项目运作牵涉双边或多边的政府和企业外交关系以及各类社会团体之间的关系，涉及投资、融资、法律、规划、设计、施工、房地产和政府公共关系等多个专业领域，参与其中的各方专业人士和第三方机构的顾问、律师高峰时期多达上千人，中英文各类文件数千份。公司团队多年来重培训、重积累，培养了具有商业谈判经验、熟悉市场、精于业务、理念创新的高素质精英团队，凭借强大、健康的企业文化，公司上下齐心协力保证了利益最大化和项目按计划进入融资关闭阶段。

2011 年 2 月 21 日，巴哈马大型海岛度假村项目开工典礼在巴哈马首都拿骚隆重举行，标志着项目施工建设全面拉开帷幕。

## Taking full advantage of capital and making good use of bank resources

The Company suggested that the Export-Import Bank of China should contact the Bahamas Project and invited senior leaders of the bank to visit the Bahamas in November of 2007 at the early stage of the project's operations (when the owners had no financing pressure). The general manager of the bank responsible for project financing and the person in charge of the Bahamas project began financing negotiations for the Bahamas Large Island Resort Project in April of 2008. The Company stayed a step ahead to demonstrate its advantages in capital resources to secure an advantageous position, which fundamentally changed the project's pattern of progression.

## Changing the operation model of the project and helping the project get out of difficult situations

The policy orientation of the Export-Import Bank of China determined that the loan had to be based on the condition that CSCEC be the general contractor for the project. After further analysis, the Company decided to invest a small amount of capital into the project. On the one hand, CSCEC did help facilitate the success of the project's financing model; on the other hand, it did to share in the stable profits during the operations period and change its position to having a real say based on its invested capital. The Company and the Bahamas large island resort formally signed the EPC agreement in Beijing in March of 2009. The Company then signed the Framework Agreement of the Project Investment and signed the Framework Agreement of the Project Loan with the Export-Import Bank of China in September of 2009. Thus, CSCEC was now fully involved in the project operations through, as its financing and investment were driving engineering general contracting.

## Relying on an elite team of an international standard to ensure the smooth operation of the project

The operation of the project involved bilateral and multilateral diplomatic relations between governments and enterprises and the relationships between various social groups. Project operations also involved multiple areas of expertise, such as investment, financing, law, planning, design, construction, real estate, and government and public relations. This involved thousands of professionals with various kinds of expertise and consultants and lawyers from third parties as well as thousands of documents of many types in both English and Chinese. Having put a high value on training and the accumulation of experience over many years, the Company's team was able to cultivate a high quality elite team with business negotiation experience and innovative concepts who were also familiar with the market and proficient in business so that the whole Company could collaboratively guarantee that they would maximize the benefits and that the project would enter into the closing stage of financing according to plan through the strong and healthy company culture.



### 三、成效

巴哈马项目的运作模式为融投资带动工程总承包的全新运作模式。中国建筑在整个项目中既扮演投资人又扮演总承包商的双重角色，借助融投资的话语权，能够获得较为有利的承包工程条件，使承包工程的利润变得相对丰厚，综合工程承包和投资收益的整体利润较高。

项目建成后将为当地创造 12000 个工作岗位，并在未来 20 年为巴哈马贡献 110 亿美元 GDP 产值及 47 亿美元的税收收入，对于增加当地就业、恢复经济乃至政治和社会都将产生重要和积极的影响。项目的成功运作和实施得到了社会各界的认可和赞誉，对中巴两国政治、经贸往来做出重大贡献，对进一步充实和丰富两国关系内涵、不断开创中巴友好合作新局面起到重要作用。

项目实现了金融资本与产业资本的结合，开创了在海外项目经营中联合银行业实施融投资带动总承包的先河。项目的实施扩大了中国在加勒比地区的影响力，提升了中国承包商在全球的整体竞争实力。哈佛大学商学院以中建美国公司成功运作 36 亿美元巴哈马大型海岛度假村项目为内容编写案例走进了哈佛大学商学院的课堂。

### 四、展望

中建美国公司无论软实力还是硬实力都足以承载融投资带动总承包模式下的超大型项目。未来公司将调整相应的经营结构，继续强化建造业务，打造房建和基础设施领域核心竞争力，并将涉及融投资的超大型项目作为经营重点。

The commencement ceremony of the Bahamas Large Island Resort Project was solemnly held in Nassau, the capital of the Bahamas, on February 21, 2011, marking the start of construction for the project.

#### III.Effect

The operational model represented a new financing and investment model in driving engineering general contracting. CSCEC played a dual role both as an investor and a general contractor. By having a say in the financing and investment, the Company was able to get relatively favorable conditions, which allowed for a relatively high yield in profits and enabled overall profits on comprehensive contracting and investment returns to be higher.

Completion of the project will create 12,000 jobs for the local area, and will contribute 11 billion US dollars in GDP output value and 4.7 billion US dollars in tax revenue for the Bahamas over the next 20 years. This will have a significant positive effect in terms of local employment, economic recovery and even on politics and society in general. The successful operations and implementation of the project have gained recognition and praise from all walks of life, have made a significant contribution to political, economic and trade exchanges between China and the Bahamas and have played an important role in further improving and enriching bilateral relations and facilitating friendly cooperation between the two countries.

The project has achieved the integration of financial and industrial capital, and created a precedent for leveraging financing and investment to drive general contracting in the process of overseas project operations combined with banking. The implementation of the project expanded China's impact on Caribbean areas and improved Chinese contractors' competitive strength in the global market. Harvard Business School wrote a case based on how the American branch of CSCEC successfully operated the 3.6 billion US dollar Bahamas Large Island Resort Project. It also adopted the case as part of the curriculum studied in its classrooms.

#### IV.Prospects

Both in terms of “soft power” and “hard power”, the American branch of CSCEC has the capabilities to carry out a huge project through the model of leveraging financing and investment. The Company will adjust its business structure and continue strengthening its construction business to build up its core competitiveness in the fields of housing construction and infrastructure, and focus on the operation of vast projects concerning financing and investment.

## 助力分包商提升技术水平 ——中国水电顾问集团昆明勘测设计研究院

### Assisting local sub-contractors in technology development— Hydrochina Kunming Engineering

## 4.2

**摘要：**公司承建中缅原油管道项目原油码头水库工程，组织专业技术人员，带领技术薄弱的当地分包商实施工程，提高施工效率，保障工程顺利完工，提高当地分包商的技术和管理水平，展示了高度负责的企业形象。

**Abstract:** In the crude oil terminal reservoir projects of the China-Myanmar crude oil pipeline project, the Company organized professionals to lead technically weak local subcontractors in the construction, thus increasing construction efficiency, ensuring the smooth completion of the works, raising local subcontractors' technical and management levels, and demonstrating its image as a highly responsible enterprise.

中国水电顾问集团昆明勘测设计研究院（简称：昆明院）是具有工程设计综合甲级资质的大型勘测设计科研单位，主要从事国内外水利水电、风电、太阳能发电以及市政工程的勘察、设计、科研、咨询、监理和总承包等业务。

Hydrochina Kunming Engineering Corporation (KHIDI) is a large survey and design research unit with comprehensively first-rate qualifications in engineering design. It is primarily engaged in water conservancy and hydropower at home and abroad, wind power, solar electrical energy generation, as well as survey, design, scientific research, consultancy, supervision, general contracting, and other areas related to municipal engineering.

### 一、案例背景

2010 年，昆明院承建中缅原油管道项目原油码头水库工程，水库是中缅油气管道码头配套供水水库，主要用途是为原油码头运行期供水，兼顾当地的人、畜用水。项目建设前期，分包商因施工组织及管理原因，施工进度有所拖延；且缺乏钢筋混凝土工程技术人员、技术水平落后，使水库工程建设面临工期紧、任务重、资源配置不到位等严峻形势。

### 二、措施

为保证安全、优质、按期完工，昆明院充分利用自身专业优势，提高分包商管理和技术水平，调动各方资源，有效应对项目建设过程出现的各类难题和风险。

#### I.Case Background

KHIDI was contracted to build the crude oil wharf reservoir of the China-Myanmar crude oil pipeline project in 2010. The reservoir was to supply water for the operating period of the crude oil wharf and for both the local people and animals and was also to act as a water supply reservoir for the oil and gas pipelines wharf between the two countries. In the early stage of the project, the sub-contractors postponed construction for management reasons; the lack of technicians in regards to reinforced concrete engineering and the backwardness of technology left the reservoir engineering construction in dire straits, with tight schedules, burdensome tasks and a lack of appropriate resource allocation.

#### II.Measures

To ensure safety, high quality and on schedule completion, KHIDI made full use of its own professional advantages to improve the sub-contractors' management and technological levels, mobilized resources from all parties and effectively coped with various problems and risks in the process of project construction.

## 提高分包商管理技术水平

昆明院发挥自身实力，针对分包商钢筋混凝土施工技术力量薄弱和语言不通的问题，从缅甸北部招聘懂中文的缅甸籍技术工人，带领分包商专门实施钢筋混凝土施工工程；施工过程中，分包方大量使用人力及木材，施工方法落后，效率低下，且浪费自然资源，昆明院施工人员通过手把手传授，将国内的成熟施工技术教给当地施工人员，改变了分包商传统的施工方法，提高了施工效率，也为项目按时竣工提供了保障。

## 争取当地社区支持

昆明院遵守当地法律法规，主动纳税，保护当地环境，积极参与社区发展，促进了建设沿线的就业、基础设施完善和经济的发展，得到了当地政府、警察、部分村民的鼎力支持。缅甸政府为保障中方人员的安全，与当地人员沟通，在工程施工过程中，向项目部派驻缅甸政府官员为项目服务。针对分包商普通劳动力不足的问题，当地政府帮助项目部从当地调集 100 多名居民，组织当地村民参加施工，并发放相应的劳动报酬；针对混凝土生产能力不足问题，项目部积极增加工程设备，并邀请附近其他承包商支持。

经过各方努力，水库工程在合同期内完成，后期业主追加的马德岛村民供水工程项目也于当年缅甸新年泼水节前完工并向居民提供了优质生活用水。

## 三、成效

### 工程质量受到利益相关方好评

水库工程未出现质量问题，合格率 100%，实现了零事变、零传染、零死亡和无社会治安纠纷、以及无质量事故和安全事故的优秀工程项目，得到了业主和当地政府的好评。

### 提高缅甸相关产业的技术和管理水平

工程建设大量使用缅甸当地的公司、人力和物力。其中分包给缅甸方分包商的合同金额约为 550 万美元，累

### Improving sub-contractors' management and technology skill

Because the sub-contractors had a poor level of technical skill in reinforced concrete construction and because of language barriers, KHIDI leveraged its own strengths to recruit Burmese technical workers from Northern Burma who could speak Chinese to lead the sub-contractors' implementation of reinforced concrete construction engineering. As the sub-contractors used massive amounts of manpower and wood and utilized backward construction methods, which resulted in inefficiency and the waste of natural resources, KHIDI taught local constructors mature domestic construction technology step-by-step in order to update the workers' traditional construction methods, improve the efficiency of construction and provide favorable conditions for completion of the project on time.

