Sustainable Infrastructure Guidelines for Overseas Chinese Enterprises

(Publicity Version)

China International Contractors Association

October 2016

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Foreword

As sustainable development has become a mutual endeavor of countries around the world, so is sustainable infrastructure a topical issue of governments and financial institutions. After "developing sustainable infrastructure" was included in the UN Sustainable Goal of Industry, Innovation & Infrastructure in 2015, the 2016 G20 Hangzhou Summit once again billed infrastructure as one of the global priorities for sustainable development, and vowed heavier investment in sustainable infrastructure. International financial agencies, out of consideration for risk control, has successively issued loans and investment principles relating to environmental and social issues, including the "Equator Principles", "Principles for Responsible Investment" and "green credit", urging project investors, owners and contractors to take full account of the economic, environmental and social impact of funding, planning, design, building and operation. Meanwhile, institutions from western developed countries have released evaluation standards for sustainable infrastructure, such as Envision by Harvard University, SuRe by Global Infrastructure Basel Foundation, and Performance Standards on Environmental and Social Sustainability of International Finance Corporation (IFC). These standards are binding, from the perspectives of economy, society, environment and governance, on enterprises engaged in sustainable infrastructure projects, and have been, or are planned to be, applied to financing evaluation for projects. Sustainable infrastructure will obviously become a new trend in international infrastructure market.

Sustainable infrastructure projects are required to comply with the long-range objectives of local economic development, social progress and environmental protection. Such a requirement is completely in accord with what the Belt and Road (B&R) initiative stands for - B&R projects should be jointly built through consultation to accommodate the concerns of all and seek a conjunction of interests, so that the results of the harmonious, inclusive, win-win cooperation will benefit wider areas and populations. Sustainable infrastructure projects point a way for Chinese enterprises to implement the B&R initiative. Those companies who conduct outward investment and economic cooperation should expedite business restructuring and upgrading by extending their business chain from contracting merely to funding, planning, design, building and operation of projects. With a expanded market and a extended supply chain come heavier capital investment and higher financing and operati on risks. Economically, environmentally and socially sustainable infrastructure projects are, therefore, an inevitable choice for going-global Chinese enterprises to achieve long-term sustainability.

To follow the international trends of sustainable infrastructure, satisfy the needs for rapid industrial development, and promote the building of soft capacity, China International Contractors Association (CHINCA) and Dagong Global Credit Rating Co., Ltd. have jointly formulated the *Sustainable*

Infrastructure Guidelines for Overseas Chinese Enterprises. The Guidelines are designed to provide an industrial standard for sustainable infrastructure projects and spur enterprises into the processes of funding, planning, design, building and operation.

The core topics hereof include the guidelines for economic, environmental and social sustainability as well as sustainability governance rules. The Guidelines have referred to some concepts of such standards for sustainable infrastructure as Envision, SuRe, and IFC Performance Standards on Environmental and Social Sustainability), internationally accepted sustainability standards and conventions, as well as domestic laws and rules on environmental protection and CSR. To enhance the applicability and feasibility of the Guidelines, indicators herein are tailor-made for the stages of design，building and operation of projects, to the extent that qualitative indicators are assessable and quantitative ones measurable.

As a guiding document for Chinese enterprises engaged in overseas sustainable infrastructure projects, the Guidelines, co-developed and released by CHINCA, are subject to amendment in due course as per business conditions and effect of implementation hereof.

CHINCA will evaluate projects undertaken by its members based on the Guidelines, and call on relevant governments and financial institutions to use the Guidelines as a reference for project approval and loan lending.

1. General Provisions

1.1 Instructions

1.1.1 To guide and promote overseas Chinese companies to fund, plan, design, build and operate projects in a sustainable manner, CHINCA hereby formulates the Guidelines in accordance with domestic and international laws, regulations, standards and rules regarding sustainable infrastructures.

