



# Technical Assistance Report

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Project Number: 48472-001  
Policy and Advisory Technical Assistance (PATA)  
December 2015

## People's Republic of China: Promotion of Environmentally Sustainable Infrastructure Investment in Asia and the Pacific

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Asian Development Bank

## CURRENCY EQUIVALENTS

(as of 10 December 2015)

Currency unit	–	yuan (CNY)
CNY1.00	=	\$0.1555
\$1.00	=	CNY6.4291

## ABBREVIATIONS

ADB	–	Asian Development Bank
CAREC	–	Central Asia Regional Economic Cooperation
GMS	–	Greater Mekong Subregion
MEP	–	Ministry of Environmental Protection
MSR	–	21st Century Maritime Silk Road
PRC	–	People's Republic of China
SREB	–	Silk Road Economic Belt
TA	–	technical assistance

## NOTE

In this report, "\$" refers to US dollars.

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## POLICY AND ADVISORY TECHNICAL ASSISTANCE AT A GLANCE

<b>1. Basic Data</b>		<b>Project Number: 48472-001</b>	
<b>Project Name</b>	Promotion of Environmentally Sustainable Infrastructure Investment in Asia and the Pacific	<b>Department /Division</b>	EARD/EAPF
<b>Country</b>	China, People's Republic of	<b>Executing Agency</b>	Ministry of Environmental Protection
<b>2. Sector</b>		<b>ADB Financing (\$ million)</b>	
✓ Finance	Infrastructure finance and investment funds		0.40
		<b>Total</b>	<b>0.40</b>
<b>3. Strategic Agenda</b>		<b>Climate Change Information</b>	
Inclusive economic growth (IEG) Environmentally sustainable growth (ESG) Regional integration (RCI)	Pillar 1: Economic opportunities, including jobs, created and expanded Environmental policy and legislation  Pillar 2: Trade and investment Pillar 3: Money and finance	Climate Change impact on the Project	Low
<b>4. Drivers of Change</b>		<b>Gender Equity and Mainstreaming</b>	
Governance and capacity development (GCD) Knowledge solutions (KNS)	Institutional systems and political economy  Knowledge sharing activities	No gender elements (NGE)	✓
<b>5. Poverty Targeting</b>		<b>Location Impact</b>	
Project directly targets poverty	No	Nation-wide	High
<b>6. TA Category:</b>	B		
<b>7. Safeguard Categorization</b> Not Applicable			
<b>8. Financing</b>			
<b>Modality and Sources</b>		<b>Amount (\$ million)</b>	
<b>ADB</b>		<b>0.40</b>	
Policy and advisory technical assistance: Technical Assistance Special Fund		0.40	
<b>Cofinancing</b>		<b>0.00</b>	
None		0.00	
<b>Counterpart</b>		<b>0.00</b>	
None		0.00	
<b>Total</b>		<b>0.40</b>	
<b>9. Effective Development Cooperation</b>			
Use of country procurement systems		No	
Use of country public financial management systems		No	

## I. INTRODUCTION

1. The Government of the People's Republic of China (PRC) requested policy and advisory technical assistance (TA) from the Asian Development Bank (ADB) to promote environmentally sustainable infrastructure investment. The TA is included in ADB's country operations business plan, 2015–2017 for the PRC.<sup>1</sup> In May 2015, ADB and the Ministry of Environmental Protection (MEP) reached an understanding on the objectives, scope, implementation arrangements, costs, and terms of reference for the TA. The design and monitoring framework is in Appendix 1.<sup>2</sup>

## II. ISSUES

2. Physical infrastructure is remarkably poor in most developing countries in Asia and the Pacific. It must be greatly improved if the full benefits of regional cooperation and the cross-border sharing of ideas are to be realized. ADB estimates that Asia and the Pacific will need \$8 trillion in national infrastructure investment and \$290 billion in regional infrastructure investment during 2010–2020.<sup>3</sup> The foreign investment and contractor resources required to complete the needed infrastructure projects are substantial. The PRC, already providing much of the foreign investment and contractors in the region, has an important role in filling the infrastructure gap.

3. The PRC has been a favored destination for foreign investment since the opening of its economy began in the late 1970s. By 2014, the PRC had become a net capital exporter. With a high savings rate and active government support for outbound investment, the country has enormous potential to increase international investment. The PRC's outbound investment has risen rapidly since 2000. In 2002, the PRC's total outbound investment on acquisitions and greenfield projects was less than \$3 billion. Investment rose to almost \$108 billion by 2013.<sup>4</sup> By the first half of 2014, the PRC's outbound investment and international construction contracts had reached \$870 billion.<sup>5</sup> Each of these investments and contracts is valued at more than \$100 million; the contracts cover a range of industries, including energy, mining, real estate, and transport.

