



**STRATEGY 2030  
OPERATIONAL PLAN FOR PRIORITY 3  
TACKLING CLIMATE CHANGE,  
BUILDING CLIMATE AND DISASTER  
RESILIENCE, AND ENHANCING  
ENVIRONMENTAL SUSTAINABILITY,  
2019–2024**

---

SEPTEMBER 2019

**STRATEGY 2030**  
**OPERATIONAL PLAN FOR PRIORITY 3**  
**TACKLING CLIMATE CHANGE,**  
**BUILDING CLIMATE AND DISASTER**  
**RESILIENCE, AND ENHANCING**  
**ENVIRONMENTAL SUSTAINABILITY,**  
**2019–2024**

---

SEPTEMBER 2019



Creative Commons Attribution 3.0 IGO license (CC BY 3.0 IGO)

© 2019 Asian Development Bank  
6 ADB Avenue, Mandaluyong City, 1550 Metro Manila, Philippines  
Tel +63 2 8632 4444; Fax +63 2 8636 2444  
[www.adb.org](http://www.adb.org)

Some rights reserved. Published in 2019.

Publication Stock No. SPR200019  
DOI: <http://dx.doi.org/10.22617/SPR200019>

The views expressed in this publication are those of the authors and do not necessarily reflect the views and policies of the Asian Development Bank (ADB) or its Board of Governors or the governments they represent.

ADB does not guarantee the accuracy of the data included in this publication and accepts no responsibility for any consequence of their use. The mention of specific companies or products of manufacturers does not imply that they are endorsed or recommended by ADB in preference to others of a similar nature that are not mentioned.

By making any designation of or reference to a particular territory or geographic area, or by using the term “country” in this document, ADB does not intend to make any judgments as to the legal or other status of any territory or area.

This work is available under the Creative Commons Attribution 3.0 IGO license (CC BY 3.0 IGO) <https://creativecommons.org/licenses/by/3.0/igo/>. By using the content of this publication, you agree to be bound by the terms of this license. For attribution, translations, adaptations, and permissions, please read the provisions and terms of use at <https://www.adb.org/terms-use#openaccess>.

This CC license does not apply to non-ADB copyright materials in this publication. If the material is attributed to another source, please contact the copyright owner or publisher of that source for permission to reproduce it. ADB cannot be held liable for any claims that arise as a result of your use of the material.

Please contact [pubsmarketing@adb.org](mailto:pubsmarketing@adb.org) if you have questions or comments with respect to content, or if you wish to obtain copyright permission for your intended use that does not fall within these terms, or for permission to use the ADB logo.

Corrigenda to ADB publications may be found at <http://www.adb.org/publications/corrigenda>.

Notes:

In this publication, “\$” refers to United States dollars.

Cover design by Anthony Victoria.

Operational Priority 3

# Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability



- Integrated approach in country partnership strategy/country operations business plan
- Deploy approaches for capturing co-benefits in coordination with other operational priorities
- Promote innovative clean technology
- Expand private sector operations
- Build partnerships with think tanks, nongovernment organizations, academe, and private sector
- Access to finance: use of concessional finance in a targeted and catalytic way—maximizing delivery of outcome

**Targets:** 75% committed operations (3-year rolling average) and \$80 billion of own resources (2019-2030, cumulative) will support climate actions

## Strategic Operational Priorities

1

**Mitigation of climate change increased**

2

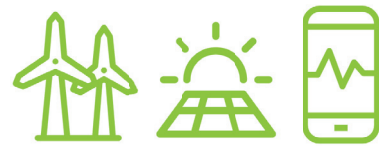
**Climate and disaster resilience built**