1.1.2 The Guidelines aim to help enterprises establish effective and equitable sustainability governance rules and boost economic, social and environmental sustainability of infrastructure through viable actions.

1.1.3 As a voluntary standards for sustainable infrastructure, the Guidelines propose the desirable behavior and governance rules of Chinese enterprises engaged in overseas infrastructure projects.

1.2 Scope

The Guidelines are applicable to overseas infrastructure projects, in which Chinese enterprises (or consortia led by Chinese enterprises) are involved, including but not limited to engineering facility projects benefiting industries and households as well as large contracting projects. Chinese enterprises involved in overseas infrastructure M&A or any or all stages of the said projects ranging from funding, planning, design, building, operation and maintenance to closure may refer to relevant contents of the Guidelines. The Guidelines may also serve as a tool for sustainability evaluation on completed projects.

1.3 Definition

Sustainable infrastructure refer to the projects which fully integrate the ideology of sustainable development into the processes of funding, planning, design, building and operation so as to eliminate or ensure the least harm to stakeholders' rights and interests throughout their lifecycle, minimize natural resource consumption and adverse environmental effect, keep in harmony with the community, and meet the local needs for medium-to-long-term socioeconomic growth.

1.4 Principles

Three principles related to sustainable infrastructure must be follows as below:

First, stakeholders must be given due attention. The projects should take into account stakeholder's concerns and interests as well as environmental risk avoidance and ecosystem protection. The stakeholders mentioned herein refer to the groups and individuals that may influence, or be influenced by, business activities and decisions, including shareholders, employees, consumers, governments, suppliers, investors, competitors, civil societies, media and community residents.

Second, all stages in the lifecycle of projects must be covered. The entire project lifecycle should carry the stamp of sustainability. During the stages of investment, planning, design, building, operation, maintenance and closure, the enterprises should safeguard the legitimate rights and interests of employees, creditors and shareholders, treat consumers and suppliers in a sincere manner, and engage in environmental protection, community development and other public welfare campaigns so that the projects can take their economic, environmental and social value up a notch and grow in concert and harmony with stakeholders.

Third, resilience to changes must be a necessity. The infrastructures should be not only aligned with current and short-term demands, but also adaptable to changes (social demands, natural disasters and climate changes) in the distant future. In face of uncertainties, the projects should be capable of constant self-adjustment and self-improvement. In the event of an emergency or crisis, solutions should be promptly proposed and effectively implemented so as to resume normal operation of infrastructures in the shortest time possible.

1.5 Framework

The Guidelines shed light on the four dimensions of sustainability: economy, society, environment and governance. Economic sustainability is the foundation of sustainable building and operation, social sustainability the prerequisite for stakeholder engagement and harmonious co-existence, environmental sustainability the premise of ecological balance, and sustainability governance the institutional guarantee of systematic project management.

Guidelines for Economic Sustainability

As the basis for successful construction and operation of projects, economic sustainability refers to the operating ability to ensure financial soundness and

expected return on investment (ROI), keep the projects involved in local industrial integration, and spur the economic development.

2.1 Financial Performance

2.1.1 The enterprises should take account of local culture, economy, laws, politics, religion and market needs so as to ensure financial soundness and expected ROI, and protect their assets and capital.

2.1.2 In the course of design, the enterprises should a) establish equitable operating modes; b) forecast, or authorize a professional agency to forecast, the profitability of the projects; and c) develop feasible and rational long-term profit-sharing policies, measures and plans in return for shareholder commitment.

2.1.3 In the process of building or operation, the enterprises should, on the premise of lawful operation, constantly uplift the financial performance of the projects and perform their corresponding responsibilities and obligations, including but not limited to:

(1) Adopt innovative building or operating modes to increase business revenue;

(2) Reduce costs and enhance profitability;

(3) Guarantee creditors' rights and interests;

(4) Carry out profit-sharing plans to the letter;

(5) Entrust specific personnel with strict information disclosure and treat all investors fairly; and

(6) Brief stakeholders on the project audit report.