4. Much of the PRC's outbound capital is invested in basic infrastructure. The PRC's infrastructure boom of recent decades has created many enterprises with the capacity to design, build, and operate large infrastructure projects. PRC companies now have the expertise and experience needed to construct high-quality, major infrastructure projects internationally.

5. In 2013, the PRC announced the Silk Road Economic Belt and the 21st Century Maritime Silk Road (MSR) (One Belt One Road) initiative. This focuses on achieving connectivity and cooperation between countries in Eurasia through two main components, the land-based Silk Road Economic Belt (SREB) and the ocean-going MSR. Infrastructure development in countries along the SREB and MSR is an important part of the One Belt One Road initiative. PRC investment is now expected to increase for infrastructure projects in the SREB and MSR regions,<sup>6</sup> which cover a large part of Asia and the Pacific.

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<sup>1</sup> ADB. 2014. *Country Operations Business Plan: People's Republic of China, 2015–2017*. Manila.

<sup>2</sup> The TA first appeared in the business opportunities section of ADB's website on 3 November 2015.

<sup>3</sup> ADB. 2011. *Asia 2050: Realizing the Asian Century*. Manila.

<sup>4</sup> Financial Times. <http://www.ft.com/intl/cms/s/0/28f6b8d4-59cd-11e4-9787-00144feab7de.html#axzz3fCLtX7be>.

<sup>5</sup> American Enterprise Institute and the Heritage Foundation. China Global Investment Tracker. <http://www.heritage.org/research/projects/china-global-investment-tracker-interactive-map>

<sup>6</sup> Financial Times. [http://www.ft.com/cms/s/3/e9dcd674-15d8-11e5-be54-00144feabdc0.html#axzz3fwkSGDuA:Government\\_of\\_the\\_People's\\_Republic\\_of\\_China](http://www.ft.com/cms/s/3/e9dcd674-15d8-11e5-be54-00144feabdc0.html#axzz3fwkSGDuA:Government_of_the_People's_Republic_of_China). [http://www.gov.cn/xinwen/2015-03/28/content\\_2839723.htm](http://www.gov.cn/xinwen/2015-03/28/content_2839723.htm).

6. In line with the expected increase in the PRC's outbound investment, the government has sought to incentivize the compliance of PRC investors and contractors with host country environmental protection laws and regulations. The PRC's 12th Five Year Plan (2011–2015) highlights investors' social responsibilities, including environment safeguards.<sup>7</sup> In 2013, MEP and the Ministry of Commerce released guidelines for environment protection for overseas investment and cooperation, which provide guidance to PRC investors and contractors to "further standardize environment protection behavior in the activities of overseas investment, and to identify and prevent environmental risks in time, and guide companies to actively fulfill the social responsibility of environment protection, and establish a favorable overseas image of PRC enterprises to support host nations' sustainable development."<sup>8</sup>

7. Industry associations also issued supporting guidelines. The China Chamber of Commerce of Metals, Minerals, and Chemicals Importers and Exporters prepared guidelines for social responsibility in outbound mining investments. The guidelines recommend that mining firms integrate environmental protection into their daily operation management system and follow international practice and host country environmental protection regulations, and include pre-operation environmental impact evaluation, periodic environmental impact monitoring, and contingency plan design. These guidelines are not mandatory as environmental protection is under the host country's jurisdiction.

8. The PRC's international projects routinely follow international practice and comply with the host country's environmental protection policies and regulations. But in some cases, projects do not meet the host country's regulations and have negative impacts on the local environment. Key reasons for this are poor governance systems in host countries, a lack of solid environmental management during project implementation, and weak policy coordination between the PRC and the host country.<sup>9</sup> Weak governance systems in host countries fail to protect communities and the environment from potential harm. Some PRC companies, especially some small and medium-sized companies, which do not heed social and environmental responsibility within the PRC, are now taking these negative practices out of the country.

9. A lack of coherence between international investment, trade treaties, and environmental agreements adds to the problems. From an international legal perspective, this is a grey area. Better policy coordination is necessary among governments to enhance the environmental sustainability of international projects. The PRC government requested ADB assistance to help address institutional and capacity constraints; introduce international practice on environmental administration, management, and protection; and work with host countries to facilitate PRC high quality infrastructure investments. This will contribute to the achievement of sustainable development within partner countries.