3

**Environmental sustainability enhanced**

## Operational Approaches

Clean energy



*Green business and jobs*

Sustainable transport and urban development



*Clean air and water, waste management*

Climate-smart agriculture and sustainable land use



Climate and disaster Resilience



*Physical (climate-proof), eco-based, financial, social, and institutional*

Water–food–energy security nexus



Air and water pollution management

Natural capital and healthy oceans

*Environmental governance*

## Sub-pillars

- Access to climate finance increased
- Capacity of developing member countries to implement climate actions enhanced
- Low-carbon infrastructure improved
- Renewable energy capacity increased
- Low-carbon development solutions implemented
- Integrated flood risk management measures supported
- Resilience building initiatives implemented
- Finance preparedness for post-disaster response enhanced
- Planning for climate change adaptation and disaster risk management improved
- Infrastructure assets made more resilient
- Pollution control infrastructure assets implemented
- Pollution control and resource efficiency solutions promoted and implemented
- Conservation, restoration and enhancement of terrestrial, coastal and marine areas implemented
- Solutions to conserve, restore, and/or enhance terrestrial, coastal, and marine areas promoted and implemented
- Water–food–energy security nexus addressed

# CONTENTS

|   |           |
|---|-----------|
| <b>Figures and Boxes</b>  | <b>v</b>  |
| <b>Abbreviations</b>  | <b>vi</b> |
| <b>I. Strategic Operational Priorities</b>                                  | <b>1</b>  |
| A. Overview   | 1         |
| B. ADB Experience and Initiatives   | 2         |
| C. Key Trends, Challenges, and Opportunities in Developing Member Countries | 6         |
| D. Strategic Priorities of the Operational Plan                             | 7         |
| <b>II. Operational Approaches</b>   | <b>9</b>  |
| A. Approaches   | 9         |
| B. Expected Results   | 10        |
| C. Major Outcomes and Activities  | 12        |
| <b>III. Implementation</b>  | <b>20</b> |
| A. Interdepartmental Cooperation  | 20        |
| B. Strategic Partnerships and Coordination                                  | 20        |
| C. Emerging Areas   | 22        |
| D. Knowledge Priorities   | 23        |
| <b>IV. Strategy 2030 Operational Priority Results</b>                       | <b>24</b> |
| <b>Appendixes</b>   |           |
| 1 Contribution of Sector and Thematic Areas to the Operational Plan         | 25        |
| 2 Interdepartmental Cooperation Matrix                                      | 30        |
| 3 Evolution of ADB's Climate Change and Disaster Risk Management Program    | 34        |

# FIGURES AND BOXES

## Figures

|    |  |    |
|----|--|----|
| 1  | ADB's Climate Change Finance, 2011-2018                      | 3  |
| 2  | Framework for Operational Priority 3 of Strategy 2030        | 11 |
| A1 | Sector and Thematic Group Linkages to Operational Priority 3 | 33 |
| A2 | One ADB Approach in Implementing Operational Priority 3      | 33 |

## Boxes

|   |   |    |
|---|---|----|
| 1 | ADB Action Plan for Healthy Oceans and Sustainable Blue Economies and the ADB Oceans Financing Initiative | 17 |
| 2 | Aligning ADB Operations with the Paris Agreement on Climate Change  | 22 |

# ABBREVIATIONS

|      |   |                                     |
|------|---|-------------------------------------|
| ADB  | - | Asian Development Bank              |
| DMC  | - | developing member country           |
| DRM  | - | disaster risk management            |
| GHG  | - | greenhouse gas                      |
| IDRM | - | integrated disaster risk management |
| MDB  | - | multilateral development bank       |
| NDC  | - | nationally determined contribution  |
| PPP  | - | public-private partnership          |
| PRC  | - | People's Republic of China          |
| SDG  | - | Sustainable Development Goal        |
| TA   | - | technical assistance                |

# STRATEGIC OPERATIONAL PRIORITIES

## A. Overview

1. In the face of rapidly growing greenhouse gas (GHG) emissions, increasing risks and impacts from climate change and disasters, and accelerating environmental degradation, the Asian Development Bank (ADB) recognizes that tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability are critical to achieving its Strategy 2030 vision of a prosperous, inclusive, resilient, and sustainable Asia and the Pacific.<sup>1</sup> Key responses identified under operational priority 3 of Strategy 2030 include scaling up support to address climate change, disaster risks, and environmental degradation; accelerating low GHG emission development; ensuring a comprehensive approach to build climate and disaster resilience; ensuring environmental sustainability; and increasing focus on the water–food–energy nexus.