2.1.4 Core evaluation indicator

Profit margin or ROI

2.2 Implications for Local Industries

2.2.1 The projects should be as closely aligned with local industry trends as possible, and the enterprises should create a win-win situation through rational project design.

2.2.2 In the course of design, the enterprises should:

(1) Properly orient themselves towards local industrial chains;

(2) Examine, or authorize a professional agency to examine, project compatibility with local industries (i.e. integrative, alternative or exclusive); and

(3) Develop the approach to access more resources and sharpen their edge in the context of integrated development.

2.2.3 In the process of operation, the companies should do their best to maximize their positive influence on local industries, including but not limited to:

(1) Sharpen their edge in the industry and spur industrial development;

(2) Integrate upper- and lower-stream industries and boost relevant sectors; and

(3) Enhance resource integration and sharpen their edge through M&A or restructuring.

2.2.4 In the process of operation, the enterprises should rigorously disclose information on project compatibility with local industries, including but not limited to:

(1) Whether the projects are integrative?

(2) Whether the projects are alternative? If so, will their profitability be affected?

(3) Whether the projects are exclusive? If so, will they be sustainable?

2.2.5 Core evaluation indicators

(1) Relevance of the projects to local industries concerned; and

(2) Expansion of new industries through the projects.

2.3 Benefits for Local Economy

2.3.1 The enterprises should fully assess and do their best to engage in projects with the greatest relevance to local economy.

2.3.2 The enterprises should forecast, or authorize a professional agency to forecast, the profitability of the projects, and assess their relevance to local economy.

2.3.3 In the process of operation, the projects should do their best to develop synergies with relevant sectors and spur regional economic growth and restructuring.

2.3.4 In the process of operation, the enterprises should rigorously disclose information including but not limited to:

(1) Relevance of the projects to local economy;

(2) Annual contribution rate of the projects to local economy; and

(3) Sustainability of such contribution.

2.3.5 Core evaluation indicators

(1) Contribution rate of the projects to local GDP growth;

(2) Contribution of the projects to relevant sectors and local economic restructuring; and

(3) Relevance of the projects to local consumption and investment.

3. Guidelines for Social Sustainability

The requirement for social sustainability prompts Chinese enterprises engaged in overseas infrastructure projects to safeguard stakeholder rights and interests, promote community living standards and sustainability, boost local

employment, mitigate the negative social impact of the projects at the present time and in the future, strengthen preservation of cultural heritage and natural scenery, initiate supply chain management, enhance quality management, and shoulder their due responsibilities to stakeholders for the sake of harmonious co-existence and co-development.

The Guidelines offer a five-pronged approach to social sustainability: protection of employees' rights and interests, occupational health and safety management, supply chain management, quality management, and harmonious co-existence with community residents.

3.1 Protection of Employees' Rights and Interests

3.1.1 The enterprises should support the local union and safeguard employees' legitimate rights and interests to ensure smooth operation of the projects.

3.1.2 In the course of design, the enterprises should, in line with industrial characteristics, establish corresponding employee support policies, including but not limited to:

(1) Safeguard employees' rights and interests in recruitment and promotion;

(2) Provide equal employment opportunities;

(3) Give weight to diversified recruitment and career paths;

(4) Prohibit child labor;

(5) Stay in compliance with local laws and regulations on working hours;

(6) Offer reasonable compensation and benefits;

(7) Treat employees in a humane manner;

(8) Prohibit racial and gender discrimination in employment;

(9) Accord special grants to and take precautions for employees working under extreme conditions (e.g. offshore/down-hole operation); and

(10) Establish and maintain the channels for communicating with employees and soliciting their concerns.