### Striving for support from the local community

KHIDI abided by the local laws and regulations, proactively paid taxes, protected environment, actively engaged in local community and promoted employment along the construction line. Moreover, it improved the infrastructure and development of the economy, and so won support from the local government, police and some of the villagers. To guarantee the security of the Chinese staff, the Burmese government communicated with the local people and sent government officials to the project department to help in the process of construction. With the shortage of common manpower for the sub-contractors, the local government helped the project department to assemble more than 100 local residents, organized the local villagers to engage in construction and gave out corresponding remuneration. As for the problem of insufficient concrete production capacity, the project department actively added engineering equipment and invited the support of other contractors nearby.

Though the efforts of all parties, the reservoir project was completed within the contract period, and the water supply project for the Maday Island villagers, which was added by the owners at a later stage, was also finished before the Water-splashing Festival during the Burmese New Year the same year and provided high-quality drinking water for the residents.

## III.Effect

### The quality of the project was well-received by the stakeholders

There were no quality problems, and the reservoir project received a 100% pass, which demonstrated the excellence of the engineering project. There were no incidents, no transmission, no death, no social security disputes, no quality accidents and no safety accidents. The project thus met with the approval of the owners and the local government.

计属地用工 134408 个工日，占总用工量的 80% 以上，在当地采购物资金额为 6.54 亿缅币。项目实施提高了当地分包商及缅甸相关产业的技术和管理水平。

## 居民生活水平提高

原来居住在马德岛上的居民生活条件非常艰苦，出门无道路，到了旱季用水困难，水质混浊。水库的建成彻底解决了岛上居民的用水问题，也带动了周边道路的修建。2012 年 4 月的泼水节，缅甸马德岛上的居民一改往日因缺水而互相抹泥巴的习惯，第一次尝试泼洒清水。

## 四、展望

公司将继续保持与当地公司的合作，不断寻求与当地各类机构的多方合作，推行员工、物资的属地化管理，展示负责任的企业形象，推动当地能源建设行业的发展，进一步带动当地经济、社会的发展。

### Improving the management and technology levels of Burma's related industries

The engineering construction used a great deal of local companies, manpower and material resources from Burma. The contract amount subcontracted to Burmese subcontractors was approximately 5.5 million US dollars. The number of working days for locally recruited employees was 134,408, constituting over 80% of the total number of working days. The amount spent on local material procurement was 654 million kyat. The implementation of the project improved the management and technology levels of the local subcontractors and Burma's related industries.

### Residents' living standards improved

The living conditions of Maday Island residents were originally so poor. Previously, they even had no functioning road for transport, and in the dry season, the water was too muddy to drink. The construction of the reservoir not only addressed the water issues for the island's residents, but also drove the construction of the surrounding roads. In April of 2012, Maday Island residents were able to pour clean water during the Water-Splashing Festival for the first time, rather than smearing mud onto each other due to a shortage of water.

## IV.Prospect

The Company will continue to maintain its cooperation with local companies, seek multi-faceted cooperation with various local institutions to carry out localization management of staff and goods and materials, demonstrate its responsible corporate image, and drive the development of the local energy construction industries, so as to further foster the development of the local economy and society.



## 全周期生物多样性保护 ——中国路桥工程有限责任公司

Whole life-cycle biodiversity conservation – China Road and Bridge Corporation

5.1

**摘要:** 公司在巴基斯坦喀喇昆仑公路项目中, 通过宣传教育, 优化工程设计等措施, 将环境保护理念贯穿于施工的各阶段, 保护当地的珍稀野生动物及其栖息地、公园原生植被, 实现工程建设与自然环境的和谐发展。

**Abstract:** During the Karakoram Highway project in Pakistan, through measures such as publicity, education, and engineering design optimization, the Company implemented the concept of environmental protection throughout the project, thus protecting local rare wildlife and their habitats and the native vegetation of park while also accomplishing the harmonious development of engineering construction and the natural environment.

中国路桥工程有限责任公司拥有国家建设部批准的施工总承包资质、专业承包资质和公路工程施工总承包特级资质, 是以道路、桥梁、隧道工程以及港口建设为主, 兼具贸易、投资、租赁、服务业务的国有大型外经企业, 在世界 45 个国家和地区设立了分支机构, 在亚洲、非洲、欧洲形成了高效快捷的经营开发管理网络。

China Road and Bridge Corporation (CRBC) has a General Contracting Qualification in Construction, Professional Contracting Qualification and Special Grade General Contracting Qualification in Road Construction approved by the National Ministry of Construction. CRBC is mainly engaged in the construction of roads, bridges, tunnels and ports and is a large state-owned overseas economic cooperation company that deals with trade, investment, leasing and services. It has set up branches in 45 countries and regions all over the world and has established an efficient and rapid management network for operations and development in Asia, Africa, and Europe.

### 一、案例背景

中国路桥承建的巴基斯坦喀喇昆仑公路项目施工段落穿越巴基斯坦红其拉甫国家公园。该公园坐落于巴基斯坦北部寒冷荒漠化地区, 是一个生物多样性区域, 栖息着众多珍稀甚至濒危动物。保护珍稀野生动物及其栖息地、公园原生植被是项目实施过程中的重点。

### I. Case Background

The construction section of the Karakoram Highway Project in Pakistan contracted by CRBC crosses Pakistan's Khunjerab National Park. Located in a cold desert area of northern Pakistan, that park is an area rich in biodiversity and contains many rare and endangered animals. A significant focus during the process of project implementation was the protection of the rare wild animals and their habitats as well as the other native vegetation in the park.

### 二、措施

公司本着“不破坏就是最大的保护”的原则, 公司优化工程设计和组织施工, 从施工前、中和后三个阶段安排自然生态保护工作, 以工程建设与自然环境的和谐发展。

### II. Measures

Based on the principle that “avoidance of damage means protection”, the Company optimized the engineering design, organized construction and arranged work for natural ecological protection in three key stages: before, during and after construction. The goal was to achieve harmonious development concerning the engineering construction project and the natural environment.

#### 施工前——多举措, 奠定生物多样性保护基础

宣传教育。在开工前对施工人员进行宣传教育, 提高施工人员对野生动物的保护意识, 严禁随意砍树、采药, 严禁捕杀、惊吓野生动物。

#### Before construction – taking more measures to pave way for biodiversity conservation

Education: This involved educating and improving contractors' awareness of the protection of wildlife and prohibiting them from cutting down trees, gathering herbs, and killing or frightening wildlife.



营地建设。营地主要建在远离地表河流、无自然植被的空地及台地上，隔离营地与周围居民居住区、村庄，减少对原有植被的破坏。营地内生活污水通过管道汇集到化粪池进行统一处理；生活垃圾集中收集，定期进行处理，减少污染。

工程优化设计。针对公路沿线途径的帕苏冰川景观路段、三山交汇景观路段和罕萨岩画景观路段三处自然、人文景观的地理特点，优化设计路线，避免发生对其人为影响造成物质文化损失，力图使公路与周边风景达到和谐统一。

### 施工中——多角度，践行生物多样性保护行动

植物保护。按照乔木>灌木>草本>树桩的优先保护顺序进行合理保护利用植物，尽量保留路基坡脚处压埋较浅（30cm 以下）的灌丛，用砖、石砌筑树池保护填方路基坡脚处胸径大于 8cm 且填方后压埋较深（30cm 以上）的乔木，全部保留路基坡脚以外的所有植物资源（包括乔木、灌丛等），禁止人为扰动破坏，并通过采用浅碟型生态边沟、排水沟的形式，保护道路沿线的部分植被。

动物保护。施工时，严格控制噪声，尽量避免夜间施工，确需夜间施工时，尽量采用近光灯，避免使用远光灯；特别在红其拉甫国家公园 K753+800-K811+343 段施工时，施工便道旁设置禁止车辆鸣笛的临时标示牌。

防止废弃物污染。项目在临水路段的下挡墙施工中，在临水侧采取“先开挖临时防护，后砌筑”的挡墙设置方式，保证在施工的同时有效保护施工期水体水质和河道行洪；路基施工中，加强道路的洒水降尘工作，防止扬尘对空气造成污染；利用沉淀池和泥水分离泵处理桥梁工程钻孔施工中产生的废水，避免对河流造成污染；定期对搅拌场地进行洒水降尘，分仓贮存所有材料，集中处理拌和站的废水；在邻近水体路段实施沥青混凝土摊铺阶段，严格控制施工作业范围，防止摊铺料落入附近水体，集中收集处理施工中废弃的沥青混合料。

Building the work encampment: The site was built on open space and high land with little vegetation and away from surface rivers. The site and the surrounding villages were isolated in order to reduce the damage to original vegetation. The sanitary sewage was processed by draining the sewage into a septic tank through a pipe. Domestic refuse was collected together and processed on a regular basis to avoid pollution.

Optimizing engineering design: The route was to be optimized and designed to avoid causing damage to the local area through anthropogenic impacts and try to achieve the goal of harmony and unity between the highway and the surrounding landscapes in accordance with the geographical features of three major local natural and human features of the environment that run along the highway: the Passu Glacier, the Three Mountain Intersection and the Hunza Cliff Paintings.

#### Under construction – implementing multi-faceted biodiversity conservation

Protecting plants: Plants were protected according to the order of priority protection: arbors, shrubs, herbaceous plants, and tree stumps. As much as possible, brushes in relatively shallow buried areas (less than 30 cm) at the foot of the subgrade slopes were retained. Arbors with a diameter greater than 8 cm in relatively deep burial areas (more than 3 0 cm) at the foot of the filled subgrade slopes were retained by piling and building enclosures with bricks and stones. All of the plant resources (including arbors and shrubs) were retained to avoid damage from artificial disturbances and protect part of the vegetation along the road via shallow ecological ditches and drainage ditches.

Protecting animals: During the process of construction, noise was to be strictly controlled and nighttime night time construction was to be avoided as much as possible. When nighttime construction was necessary, lights that only lit up the local areas were to be used as much as possible. A temporary sign stating “NO VEHICLE HORNS” was to be erected by the side of the construction road, particularly at the K753+800-K811+343 section in Khunjerab National Park.

Avoiding waste pollution: During the construction of the retaining walls in areas of the project facing the water, “first establishing temporary protection and then laying” was applied at the waterside to ensure the effective protection of water quality and flood discharge for rivers during the construction period. When the subgrade was under construction, the dust falls on the road were to be limited to prevent dust pollution in the air. A separation pump to deal with the wastewater produced by drilling construction of the bridge engineering project was to be used to avoid polluting rivers. Measure to decrease dust in the stirring area were to be conducted on a regular basis. All the materials were to be stored in different warehouses and the wastewater from the mixing plant was to be processed together. During the paving of bituminous concrete in adjacent water sections, strict controls were to be implemented in the construction area to keep the paving material from dropping into the water. The waste asphalt generated by the construction was to be collected and processed.

