



# Technical Assistance Report

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Project Number: 49354-001  
Regional—Research and Development Technical Assistance (R-RDTA)  
April 2016

## Scaling Up Private Sector Participation and Use of Market-Based Approaches for Environmental Management

This document is being disclosed to the public in accordance with ADB's Public Communications Policy 2011.

Asian Development Bank

### ABBREVIATIONS

ADB	–	Asian Development Bank
DMC	–	developing member country
ETG	–	Environment Thematic Group
MBA	–	market-based approach
MBAEM	–	market-based approach for environmental management
OECD	–	Organisation for Economic Co-operation and Development
SDG	–	Sustainable Development Goal
TA	–	technical assistance
UNEP	–	United Nations Environment Programme

### NOTE

In this report, “\$” refers to US dollars.

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## CONTENTS

	<b>Page</b>
RESEARCH AND DEVELOPMENT TECHNICAL ASSISTANCE AT A GLANCE	
I. INTRODUCTION	1
II. ISSUES	1
III. THE RESEARCH AND DEVELOPMENT TECHNICAL ASSISTANCE	3
A. Impact and Outcome	3
B. Methodology and Key Activities	3
C. Cost and Financing	5
D. Implementation Arrangements	5
IV. THE PRESIDENT'S DECISION	5
APPENDIXES	
1. Design and Monitoring Framework	6
2. Cost Estimates and Financing Plan	8
3. Outline Terms of Reference for Consultants	9



## RESEARCH AND DEVELOPMENT TECHNICAL ASSISTANCE AT A GLANCE

<b>1. Basic Data</b>		<b>Project Number: 49354-001</b>	
<b>Project Name</b>	Scaling Up Private Sector Participation and Use of Market-Based Approaches for Environmental Management	<b>Department /Division</b>	SDCC/SDDES
<b>Country</b>	REG	<b>Executing Agency</b>	Asian Development Bank
<b>2. Sector</b>	<b>Subsector(s)</b>	<b>ADB Financing (\$ million)</b>	
✓ Public sector management	Public administration	0.50	
Agriculture, natural resources and rural development	Forestry	0.50	
Water and other urban infrastructure and services	Urban policy, institutional and capacity development	0.50	
		<b>Total</b>	<b>1.50</b>
<b>3. Strategic Agenda</b>	<b>Subcomponents</b>	<b>Climate Change Information</b>	
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive	Climate Change impact on the Project	Low
Environmentally sustainable growth (ESG)	Environmental policy and legislation		
<b>4. Drivers of Change</b>	<b>Components</b>	<b>Gender Equity and Mainstreaming</b>	
Governance and capacity development (GCD)	Institutional development	No gender elements (NGE)	✓
Knowledge solutions (KNS)	Application and use of new knowledge solutions in key operational areas Knowledge sharing activities Pilot-testing innovation and learning		
Partnerships (PAR)	Civil society organizations Implementation Private Sector Regional organizations United Nations organization		
Private sector development (PSD)	Conducive policy and institutional environment Promotion of private sector investment		
<b>5. Poverty Targeting</b>		<b>Location Impact</b>	
Project directly targets poverty	No	Rural Urban	Medium 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>1.50</b>	
Research and development technical assistance: Technical Assistance Special Fund		1.50	
<b>Cofinancing</b>		<b>0.00</b>	
None		0.00	
<b>Counterpart</b>		<b>0.00</b>	
None		0.00	
<b>Total</b>		<b>1.50</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 midterm review of the long-term strategic framework of the Asian Development Bank (ADB) and the Environment Operational Directions, 2013–2020 have identified strengthening environmental governance in developing member countries (DMCs) as a priority area.<sup>1</sup> Policies, regulatory frameworks, and the structure of incentives need to be more effectively aligned to promote greater resource efficiency, abate pollution, and reduce greenhouse gas emissions. With its strong focus on environmental management, the 2030 Agenda for Sustainable Development—specifically the Sustainable Development Goals (SDGs)—reaffirms these priorities.<sup>2</sup> Estimates of financing to meet SDG targets show that public sector and international development assistance will not be sufficient. The private sector needs to continue to change and contribute additional resources.