2. ADB has been promoting environmental sustainability in its developing member countries (DMCs) in the last 3 decades, while support to DMCs on climate change and disaster risk management (DRM) issues has become increasingly important since the early 1990s. Building on its strong performance in integrating climate change mitigation and adaptation into the design of its development projects, and recognizing that DMCs will require access to climate finance, technology, and capacity development support, Strategy 2030 commits ADB to ensuring that (i) 75% of its operations support climate change mitigation and adaptation by 2030,<sup>2</sup> and (ii) climate finance from ADB's own resources will reach \$80 billion cumulatively from 2019 to 2030. Moreover, there are existing 2020 targets for providing \$6 billion (i.e., \$4 billion for mitigation and \$2 billion for adaptation) in climate finance from ADB's own sources annually. This includes \$2 billion in climate finance to concessional assistance countries by 2020.

3. Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability are interconnected agendas and are central to the achievement of the Sustainable Development Goals (SDGs). Thirteen of the 17 SDGs are relevant to or will be impacted by actions on climate change, climate and disaster resilience, and the environment.

4. In addition to the SDGs, the Paris Agreement on Climate Change and Sendai Framework for Disaster Risk Reduction are important frameworks driving action on climate change and DRM, while other multilateral environmental agreements—particularly the Convention on Biological Diversity, the United Nations Convention to Combat Desertification, and the Ramsar Convention, among

<sup>1</sup> ADB. 2018. *Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific*. Manila.

<sup>2</sup> On a 3-year rolling average, including both sovereign and nonsovereign operations.



others—provide a basis for promoting environmental sustainability and sustainable natural resource management in line with DMC commitments.<sup>3</sup> Further, increased awareness of the interconnectivity or nexus of water, food, and energy security is leading to more regional and national processes aimed at identifying synergies among sectors and avoiding adverse consequences of single-sector approaches.<sup>4</sup>

5. The main focus of this operational plan will be:

- (i) increasing the quantity of ADB projects and overall investment toward climate change mitigation, climate and disaster resilience, and environmental sustainability; and
- (ii) increasing the quality of ADB interventions with regard to mainstreaming of climate change mitigation, climate and disaster resilience, and environmental sustainability; integration across the water–food–energy security nexus; and overall delivery of the development impact and results.

6. This operational plan builds on the general thrusts and emerging lessons learned from the implementation of the Climate Change Operational Framework, 2017–2030; Integrated Disaster Risk Management Operational Plan, 2014–2020; Environment Operations Directions, 2013–2020; and Water Operational Plan, 2011–2020, while taking a more integrated and holistic approach to reflect the varied and crosscutting nature of actions required for tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability.<sup>5</sup> In addition, the operational plan supports the implementation of ADB’s action plan for healthy oceans and sustainable blue economies, 2019–2024.<sup>6</sup>

## B. ADB Experience and Initiatives

7. **Climate change.** ADB has been providing integrated solutions to address the causes and consequences of climate change in the Asia and Pacific region since the late 1980s. ADB support has grown substantially since 2010, when it released a board paper on *Addressing Climate Change in Asia and the Pacific: Priorities for Action*, which included five priority areas including scaling up investments in clean energy, sustainable transport and urban development; managing natural resources and building climate resilience; and strengthening policies, governance, and institutions. These objectives were reiterated in 2014 in the midterm review of ADB’s Strategy 2020 with a recognition that efforts should

<sup>3</sup> More than 500 international agreements on global environmental protection and management are in effect, including the Ramsar Convention on Wetlands (1971), Convention on International Trade In Endangered Species Of Wild Fauna And Flora (1973), Convention on Long-Range Transboundary Air Pollution (1979), Montreal Protocol on Substances that Deplete the Ozone Layer (1985), Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (1989), Convention on Biological Diversity (1992), United Nations Convention to Combat Desertification (1994), and Stockholm Convention on Persistent Organic Pollutants (2001). These international agreements address key issues that are cross-border in nature (i.e., air pollution, climate change, ocean pollution, and ozone depletion), and require commitments from countries and areas worldwide.