噪声控制。晚上 22: 00 至次日凌晨 6: 00 停止施工，并将混凝土拌和站和沥青混凝土拌和站设置在远离城镇与村庄的地方，降低对周围居民生活的影响。

### 施工后——全方位，恢复生物多样性原貌

处理废料。清除污水，保持当地饮水质量；统一处理建筑垃圾，清理干净施工现场的残土、废料等；妥善处理废方，山坡弃方尽量避免破坏和掩埋路基下侧的林木、农田及其它工程设施。

恢复原貌。清理和恢复所有施工场地（包括临时租用土地），撤除修建的临时生产、生活房屋，平整场地，复耕占用的耕地，绿化弃渣场地，恢复场地和工地的原有功能；清理渠道及沿河弃土避免壅塞河道，确保排水畅通；修复道路，确保当地交通正常运行；对弃土堆进行复垦及绿化。

## 三、成效

公司对项目实行全过程优化，采取有力措施保护环境，有效保护了项目周边的珍稀野生动物及原生植被，也保护了喀喇昆仑公路沿线的文物古迹、自然景观和人文景观，防止了扬尘对空气造成污染，未发生一起重大环境污染事故；城镇施工控制扬尘、扬沙；复耕和绿化达到设计要求、最大限度的节约能源及其他资源。

重点路段的环保举措的实施，为整个工程的顺利完成奠定基础，也受到了当地政府和居民的高度赞扬，当地居民充满深情地说：“感谢公司给我们带来了出行的便利，精品的工程，中国路桥在环境保护方面所做的一系列努力让我们尤为感动”。

## 四、展望

作为中央企业，作为中国“走出去”战略的重要载体，在未来，公司将从长远发展出发，以“实施一个工程，树立一座丰碑，修筑一条公路，造福一方人民”为己任，帮助当地人们修路建桥的同时，采取切实可行的措施保护当地环境，力图实现与当地环境和谐发展。

Controlling noises: Construction was to be terminated from 22:00 pm to 06:00. The concrete mixing plant and bituminous concrete mixing plant were to be placed far away from towns and villages to reduce the impact on residents. Those working on the construction projects were to be equipped with the necessary protective equipment, such as earplugs and earmuffs.

#### Disposing waste materials

Properly disposing of waste materials: The Company cleared away the wastewater to maintain the quality of the drinking water; disposed of construction waste, waste earth and materials properly disposed of soil and stone to prevent soil on slopes from leading to damage to or burying the woods, farmland and engineering facilities below the roadbed.

Restoring the original landforms: The Company cleaned up and restored all the construction sites (including the temporarily rented land), removed building temporarily built and residence purposes, leveled the sites, re-cultivated the occupied farmland, replanted damaged ground, and restored the original functions of all the sites. It also cleaned up the channels and the discarded soil along the river areas, which prevented the blocking of the river-ways and ensured smooth channels for drainage and repaired the roads to ensure normal local traffic, reclaimed and replanted the areas with discarded soil.

### III.Effect

The Company implemented the overall process optimization and took strong measures to protect environment, which effectively protected the rare wild animals and original vegetation around the project and also the cultural relics as well as natural and cultural landscapes along the Karakorum Highway. As such, dust was also prevented from polluting the air and never caused any major environmental pollution accidents. Dust and sand was controlled during urban construction. The re-cultivating and replanting undergone met design requirements, and energy and other resource savings were maximized.

The measures taken to protect the environment of the key road sections laid the foundation for the successful completion of the entire project and were highly praised by the local government and people who affectionately said, "Thanks China Road & Bridge Corporation for the convenient transportation links, high-quality project, and especially for your serial efforts to protect the environment which deeply moved us."

### IV.Prospects

As a national enterprise and an important component of the national “Going Global” strategy, in the future, CRBC will continue its long-term development with the mission of “implementing a project to erect a monument, and building a road to benefit the people in a region” and while building roads and bridges, taking realistic and achievable measures to protect the local environment and seeking to develop harmoniously with the local environment.



# 主动引导业主关注环境保护 ——中地海外建设集团有限公司

## Promoting the environmental protection awareness of proprietors – CGCOC GROUP

5.2

**摘要：**公司在尼日利亚供水设施项目中，开展绿色选址，绿色施工，积极引导业主重视环境保护和绿色运营，实现项目的环保效益和经济效益双丰收，获得业主、当地政府和居民的认可。

**Abstract:** Through the water supply facilities project in Nigeria, the Company conducted green site selecting and green construction and actively guided the project owner in attaching great importance to environmental protection and green operations, thus yielding substantial environmental and economic benefits and earning high praise from the owner, the local government and residents.

中地海外建设集团有限公司是由国内大型石油化工、矿业勘察、工程建设、投资基金共同投资组建的跨国集团，在十余个国家主要从事工程建设、贸易租赁、投资运营、代理咨询业务。集团凭借长期扎根海外的团队优势，秉承“合作创造财富，创新谋求发展”的经营理念，为所在国的经济和社会发展以及中国资本和技术“走出去”提供优质服务。

### 一、案例背景

中地海外尼日利亚有限公司为中地海外建设集团的直属子公司，于 1983 年进入尼日利亚工程市场，该国供水设施发展相对滞后，当地百姓饮用水环境不甚理想。近年来，供水行业的发展虽然在一定程度上解决了部分城市的供水问题，但很多水厂建设项目或竣工后不能投产，或投产后产能衰减严重，导致尼日利亚城市供水领域的发展并未呈现出预期的高速发展态势，同时部分废弃的水厂给环境带来了伤害。

### 二、措施

公司在海外运营时，重视保护当地环境，也注重项目能给业主和当地社会经济发展带来的效益，并从承包商的角度不断探索和尝试，制定一系列的对策，积极引导业主重视环境保护和项目运营。

CGCOC GROUP Co., Ltd. is a transnational group that was set up through joint investment by large domestic petrochemical industry, metals discovery, engineering construction, and investment funds and is mainly engaged in engineering construction, trade lease, investment and operation, and agent consultation. With the advantage of having been rooted overseas for a long time and the operational concept of “cooperation creates wealth and innovation brings development”, the Group provides high-quality services for the host nation’s economy and social development and for applying Chinese capital and technology abroad.

### I. Case Background

CGC NIGERIA LTD is a wholly funded subsidiary of the CGCOC GROUP that entered the Nigerian engineering market in 1983 when the country’s water supply facilities were relatively backward, which meant that the condition of drinking water for local people was poor. In recent years, the water supply problems in some cities have been solved to some extent due to the development of the industry, but many water plant building projects can either not be put into production after completion or cannot be put into production without serious decreases in productivity, which has resulted in the failure of the Nigerian urban water supply industry to present the desired high-speed development and has often led to environmental damage brought about by wastewater plants.

### II. Measures

During operations abroad, the Company has valued both the local environment and the project, benefiting both the project owner and local social and economic development. From the perspective of a contractor, the Company has

### 绿色选址

项目开工前，在业主确定厂址时，公司会从环境保护的角度来给出意见和建议。LOKOJA 水厂项目计划建在居民区里，虽然取水方便，但会有大量房屋拆迁，施工噪音、施工运输等也会对周边环境产生影响。公司向业主提出更换厂址的要求，在各方的努力下，实现厂址更换。更换后的厂址，施工环境好，且对居民没有影响。虽然在取水头部增加了投资，但为业主减少了大量拆迁费用，减少了施工运输等对周边环境的影响。

### 绿色建设

公司在测量阶段标出树木位置，设计时考虑保留原有树木。在施工过程中，除了对灌木进行清除，保留所有的原有树木，尽最大可能保护原有环境。公司统一堆放、运输、填埋所有施工、生活垃圾，做到不因项目施工而破坏周边环境。在执行完水厂建设项目后，公司进行大面积的绿化工程，使得水厂环境成为当地最好的“公园”。

### 绿色运营

公司确立引导业主做好项目运营的战略，制定相应策略，积极引导业主重视项目运营，保证项目给业主和当地经济社会发展和环境保护带来效益。在承建完 GOMBE 水厂项目后，考虑到水厂技术含量、自动化程度相对较高，当地运营维护团队能力有限，为确保该项目能充分发挥效益，保证使用寿命，经过和业主多次深入的交流和沟通，最终州政府决定由中地海外负责该水厂后续三年的运营和维护。在中地海外运营维护 GOMBE 水厂期间，持续保质保量地供水，水厂设备运行状况良好，药剂供应充足及时，厂区环境整洁优美。GOMBE 水厂的运营更为业主方培养了不少专业技术人才，分别被派往州内其他小型水厂负责相关工作。

### 三、成效

#### 专业运营树标杆

公司通过一系列措施，保证了水厂项目使用周期，延长

constantly explored and engaged in the development of a series of measures to cope with specific challenges and actively guided the owner to value environmental protection and project operations.

#### Green site selection

Before the commencement of the project, when the owner was selecting the location for the plant, the Company provided relevant comments and suggestions from the perspective of environmental protection. The planned location of the LOKOJA water plant project was in a residential area. In spite of the convenience of getting water, a great deal of building demolition would need to be conducted and construction noise and construction transportation would impact the surrounding environment. The Company suggested that the owner should change the location, and through efforts on all sides, a change in location was achieved. The changed location had a good environment for construction and had no impact on the residents. In spite of added investment to the intake head, a great deal of demolition costs were reduced for the owner and a lesser impact on the surrounding environment by construction, transportation, and other processes was achieved.

#### Green building

The Company marked the locations of the trees during the measurement stage and considered preserving the existing trees during the design process. During construction, the Company removed bushes and preserved all the existing trees, achieving the goal of protecting the environment as much as possible. The Company uniformly stacked, transported, and landfilled all of the construction and domestic waste so as not to damage the surrounding environment during project construction. After the completion of the water plant building project, the Company conducted “greening” work over a large area to make the water plant the best local “garden”.