2. Improving environmental governance is of interest to several DMCs that are dealing with environmental problems across various issues and seeking approaches that support effective implementation of DMCs' strategies for environmentally sustainable or green growth. This technical assistance (TA) is designed to catalyze the adoption and scaling up of innovative approaches in two areas: (i) the use of market-based approaches (MBAs) and other flexible policies for environmental management, and (ii) the development of green businesses. It will undertake targeted research activities on the applicability of market-based instruments in addressing environmental problems in DMCs, and opportunities to expand green businesses in the region. Using research outputs, the TA will carry out structured knowledge sharing events and develop strategies and/or action plans and road maps to stimulate decisions and/or actions in DMCs toward the adoption of environmental management approaches and establishment of green businesses. The design and monitoring framework is in Appendix 1.<sup>3</sup>

## II. ISSUES

3. The SDGs prominently feature environmental sustainability. Goals 12–15 deal with the environment and climate change directly, and goals 6–11 are linked to environmental goals indirectly. The United Nations Open Working Group's estimates suggest that financing the SDGs will be a significant challenge that cannot be met by relying solely on traditional public sector financing. Private sector finance will be critical to initiating and scaling up measures that promote environmental sustainability. Opportunities abound for private sector involvement. The World Business Council for Sustainable Development estimates that under the right policies, green business in the natural resources management, health, and education sectors could reach \$500 billion to \$1.5 trillion per annum globally by 2020.<sup>4</sup>

4. Environmental management in most developing countries is characterized by weakly enforced environmental regulations—typically, command-and-control approaches<sup>5</sup>—to pursuing chosen objectives. However, exclusive or overwhelming reliance on command-and-control

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<sup>1</sup> ADB. 2014. *Midterm Review of Strategy 2020: Meeting the Challenges of a Transforming Asia and Pacific*. Manila; and ADB. 2013. *Environment Operational Directions 2013–2020: Promoting Transitions to Green Growth in Asia and the Pacific*. Manila.

<sup>2</sup> United Nations Development Programme. 2015. World leaders adopt Sustainable Development Goals. News release. 25 September. <http://www.undp.org/content/undp/en/home/presscenter/pressreleases/2015/09/24/undp-welcomes-adoption-of-sustainable-development-goals-by-world-leaders.html>

<sup>3</sup> The TA first appeared in the business opportunities section of ADB's website on 12 January 2016.

<sup>4</sup> World Business Council for Sustainable Development. 2010. *Innovating for green growth: Drivers of private sector RD&D*. Geneva; and World Business Council for Sustainable Development. 2012. *Changing Pace: Public policy actions to scale and accelerate business actions towards Vision 2050*. Geneva.

<sup>5</sup> The direct regulation of an industry or activity by legislation that states what is permitted and illegal.

could result in rigidity and a high compliance cost as the regulated community cannot make use of technological and management opportunities to achieve compliance more flexibly at a lower cost. Reflecting pressure from enterprises to lower the compliance cost, other approaches have emerged, including MBAs and flexible policy instruments.<sup>6</sup> Initiatives that use new monitoring and information technology, expanded transparency, and innovative enforcement approaches (such as Next Generation Compliance) are being implemented.<sup>7</sup> The early experience of applying alternative or complementary approaches to environmental regulation in Asia and the Pacific and elsewhere deserves to be carefully studied in order to draw policy- and practice-related lessons and assess their applicability to individual or suitably grouped DMCs.<sup>8</sup> Initial experience from the Organisation for Economic Co-operation and Development (OECD) countries shows that while command-and-control approaches remain effective in certain sectors (e.g., emission standards in cars and buildings), alternative approaches may be more suitable in others. Experience in assessing the suitability of different policy instruments in country-specific conditions is seriously limited in DMCs in Asia, and this gap needs to be addressed.