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<sup>7</sup> Government of the People's Republic of China, National Development and Reform Commission. 2011. 12th Five-Year Plan, 2011-2015. Beijing.

<sup>8</sup> Government of the People's Republic of China, Ministry of Commerce. <http://www.mofcom.gov.cn/article/b/bf/201302/20130200039930.shtml>.

<sup>9</sup> Based on the analysis of the World Resource Institute and other environmental protection organizations. World Resource Institute. <http://www.wri.org/blog/2013/05/how-are-china%E2%80%99s-overseas-investments-affecting-environment>.

10. This TA will review international environment safeguard practices, and offer policy advice to MEP.<sup>10</sup> Capacity development assistance will be provided to PRC investors and contractors on environmental management. Regional policy dialogue will be conducted through conferences and other events.

### III. THE POLICY AND ADVISORY TECHNICAL ASSISTANCE

#### A. Impact and Outcome

11. The impact will be increased environmentally sustainable infrastructure projects in Asia and the Pacific. The outcome will be enhanced environment safeguards for the PRC's international infrastructure investments.

#### B. Methodology and Key Activities

12. The TA will produce three outputs: (i) environmental administration and management of the PRC's international infrastructure investments assessed; (ii) international practices and environmental administration experiences identified, analyzed, and shared; and (iii) the PRC's capacity for environmental management of international infrastructure investments developed.

13. **Output 1: Environmental administration and management of the PRC's international infrastructure investments assessed.** The PRC's environmental administration procedures and policies for foreign investments will be reviewed. The environmental performance and management of outbound investors and contractors will be assessed. International practices for environmental safeguards for international infrastructure investments will be reviewed according to the source of funding (e.g., foreign direct investment, multilateral development assistance, and bilateral development assistance). Based on international practice and the PRC experience, the consultants will design a policy package for MEP to ensure that environmental safeguards carry more weight during the government's decision-making process. This will help incentivize outbound PRC infrastructure investors to improve their environmental performance.

14. **Output 2: International practices and environmental administration experiences identified, analyzed, and shared.** Both capital exporters and investment host country agencies should work to ensure infrastructure projects follow local regulations and relevant international standards. At least two high-level policy dialogue conferences will be designed to introduce international practices and share environmental administration experience among ADB developing member countries. MEP has set up a working relationship with the Greater Mekong Subregion (GMS) and participating countries of the Central Asia Regional Economic Cooperation (CAREC).<sup>11</sup> The targeted participants will be the environmental protection agencies of these countries.

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<sup>10</sup> International institutions recommend good practices for environmental management. Of these practices, the most important are the environmental management and environmental performance evaluation guidelines: International Standards Organization. ISO 14031:2013. [http://www.iso.org/iso/catalogue\\_detail.htm?csnumber=52297](http://www.iso.org/iso/catalogue_detail.htm?csnumber=52297); Organisation for Economic Co-operation and Development. Guidelines for Multinational Enterprises. <http://www.oecd.org/daf/inv/mne/oecdguidelinesformultinationalenterprises.htm>; United Nations Conference on Trade and Development. Investment Policy Framework for Sustainable Development. <http://investmentpolicyhub.unctad.org/ipfsd>

<sup>11</sup> In 2006, the GMS countries launched the Core Environment Program in response to increasing concern about the environmental impacts of rapid economic development. Administered by ADB and overseen by the environment ministries of the six countries that form the Working Group on Environment, the Core Environment Program aims to achieve "an environmentally friendly and climate-resilient GMS Program." It is coordinated by the Environment

15. **Output 3: The PRC's capacity for environmental management of international infrastructure investments developed.** An international infrastructure environmental management manual will be designed. Targeting PRC international investors and contractors, the manual will cover the following topics: (i) principles of environmental performance evaluation, (ii) environmental contingency design, (iii) environmental review and life-cycle assessment, (iv) environment public policy, (v) major investment host countries' environmental protection administration structure and policy, (vi) environmental training for employees, and (vii) case studies. Once the international environmental management manual is finalized, two training workshops will be delivered to the PRC's international infrastructure investors and contractors.

### **C. Cost and Financing**

16. The TA is estimated to cost \$440,000, of which \$400,000 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-other sources). The government will provide counterpart support in the form of office space and local transport, remuneration and per diem of local support staff, equipment, and other in-kind contributions (Appendix 2).