#### Green operating

The Company established the strategy of guiding owners to operate a project well, developed its other strategies accordingly, and actively guided the owner to lay a lot of emphasis on project operations that ensure that the project can best benefit the owner, local economic and social development and environmental protection goals. After the completion of the GOMBE water plant project, in view of the relatively high technical content and degree of automation of the water plant and the limited capabilities of the local operation and maintenance team, after much in-depth communication with the owner, the state government finally decided to appoint CGC to take responsibility for operation and maintenance of the water plant for the subsequent three years with the goal of ensuring the maximization of benefits and service life. During

设备使用寿命，避免了低水平重复建设和资源环境的浪费，实现了项目预期的社会和经济效益。水厂运营模式在造福百姓的同时，也保护了当地环境。专业化运营的GOMBE 水厂也成为尼日利亚该行业的领跑者和标杆。很多州府官员，尤其是水资源部官员与工程师纷纷慕名而来进行参观考察。

### 主动献策获认可

公司从业主方、当地经济社会发展和环境保护角度出发，为业主提出建议并得到采纳，得到了业主、当地政府和社区居民的一致认可，提升了中地海外的品牌形象。公司也因此获得了尼日利亚政府的信任，签署了一系列的水厂建设合同，公司经济效益获得明显提升。

## 四、展望

展望未来，公司将继续秉承“与人为善，与人合作”的经营理念，承担对社会、项目业主、员工、环境及区域发展的市场责任和环境责任，始终将中国企业的形象和工程质量放在首位，不断进取开拓海外市场。

the process of operation and maintenance by CGC, the quality and quantity of the water supply was always ensured, the equipment was operated well, medicine was fully supplied and supplied in a timely manner, and the plant environment was clean and beautiful. The operation of the GOMBE water plant also cultivated many professional and technical personnel for the owner. They were then assigned to other small water plants in the state responsible for the relevant work.

### III.Effect

#### Setting an example for the industry through professional operations

Through taking a series of measures, the Company ensured the use cycle of the water plant project, lengthened the service life of the equipment, avoided low-level reconstruction and waste of resources, and finally achieved the desired social and economic benefits of the project. The operational model not only benefited the people, but also protected the environment. Through professional operations, the GOMBE water plant became an example for the industry in Nigeria. Many officials in the state government, especially the officials and engineers from the department of water resources, came here out of admiration to visit and investigate.

#### Proactively offering advice and gaining recognition

The Company provided suggestions for the owner in terms of local economic and social development and environmental protection from the owner's own perspective, and those suggestions were approved and implemented by the owner. The Company gained the recognition of the owner, local government and the community residents for its work. As a result, the brand image of CGC was improved. Consequently, the Company obtained the trust of the Nigerian government and signed a series of contracts for water plant construction, so the economic benefits of the Company were obviously improved.

### IV.Prospect

Looking ahead, continually adhering to the “good intentions toward others and cooperation with others” operational principal, the Company will take market and environmental responsibility for society, project owners, employees, the environment and regional development. It will also place the image and project quality of Chinese corporations at the forefront and make constant efforts to develop overseas markets.

# 推进清洁能源替代 ——中国机械进出口（集团）有限公司

## Advocating the application of clean energy – China National Machinery Import & Export Corporation

## 5.3

**摘要：**公司在圭亚那承建现代化斯凯尔顿糖厂项目，将环保理念融入设计，优化工艺流程，充分利用蔗渣作为原料，建设生物质电厂，减少“三废”产生，减少温室气体排放，改变圭亚那制糖工业落后面貌，实现圭亚那制糖工业的可持续发展。

**Abstract:** For the creation of a plant for the Skeldon Sugar Modernization Project in Guiana, the Company integrated concepts of environmental protection into design, optimized technological progress and built a biomass power plant through making full use of bagasse as a building material, thus reducing the "three wastes", namely, reducing greenhouse gas emissions, changing the industrial backwardness of Guiana's sugar industry and accomplishing the sustainable development of Guiana's sugar industry.

中国机械进出口(集团)有限公司是中国通用技术(集团)控股有限责任公司的全资子公司，是新中国最早的以经营机电产品进出口贸易和国际工程承包业务为主的大型国有外贸公司。目前，公司是中国重要的国际工程承包商、项目管理商和汽车供应链综合服务商，主营业务包括国际工程承包和大型成套设备出口、国内贸易与工程、汽车营销等板块。

## 一、案例背景

制糖工业是拉丁美洲圭亚那的支柱产业之一，但随着其他国家制糖工业的发展，生产效率的提高，圭亚那的制糖行业在国际竞争中逐渐被淘汰，而且普通的制糖工厂“三废”污染严重。因此，建设新型环保、高生产率的糖厂成为提升圭亚那制糖工业的必经之路。

## 二、措施

公司在圭亚那承建的日产 8400 吨现代化斯凯尔顿糖厂项目，成为圭亚那向现代化糖厂转型的标杆。在建设过程中，公司还充分利用蔗渣作为原料，建设生物质电厂，解决制糖工艺中的“三废”污染问题。

China National Machinery Import & Export Corporation (CMC), a fully-funded subsidiary of China General Technology (Group) Holding Co., Ltd., was the earliest large-scale state-owned Chinese foreign trade company to engage in the import and export of mechanical and electrical products in regards to the international project contracting business. At present, the Company is a major Chinese international engineering contractor, project management contractor, and comprehensive service provider of automobile supply chains, and its main areas of business include international engineering contracting and the export of complete sets of large equipment, domestic trade, and engineering and automobile marketing.

### I.Case Background

The sugar industry is one of the pillar industries of Guiana in Latin America. However, with the development of the industry and the improvement of production efficiency in other countries, the sugar industry in Guiana was gradually diminished by international competition, and the ordinary sugar plants there have caused serious “three wastes” pollution. So, building new environmentally-friendly and high-productivity sugarhouses was fully necessary to improve the sugar industry in Guiana.

### II.Measures

CMC was contracted to build a plant for the Skeldon Sugar Modernization Project which produced 8,400 tons of sugar per day and has now become a leading example for modern sugar plants. During construction, the Company made full use of bagasse as raw material to build biomass power plants, in order to solve “three wastes” pollution.



## 注重分包商选择，提升项目品质

作为项目总承包商，公司组织国际领先的设计院、设备供应商、施工单位以及调试单位严格按照 FIDIC 合同完成项目执行，设计上采用了环保低能耗的做法，比如使用渗出器（75KW）代替三座高耗能榨机，自动化控制系统选用 Siemens 先进的工业自动化 PCS7 操作系统。

## 优化工艺流程，减少“三废”产生

公司承建的斯凯尔顿糖厂，每日产生的蔗渣约 3000 吨。为有效利用蔗渣，公司在制糖工艺外建起了一个生物质电站，以蔗渣为原料进行发电。

电站产生的电量在满足制糖厂自用电外，每年还向区域电网输送电量约 77GWh，替代了区域电网中的部分小柴油发电机组的高成本发电。通过静电除尘器净化处理，将生物质电站中锅炉产生的废气进行净化处理，并将余热气体输送至制糖车间作为热源进行循环使用。同时，将在制糖工艺中产生的滤泥榨干，榨干的产物可以作为肥料还田，为当地农田提供肥料。

## 改善工作环境，提升管理水平

项目建成的整个工厂是自动化程度较高的现代化糖厂，将厂内原有的就地操作集中到中控室，改善了工作环境。利用新型的测控设备和逻辑元件控制汽、水、电和物料的动态平衡，提升了制糖的工艺管理水平。

## 三、成效

### 实现圭亚那制糖工业的可持续发展

公司通过引进先进制糖技术，推动了圭亚那制糖工业向现代化转型升级，提高了产能；老糖厂日榨 2000 余吨甘蔗，每吨甘蔗得糖不足 7%，新糖厂日榨量可达 8000 余吨，吨甘蔗得糖约 8%，年产原糖能力达到 8 万吨；新糖厂项目的高度自动化水平，也使原本靠大量人工操作的初级阶段向工业自动化生产的高级阶段迅速转型，并因此提升了老糖厂 400 多名工人的管理和技术水平。

### Improving the quality of the project and emphasizing the selection of sub-contractors

As the general contractor, the Company organized international advanced design institutes, equipment suppliers, construction units and debug units to complete the project strictly within the requirements of the FIDIC contract. The design adopted environmentally-friendly and low-energy methods. For example, a diffuser (75KW) was used as a replacement for the three energy-intensive presses, the automatic control system used the Siemens advanced industrial automation PCS7 operating system, and the auxiliary equipment was chosen from relatively mature domestic units.

### Optimizing the technical process and reducing the generation of the “three wastes”

The Company was contracted to build the Skeldon Sugar Factory, which could generate 3,000 tons of bagasse every day. the Company built a biomass power station to generate power using the bagasse as the raw material for power.

The quantity of power supplied not only met the auxiliary power supply needs of the sugar factory, but was also enough to supply 77 GWh of power to the regional power grid every year, reducing the need for the high-cost generation of some small diesel generating entities in the regional power grid. The exhaust gas generated in the boiler of the biomass power station was purified through the electrostatic precipitator, and the waste heat gas was transported to the refining workshops to be recycled as a heat source. Meanwhile, the filter mud generated during the refining process was pressed. In this way, the matter produced could serve as the fertilizer for local farmland.

### Improving working environment and management level

The entire project was constructed as a modern sugar factory with a high degree of automation. The original local operation was concentrated into the central control room, and the working environment was improved. The new equipment for both measurement and control and logical elements were used to control the dynamic equilibrium between steam, water, electricity and raw materials, which improved the management level of the sugar refining process.

## III.Effect

### Achieving sustainable development of the Guiyana sugar industry

By introducing advanced sugar refining technologies, the Company drove the Guiyana sugar industry to transform and upgrade to modern levels, thus improving productivity. The old factory had been pressing more than 2,000 tons of sugarcane every day with every ton of sugarcane yielding less than 7%

## 为当地提供持续的清洁能源

制糖流程产生的蔗渣及滤泥分别成为了燃料和肥料，年均向周边城镇供电 1 亿千瓦时，用蔗渣锅炉发电代替了分散低效的小柴油发电机组发电，减少了二氧化硫等污染气体的排放；静电除尘器的使用也使粉尘颗粒大幅减少。这些环保节能设计的实现，不仅改善了圭亚那当地的民生条件，也取得世界银行的低碳产业资金支持。

## 为公司赢得经济和社会效益

现代化糖厂为公司实现了经济效益和社会效益双丰收，为中国对外工程承包企业在海外树立了良好的示范和带动作用，增强了公司开发带动就业、低碳环保和互利互惠项目上的软实力，储备了一大批优秀的工程管理专业人才，也提升了公司在拉美国家的责任品牌形象，为公司顺利执行国际工程创造了和谐的外部环境。在项目执行过程中，公司在圭亚那又成功获得了 4000 万美元的国家电网建设的民生工程项目。

## 四、展望

公司将持续秉承互利共赢的理念，通过规范的流程最大限度地向客户和项目业主提供符合法定标准的产品和服务。在开拓国际市场，实现自身业务增长的同时，促进当地经济、社会发展，让责任永续传播。

sugar, while the new factory offers the potential to press more than 8,000 tons of sugarcane per day to yield about 8% sugar. The yearly sugar productivity thus reached 80 thousand tons. With its high degree of modernization, the new factory project led to the transformation from an initial stage of a significant level of manual operation to an advanced stage of industrial automation, which improved the management and technical level of over 400 workers of the old factory.

### Providing sustainable clean energy for the region

The bagasse and filter mud from the sugar refining process were used as the fuel and fertilizer, generating 100 million KWH of power for the surrounding cities and towns. The bagasse boiler replaced the small diesel generating sets, which were dispersive and inefficient. This reduced the discharge of sulfur dioxide and other pollutants. The use of electric precipitators also sharply reduced the amount of dust and particles and decreased pollution. The impact of the designs in terms of energy savings and environmental protection not only improved the living conditions of the Guiyana people, but also brought about capital support for low-carbon industry from the World Bank.