5. The TA seeks to build on and capture the experience of growing corporate willingness to work in partnership with governments and other stakeholders for better environmental management, focusing on a range of environmental issues in the region. Wetland banking in California (with its marketable “wetland credits”), tradable biodiversity credits, ecosystem service payments, voluntary standards, and certification schemes are examples of private sector initiatives and voluntary agreements.<sup>9</sup> These and other incentive-based policy measures offer attractive additions to command-and-control regulatory fundamentals, and have the potential to become a vital component of the environmental management tool kit in developing countries.

6. At the same time, the global sustainable development agenda, green urbanization, and responses to resource scarcity and environmental degradation create major opportunities in green business segments. Benefiting from suitable regulatory and incentive regimes, green businesses are emerging, supported by large corporations and small and medium-sized enterprises in both advanced and developing economies. They are involved in clean production, energy-efficient processes, new technologies, manufacturing methods and products, and sustainability of supply chains. These resource-efficient businesses already contribute to economic growth and can become powerful engines for future growth in the region. Recognizing the growing number of venues and partnerships that facilitate the exchange of green business-related lessons in Asia and the Pacific, this TA will focus on those that will reduce resource use and environmental damage, such as sustainable forest management, waste management, climate change mitigation and adaptation (especially ecosystem-based adaptation),<sup>10</sup> green urban development, ecotourism, and sustainable agriculture and food value chains. Special attention will be paid to policy preconditions for successful green business.

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<sup>6</sup> These include pollution discharge fees, pollution trading, fiscal tools, performance guarantee bonds, voluntary environmental performance standards, payment for environmental services, and transferable development rights.

<sup>7</sup> Next Generation Compliance is the United States Environmental Protection Agency’s strategy to bring together the best thinking on how to structure regulations and permits combined with new monitoring and information technology, expanded transparency, and innovative enforcement.

<sup>8</sup> ADB. 1998. *Technical Assistance to the Kingdom of Thailand for the Promotion of Market-Based Instruments for Environmental Management*. Manila; and ADB. 2007. *Technical Assistance to the People’s Republic of China for a Policy Study on Market-Based Instruments for Water Pollution Control*. Manila. These were among several ADB TA projects that focused on market-based instruments. Both TA projects highlighted opportunities to use market-based approaches for environmental management (MBAEMs) and the need to focus on managing specific environmental problems in DMCs while applying policy instruments.

<sup>9</sup> United Nations Environment Programme (UNEP). 2012. *The Business Case for the Green Economy: Sustainable Return on Investment*. Paris.

<sup>10</sup> Ecosystem-based adaptation means the restoration and maintenance of the resilience of local ecosystems in the face of climate-related risks.



7. In summary, two major challenges demand priority attention and action. First, environmental regulation needs to be made more efficient, effective, and innovation-friendly. To this end, it is crucial to build on command-and-control regulatory systems, enhance these with Next Generation Compliance methods, and adopt, where feasible, more market-based and voluntary approaches for environmental management. Second, given the urgency to narrow the SDG environmental investment gap where public resources are limited, green business must be stimulated, knowledge exchanged, and policies instituted that nurture private sector investments in green growth. To understand the links between DMCs' environmental policies and the growth of green business (or lack thereof), events and forums in the region should be promoted where government officials, investors, experts, and practitioners from the region and beyond can discuss policies and exchange knowledge that can facilitate green growth and investments in green businesses. The TA is aligned with the work program of the Environment Thematic Group (ETG) on knowledge for environmental governance.

### III. THE RESEARCH AND DEVELOPMENT TECHNICAL ASSISTANCE

#### A. Impact and Outcome

8. The impact will be improved environmental performance in Asia and the Pacific. The outcome will be public and private stakeholders' knowledge on the applicability of market-based approaches for environmental management (MBAEMs) and opportunities for green business increased. The TA will conduct research on the applicability of various voluntary and incentive-based approaches and the use of new monitoring and information technologies, expanded transparency, and other innovative approaches to make environmental management more effective and efficient; and promote other MBAs such as wetland banking and ecological compensation schemes, including payments for ecosystem services, and a range of new initiatives and programs to promote green business engagement and investments.