3.1.3 In the process of building and operation, the enterprises may take the following measures to safeguard employee's rights and interests:

(1) Observe relevant employment and labor laws;

(2) Offer necessary facilities and venues to the union;

(3) Do their best to recruit local workers, strengthen localized management and prevent racial discrimination;

(4) Enhance professional training;

(5) Pay employees in a timely manner;

(6) Forge, maintain and improve the labor relations;

(7) Prevent forced labor;

(8) Provide healthy and safe working conditions; and

(9) Release policies on safeguarding employees' rights and interests, and disclose how well they are implemented.

3.1.4 Core evaluation indicators

(1) Social security coverage;

(2) Compensations and benefits;

(3) Training frequency and coverage; and

(4) Fair promotion.

3.2 Occupational Health and Safety Management

3.2.1 To enhance safety awareness, protect employees' health and ensure workplace safety, the companies should establish an occupational health and safety management system including:

(1) Control of occupational diseases;

(2) Management of occupational medical examination;

(3) Education and training on occupational health; and

(4) Safer operating conditions.

3.2.2 In the process of building and operation, the enterprises should take the following measures to enhance occupational health and safety management:

(1) Entrust specific departments and personnel with occupational health and safety management;

(2) Conduct regular safety training;

(3) Arrange regular medical examination for employees;

(4) Ensure workplace safety;

(5) Provide and routinely replace necessary labor protection appliances;

(6) Reduce noise in the workplace;

(7) Prevent electrical hazards;

(8) Prevent fire hazards and explosion;

(9) Prevent chemical hazards;

(10) Control dust in the workplace;

(11) Release policies on occupational health and safety management, and disclose how well they are implemented; and

(12) Observe occupational health management rules provided by local laws and regulations;

3.2.3 Core evaluation indicators

(1) Annual medical examination coverage;

(2) Safe and sanitary workplace;

(3) Occupational disease rate; and

(4) Work-related injury and death rate.

3.3 Supply Chain Management

3.3.1 The enterprises should enhance supply chain management and integrate resources in the course of building and operation so as to sharpen their edge, avoid operating risks, and realize sustainable development of the projects.

3.3.2 In the course of design, the enterprises should, in line with local conditions, identify stakeholders along the supply chain, including equipment providers, dealers and subcontractors, and develop the mode and process of supply chain management.

3.3.3 In the process of building and operation, the enterprises should enhance cooperation with suppliers and disclose the progress of supply chain management and major partnerships to ensure sustainable development of the projects, including but not limited to:

(1) Implement the policy of open procurement, in an effort to safeguard the legitimate rights and interests of, and fulfill their commitment to, suppliers and subcontractors;

(2) Develop new modes of cooperation with subcontractors for the purpose of profit and risk sharing;

(3) Do their best to purchase local products and services; and

(4) Do their best to partner with CSR-minded suppliers and subcontractors for the sake of green procurement.

3.3.4 Core evaluation indicators

(1) Design of supply chain management process;

(2) Local procurement; and

(3) Green procurement.

3.4 Quality Management

3.4.1 The enterprises should lay down the policies and targets of quality management. By means of quality planning, control, assurance and improvement - the four elements of quality management system - they should provide communities and residents with premium, reliable, safe offerings.

3.4.2 In the course of design, quality management may be conducted in the following manners:

(1) Lay down the policies and targets of quality management;

(2) Specify the responsibilities of the quality management unit;

(3) Establish the quality management and technology standards; and

(4) Develop the quality inspection mechanism.

3.4.3 In the process of operation, quality management may be conducted in the following manners:

(1) Urge the quality management unit to itemize the quality flaws and propose solutions;

(2) Rectify the flaws and collect data concerned;

(3) Evaluate quality improvement and benchmark the achieved level of quality against the standards; and

(4) Follow out quality management to the point of meeting the standards.

3.4.4 Core evaluation indicators

(1) Availability of quality management and technology standards; and

(2) Establishment and implementation of quality inspection mechanism.