### **D. Implementation Arrangements**

17. MEP is the executing agency. The Foreign Economic Cooperation Office of MEP will be the implementing agency, supervising the day-to-day work of the consultants. It will assume overall responsibility for workshops and conferences.

18. The TA will be implemented from 1 January 2016 to 31 December 2017. It will engage a consulting firm comprising two international consultants (3 person-months) and three national consultants (12 person-months). Assisted by the Foreign Economic Cooperation Office, the consulting firm will provide international experience and organize conferences with participants from GMS and CAREC member country environmental protection agencies. The national consultants will have expertise in PRC environmental protection and international investment administration policies. The outline terms of reference are in Appendix 3.

19. The consultants will be hired in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time) using the quality- and cost-based selection method following the simplified technical proposal procedure. The weighted ratio of technical and financial proposals will be 80:20. The consulting firm will submit all reports in English and Chinese to MEP and ADB in hard and electronic copies. The consultants will maintain close working relations with ADB and MEP, and will regularly discuss progress and findings. Tripartite meetings involving ADB, MEP, and the consultants will be held when necessary to provide guidance to the consultants and to review draft reports. Proceeds of the TA will be disbursed in accordance with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time).



#### **IV. THE PRESIDENT'S DECISION**

20. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$400,000 on a grant basis to the Government of the People's Republic of China for the Promotion of Environmentally Sustainable Infrastructure Investment in Asia and the Pacific, and hereby reports this action to the Board.

## DESIGN AND MONITORING FRAMEWORK

<b>Impact the Technical Assistance Project is Aligned with:</b> Environmentally sustainable infrastructure projects in Asia and the Pacific increased (PRC's 12th Five Year Plan, 2011–2015) <sup>a</sup>			
<b>Results Chain</b>	<b>Performance Indicators with Targets and Baselines</b>	<b>Data Sources and Reporting Mechanisms</b>	<b>Risks</b>
<b>Outcome</b> Environment safeguards for the PRC's international infrastructure investments enhanced	a. Environment safeguards monitored as a mandatory factor under the government's administration of international investments (2015 baseline: not applicable) b. Policy advice submitted to the government 3 months after TA completion (2015 baseline: not applicable)	a–b. TA progress and completion reports	Line ministries do not support the activities, and difficulties are encountered in securing needed cooperation and coordination
<b>Outputs</b> 1. Environmental administration and management of the PRC's international infrastructure investments assessed	1a. TA report submitted to the executing agency (by month 20) (2015 baseline: not applicable)	1a. TA progress and completion reports	Government agencies provide insufficient data and inputs
2. International practices and environmental administration experiences identified, analyzed, and shared	2a. Executing agency will host at least two conferences on environmental protection for authorities of the Greater Mekong Subregion and the Central Asia Regional Economic Cooperation (by month 16) (2015 baseline: 0)	2a. TA progress report, government announcements, and TA review missions	Environmental protection agencies in Asia and the Pacific have limited participation
3. The PRC's capacity for environmental management of international infrastructure investments developed	3a. Design of international infrastructure environmental management manual (by month 12) (2015 baseline: 0) 3b. Two training workshops organized (by month 18); at least 50 infrastructure project managers participate (2015 baseline: 0)	3a. Government announcement, TA review and completion reports  3b. Participant lists and evaluations	
<b>Key Activities with Milestones</b> Mobilize the consultant team by month 6 Develop the study framework, prepare inception report, and conduct inception workshop by month 8 Prepare the interim report by month 12 Prepare draft final report and conduct final workshop by month 16 Finalize the TA outputs by month 20  1. Report on the PRC environmental administration for international infrastructure investments 1.1 Review international experience, literature, and official policies and regulations by month 8			

### **Key Activities with Milestones**

- 1.2 Conduct data collection, survey, and consultations by month 11
- 1.3 Submit interim report and conduct interim workshop by month 12
- 1.4 Conduct further data collection and analysis by month 14
- 1.5 Prepare draft final report by month 16
- 1.6 Submit final report by month 20
  
- 2. Regional environmental protection coordination conference
  - 2.1 Submit conference design by month 2 after mobilization of consultant
  - 2.2 Organize first regional conferences by month 10
  - 2.3 Organize second regional conference by month 16
  
- 3. Capacity development activities
  - 3.1 Submit the outline for the international environmental management manual by month 8
  - 3.2 Complete the first draft by month 10
  - 3.3 Finalize the manual by month 12
  - 3.4 Conduct first training workshop by month 14
  - 3.5 Conduct second training workshop by month 18

### **Inputs**

Asian Development Bank: \$400,000 Technical Assistance Special Fund (TASF-other sources)

Note: The government will provide counterpart support in the form of office space and local transport, remuneration and per diem of local support staff, equipment, and other in-kind contributions.