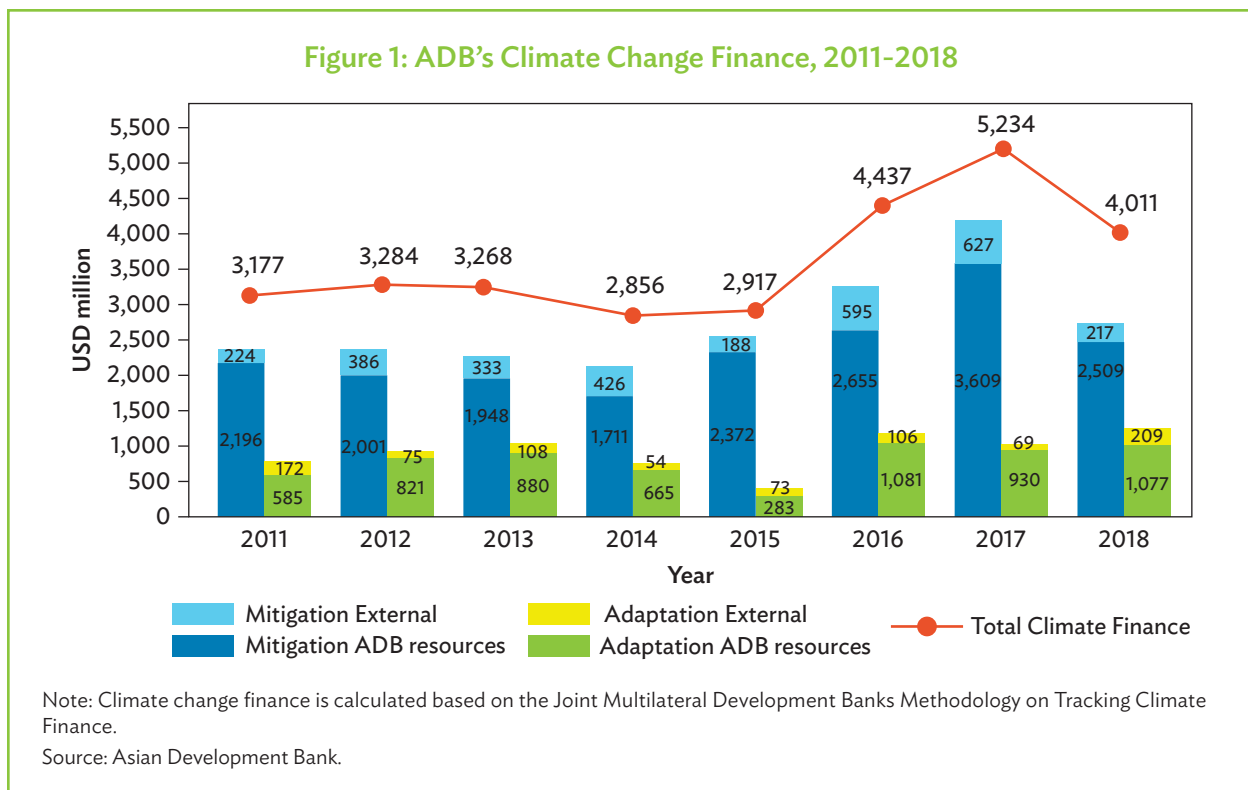
<sup>4</sup> The Bonn 2011 Nexus Conference was a significant milestone for the establishment of the concept of the water–food–energy nexus. Nexus. The Water, Energy and Food Security Resource Platform (accessed 10 March 2019).