#### B. Methodology and Key Activities

9. The TA will have three key outputs.

10. **Output 1: Knowledge products developed and disseminated.** The TA will conduct research and disseminate knowledge as follows:

- (i) **Applicability of market-based approaches for environmental management in Asian countries studied.** The TA will undertake a regional review and stocktaking on the use of MBAEMs and other voluntary and flexible policy approaches, building on existing research including sources from outside the region, such as the OECD. The review will focus on the use of MBAEMs to address key environmental challenges in the region, including pollution control and prevention, biodiversity conservation, watershed management, and sustainable urban development. Analysis will focus on the applicability and/or potential to scale up the use of MBAEMs in other DMCs, where feasible to a broader range of environmental problems. ADB will engage experts to prepare and deliver papers analyzing experience in the design, use, and performance of these instruments and approaches in addressing environmental problems in diverse institutional contexts, and make recommendations for their application in specific DMCs. The draft findings will be reviewed in a 2-day workshop attended by ADB staff and DMC officials from relevant government offices (to be identified during TA implementation). The analysis and key recommendations will be

summarized in a flagship study. Recommendations will cover new directions for applying MBAs and flexible policy instruments, particularly in middle-income countries in Asia. The study's findings will be disseminated via several knowledge sharing activities. Information will be collected for the OECD database on instruments used for environmental policy and natural resources management.

**(ii) Opportunities and challenges for green business in the region developed.**

The TA will review green business sectors operating globally and regionally, focusing on those providing products and services that reduce resource use and environmental damage, such as waste management, pollution control and prevention, ecotourism, and sustainable agriculture and food production. The findings will be compiled in a green business stocktaking report. As input to the report and the green business forum, six or seven background papers will be developed on how best to promote green business investments in Asia and the Pacific, focusing on priority sectors and topics: (a) reform of the policy regulatory framework; (b) access to credit and/or finance; (c) technology exchange and transfer; (d) complementary green services (advisory, technical support, auditing and/or diagnostic work, financial consulting services, energy service companies); (e) networking, matchmaking, brokering, and setting up a marketplace; (f) working with small and medium-sized enterprises and supporting the informal sector and/or microenterprises; (g) certification, codes of conduct, and performance standards; and (h) role of industry organizations, chambers of commerce, and sector associations.

**11. Output 2: Pilot country road maps toward greater use of market-based approaches for environmental management developed for two or three DMCs.** ETG and operations departments will prepare the selection criteria for DMCs to be assisted in preparing country road maps. The criteria will include (i) interest in making MBAEMs a component of national environmental management; (ii) record of previous involvement in MBAEMs through research, training, and use; (iii) existence of domestic capacity to support the analysis of MBAEM options; (iv) willingness to engage in reforms; and (v) recent economic development patterns that suggest a case may exist to pilot test and ultimately introduce MBAEMs. The pilot country road maps will help DMCs, through technical advice and knowledge support, identify environmental performance targets, develop a strategic plan (including market-based tools and/or approaches) to achieve these targets, and determine the actions needed to implement the plan. The preparation of road maps will enhance client countries' knowledge and provide opportunities for targeted capacity building. DMCs have shown strong interest in this output.<sup>11</sup> Lessons generated will be disseminated in knowledge sharing events.

**12. Output 3: Flagship event on green business held.** A flagship event, the first Green Business Forum at ADB, will be organized in 2016 at ADB headquarters. At least 100 business leaders and professionals and 50 government officials are expected to participate. The forum proceedings, containing key background papers, will be published in 2017. For this task, ADB will identify knowledge partner institutions with experience in, or useful data on, the study topics.<sup>12</sup> To ensure accuracy, coherence, and consistency in approach across the TA and its

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<sup>11</sup> Based on discussions with DMC officials at the Regional Conference on "Next Generation Compliance in Asia" organized by the Asian Environmental Compliance and Enforcement Network in September 2015.

<sup>12</sup> Cooperation may be established with the Asian Environmental Compliance and Enforcement Network, United Nations Economic and Social Commission for Asia and the Pacific, Institute for Global Environmental Strategies, International Union for Conservation of Nature, UNEP, World Resources Institute, and World Wildlife Fund.

outputs, resource persons who are experts in their fields will be engaged to improve analytical rigor and strengthen the relevance of the outputs.