PRC = People's Republic of China, TA = technical assistance.

<sup>a</sup> Government of the People's Republic of China, National Development and Reform Commission. 2011. 12th Five-Year Plan, 2011-2015. Beijing.

Source: Asian Development Bank.

**COST ESTIMATES AND FINANCING PLAN**  
(\$'000)

<b>Item</b>	<b>Amount</b>
<b>Asian Development Bank<sup>a</sup></b>	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	80.0
ii. National consultants	60.0
b. International and local travel	60.0
c. Reports and communications <sup>b</sup>	20.0
2. Training, seminars, and conferences	
a. Conferences and workshops <sup>c</sup>	115.0
b. Resource persons and survey	45.0
3. Contingencies	20.0
<b>Total</b>	<b>400.0</b>

Note: The technical assistance (TA) is estimated to cost \$440,000, of which contributions from the Asian Development Bank are presented in the table above. The government will provide counterpart support in the form of office space and local transport, remuneration and per diem of local support staff, equipment, and other in-kind contributions. The value of the government contribution is estimated to account for 9.09% of the total TA cost.

<sup>a</sup> Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF-other sources).

<sup>b</sup> Includes the cost of translation and interpretation of international practices and guidelines, reports, and other TA outputs.

<sup>c</sup> Includes consultation workshops to collect stakeholders' comments on capacity development products.

Source: Asian Development Bank estimates.

## OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

1. **Environment policy specialist and team leader** (national, 6 person-months, intermittent). The specialist will have (i) at least 15 years of experience in environmental management, environmental protection policy administration, and formulation; (ii) a master's degree or higher qualification in environment policy, public governance, or other closely relevant field; (iii) proficiency in English; and (iv) demonstrated environment policy consultation experience with the Government of the People's Republic of China (PRC). As the team leader, the specialist will be responsible for the final outputs of the technical assistance (TA), as well as for daily team coordination and supervision. The specialist will undertake the following:

- (i) Develop the detailed study framework and methodology in consultation with the executing and implementing agencies.
- (ii) Develop the outlines for the TA inception, interim, and final reports; and assign work to respective specialists and resource persons.
- (iii) Prepare inception, interim, and final reports, and their revision with inputs from the team members; review the present international infrastructure investment administration system; assess the contractors' environmental management status; evaluate related international practices; and, based on the study, identify practical policy suggestions to secure environmentally sustainable international infrastructure investments.
- (iv) Ensure timely implementation of TA activities, including conducting field investigation and data collection, preparing reports, organizing regional coordination conferences and workshops, providing technical support for capacity building events, and undertaking other related activities.
- (v) Guide the international specialists to identify international experience and lessons that can be incorporated by the government and international infrastructure investors.
- (vi) Prepare TA progress reports to be submitted semianually to the Asian Development Bank (ADB) and the executing agency.
- (vii) Carry out other tasks necessary to accomplish the TA objectives.

2. **Environment policy specialist** (international, 1.5 person-months, intermittent). The specialist will have (i) strong expertise, extensive experience, and in-depth knowledge of environmental management and international environment policy; (ii) at least 10 years of relevant experience, and a master's degree or higher qualification in environment policy, law, or closely related field; (iii) experience in environment policy design, administration, consultation, and regional collaboration; (iv) consultation experience in the PRC; and (v) proficiency in Chinese (preferred).

3. The specialist will, as part of the team, prepare the report based on international practice. The specialist will undertake the following tasks:

- (i) Guided by the team leader, conduct a comprehensive review of policies, institutions, and mechanisms adopted by developed countries for environmental management and protection during international investment in infrastructure; and prepare introduction materials on international environmental management and protection, especially for infrastructure projects funded by foreign direct investment, official development assistance, and multilateral development banks.
- (ii) Assess the applicability of these policies, institutions, and mechanisms to the Ministry of Environmental Protection, with assistance from the team leader.
- (iii) Guided by the team leader, design two, 2-day, regional conferences on environmental protection during international infrastructure development; and

assisted by the events coordinator and resource person, introduce the international practice to the participants and organize policy dialogue among participants (hosting at least two discussion sessions during each conference).