3.5 Harmonious Co-existence with Community Residents

3.5.1 In the course of design, the enterprises should take into full consideration the relevance of the projects to local employment, living and working conditions, fulfillment of residents' needs, neighborhood and lifestyle. They should heed residents' views about the subsequent stages of the projects, and make improvements in a timely manner.

3.5.2 In the process of building and operation, the projects may take the following measures to promote the harmonious co-existence with community residents:

(1) Create job opportunities and provide professional training for the residents;

(2) Do their best to protect the living environment of local residents;

(3) Prevent significant changes to the neighborhood and lifestyle. The enterprises should enhance cooperation with the local government to ensure legal and rational land access, and do their best to maintain the living standards of resettled residents, if any.

(4) Avoid damage to cultural heritage and natural scenery. Such damage, if unavoidable, should be effectively rectified.

(5) Engage in local public welfare campaigns;

(6) Respond to residents' views and make corresponding improvements; and

(7) Disclose beforehand, and solicit residents' views on, any measure that may affect the residents.

3.5.3 Core evaluation indicators

(1) Resident satisfaction;

(2) Means of land access and difficulty of resettlement;

(3) Compensation to residents;

(4) Employment of local workers;

(5) Improvement of living standards; and

(6) Engagement in public welfare campaigns.

4. Guidelines for Environmental Sustainability

The requirement for environmental sustainability prompts Chinese enterprises engaged in overseas infrastructure projects to a) observe local environmental laws and regulations; b) authorize specific personnel to establish, optimize, implement, or supervise the implementation of environmental rules; c) provide necessary human and material resources, funds and technology in support of environment protection; and d) rectify any violation of the said rules.

The enterprises should pay attention to the reduction in greenhouse gas (GHG) emission and pollutant discharge as an antidote to water, air, soil, noise and solid waste pollution. They should strengthen water and soil conservation as well as the protection of species, nature reserves and marine environment. They should also make effective and rational use of resources.

4.1 GHG Emission Reduction

4.1.1 The enterprises should do their best to reduce GHG emission, in an effort to avoid direct or indirect damage of global warming to ecological balance and living environment.

4.1.2 In the course of design, the enterprises should develop financially and technically viable solutions to GHG emission, including the use of renewable or low-carbon energy, and work out green logistics plans for subsequent stages of the projects so that the GHG emission per unit meets both local standards and the requirements for environmental sustainability.

4.1.3 In the process of building and operation, the enterprises should cut energy use by increasing energy conversion efficiency, and reduce fossil fuel consumption and CO_2 emission. A number of energy conservation and emission reduction measures should be taken, including but not limited to:

(1) Upgrade the operating efficiency or technology of existing equipments;

(2) Develop advanced and efficient modes of energy use;

(3) Increase the use of low-carbon fuel (e.g. natural gas and coal gas) in power generation;

(4) Adopt CO_2 capture and storage technology; and

(5) Implement green logistics plans for infrastructure projects.

4.1.4 Core evaluation indicators

(1) Plans and measures for GHG emission reduction;

(2) CO_2 emission per unit; and

(3) Carbon emission reduction over the past five years.

4.2 Pollution Control

4.2.1 The enterprises should take pains with pollution control to avoid direct or indirect threat to humans and other creatures from changes in the composition and nature of the environment. Pollution control measures should be integrated into the stages of design, building and operation.

4.2.2 In the course of design, the enterprises should foster the scientific outlook on green development and give the greatest possible scope to energy-efficient equipment and clean production techniques, with the aim of reducing water, air, soil, noise and solid waste pollution. To be specific, they should:

(1) Develop detailed solutions to air pollution, including the installation of desulfurization and denitrification systems as well as dust remover for emission reduction, or the use of sprinkler for dust suppression;

(2) Work out measures for wastewater separation and treatment;

(3) Make comprehensive use of pollutant treatment technology for the sake of recycling;

(4) Protect soil against such contaminants as toxics, heavy metals and ions; and

(5) Lay down noise control plans.