13. Potential risks are identified in the design and monitoring framework (Appendix 1). To minimize these risks, the TA will (i) design suitable knowledge dissemination activities for the private sector; and (ii) collaborate with development partners on topics of shared interest (e.g., the United Nations Environment Programme [UNEP] on MBAEMs and green business) and/or where previous work has been done. Informal consultations have been carried out with some DMCs and development partners (e.g., the Asian Environmental Compliance and Enforcement Network, the United Nations Economic and Social Commission for Asia and the Pacific, and UNEP) on the use of MBAEMs. Using environment thematic assessments as an entry point, further consultations will be carried out with DMCs that are preparing country partnership strategies (e.g., the Lao People's Democratic Republic). ADB will ensure that key DMC stakeholders will be engaged in developing country road maps. Knowledge sharing activities will be provided to address knowledge and capacity gaps.

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

14. The TA is estimated to cost \$1,500,000, which will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-other sources).

### **D. Implementation Arrangements**

15. ADB will be the executing agency of the TA, which will be implemented by ADB's Sustainable Development and Climate Change Department, led by the ETG.<sup>13</sup> The ETG will consult with relevant departments (e.g., East Asia Department, Economic Research and Regional Cooperation Department, Southeast Asia Department) in preparing the knowledge and/or research framework, carrying out research activities, and developing country road maps on the use of MBAEMs with sector and thematic groups (e.g., rural development and food security, finance, urban, and water) particularly on identifying opportunities for green businesses. ADB will collaborate with development partners with experience, knowledge, and/or useful data on the TA research topics.

16. The TA will be implemented from March 2016 to August 2018. An indicative implementation schedule is in the design and monitoring framework. The TA will require 58 person-months of international consultants and 57 person-months of national consultants. ADB will engage the consultants and resource persons in accordance with its Guidelines on the Use of Consultants (2013, as amended from time to time). Disbursements under the TA will be made in accordance with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time). Technical reports, country road maps, and the proceedings of the ADB Green Business Forum will be disseminated as knowledge products through workshops, stakeholder meetings, and relevant knowledge hubs.

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

17. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$1,500,000 on a grant basis for Scaling Up Private Sector Participation and Use of Market-Based Approaches for Environmental Management, and hereby reports this action to the Board.

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<sup>13</sup> An Environment and Safeguards Division staff member will act as the TA team leader.

## DESIGN AND MONITORING FRAMEWORK

<b>Impact the TA is Aligned with</b> Improved environmental performance in Asia and the Pacific (defined by the project)			
<b>Results Chain</b>	<b>Performance Indicators with Targets and Baselines</b>	<b>Data Sources and Reporting</b>	<b>Risks</b>
<p><b>Outcome</b> Public and private stakeholders' knowledge on the applicability of MBAEMs and opportunities for green business increased</p>	<p>a. TA findings accepted by regional stakeholders and used by stakeholders in making the case for innovative MBAEMs and pursuing green business opportunities by 2018</p> <p>b. Elements of draft policy or directive for the use of MBAEMs in 2 DMCs prepared by 2018</p> <p>c. Plans for establishing green business prepared by 2018</p>	<p>a. Documented evidence such as ADB back-to-office reports, and meeting notes of dissemination and acceptance of TA findings by regional stakeholders</p> <p>b–c. Reports and publications from concerned government agencies, industry associations, and other sources<sup>a</sup></p>	<p>Private sector stakeholders do not perceive green businesses as attractive and feasible business development opportunities.</p>
<p><b>Outputs</b> 1. Knowledge products developed and disseminated</p> <p>1.1. Applicability of MBAEMs in Asian countries studied</p> <p>1.2. Opportunities and challenges for green business in the region developed</p>	<p>1.1a. Flagship knowledge product on MBAEM lessons, opportunities, and challenges for Asia and the Pacific published by 2018</p> <p>1.1b. Inventory of market-based instruments used for environment policy in Asia and the Pacific DMCs shared and entered in OECD database by 2018</p> <p>1.2a. Green business stocktaking report, including 6 or 7 background papers on promoting green business investments, prepared by 2017</p> <p>1.2b. ADB Green Business Forum proceedings published by 2017</p>	<p>1.1a. Published flagship knowledge product</p> <p>1.1b. Documented evidence of dissemination of report findings to regional stakeholders, OECD database on instruments used for environmental policy and natural resources management</p> <p>1.2a. Published green business report</p> <p>1.2b. Published Green Business Forum proceedings</p>	<p>Topic experts are not available.</p> <p>Participation of target DMC stakeholders is limited.</p>