- (iv) Provide substantial inputs to TA reports.
- (v) Participate in the TA workshops to present and discuss study findings.
- (vi) Conduct other related tasks assigned by the team leader.

4. **Environmental legal specialist** (national, 2 person-months, intermittent). The specialist will have (i) strong expertise, extensive experience, and in-depth knowledge of international environment laws and environmental administration by governments; (ii) at least 10 years of relevant experience with international environment law, and a master's degree or higher qualification in environment law, or closely related field (strongly preferred); (iii) demonstrated experience in international environment policy collaboration; and (iv) proficiency in English (required).

5. The specialist will undertake the following tasks:

- (i) Conduct a comprehensive review of international environmental protection policies and regulations, and governments' environmental administration institutions, including all Central Asia Regional Economic Cooperation and Greater Mekong Subregion member countries.
- (ii) Based on the analysis, propose policy recommendations for PRC environment policy coordination with regional countries, and submit to the team leader.
- (iii) Assist the international environment policy specialist with preparation of regional conferences, and host at least one session during each conference.
- (iv) Participate in TA workshops to present and discuss findings.
- (v) Provide substantial inputs to the TA reports.
- (vi) Conduct other related tasks assigned by the team leader.

6. **Environmental management specialist** (international, 1.5 person-months, intermittent). The specialist will have (i) strong expertise, extensive experience, and in-depth knowledge of international infrastructure environmental management; (ii) at least 10 years of relevant experience, and a master's degree or higher qualification in environmental management or closely related field; (iii) experience with environmental management and environmental performance system design, implementation, consultation, and international infrastructure project implementation (required); (iv) consultation experience in the PRC; and (v) proficiency in Chinese (preferred).

7. The specialist will undertake the following tasks:

- (i) Review the international environmental management standards and guidelines adopted by international infrastructure investors and contractors.
- (ii) Assisted by the national consultant, evaluate the present environmental management policy and environmental performance of PRC infrastructure investors and contractors during international infrastructure development.
- (iii) Based on the analysis, propose possible policy recommendations for the adoption of international project environmental management standards and practices.
- (iv) Guided by the team leader, design the infrastructure environmental management manual. The manual will cover (a) principles of environmental performance evaluation, (b) environmental contingency design, (c) environmental review and life-cycle assessment, (d) environment public policy, (e) environmental protection

- administration structure and policy of major investment host countries, (f) environmental training for employees, and (g) development of case studies.
- (v) Assisted by the events coordinator and resource person, organize a consultation workshop on the environmental management manual.
  - (vi) Participate in the training workshops as the main lecturer.
  - (vii) Provide substantial inputs to the TA reports.
  - (viii) Conduct other related tasks assigned by the team leader.
8. **Environmental management specialist** (national 4 person-months, intermittent). The specialist will have (i) strong expertise, extensive experience, and in-depth knowledge of environmental management; (ii) at least 10 years of relevant experience, and a master's degree or higher qualification in environmental management, or closely related field; (iii) demonstrated experience in international environmental management; and (iv) proficiency in English language (required).
9. The specialist will undertake the following tasks:
- (i) Guided by the international environmental management specialist, conduct a comprehensive review of the environmental performance of existing PRC contractors working internationally, and identify gaps of their environmental management systems during international infrastructure development.
  - (ii) Assist the international environmental management specialist in designing the international environmental management manual and provide quality control for the Chinese version.
  - (iii) Guided by the international environmental management specialist, organize training workshops on environmental management and work as the main lecturer.
  - (iv) Participate in TA workshops to present and discuss findings.
  - (v) Provide substantial inputs to the TA reports.
  - (vi) Conduct other related tasks assigned by the team leader.
10. **Resource persons** (national and international, intermittent, up to four persons for each conference or workshop, up to 4 days each). The resource persons will have (i) a degree in finance, economics, law, public management, business administration, public policy, or a closely related field; and (ii) at least 10 years of experience in environment policy design and administration, and international infrastructure environmental management. Reporting to the team leader, the resource persons will participate in the regional conferences and knowledge products review workshops to provide specific expertise and experience relevant to the issues addressed by the event.
11. **Events coordinator** (national, up to two persons for each regional conference). The coordinator will be recruited separately to help the events organizer to arrange logistics, including the dissemination of invitation letters, follow-up participation confirmation, airline tickets, and hotel booking. The coordinator will have a bachelor's degree in English, economics, environmental protection, or other related field. Fluency in English is required.
12. **Reports.** The consulting firm will submit all reports in English and Chinese to the executing agency and ADB in hard and electronic copies.