<sup>5</sup> ADB. 2017. *Climate Change Operational Framework, 2017–2030: Enhanced Actions for Low Greenhouse Gas Emissions and Climate-Resilient Development*. Manila; ADB. 2014. *Operational Plan for Integrated Disaster Risk Management, 2014–2020*. Manila; ADB. 2013. *Environment Operations Directions, 2013–2020: Promoting Transitions to Green Growth in Asia and the Pacific*. Manila; and ADB. 2011. *Water Operational Plan, 2011–2020*. Manila.

<sup>6</sup> ADB. 2019. *Action Plan for Healthy Oceans and Sustainable Blue Economies, 2019–2024*. Manila.

be broadened and deepened. An evaluation on climate finance access by the Independent Evaluation Department of ADB urged concerted actions to (i) broker and create new knowledge, (ii) innovate with financial products and leverage resources, and (iii) align organizational structure and systems with ADB's evolving role in the climate change domain.<sup>7</sup> In the meantime, in 2013, ADB included a target in its Corporate Results Framework to ensure that 45% of ADB projects will address climate change. In the same year, it also mandated climate risk screening for all projects. A step change, however, was introduced in 2015, with the creation of the Climate Change and Disaster Risk Management Division and forging of an institution-wide community of experts working in this area, signaling the strategic importance of this agenda for ADB moving forward. This was accompanied by a commitment to double ADB's climate financing by 2020, with clear and unconditional targets for mitigation and adaptation financing for key sectors including energy, transport, urban development, and agriculture, rural development, and food security. In 2017, ADB implemented a shadow carbon price of \$36 per ton of carbon dioxide equivalent of GHG emissions in its economic analysis of projects and pledged to increase the shadow carbon price by 2% annually.<sup>8</sup>

8. As shown in Figure 1, ADB climate change finance for mitigation and adaptation reached more than \$29 billion cumulatively from 2011 to 2018, including over \$3.9 billion from external resources such as multilateral funds (e.g., the Climate Investment Funds and the Global Environment Facility) and special funds and trust funds managed by ADB (e.g., the Climate Change Fund, the Clean Energy Financing Partnership Facility, and carbon funds). ADB climate finance includes technical assistance



<sup>7</sup> ADB. 2014. *Real-Time Evaluation of ADB's Initiatives to Support Access to Climate Finance*. Manila.

<sup>8</sup> ADB. 2017. *Guidelines for the Economic Analysis of Projects*. Manila.

(TA) support for policy and institutional development and knowledge and capacity improvement to ensure the effectiveness and sustainability of climate investments. ADB's capacity development and project preparation TA facilities have been instrumental in supporting the successful scale-up of investments and capacity development for low GHG emission and climate-resilient development. Since 2011, ADB has consistently delivered over \$2 billion per year in clean energy financing.

9. While the overall strategic directions applied hitherto remain valid, some basic fundamentals have undergone dramatic change, including a greater awareness of climate risks, costs and opportunities, greater knowledge on the needed scale and urgency of response to the climate change challenge, and evolving and highly differentiated DMC priorities and commitments for action under the Paris Agreement on Climate Change, the SDGs, and the Sendai Framework for Disaster Risk Reduction. In recognition of these developments, ADB outlined its Climate Change Operational Framework 2017–2030, which was adopted in 2017 and provides broad direction and guidance for enhancing resilience and strengthening climate actions in ADB's operations and business processes and serves as the framework for ADB's support to DMCs in meeting their climate commitments and development objectives under the Paris Agreement on Climate Change, including the nationally determined contributions (NDCs).

10. In addition to significantly scaling up investment and TA, ADB has been developing and sharing knowledge and building capacity on effective responses to climate change. ADB has produced a range of guidelines and tools for climate risk screening, impact and vulnerability assessment, and adaptation planning. Key knowledge products include analyses of the economics of climate change, implications of climate change for the region's energy and agriculture sectors, the human dimensions of climate change, and gender mainstreaming in climate finance. Appendix 3 shows the evolution of ADB's climate change and DRM program.