### Winning economic and social benefits for the Company

The modern sugar factory achieved both economic and social benefits for the Company and set a good example for Chinese overseas project contractors abroad. It strengthened the soft power of the Company by driving employment through development, low carbon emissions, and mutual benefits and reciprocity. Furthermore, it cultivated a host of excellent engineering management talents. It also improved the responsible brand image of the Company in Latin American countries, which helped create a harmonious external environment for the Company in the smooth implementation of international projects. During the implementation of the project, the Company successfully obtained a new project, a people's livelihood project with a contract value of 40 million US dollars for constructing the national power grid.

## IV.Prospects

The Company will constantly adhere to the principles of “mutual benefit and win-win results” and further provide customers and project owners with products and services that conform to the legal standard through normative processes. While exploring the international market and achieving business growth, the Company serves the local economy and social development and strives to make responsibility an eternal goal.

# 融入当地，打造生态工程 ——中国水利电力对外公司

## Forging eco-projects with local experts– China International Water & Electric Corporation

### 5.4

**摘要：**公司在老挝水电站项目中，重视环境保护和履行社会责任，遵守当地环保法律法规，广泛引进当地环保机构工作人员、社区居民参与环境保护工作，保护当地生态环境。

**Abstract:** In the hydropower station project in Laos, the Company attached great importance to environmental protection and social responsibility performance, abided to local environmental protection laws and regulations, and extensively guided staff from local environmental institutions and community residents in the protection of the local ecological environment.

中国水利电力对外公司是中国长江三峡集团公司的全资子公司，前身是原国家水电部的援外机构，1955 年开始代表国家承担和组织实施水利电力对外经援项目，是国务院批准的首批从事对外工程承包经营的八大公司之一。公司负责开展中国水利电力行业的对外援助，成套设备进口，国际工程承包，劳务输出等业务。

## 一、案例背景

公司在老挝承建多个水电站项目，项目所在地多为生态环境良好，生态系统较发达地区，环境保护工作压力较大。如何保护好当地的自然环境，不仅直接影响项目在该地区的顺利实施，同时也关系到公司在当地的发展前景。

## 二、措施

公司秉承“建设一个项目，造福一方人民”的精神，重视环境保护和履行社会责任，遵守当地环保法律法规，广泛引进当地环保机构工作人员、社区居民参与环境保护工作，最大限度保持原有自然环境，保持生态平衡。

China International Water & Electric Corporation (CWE), a solely-funded subsidiary of China Three Gorges Corporation, was previously the foreign aid organ of the original National Ministry of Water and Electricity. The Company began to represent the country in undertaking and organizing the implementation of water conservation and electric power aid projects for other countries in 1955. It was one of the first eight companies to be approved by the Chinese State Council to obtain contracts for foreign engineering projects. The Company is responsible for Chinese foreign aid in regards to water conservation and the electric power industry. It is an importer of complete sets of equipment, an international project contractor and an exporter of labor service.

## I.Case Background

The Company was contracted to build several hydropower stations in Laos. The projects were often located in areas where the ecological environment and the ecological system were very good, so there was a great deal of pressure with regards to environmental protection work. The question of how to protect the pre-existing natural environment not only directly influenced the smooth implementation of the project in the region, but also influenced the Company's vision for development in the area.

## II.Measures

Adhering to “benefitting localities with each project undertaken there”, the Company emphasized environmental protection

## 主动沟通，了解环保建议和要求

公司改变以往出现问题再被动协调的工作方式，要求所有施工单位必须“先沟通，再开工”，采用工作组的形式，主动入户、提前沟通，向当地居民详细说明项目目的、现场施工内容和步骤，收集当地居民关心的问题，以及对环境保护工作的建议和想法。工作组采用座谈、发放宣传单、树立广告牌、举办茶话会和文体活动等多种形式，建立良好顺畅的沟通渠道，有效增进了相互了解。

## 专家参与，推动决策专业化

在开工前，公司多次组织专家对项目建设进行环境评价，形成环评报告，为项目环保工作开展提供科学依据。在项目建设中，工作组严格执行环评报告要求，采取多种措施不断减少工程对当地环境的影响；专门成立环保办公室，聘请老挝工作人员，参与管理项目建设对环境方面的影响，及时研究方案解决项目建设可能对当地环境造成的影响。项目结束后，公司积极实施生态恢复，努力使生态环境恢复原来状态。

## 外部监督，提升环保工作实效

项目建设过程中，项目施工现场曾多次主动要求和接受万象省环境办公室以及社会各界的参观检查，类似的参观和检查几乎贯穿着项目建设的全过程，有力的提升了环境保护工作的效率和合法合规性。

## 三、成效

当地人参与到项目环境保护工作中，加强了环保工作的针对性，提高工作效率，同时保证整个过程满足利益相关方的期望和诉求；另一方面，加强了与当地政府和居民的沟通，增强了认同感和信任感，为项目施工创造了有力的内外部条件，取得了一定的环境和经济效益。

水电站项目的建成，对老挝人民的实际生活产生巨大的经济和社会效益。在老挝南立 1-2 水电站项目竣工仪

and fulfilled its social responsibilities. It complied with local laws and regulations on environmental protection, widely led the local workers in environmental agencies and community residents to participate in the work of environmental protection, and sought to maintain the original natural environment to maintain the ecological balance.

## Actively communicating to understand suggestions and requirements

The Company changed the old working method of passively coordinating after the occurrence of problems and required all of the construction units to “communicate first and start later”. It adopted the form of working teams to proactively visit residents and communicate ahead of time to specify the purpose of the project, the content and steps of the on-site construction to the local people and collected information about their concerns, suggestions and ideas in regards to environmental protection. The working teams had informal discussions, handed out leaflets, set up billboards, held tea parties, recreational and sports activities and adopted other forms of activities to establish smooth and sound communication channels and effectively expand mutual understanding.

## Involving experts to drive professional decisions

Prior to construction, the Company repeatedly organized experts to assess the environment of the project and create an environmental impact assessment report (EIA report), which was the scientific basis of the environmental work concerning the project. During construction, the working teams strictly implemented the requirements of the EIA report and adopted several measures to gradually reduce the project's impact on the local environment. The Company specially established an environmental office and employed Laotian workers to participate in managing the environmental impact of the project construction and timely studying and solving the possible environmental impacts of the project construction. After the project, the Company actively implemented ecological restoration to make efforts to restore the state of the original ecological environment.

## External supervision to enhance the effectiveness of the environmental work

During the project construction, the Company repeatedly asked and received the Vientiane Province Environment Office and different sectors of society for visits and inspections of the construction site throughout the whole process of the project construction, which significantly improved the efficiency, legality and compliance of the environmental work.



式上，老挝国家第一次为项目投资及建设的外国企业员工颁发国家劳动奖章，充分体现了老挝政府对项目投资建设成绩的肯定。

## 四、展望

展望未来，公司将继续践行“建好一座电站，带动一片经济，改善一片环境，造福一批移民”的水电开发理念，进一步加强海外企业与老挝当地人员的环境保护合作，通过与当地利益相关方的密切合作，深入理解老挝当地利益相关方的环境诉求，从环境评价和社会责任的角度去看待问题和进行项目建设，实现经济环境和谐共赢。

## III.Effect

On the one hand, the local people took part in the environmental work of the project, which added to the specificity of the environmental work, improved work efficiency and ensured that the whole process met the expectations and demands of the stakeholders; on the other hand, communication with the local government and residents was enhanced, and this strengthened their sense of identity and trust, which created strong internal and external conditions for the construction of the project and brought about certain environmental and economic benefits.

The completion of the hydropower station project generated huge economic and social benefits for the lives of the Lao people. During the completion ceremony of the Laos Nam Lik 1-2 Hydropower Project, the government for the first time issued the National Labor Medal to foreign workers of a foreign corporation in the field of project investment and construction, which fully embodied the affirmation of the government in regards to the outcomes of the project investment and construction.

## IV.Prospects

Looking ahead, the Company will continue to fulfill the hydroelectric developmental concept of “build power plant to drive local economy, protect environment to benefit local residents” through further enhancing the environmental cooperation between overseas corporations and the Laotian workers, gaining a deeper understanding of the environmental demands of the local stakeholders by closely cooperating with them, and construct projects from the perspective of environmental assessment and social responsibility, in order to achieve harmonious and win-win outcome for the economy and the environment.

# 6

## 社区关系 ——创造和谐共赢

### Community Relationship – Striving for Harmony and Win-Win Outcomes





# 系统化履行社区责任 ——中国有色矿业有限公司

## Fulfilling social responsibilities in a systematic way– China Nonferrous Metal Mining

6.1

**摘要：**公司在海外经营中，致力于当地基础设施建设，改善当地医疗条件，支持当地教育事业发展，通过制定社会公益事业计划，提升公司履行社会责任的效率和价值，获得当地社区政府和居民的认可。

**Abstract:** In its overseas operations, the Company demonstrated commitment to local infrastructural construction and improved local medical conditions. It supported local educational development and worked out a public welfare program to enhance the efficiency and value of social responsibility performance, thus earning praise from the local community, government and residents.

中国有色矿业有限公司是全球领先的铜生产商，在赞比亚专注经营铜开采、选矿、湿法冶炼、火法冶炼及销售的垂直综合业务，是唯一拥有海外铜冶炼厂的中资企业，亦是中国有色集团铜及钴资源开发的海外平台。公司控股股东为中国有色矿业集团有限公司，于中国及海外从事开发有色金属矿产资源开发、建筑工程和相关贸易及技术服务。

### 一、 案例背景

公司自进入赞比亚以来，始终坚持“发展企业，回馈股东、员工和社会”的理念，积极履行社会责任，参与各种社会公益活动，支持和促进赞比亚当地的经济社会发展。如何更有效、更具针对性地开展各类公益活动，更好地树立企业负责任的形象，建立更加和谐的社区关系对公司实现在当地可持续发展具有至关重要的作用。

### 二、措施

公司改变以往履行社会责任的方式，逐步尝试有计划性地履行社会责任，探索企业社会责任的常态化和制度化。

China Nonferrous Metal Mining Corporation Ltd. is focused on vertical integrated services, including copper mining, mineral separation, hydrometallurgy, pyrometallurgy and sales in Zambia. The Company is a globally leading copper producer, the only Chinese enterprise with a copper smelter overseas and also serves as the overseas platform for copper and cobalt resource development for its controlling shareholder – China Nonferrous Metal Mining Group Corporation (CNMC), which is engaged in the development of nonferrous metal mine resources, construction engineering, and related trade and technical services at home and abroad.