4.2.3 In the process of building and operation, the enterprises may, based on their own needs, authorize specific personnel to routinely supervise the implementation of environmental rules, and rectify any violation of the rules.

4.2.3.1 Air pollution control

(1) Install the device for air pollutant discharge reduction;

(2) Entrust specific personnel with regular inspection of the device; and

(3) Sprinkle the building site to remove dust.

4.2.3.2 Water pollution control

(1) The building site is supposed to be far away from the water body. If not, it is strictly prohibited to discharge industrial wastes directly into the water body; and

(2) Wastewater should go through biochemical treatment so that it meets the discharge standards.

4.2.3.3 Solid waste pollution control

According to the nature of solid wastes, the enterprises may:

(1) Remove or handle domestic wastes and general industrial solid wastes in a timely manner;

(2) Properly emplace or dispose of hazardous wastes; and

(3) Recycle wastes.

4.2.3.4 Soil pollution control

(1) Prevent or reduce the infiltration of such contaminants as toxics, heavy metals and ions into the soil; and

(2) Prevent pollution through microbial catalytic degradation and pollutant transformation, or reduce pollution and resume the ecological functions of soil through physical/chemical remediation.

4.2.3.5 Noise reduction

(1) High-decibel projects are supposed to be far away from noise-sensitive areas (e.g. schools, hospitals and sanatoria);

(2) If not, such projects should try to use low-decibel machinery, and refuse entry to machinery that is excessively noisy. Noise barriers, acoustic ventilation windows, shielding woods and buffer zones are preferred; and

(3) Strictly control the duration of high-decibel operations so as to reduce disturbance to the surroundings, residents and entities.

4.2.3.6 Environmental information disclosure

In the process of building and operation, the following environmental information should be disclosed:

(1) Environmental protection plans and targets for the stages of building and operation;

(2) Environmental investment and environmental technology development;

(3) Type, quantity, concentration and discharge of pollutants;

(4) Building and operation of environmental protection facilities;

(5) Waste treatment, recycling and comprehensive utilization; and

(6) Other relevant information.

4.2.4 Core evaluation indicators

4.2.4.1 Air pollution

(1) Air pollution control measures, plans and techniques;

(2) CO_2, NOx and soot emission per unit of output; and

(3) Up-to-standard emission rate.

4.2.4.2 Water pollution

(1) Water pollution control measures, plans and techniques;

(2) Wastewater treatment rate; and

(3) Up-to-standard discharge rate.

4.2.4.3 Solid waste pollution

(1) Proper solid waste treatment rate; and

(2) Solid waste recycling rate.

4.2.4.4 Soil pollution

(1) Soil pollution control measures and plans;

(2) Restoration of polluted soil; and

(3) Resources invested in soil pollution control.

4.2.4.5 Noise pollution

(1) Noise control measures for the stage of building;

(2) Avoidance of noise-sensitive areas; and

(3) Residents' complaint.

4.3 Species Protection

4.3.1 Species protection should be a major factor in the siting decision. The enterprises should do their best to prevent damage to the ecosystem and conserve biodiversity and habitats.

4.3.2 In the course of design, the places where rare and endangered wildlife species grow, inhabit, forage, spawn, breed or migrate should be avoided as the project site, thus minimizing the environmental impact.

4.3.3 In the process of building and operation, the enterprises should take precautions to minimize their impact on major species in the locality, including but not limited to:

(1) Establish an ecological corridor;

(2) Cordon off a conservation area;

(3) Set up a buffer zone; and

(4) Use isolation belts.

4.3.4 Core evaluation indicators

(1) Measures and plans for species protection;

(2) Construction of species protection facilities; and

(3) Avoidance of places where rare species inhabit, breed and migrate.

4.4 Ecosystem Management

4.4.1 Emphases should be placed on water source protection, water and soil conservation, flood diversion and storage, windbreak and sand fixation, and maintenance of biodiversity in the nature reserve.