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
2. Pilot country road maps toward greater use of market-based approaches for 2 or 3 DMCs developed  3. Flagship event on green business held	2. ADB-supported country road maps for 2 or 3 DMCs developed by 2018 (2016 baseline: 0)  3. At least 100 business leaders and professionals and 50 government officials participated in first ADB Green Business Forum in late 2016	2. Country road maps and documented evidence of dissemination and acceptance of report findings by regional stakeholders  3. Forum proceedings	
<p><b>Key Activities with Milestones</b></p> <p><b>Output 1. Knowledge products developed and disseminated</b></p> <p><b>1.1 Applicability of market-based approaches for environmental management in Asian countries studied</b></p> <p>1.1.1 Prepare the global and regional review and/or stocktaking report on the use of market-based and other voluntary approaches (Q3 2016)</p> <p>1.1.2 Conduct in-depth analysis of environmental problems with the most potential for application of MBAEMs in DMCs (Q4 2017)</p> <p>1.1.3 ADB and experts review draft findings in a 2-day workshop (Q3 2017)</p> <p>1.1.4 Finalize report (Q1 2018)</p> <p>1.1.5 Identify target participants and organize knowledge sharing events (Q2 2018)</p> <p>1.1.6 Gather data on the use of market-based instruments or environment regulation in at least 10 DMCs (Q1 2017) to share and enter in OECD database (Q1 2018)</p> <p><b>1.2 Opportunities and challenges for green business in the region developed</b></p> <p>1.2.1 Prepare rapid stocktaking report to identify and map green businesses, including those in Asia and the Pacific (Q4 2016)</p> <p>1.2.2 Conduct in-depth and forward-looking analysis for at least 6 or 7 sectors and themes with the highest potential to support green growth (Q4 2016)</p> <p><b>Output 2. Pilot country road maps toward greater use of market-based approaches developed for 2 or 3 developing member countries</b></p> <p>2.1 Develop and apply selection criteria for pilot DMC road maps (Q3 2017)</p> <p>2.2 Secure the concurrence of pilot DMCs to participate in the TA (Q3 2017)</p> <p>2.3 Develop country road maps and present to DMCs for review (Q1 2018)</p> <p>2.4 Revise and/or update road maps based on comments and/or inputs from DMCs (Q2 2018)</p> <p>2.5 Identify target participants and organize 2 knowledge sharing activities (Q2 2018)</p> <p><b>Output 3. Flagship event on green business held</b></p> <p>3.1 Prepare the design of the green business forum, including proposed sessions and target participants, and designate a team to implement the forum (Q3 2016)</p>			
<p><b>Inputs</b></p> <p>ADB: \$1,500,000</p>			
<p><b>Assumptions for Partner Financing</b></p> <p>Not Applicable.</p>			

ADB = Asian Development Bank, DMC = developing member country, MBAEM = market-based approach for environmental management, OECD = Organisation for Economic Co-operation and Development, Q = quarter, TA = technical assistance.

<sup>a</sup> These reports will be identified during TA implementation.

Source: Asian Development Bank.