### I.Case Background

The Company has always insisted on the idea of “developing the corporation and bringing about returns for shareholders, employees and society”. It has actively performed its social responsibilities, participated in all kinds of public welfare activities, and supported and promoted the local economic and social development of Zambia. A vital aim for the Company as it seeks to realize sustainable development in the locality is developing all kinds of public welfare activities more effectively and establishing a better enterprise image and more harmonious community relations.

### II.Measures

The Company has changed the old model for demonstrating social responsibility and is gradually trying to better perform its social responsibilities through exploring normalization and institutionalization of the corporation’s social responsibility.

### 与利益相关方充分沟通

在开展公益项目前，公司与当地社区广泛沟通，深入了解其最迫切的需求。通过登门拜访、见面会、媒体新闻发布会、CEO 公开信、重大消息发布会等方式，与当地政府部门、社区及有关社区组织机构联系和沟通，调查当地需求，结合自身专业优势、当地实际情况及各公益项目的紧迫性，确定重点关注领域，明确公益项目类型和开展方式。

### 制定履行社会责任计划

根据企业发展的实际和企业所在地的要求，公司每年均制定社会公益事业计划，纳入公司发展规划，并核定必要的预算，安排专门人员负责各个社会公益事业项目的落实，将支持社区发展的行动常态化、制度化。在年初制定全年各项工作计划时，加入本年度的社会责任计划，确定社会责任资金投入及履行方式，并适时对外公布，接受利益相关方的监督。

### 兑现社会责任承诺

公司依据社会责任规划，长期、持续、有计划地履行对社区的责任，与政府、社区代表、非政府组织等一起发展和支持为社区带来利益的项目。截至 2011 年底，公司累计投入 1.3 亿美元用于赞比亚基础设施建设，为当地社区捐建道路、公共候车厅、农贸市场、变电站等公用设施；经营多家矿区医院，引进先进医疗设备和技術，改善当地医疗条件；支持包括小学、技校和大学等各个层次的教育事业，帮助赞比亚人民提高受教育水平和职业技能水平。

### 三、成效

按照履行社会责任计划，2012 上半年，公司向卡鲁鲁西市捐赠救护车、发电机和摩托车等物品，总价值超过 10 万美元；与赞比亚铜带省大学签订资助大学生奖学金的长期合作协议，使资助的学生从过去的 8 名增加

### Maintaining good communications with the stakeholders

The Company has widely communicated with local communities to come to deeply understand their most pressing needs before launching a public welfare program. The Company researches local needs through visiting, meeting-and-greeting, media press conferences, open letters from the CEO, major news press conferences and other means to communicate with and have contacts with local governments, sectors, communities and relevant community organizations. The Company then confirms a critical area of focus and clear public welfare project type and development measures by integrating its own professional advantages, the actual local situation and the urgency of each public welfare project.

### Formulating a social responsibility performance plan

The Company implements a social welfare project plan every year and incorporates such a plan into the development program of the Company, checks necessary budgets, arranges special personnel to be responsible for the implementation of each public welfare project to normalize and institutionalize the action of supporting community development in accordance with the reality of its development and local requirements. While working out each job plan for the whole year at the beginning of the year, the Company incorporates the social responsibility plan for that year, confirms the funding for social responsibility measures and the way they will be performed. It then timely releases information to the public and accepts supervision from the relevant stakeholders.

### Fulfilling the social responsibility promise

The Company performs its social responsibilities to communities on a long-term basis and designs its responsibility plans in accordance with sustainability. It cooperates with the government, community representatives and non-governmental organizations to develop and support the projects that are able to benefit the community. By the end of 2011, the Company had invested a total of 130 million dollars in infrastructure construction in Zambia, building roads, public waiting halls, markets for agricultural products, and transformer substations with the funds. It also ran many hospitals in the mining area and introduced advanced equipment and technology to improve local medical conditions while also supporting educational development at different levels, including primary schools, technical schools and colleges in order to assist Zambia in the improvement of its educational levels and vocational skills.



到 18 名，同时向赞比亚铜带省大学捐赠奖学金 3 万美元；投资近 10 万美元帮助谦比希高中扩建教室，向卡翁达儿童基金会提供 1 万美元的慈善捐款，受到了当地政府和居民的高度评价。赞比亚首任总统卡翁达考察公司在赞项目时，在见证了公司的发展和在企业社会责任方面的投入之后，即兴与中赞员工一起高唱：“中国，赞比亚，让我们一同向前。”

通过制定社区发展规划，增强了公司参与当地社区发展的针对性、计划性和系统性，提升了公司履行社会责任的效率和价值，社区政府和居民对公司的认可度增强，树立了中国企业负责任的良好形象。

## 四、展望

履行对社区的责任有助于企业在当地取得运营许可，实现健康成长。公司将继续扎根非洲，深入融入当地社会，在自身发展同时，推动当地经济发展进程，实现双方共赢的长久循环效益的跨越式成长。

## III.Effect

In the first half of 2012, in accordance with its social responsibility plans, the Company donated ambulances, generators, motorcycles and other articles to Kaluluxishi, for a total donated value of over 1 billion dollars. Moreover, it signed a long-term cooperation agreement with Zambia's Copperbelt University in regards to scholarship donations, increased the number of subsidized students from 8 to 18, donated 30,000 dollars in scholarship funds to Copperbelt University, invested nearly 100,000 dollars in Chambishi High school for the expansion of the classroom, provided and donated 10 thousand dollars to the Kaunda Children's Fund, and won high praise from the local government and residents. Kaunda, the first president of Zambia, extemporaneously sang: "China, Zambia, let's march forward together," after inspecting the Company's projects in Zambia and witnessing the Company's development and investments in social responsibility.

Through the establishment of its community development plan, the Company has enhanced the pertinence and planning of its local community development work while also making it systematized. Furthermore, the plan's establishment has improved and raised the efficiency and value of its social responsibility performance, enhanced the acceptance and recognition of the Company by the community government and residents, and established a positive responsible image for Chinese enterprises.

## IV.Prospects

The performance of the Company's responsibilities to the community helps in the obtainment of business permits and the realization of healthy development. The Company hopes to grow in leaps and bounds through the development of win-win and long cycle efficiency by remaining rooted in Africa, integrating into the local society and promoting local economic progress during the process of its own development.

# 不仅是一条路 ——中国建筑股份有限公司

## Multiple Ways Forward – China State Construction Engineering Corporation Limited

## 6.2

**摘要：**公司承建刚果（布）国家 1 号公路项目过程中，为沿线市区提供就业机会，为当地工人提供专业培训，为沿线社区修建便民设施，将环保理念融入设计和施工过程，促进当地经济社会发展，保护当地环境，树立了公司负责任的品牌形象。

**Abstract:** During the course of the No. 1 National Highway project in the Republic of Congo, the Company created jobs for the urban areas along the highway, gave professional training to local workers, built facilities for the convenience of communities along the line, and integrated the concept of environmental protection into design and construction, thus promoting local economic and social development, protecting the local environment and building up the Company's image as a responsible company.

中国建筑股份有限公司是由国务院国有资产监督管理委员会为实际控制人的大盘蓝筹股，由中国建筑工程总公司、中国石油天然气集团公司、宝钢集团有限公司、中国中化集团公司等 4 家世界 500 强企业共同发起，于 2007 年 12 月 10 日正式创立。中国建筑传承了中国建筑工程总公司的全部资产和企业文化，主营业务包括房屋建筑工程、国际工程承包、房地产开发与投资、基础设施建设与投资以及设计勘察五大领域。

## 一、案例背景

刚果（布）国家 1 号公路是连接刚果（布）首都布拉柴维尔和经济中心黑角市之间唯一的公路交通要道，其原址始建于 1980 年，二十多年来由于战争的破坏及缺乏维护，损坏非常严重，大部分路段无法通行。2008 年 5 月，中国建筑肩负起修缮 1 号公路的使命。

## 二、措施

公司深知修建一条畅通的柏油马路只是开始，更多的责任在于参与非洲国家发展建设，融入当地社区，继续做好对沿线居民、社会有益的活动，为当地社区的社会发展做出突出贡献。

China State Construction Engineering Corporation Limited (CSCEC) is a large blue-chip company controlled by the State-owned Assets Supervision and Administration Commission of the State Council of the Republic of China. The Company was jointly founded on December 10, 2007 by China State Construction Engineering Corporation, China National Petroleum Corporation, Baosteel and SINOCHEN Group, which are all companies in the Fortune Global 500. The Company has inherited all the assets and the enterprise culture of China State Construction Engineering Corporation. Its main fields of businesses include building engineering, international project contracting, real estate development, infrastructure construction and investment, and survey and design services.

## I.Case background

The original No.1 National Highway in the Republic of Congo was established in 1980. It is the only major transit link connecting Brazzaville, the capital of the Republic of Congo, and Pointe-Noire, the economic center. Due to serious damage caused by war and insufficient maintenance over a period of more than 20 years, the road became impassable in many places. CSCEC undertook the duty of repairing the road in May of 2008.

## II.Measures

The Company deeply understands that building a smooth bituminous road is just a beginning and that the undertaking of more responsibilities is needed to make an outstanding contribution to the local community's economy and society

## 带动当地就业

公司平均每月为沿线社区提供就业机会，同时为当地工人提供各种专业知识培训，如绑扎钢筋、浇筑混凝土等的操作程序和控制要点。许多工人从对施工技术了解为零到成为熟练工种，在提升了自身就业能力同时，也为家庭生活提供了有力保障。

## 积极保护环境

在项目设计时，公司尽可能沿用原 1 号路的线形，以避免对周边环境产生新的破坏；对一期工程沿线的砂性土路段进行设计时，普遍采用客土喷播、三维网植草进行有效防护；结构物设计时，保证与自然景观环境相协调；针对不同生态区域进行分段设计，以营造动感生态旅游风景。

在项目施工过程中，土方开挖尽量避开雨季，在雨季充沛地区设置边坡截水沟等以防垮塌，破坏植被；合理选取取土场和弃土场，施工后对其进行植被恢复；及时对路堤边坡进行植草防护。

## 助力改善民生

公司为施工沿线社区居民修建了许多便民设施，譬如村庄里的人行道盖板、行车盖板、交叉路口拓宽等工程；还投资修建了以 1 号公路为主干线，垂直于 1 号公路的多条通村道路，改善了村与村的道路网络联接。

为解决沿线 20 多个村庄的纯净水饮用困难问题，公司在施工沿线为村民修建水井；同时为施工沿线的居民修建两所医疗诊所，解决了社区居民的疾病治疗等难题，为刚果人民身体健康提供了有力保障。

公司还投资新建两所希望小学，通过对学校的教室、场地进行修缮、平整等工作，初步改善了学生的学习环境，提升了当地基础教育设施水平。

through participation in the development and construction of African countries, integrating with local communities, and insisting on engaging in activities that benefit the residents along the line and the society as a whole.