11. **Disaster risk management.** ADB has supported disaster risk reduction and post-disaster response since its early years. ADB's Operational Plan for Integrated Disaster Risk Management, 2014–2020, builds on its significant support for DRM and good performance in this area, while remaining in alignment with the 2004 Disaster and Emergency Assistance Policy. It seeks to promote an integrated disaster risk management (IDRM) approach based on a vision of disaster resilience combined with three basic DRM principles: (i) many development actions carry potential disaster risk but also provide opportunities to strengthen resilience, (ii) DRM investments may underperform and ultimately even exacerbate disaster risk if climate change is ignored, and (iii) levels of expenditure on risk reduction and residual risk management should increase to reflect long-term risk profiles. These principles in turn imply three key DRM requirements: (i) integrate disaster risk reduction into development, (ii) address the intersection between DRM and climate change adaptation, and (iii) ensure that there are adequate financing arrangements in place to reduce risk and to manage and transfer residual risk. This framework remains valid as it aligns well with the directions of the Sendai Framework for Disaster Risk Reduction.

12. The IDRM approach is being implemented through four cross-cutting areas: (i) institutionalizing IDRM, including through the recent development of tools and guidance materials, the enhancement of ADB's online project climate risk screening tool to include geophysical hazards, support for upstream disaster resilience measures in DMCs, and growing attention to disasters in country partnership strategies; (ii) capacity development and knowledge solutions, focusing both on DMCs and on ADB's own staff; (iii) investing in resilience, through stand-alone disaster risk reduction projects, embedded components of other projects, post-disaster recovery and reconstruction support, and disaster risk

financing projects; and (iv) stakeholder engagement, building partnerships, and leveraging additional financial resources. From 2010 to 2018, the volume of ADB projects on DRM summed up to \$4.5 billion, with \$3.31 billion supporting post-disaster recovery response, \$1.12 billion for projects that primarily focus on disaster risk reduction, and \$50 million for disaster risk financing. Further, the number of projects that embed DRM into their design consistently grew, totaling 357 projects for the same period. Over the past 15 years, ADB has developed several DRM financing instruments and loan modalities including the ADF Disaster Response Facility, the ADF12 Disaster Risk Reduction Financing Mechanism and a contingent disaster financing option under ADB's policy-based lending policy. These have helped reduce disaster risk and provide timely post-disaster financing. ADB has also begun to support countries in the design and implementation of disaster insurance products and strengthening of the related enabling environment. The application of disaster risk transfer instruments (e.g., insurance) in DMCs is still in its relative infancy, offering considerable opportunities for expansion.

13. **Environmental sustainability.** ADB has been progressively addressing the environmental sustainability of its operations. Following the 1972 United Nations Conference on the Human Environment, the ADB Board of Directors issued Environmental Considerations in ADB Operations. It made specific recommendations on how a systematic approach to environmental issues might be incorporated into ADB operations, including the introduction of environmental assessments into the project cycle. Since that time, ADB's role in promoting environmentally sustainable growth has broadened beyond building environmental safeguard capacity to include policy, institutional, and investment support to key development sectors, such as energy, water, transport, agriculture, and natural resources. This broadened scope was backed by ADB's environment policy in 2002, which emphasizes the importance of environmentally sustainable growth in ADB's mission to help its DMCs reduce poverty and improve living conditions and quality of life. Further updates were made with the approval of the Safeguard Policy Statement, 2009, which further strengthened ADB's principles and requirements for ensuring environmental sustainability within ADB projects and investments.

14. ADB's Environment Operational Directions 2013-2020 focus on the following mutually supportive directions for operations: (i) promoting a shift to sustainable infrastructure to help DMCs build infrastructure that contributes to environmentally sustainable and low-carbon development as well as to increased resilience to climate change and other threats; (ii) investing in natural capital to help reverse the ongoing decline of natural capital to ensure that environmental goods and services can sustain future economic growth and well-being, build climate resilience, and contribute to carbon sequestration; and (iii) strengthening environmental governance and management capacity for improved environmental and natural resource management, and strengthening country systems and capacities for environmental safeguards. At the project level, ADB's Safeguard Policy Statement promotes sustainability of project outcomes by protecting the environment and people by avoiding and/or mitigating adverse impacts of projects.