**COST ESTIMATES AND FINANCING PLAN**

(\$'000)

<b>Item</b>	<b>Amount</b>
<b>A. Asian Development Bank<sup>a</sup></b>	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	800
ii. National consultants	130
b. International and local travel	110
c. Reports and communications	50
2. Training, seminars, and conferences	210
3. Miscellaneous administration and support costs	50
4. Contingencies	150
<b>Total</b>	<b>1,500</b>

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

## OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

### A. Consulting Services

1. **Senior environmental economist and overall coordinator** (international, 18 person-months). The individual consultant should have in-depth knowledge on trends in the application of market-based approaches for environmental management (MBAEMs) and extensive experience in the establishment and operationalization of such approaches. At least 10 years of experience and a master's degree or higher qualification in environmental and/or ecological economics are preferred. Knowledge and experience in Asia and the Pacific is highly desirable. The consultant will assist the team leader in planning and coordinating the implementation of the technical assistance (TA). Specific tasks will include the following:

- (i) design an overall analytical framework for the flagship knowledge product on MBAEM lessons, opportunities, and challenges for Asia and the Pacific;<sup>1</sup>
- (ii) prepare inception, interim, and final reports with inputs from TA consultants;
- (iii) lead a workshop on the draft findings and recommendations of the MBAEM report, to be attended by Asian Development Bank (ADB) staff, selected developing member country (DMC) officials, and experts;
- (iv) finalize the report and coordinate its publication with ADB's Department of External Relations by 2018;
- (v) develop the criteria for selecting DMCs to be assisted in preparing country road maps,<sup>2</sup> and lead consultations with target DMCs to secure their approval and commitment;
- (vi) coordinate, provide technical guidance, and supervise the work of consultants during the preparation of country road maps;
- (vii) lead the delivery of knowledge sharing and capacity building activities linked to the TA activities;
- (viii) liaise with relevant ADB partner institutions in preparing the report, including possible collaboration in the preparation of selected sections; and
- (ix) review the data gathered for the Organisation for Economic Co-operation and Development (OECD) database on instruments used for environmental policy and natural resources management.

2. **Business development and green finance expert** (international, 12 person-months). The individual consultant should have expertise in (i) business development and entrepreneurship in the green business sectors, (ii) access to green finance, and (iii) organizing knowledge exchange activities on green business-related topics. A master's degree or higher qualification in business administration or a related field and at least 10 years' experience in business development and entrepreneurship are preferred. The consultant will be responsible for the following tasks:

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<sup>1</sup> The report, the outline of which will be finalized during TA implementation, is envisaged to include (i) a regional and/or global review and stocktaking on the use of market-based approaches (MBAs) (including the use of Next Generation Compliance tools and approaches), technologies, and other flexible policy instruments; quasi standards; and voluntary arrangements for environmental management; (ii) in-depth studies focusing on six or seven instruments or approaches with the most potential for application in ADB middle-income countries and Pacific developing member countries; and (iii) analysis and recommendations, which will cover new directions for the application of MBAs and flexible policy instruments, particularly in middle-income countries in the region.

<sup>2</sup> The country road map is envisioned to be a strategic plan that describes the steps to achieve environmental performance targets (that the country will define) by applying new methods and approaches for environmental management. Road map elements may include an evaluation of the country's need for environmental management, including the existing policy and institutional framework; goals for improved environmental management; a mix of policy tools; and technical, policy, legal, financial, market, and organizational requirements.

- (i) design an overall analytical framework for the green business stocktaking report, identify main issues, and monitor the progress of consultants in undertaking the work and quality control. The report will involve mapping various green business sectors operating in the region, enriched by non-regional experience where relevant;
- (ii) prepare inception, interim, and final reports with inputs from TA consultants;
- (iii) design the Asia Green Business Forum, including its objectives, sessions, target participants, desired outputs, and outline for the forum proceedings for subsequent dissemination;
- (iv) provide inputs to the terms of reference of experts who will prepare background papers for the Asia Green Business Forum;<sup>3</sup>
- (v) supervise the preparation and ensure the quality and consistency of background papers;
- (vi) supervise the implementation of the Asia Green Business Forum;
- (vii) lead the delivery of at least two knowledge sharing activities related to green business; and
- (viii) identify and liaise with potential implementation and knowledge partners to support the overall outcome of the TA.