### Driving local employment

The Company not only offered monthly employment opportunities to the communities along the line, but also a large variety of professional training to local workers, such as in regards to operational procedures and controlling points of reinforcement during assembling and concreting. Many workers have gone from having zero technical knowledge to becoming skilled construction laborers, meaning that they came to be able to provide for their families in a reliable way while also enhancing their own employability.

### Actively working for environmental protection

The Company tried as much as possible to retain the original route of No.1 National Highway in order to avoid any new destruction to the surrounding environment during the design of the project; adopted earth spraying and a three-dimension vegetative net for effective protection during the design of the first phase of the project; integrated the road with nature in terms of its structural design; and engaged in segmented design in particular ecological regions in order to create ecological tourism areas.

The excavation of the earthworks did not take place during the rainy season whenever possible, and roadside ditches were set up in areas of heavy rainfall to help avoid collapses and damage to vegetation. Areas for the collection and disposal of earth materials were selected rationally, and vegetation was restored after construction. The grass on the embankment slopes was also protected in a timely way.

### Helping to improve people's livelihood

The Company built many facilities for the convenience of community residents along the line, such as a cover plate for crosswalks in the village, a cover plate of the road, and a broadening of crossroads in the village. In addition, the Company also built many roads that are centered on and run vertical to No.1 National Highway to improve the road connection between the villages.

To solve the difficulty of obtaining purified drinking water for over 20 villages along the line, the Company helped to build wells. The Company also built two medical clinics to facilitate disease treatment, thus greatly helping to protect the health of the people of Congo.

## 三、成效

### 促进当地经济社会发展

1 号公路的建设，方便了居民出行，畅通了当地居民与外界的沟通，改善刚果(布)国家交通网；在修建过程中，公司平均每月为社区提供 2500 个就业机会，仅 2010 年项目部就提供合计 3 万人次的就业机会，提升了当地居民的就业能力；同时，公司利用自身优势，还修建了多条通村道路，进一步加强了当地社区与外界的连接，推动了当地社会经济的发展。

### 有效保护当地环境

通过对设计和施工阶段进行有力的把控和监督，有效保护了公路沿线的环境，最大限度地降低了道路对马永贝原始森林的环境破坏，使工程全线环境绿化工作收到较好的效果，同时确保了道路的功能与安全。

### 提高中国建筑品牌知名度

公司在修建一条公路的同时，取得了经济、社会和环境效益的和谐统一，得到了业主、当地政府和社区居民的高度认可，为公司在当地发展创造了良好的社会环境，同时树立了负责任的品牌形象，提升了公司的品牌影响力和知名度。

## 四、展望

公司将继续履行社会责任，在建设好项目本身的同时，发挥自身专业优势，积极参与社区建设，更好地帮助当地社区改善基础设施建设，保护环境，改善教育、医疗条件，为当地的发展做出更大的贡献，同时为公司在当地的发展创造良好的社区环境。

The Company also invested in the building of two hope primary schools so as to improve the studying environment and basic educational level of the region by repairing the classrooms and smoothing the school grounds.

## III.Effect

### Promoting local economic and social development

The construction of No.1 National Highway has not only offered convenience to the residents, but also smoothed the connection between local residents and the outside world and improved the communications network of the Republic of Congo. During the process of construction, the Company offered an average of 2,500 employment opportunities every month. In 2010, the project department offered a total of 30 thousand employment opportunities, improving the employability of local residents. At the same time, the Company has also repaired many roads connecting villages, enhanced the connections between the local community and the outside world, and promoted local economic development.

### Effectively protecting the local environment

Through powerful control and supervision during the design and construction stages, the Company has effectively protected the environment along the road and minimized destruction of the primeval forest in the Mayombe region. As such, the afforestation has been effective. At the same time the functionality and safety of the road have not been compromised.

### Increasing the brand awareness of China Construction

During the course of the building of the road, the Company has achieved a harmony and unity of economy, society and environmental benefits, received the positive recognition of employers, local government and community residents, created a positive social environment for the Company's development in the locality, established a responsible brand image, and promoted the influence and popularity of the Company brand.

## IV.Prospects

The Company will continue to perform its social responsibilities, contribute more to local development and create a favorable environment for local development by giving play to its professional advantages, actively participating in community construction, assisting local communities to improve infrastructure construction, protecting the environment, and improving the conditions of education and medical treatment.



# 多方沟通 妥善处理工程征地补偿 ——中国水利水电建设股份有限公司

## Communicating multilaterally to tackle land requisition and compensation issues– SINOHYDRO Group

6.3

**摘要：**公司在柬埔寨甘再水电站项目中，在工程征地补偿方面结合当地法律和国际标准，引进当地政府监管机构参与，积极与当地居民沟通，保障征地移民合法权益，促进公司与当地社区的和谐相处和共同发展。

**Abstract:** During the Kamchay Hydropower Station project in Cambodia, in accordance with local laws and international standards for land acquisition compensation, the Company brought in the local government regulatory body and proactively communicated with local residents to safeguard the lawful rights and interests of migrants whose land was acquired, thus promoting the harmony and common development of the Company and the local community.

中国水利水电建设股份有限公司是中央管理的中国水利水电建设集团公司控股创立的股份公司，是以水利建筑工程为核心业务，以基础设施建设、电力投资建设与经营、房地产开发等相关业务为支撑的综合性大型企业集团，业务覆盖亚洲、大洋洲、非洲、拉丁美洲及欧洲的多个国家地区。

### 一、案例背景

柬埔寨国内电力缺口极大，全国仅有 60% 的城镇住户和 10% 的农村住户可以用电，全国电力需求量以年均 12% 的速度增长。柬埔寨甘再水电站的建成将有效缓解当地对电力的需求，然而当地实施土地私有制，当时面临的主要问题是安置好征地移民，与当地社区保持良好的沟通，保证项目顺利实施。

### 二、措施

公司在项目执行过程中秉持“关注民生，以人为本，为社会担责任”的企业价值观，注重保障征地移民的利益，注重与当地社区的和谐相处和共同发展。

Sinohydro Group Ltd. is a stock company established by Sinohydro Corporation under central government management. Water conservancy and construction make up its core business focuses, and infrastructure, electric power construction, investment, and operations, and real estate development are its supporting areas of business. As a large and comprehensive enterprise group, it enjoys business in many countries and regions, ranging from Asia, Oceania, Africa, Latin America and Europe.

#### I. Case background

Cambodia suffers from a severe lack of electricity output, with only 60% of urban residents and 10% of rural residents having access to power. At the same time, domestic demand increases by 12% annually. The establishment of the Kampot Hydropower Station effectively helps to meet the demand for power. The major challenges encountered involved the question of how to properly handle land acquisition and resettlement since a system of private ownership of land by locals was in place, and the question of how to maintain sound relations with the local community so as to ensure the smooth implementation of the project.

#### II. Measures

Through upholding the values of “being people-orientated and performing social responsibilities”, the Company attached great importance to the locals’ interests and to living in harmony with the local community and realizing mutual development.

### 结合当地法律和国际标准，保障征地移民合法权益

针对柬埔寨土地私有制，公司结合当地法律和国际标准，确立了“征租结合、永临结合、经济补偿、到期返还”的基本思路，按照特许经营期限征用永久建筑物用地，租赁临时用地最长占用时间不超过建设竣工日期限，征地补偿依据地面农作物、附属建筑物和其他财产的市场水平价值评估制定征地补偿依据，对临时占地按照期满恢复地理原貌或赠送可继续使用的设施归还私人地主，保证了当地居民的合法权益。

### 引进当地政府监管机构参与，增强征地工作合法性

公司聘请项目所在地政府监管机构参与到征地实施与协调的相关工作中。在施工现场，公司负责征地范围规划、补偿调查评估、赔付意向洽谈等初步工作，政府监管方负责审批征地规划和实施方案，协调处理钉子户、非私有用地等问题，增强施工征地工作的合法性。

### 积极与当地居民沟通，了解居民期望和诉求

为最大限度减少现场作业对当地老百姓生活的影响，公司积极与当地居民沟通，了解其真正的顾虑及期望。通过尽职调查，市场评估，级别划分，制定差异性征地合同，对不同经济作物、不同位置、不同土地属性采用不同补偿价格，实现市场化征地补偿。在移民工作上，尽管甘再项目库区地处原始森林且施工区域中受到影响的村民较少，公司积极主动与村民协商补偿搬迁，避免工程对村民产生的可能影响。

### 提倡雇佣劳工本地化，拉动当地经济社会发展

在项目施工过程中，公司主动雇佣当地社区居民，增加本土就业，解决大部分农民的生计问题。针对当地工程建设技术人才缺乏，公司采取多种方式对工人进行技术培训和制度教育。据统计，项目在建设及运营期间拉动当地劳动力就业 1 万余人次，组织技能培训 3000 余人

### Integrating local laws and international standards to protect the legal interests of relocated residents

In regards to the system of private ownership of land in Cambodia, the Company, on the basis of local laws and international standards, set up basic guidelines for acquisition, leasing, permanent occupancy, temporary occupancy, economic compensation, and returning the land in due course. According to the franchise period for land requisition for permanent buildings, the longest period of temporary leasing was set so as not to exceed the date on which the construction was completed. Compensation was to be issued on the basis of the ground surface used for crops, annexing and the evaluation of other properties. Moreover, the land for temporary usage was to be restored to its original state and returned to the private landlords along with facilities that were still capable of being used. All these measures were taken to safeguard the legal interests of local residents.

### Calling for the engagement of local government regulators to ensure the legitimacy of land acquisition

The Company invited local government regulators to join in the implementation and coordination of the project. At the construction site, the Company was responsible for preliminary work such as land acquisition scope planning, the evaluation of compensation, and negotiation over intended compensation, while the government regulators tackled issues such as the approval of land acquisition planning, coordination activities with regard to those who refuse to relocate and in regards to land for non-private use, so as to ensure the legitimacy of land acquisition.

### Understanding locals’ expectations and demands through communication

To minimize the impact of the operation on locals, the Company took active measures to gain a better understanding of their concerns and expectations. Differentiated contracts of land acquisition were entered into through investigation and market evaluation, and land expropriation compensation was arrived at by adopting different compensation prices in accordance with differences in cash crops, locations, and the nature of land. In terms of relocating people, though few villagers were affected by the Kampot Hydropower Station project being located in the primeval forests, the Company took an active part in coordinating with locals about compensation in order to avoid the project having an adverse effect on them.