4.4.2 In the course of design, eco-sensitive zones, including water sources and rare species preservation areas, should be avoided as the project site, thus preventing direct or indirect impacts on the ecosystem.

4.4.3 In the process of building and operation, measures should be taken to enhance the protection of nature reserve, including but not limited to:

(1) Implement laws and regulations on nature reserve protection;

(2) Entrust specific departments and personnel with the filing of species in the nature reserve and contingency planning;

(3) Restore drainage and irrigation systems;

(4) Plant trees and grass to restore vegetation, and ensure a high plant survival rate;

(5) Make a reasonable schedule for the building and lay stress on waterproofing and drainage in the rainy season so as to reduce water and soil erosion; and

(6) Minimize adverse effect of the projects on local nature reserve.

4.4.4 Core evaluation indicators

(1) Measures and plans for nature reserve protection;

(2) Avoidance of eco-sensitize zones;

(3) Resources invested in ecological conservation;

(4) Measures and plans for water and soil conservation;

(5) Land restoration after the building; and

(6) Support projects for water and soil conservation.

4.5 Marine Environment Protection

4.5.1 Marine nature reserves should be avoided as the project site. Onshore engineering projects should protect marine resources, maintain ecological balance, and promote the sustainable development of marine ecosystem.

4.5.2 In the course of design, onshore engineering projects should conduct environmental impact assessment, develop scientific regional marine environment protection plans and pollution contingency plans, and include the required funds for pollution control in the project budget.

4.5.3 In the process of building and operation, measures should be taken to enhance marine environment protection, including but not limited to:

(1) Implement local laws and regulations on marine environment protection;

(2) Authorize specific departments and personnel to monitor and control the total amount of offshore discharge, and protect seawater and aquatic resources;

(3) Give priority to clean energy and techniques which discharge less pollutants, with the aim of reducing or preventing marine pollution; and

(4) Restore marine ecosystem and minimize the adverse effect of the projects on local sea areas.

4.5.4 Core evaluation indicators

(1) Measures and plans for marine environment protection;

(2) Avoidance of marine nature reserve;

(3) Resources invested in marine environment protection; and

(4) Implementation of pollution contingency plans.

4.6 Sustainable Use and Protection of Resources

4.6.1 The enterprises should a) minimize the consumption of natural resources (e.g. energy, materials and water); b) use durable, renewable and resilient materials, prioritize local procurement, and reasonably handle surplus materials; and c) enhance energy efficiency and advocate resource-saving production patterns.

4.6.2 In the course of design, the enterprises should work out energy conservation plans, covering:

(1) An energy structure with renewable energy (e.g. hydropower, wind power, solar power, biomass power, ocean power and geothermal power) as the mainstay;

(2) Effective heat recovery for the stage of operation; and

(3) Advanced recycling measures for energy, water and production materials.

4.6.3 In the process of building and operation, the enterprises may take the following measures to enhance resource efficiency:

(1) Install energy-efficient equipment;

(2) Give the greatest possible scope to renewable energy; and

(3) Use energy-efficient recycling technology.

4.6.4 In the process of building and operation, the enterprises should disclose the following information:

(1) Energy conservation plans and targets;

(2) Implementation of energy conservation plans;

(3) Total resource consumption per unit;

(4) Resource recycling; and

(5) Other information on resource utilization.

4.6.5 Core evaluation indicators

(1) Proportion of renewable energy; and

(2) Type of renewable energy.

5. Sustainability Governance Rules

5.1 Definition of Sustainability Governance Rules

5.1.1 Sustainability governance rules refer to the by-laws and processes established by Chinese enterprises engaged in overseas infrastructure projects to ensure sustainable development of the projects, regarding the stages of funding, planning, design, building, operation, maintenance and closure.