15. The indicators used to track progress in ADB's support for environmentally sustainable growth is the percentage of projects (in terms of number) supporting environmental sustainability, averaged over a 3-year period. From 2016 to 2018, the number of projects with environmentally sustainable growth as theme reached 64%, exceeding the target of 55% set by the ADB corporate results framework for 2018-2020.

16. **Water-food-energy security nexus.** ADB's Water Operational Plan (2011-2020) recognizes the interconnectivity between water, energy, and food security, and that interventions in one sector

can have consequences for another. Responding to climate change and promoting environmental sustainability also require consideration of how changes in water, food, and energy security intersect in each river basin. Incorporating nexus thinking offers the potential to deliver significant benefits and support the overall SDG goal of integrated water resources management. Action plans require design and implementation arrangements to address the increased demand for food and water, supported by effective global partnerships in knowledge, innovation, policy research, and capital. Formulation of public policy is required in ways that help decision makers allocate and rationally manage water use across the food, energy, industrial, and municipal spectrum while also taking into account considerations of environmental sustainability and GHG emissions.<sup>9</sup>

17. Incorporating nexus thinking in a more formalized manner and at an upstream stage of program and project planning is a relatively new approach although the interdependencies between sectors have been recognized for some time. ADB has been encouraging nexus considerations to be incorporated in sector operations, for example through its country water assessments. Raising awareness on the nexus and providing guidance on how to address interdependencies in ADB operations is a part of the knowledge support agenda, examining both the possible win-win benefits of taking a more cross-sectoral perspective and the need to deal with trade-offs where necessary.<sup>10</sup>

## C. Key Trends, Challenges, and Opportunities in Developing Member Countries

18. **Increasing greenhouse gas emissions.** Globally, about 70% of all GHG emissions come from 10 countries, 3 of which are DMCs: the People's Republic of China (PRC), India, and Indonesia, while nearly half of global GHG emissions—47.6 gigatons of carbon dioxide equivalent—are from countries in Asia (23.3 gigatons of carbon dioxide equivalent).<sup>11</sup> GHG emissions are set to increase in step with economic growth, as urbanization progresses, land use and consumption patterns change, and fossil fuel-based energy generation and transport expand.

19. **Increasing exposure and vulnerability to natural hazards and impacts of climate change.** Many DMCs, particularly low-lying and small island developing states, and specific regions and populations within DMCs, are highly exposed and vulnerable to natural hazards and impacts of climate change, such as the growing frequency and intensity of extreme weather events, sea level rise, changes in rainfall patterns, and increasing temperatures. Disaster losses are already growing due to insufficient regard for climate and disaster risk in either the design or location of new infrastructure. Moreover, a sizable proportion of the region's population still works in agriculture, fisheries and forestry—the productive sectors considered most at risk from climate change and extreme weather events.<sup>12</sup> Climate change impacts and disruption of ecosystem services can lead to severe effects on livelihoods and food security, which in turn would affect human health, migration dynamics, and potential for creating or exacerbating fragility and conflict.<sup>13</sup>

<sup>9</sup> ADB. 2011. *Water Operational Plan 2011-2020*. Manila.

<sup>10</sup> ADB. 2017. *Water-Energy Nexus in the People's Republic of China and Emerging Issues*. Manila.

<sup>11</sup> World Resources Institute. *CAIT Climate Data Explorer*.

<sup>12</sup> For example, more than 40% of people in South Asia work in agriculture. International Labour Organization. 2018. *Asia-Pacific Employment and Social Outlook 2018: Advancing Decent Work for Sustainable Development*. Bangkok.

<sup>13</sup> ADB. 2017. *A Region at Risk: The Human Dimensions of Climate Change in Asia and the Pacific*. Manila.