### Calling for the employment of local workers to facilitate local economic and social development

During the process of construction, the Company tried to increase local employment by engaging more local residents

次，多数当地劳务经专业培训走上了技术工种、操作手、工程翻译、行政管理等工作岗位。

### 三、成效

公司重视与当地政府、社区建立互利共赢的和谐关系，收到了良好的经济效益和社会效益。

#### 和谐关系保证项目顺利实施

通过征租结合、补偿经济农作物等方法解决了项目施工用地和永久结构物占地问题，累计补偿超 300 万美元，增加了当地农耕副业收入，保证了项目的顺利实施。柬埔寨贡布省政府为表彰中国水电甘再项目公司在工程进度、质量、安全等方面的突出业绩，颁发了优秀工程荣誉证书，也是贡布省政府首次颁发此荣誉给外资企业。

#### 项目建设带动当地经济社会发展

甘再水电站作为经济、清洁的水电能源，建成发电后将有效缓解柬埔寨电力供求矛盾，大幅度降低生活电价，提供优质廉价的电力资源。同时，将进一步促进和带动柬埔寨国家电网建设进程。水电站建设有力带动了当地政府财政收入的增加，促进当地旅游资源的开发，柬埔寨旅游部门初步形成了金边——贡布——甘再水电站——响水旅游区——卜哥山度假村——西哈努克港口风景旅游开发线路。

### 四、展望

公司将秉承“关注民生，以人为本，为社会担责任”的价值观，以国际民生工程维系企业可持续发展，继续探索实施聚民心促发展的工业生态合作模式。

and solved most farmers' problems with regards to livelihood. It also took various measures to carry out technical training and education to address the shortage of technical talent for the local project. According to statistics, a total of 10,000 job opportunities were created, and 3,000 people received technical training that helped them engage in technical work, operations, engineering translation, administrative management, etc.

#### III.Effect

The Company paid a great deal of attention to building harmonious, mutually beneficial and win-win relations with the local government and community, thus leading to sound economic and social effects.

#### Harmonious relations ensure smooth progress for the project

The issues regarding land for construction and permanent occupation were solved through the combination of acquisition and leasing and compensation for cash crops. The total compensation paid out reached 3 million US dollars. As such, local incomes were increased and the smooth progress of the project was ensured. Because of the Company's outstanding performance in regards to the progress, quality and safety of the project, the Kampot Provincial Government of Cambodia rewarded the Sinohydro Group with a certificate of honor for engineering excellence, which was the first time the Kampot Provincial Government had bestowed such an award on a foreign-invested company.

#### Driving local economic and social development

Upon its completion, the Kampot Hydropower Station, as a station for producing economical and clean power, will effectively ease the power shortage that Cambodia faces and lower the price of electricity significantly. Moreover, it will further promote the advancement of the Cambodian national power grid, increase the fiscal revenue of the local government and stimulate the growth of the local tourism industry. The Cambodian Tourism Department has been developing tourist routes from Phnom Penh, Kampot, Kampot Hydropower Station, Xiangshui Tourist Zone, Bokor Resort, to Sihanoukville Port.

#### IV.Prospects

Through upholding the values of giving high priority to well-being, being people-orientated, and undertaking social responsibilities, the Company will continue to strive for sustainable development by continuing to implement international projects that improve people's livelihoods and will explore models that integrate industry and ecology, thus earning people's recognition and spurring growth at the same time.

## 扶持海外农业 追求共赢格局 ——中信建设有限责任公司

### Supporting overseas agricultural projects and seeking win-win results – CITIC Construction

**摘要：**公司在安哥拉马兰热农业开发项目中，通过开展优良品种、高产配套栽培技术生产示范，组织农业生产技术培训，开展农副产品加工领域合作，提高当地农业技术水平，改善当地人民生活质量，获得当地政府和社区居民的广泛好评。

**Abstract:** In its agricultural development project in Malanje, Angola, the Company demonstrated a good variety of high-yield cultivation technologies, organized agricultural production technology training, and engaged in cooperation in the field of agricultural and agricultural byproduct processing, thus raising the level of local agricultural technology, improving the local people's quality of life and earning wide praise from the local government and community residents.

中信建设有限责任公司是中国中信集团公司的全资子公司。公司坚持“以投资、融资和为业主前期服务为先导取得工程总承包，以工程总承包带动相关产业发展”的经营战略，通过为业主及当地国提供项目全生命周期的一揽子综合服务，率先进入国际工程承包高端市场，在安哥拉、巴西、委内瑞拉、伊朗、乌兹别克斯坦、哈萨克斯坦、白俄罗斯、南非等地拥有多家分支机构。

### 一、案例背景

安哥拉是非洲西南部重要的农业国家，可耕面积 3500 万公顷，具有“南部非洲粮仓”的美誉。但由于农业基础设施差，生产方式落后，严重缺乏技术支持，造成粮食生产能力严重不足，必须靠国际援助和进口解决大部分消费需求。

### 二、措施

公司承建的安哥拉马兰热农业开发项目，是目前中国企业在海外承揽的最大的农业综合开发项目，对于帮助安哥拉解决粮食安全问题、脱贫艰困、发展民生具有重要意义。2011 年初，公司与兵团建工集团签订《海外农业开发项目战略合作协议》，组成“海外农业项目联合体”，共同负责海外农业项目的签约、规划、建设和经营。

#### I.Case background

Angola, an important agricultural country in southwestern Africa, has an arable area of 35 million hectares and is known as the “granary of southern Africa”. However, its capacity for grain production is wholly insufficient due to its poor agricultural infrastructure, backward modes of production and lack of technical support. It has to meet consumption demands by relying on international assistance and imports.

#### II.Measures

The Angola Malanje Agricultural Development Project undertaken by the Company is, at present, the largest comprehensive agricultural development project to have been carried out by any Chinese enterprise through overseas contracting. It is of great significance for helping Angola to ensure the safety of its grain, allaying poverty and improving people's livelihoods. In the beginning of 2011, the Company signed the Strategic Cooperation Agreement on Overseas Agricultural Development Projects with China's Xinjiang Bingtuan Construction & Engineering (Group) Co. Ltd. to form an “Alliance of Overseas Agricultural Development Projects”.



## 农业生产资料开发

为解决农作物病虫害问题，提高单产，公司引进我国符合环保要求的农业生产资料产品运用于农业生产，广泛开展优良品种、高产配套栽培技术的生产示范，提高农作物总体生产水平。

## 农业生产技术培训

公司加强对农业生产者和农村劳动力进行农作物栽培技术培训，不断提高劳动者素质和生产技能；同时提供农业技术咨询和信息服务，改变安哥拉传统的种植观念、种植方式、种植技术和种植行为，提高农作物总体生产水平。

## 农副产品加工合作

由于安哥拉农产品品种多，且具有独特性，公司与当地开展了农副产品加工领域的合作。公司的联合舰队合作伙伴通过购买或租用当地成熟的农场，建立适度规模化的农业综合开发园区，利用现代农业技术，提高初级农产品转化率，增加农产品附加值，形成完善的农产品产业链与商品流通机制，构建农产品种植、加工、养殖、消费相互促进的良性循环体系。

## 三、成效

### 提高当地农业技术水平

公司通过向当地传播先进的农业技术和理念，扶持当地农业生产资料的开发，增强农副产品合作等措施，安哥拉地区的农业种植水平不断提升，实现就地种植加工，形成一条“种植—收获—烘干—加工—市场”完整的产业链。

### 改善当地居民生活质量

通过提升农业技术水平，农业产量大幅度提升，解决了当地居民粮食紧缺问题，为改善当地人民生活质量发挥了积极作用。2011 年以来，公司在安哥拉马兰热省和威热省分别建成种植面积为 7300 公顷和 9433 公顷的

The companies thus jointly took charge of the agreement signing, planning, construction and operations phases for overseas agricultural projects.

### Develop agricultural production

To solve the problems of crop diseases and pests and improve crop yields, the Company introduced agricultural modes of production that are in compliance with environmental requirements. The Company carried out extensive production demonstrations involving good crop varieties and high yield cultivation techniques in order to increase the total output of agricultural production.

### Technical training in regards to agricultural production

The Company placed great emphasis on technical training aimed at crop cultivation, continuously improving the capabilities of local labor. Meanwhile, it offered agricultural technology consulting and information services and changed Angola's traditional concepts in terms of planting, planting methods, technology and behavior, thus raising the overall level of crop production in the country.

### Cooperation in regards to agricultural byproducts processing

The variety and uniqueness of Angola's agricultural products have brought opportunities for CITIC Construction Co. Ltd to cooperate with locals in regards to agricultural byproducts processing. The Company's joint fleet partners have established a moderate scale comprehensive agricultural development zone through buying or renting mature local farms. They have set up complete agricultural product industry chains, a commodities distribution system, and a sound cyclic system that covers planting, processing, cultivation and consumption by relying on modern agricultural techniques and improving the primary conversion rate of agricultural products and increasing the added value of those products.

## III.Effect

### Upgrading technical standards for local agriculture

Through various measures undertaken by the Company, such as the spreading of advanced agricultural techniques and concepts, the supporting of the development of local agricultural production and the strengthening of cooperation in regards to agricultural byproducts, Angola's agriculture industry has enjoyed a constant improvement and achieved on-site cultivation and processing, with a complete industry chain covering planting, harvesting, drying, processing and marketing.

两个农场。2012 年完成播种面积 1952.4 公顷，其中 1671.3 公顷玉米预计总产 4500 吨以上。

## 获得利益相关方广泛好评

公司为安格拉地区提供农业发展支持的同时，也收获了当地政府和社区居民的信任，为开拓整个南部非洲市场的工程建设打下了坚实的基础。据悉，安哥拉政府和南美委内瑞拉政府还将与公司签署 150 万至 300 万公顷的农业开发项目总承包合同，公司实施农业“走出去”的战略前景非常广阔。

## 四、展望

公司将继续深化在安哥拉地区的农业项目合作程度，探索可持续的农业合作发展模式，更好地履行企业社会责任，助力当地社会进一步发展。

### Improving local residents' well-being

Thanks to rises in agricultural technical standards, high agricultural yields have eased the severe shortage of grains and played a positive role in improving the quality of life for local residents. Since 2011, the Company has established two farms, of 7,300 hectares and 9,433 hectares respectively. One is located in Malanje, and the other is in Uíge. By the end of 2012, a total of 1,952.4 hectares had been cultivated, of which 4,500 tons of corn is expected to be produced from 1,671.3 hectares.

### Wining extensive praise from stakeholders

While providing support for Angola's agricultural development, the Company has won the trust of the local government and residents, thus laying a solid foundation for the Company's further exploration of the southern African market. It is reported that the Angolan Government and the Venezuelan Government will sign general contracts with the Company worth between 1.5 million and 3 million dollars, providing a solid foundation for implementing the Company's strategy of going global.

## IV.Prospect

The Company will continue to deepen its cooperation with Angola in regards to agricultural projects and explore a sustainable development model of agricultural cooperation, so as to better shoulder its social responsibilities and facilitate the further development of the local society.

# 全球责任 和谐共赢

Global Responsibility & All-win Harmony

中国对外承包工程商会

地址：北京市东城区东直门内大街2号

电话：86-10-59765206

网址：www.chinca.org

China International Contractors Association

Add: No. 2, Dongzhimennei Street, Dongcheng District, Beijing

Tel: 86-10-59765206

Web: www.chinca.org



本报告采用环保纸张印刷

This Report is made by recycled paper