3. **Environmental and/or resource economics specialist** (national, the Philippines and other DMCs,<sup>4</sup> 17 person-months). The consultant should have knowledge of, and experience in, the development of instruments employed for environmental regulation using both command-and-control and incentive-based approaches. A master's degree or higher qualification in environmental resource economics of environmental policy or a related field and at least 10 years of experience in environmental management and the use of MBAEMs are preferred. The individual consultant will work with the senior environmental economist and overall coordinator, and will be responsible for collecting and verifying data on selected ADB DMCs for the OECD database in Asia and the Pacific. Specifically, the consultant will:

- (i) review the OECD database reference and prepare an approach to collect data for at least 10 DMCs;
- (ii) coordinate with government agencies and, if needed, go on missions to collect and validate data for the selected DMCs;
- (iii) input collected data into the OECD database; and
- (iv) conduct other related tasks assigned by the team leader.

4. **Project management specialist** (national, the Philippines, 20 person-months). The individual consultant will be responsible for the following tasks: (i) support the TA team leader in organizing and coordinating TA implementation, (ii) develop implementation schedules and adapt management approaches to facilitate smooth TA delivery, (iii) support the project's financial administration, and (iv) support the TA team leader in organizing and delivering capacity building activities and knowledge dissemination. A degree in environmental economics, environmental policy or a related field and at least 10 years' experience in project administration, financial administration, and budgeting are preferred. ADB experience would be an advantage.

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<sup>3</sup> Six or seven background papers will be developed on how best to promote green business investments in Asia and the Pacific, focusing on priority sectors and including the following topics: (i) reform of the policy and regulatory framework; (ii) access to credit and/or finance; (iii) technology exchange and transfer; (iv) complementary green services (advisory, technical support, auditing and/or diagnostic work, financial consulting services, energy service companies); (v) networking, matchmaking, brokering, and setting up a marketplace; (vi) working with small and medium-sized enterprises and supporting the informal sector and/or micro businesses; (vii) certification, codes of conduct, and performance standards; and (viii) role of industry organizations, chambers of commerce, and sector associations.

<sup>4</sup> Other DMCs to be identified during TA implementation.



5. **Project administration specialist** (national, the Philippines, 20 person-months). The individual consultant will support project administration. He or she will (i) work with TA consultants to deal with contractual matters; (ii) organize meetings, travel, and logistics for TA consultants and project staff; (iii) manage subcontracts and partnership agreements; and (iv) process payments and reimbursements.

## **B. Unallocated Positions—International**

6. **Environmental management, environmental economics, green finance, and green business consultants and legal and institutional policy experts** (international consultants, 25 person-months). Individual consultants will be engaged to prepare (i) in-depth analysis of six or seven instruments or approaches considered to hold the greatest potential for application in ADB middle-income countries and Pacific DMCs, (ii) prepare background papers for the Asia Green Business Forum, (iii) elaborate MBA country road maps, and (iv) undertake other research and/or report preparation activities to be identified during TA implementation. The consultants will have at least a master's degree in environmental and/or ecological economics, environmental policy, finance, or a related discipline and at least 10 years' experience related to environmental management, including command-and-control and market-based approaches. Based on the topics to be studied, sector- and subject-specific expertise (including extensive experience in environmental policy research, legal and institutional and/or policy, and finance) will be required.

7. **Environmental management, environmental economics, green finance, and green business experts** (international consultants, 3 person-months, resource persons). For each MBA study topic, the experts will (i) verify the soundness of research design and the high and continued relevance of the topic, (ii) ensure that all data used in the research are the most recent available and their origin is traceable, (iii) ensure the analytical rigor and accuracy of the papers, and (iv) review the final drafts of the research papers and confirm that they are ready for publication. The resource persons will also serve as discussants during workshops and conferences. The consultants will have at least a master's degree in environmental and/or ecological economics, environmental policy, or a related discipline and at least 10 years' experience related to environmental management and MBAEMs. Based on the topics to be studied, sector- and subject-specific expertise (including extensive experience in environmental policy research, policy design, and planning and evaluation) will be required.