5.1.2 To comprehensively promote sustainability governance, the enterprises should a) foster and include the ideology of sustainable development in their decision making processes; b) set up and staff the Sustainability Governance Committee or departments concerned (e.g. Environmental Protection Dept. and CSR Dept.); c) establish the sustainability governance system which integrates sustainability evaluation into risk control and performance assessment; d) develop the mechanism for force majeure event management; and e) work out sustainability governance information disclosure and implementation plans.

5.2 Sustainability Governance System

5.2.1 The enterprises should set up an efficient, well-structured Sustainability Governance Committee, and clearly specify the rights and responsibilities of Committee members.

5.2.2 The Director of the Committee should be assumed by the Chairman or General Manager. Certain members may assume multiple posts to implement the decisions and directives of the Committee and promote sustainable development of the enterprises.

5.2.3 The main responsibilities of the Committee include:

(1) Develop and release sustainability plans, strategies and targets;

(2) Organize the preparation and implementation of sustainability plans and special budgets.

(3) Guide various units in appointing the sustainability personnel, and foster a well-structured sustainability promotion organization;

(4) Call for stakeholder engagement in major decision making and other business activities; and

(5) Organize the preparation and publishing of annual project sustainability report.

5.3 Sustainability Information Disclosure

5.3.1 The enterprises should establish and optimize the sustainability information disclosure mechanism, promote project transparency in an all-round manner, and foster closer relationship with stakeholders.

5.3.2 The following rules should be observed:

(1) The enterprises should entrust specific personnel with accurate, complete, timely and truthful information disclosure. The information disclosed should not contain any false record, misleading statement or serious omission;

(2) The enterprises should disclose on the website the sustainability governance rules and environmental protection units, and regularly release the sustainability report; and

(3) Major changes in the sustainability governance system and pollution accidents should be promptly disclosed via the website or media, and filed with the competent authority.

5.4 Sustainable Development Report

The enterprises should establish the mechanism for regularly preparing and releasing the project sustainability report. To be specific:

(1) The report should fully disclose the enterprises' sustainability governance rules, actions, performance and future plans;

(2) The report may be prepared no later than the end of the year, and released no later than the end of April of the following year; and

(3) The Sustainability Governance Committee should prepare, or commission a professional agency to prepare, the report.

5.5 Sustainability Evaluation System

The enterprises should, based on the targets provided in the sustainability report, a) establish a sustainability evaluation system which contains the mechanism for fulfillment monitoring and methods for routine evaluation; b) lay down the evaluation standards; c) set up a full-fledged sustainability performance evaluation system; d) assess the all-round implementation of sustainability rules; and e) regularly review the assessment results and rectify the problems.

In line with industrial characteristics, the evaluation standards apply both to the Sustainability Governance Committee and to the units concerned, including but not limited to:

(1) Development and release of sustainability plans, strategies and targets by the Committee;

(2) Preparation and implementation of sustainability plans and special budgets by the Committee;

(3) Appointment of sustainability personnel with clearly specified responsibilities by various units under the Committee's guidance;

(4) Establishment of evaluation standards and alert lines by the Committee for core environmental, building and operating indicators in line with the applicable local laws and regulations as well as the nature of industries concerned;

(5) Preparation and release of annual project sustainability report by the Committee;

(6) Tracking and regular forwarding of environmental, building and operating data by sustainability personnel;

(7) Ability of sustainability personnel to account for, and promptly inform the Committee of, the nearing or hitting of the alert line by the core indicators; and

(8) Ability of the Committee to promptly review the data forwarded by sustainability personnel and deal with those above the alert line.

5.6 Sustainability Emergency Management

5.6.1 The enterprises should be capable of effectively responding to external uncertainties in the shortest time, ensuring sustainable operation of the projects.

5.6.2 The enterprises should enhance management of both ecological disasters (e.g. earthquake, flood, natural disasters and extreme weather) and man-made catastrophes.

5.6.3 The enterprises should develop contingency plans and support mechanism.

6. Supplementary Provisions

The Guidelines are subject to CHINCA's interpretation.

The Guidelines take effect as of the date of promulgation.