20. **Growing environmental problems.** DMCs face growing environmental pressures, including air pollution, freshwater and marine pollution, inadequate waste management, deforestation, unsustainable fishing practices, land and coastal ecosystem degradation, and biodiversity loss. The region is also confronted with increasing water scarcity because of climate change as well as growing demand for clean water due to rapid population and economic growth. These challenges threaten sustainability and exacerbate existing vulnerabilities of the poor, who often have greater exposure to environmental pollution and depend disproportionately on ecosystem services for their livelihoods and food security.

21. **Opportunities to deliver ecologically sensitive and climate- and disaster-resilient infrastructure investments.** DMCs will need to invest \$26 trillion in infrastructure from 2016 to 2030, or \$1.7 trillion per year, to maintain its growth momentum, eradicate poverty, and respond to climate change mitigation and adaptation needs.<sup>14</sup> This presents a significant opportunity to promote inclusive, risk-informed green growth through the design, construction, and operation of infrastructure based on the principles of sustainability, resilience, and a circular economy.

22. **A compelling business case for investment.** To maintain economic growth, DMCs must address the loss and degradation of natural capital, including land, water, and forest resources, as well as biodiversity. The region has some of the largest and most diverse ecosystems in the world, which supports the region's economies and delivers a range of goods and services that sustain livelihoods, support food production, provide water and energy security, and provide resilience to climate and disaster risks. Investing in natural capital can have high returns, and it is typically more cost-effective to protect rather than to restore degraded ecosystems. Digitalization and rapidly declining costs for key technologies, such as renewable energy generation and energy storage, and circular economy approaches, are also creating significant opportunities for investment and opening the potential for technological "leapfrogging."

## D. Strategic Priorities of the Operational Plan

23. This operational plan is based on three strategic priorities for operational priority 3:

- (i) climate change mitigation increased,
- (ii) climate and disaster resilience built, and
- (iii) environmental sustainability enhanced.

24. The plan seeks to align ADB actions under these three pillars more closely with efforts to achieve the objectives of the 2030 Agenda for Sustainable Development, the Paris Agreement on Climate Change, the Sendai Framework for Disaster Risk Reduction, and other key environmental agreements, while better positioning ADB to respond to the varied and rapidly evolving needs, circumstances, and aspirations of each DMC. While all three strategic priorities are important for all DMCs, ADB will prioritize climate change mitigation in DMCs with larger GHG emissions and higher GHG reduction potential particularly upper middle-income countries while focusing on building the climate and disaster resilience of vulnerable populations and communities across all DMCs, particularly those at highest risk. In the area of environmental sustainability, ADB will work across the region with

---

<sup>14</sup> ADB. 2017. *Meeting Asia's Infrastructure Needs*. Manila.

a focus on those areas where it can make the greatest impact in terms of addressing environmental degradation as well as conservation of natural resources.

25. **Climate change mitigation increased.** ADB will support DMCs in implementing their NDCs and reducing GHG emissions through projects and programs in areas such as clean energy,<sup>15</sup> sustainable transport and urban development, and sustainable agriculture and land-use management.

26. **Climate and disaster resilience built.** ADB will apply a comprehensive approach to build climate and disaster resilience by systematically assessing and addressing climate and disaster risk and supporting holistic development solutions to manage climate and disaster risk.

27. **Environmental sustainability enhanced.** ADB will support DMCs in improving environmental management, including pollution control; investing in natural capital conservation and restoration; improving environmental governance; addressing competing water demands for food and energy production; and ensuring that projects contribute to water, energy, and food security. ADB will expand its investments and TA in supporting ocean health and coastal and marine resource management.

28. ADB will implement these actions by applying an integrated approach in ADB country programming and operations business planning; promoting innovative clean technology in and through ADB projects; expanding private sector climate and environment operations; promoting DMC access to finance; employing a structured, systematic, evidence-based, risk-informed approach to project design, implementation, and monitoring and evaluation; supporting knowledge and capacity building; and building effective partnerships.

29. ADB will ensure women's empowerment in climate change mitigation and adaptation, DRM and environmental actions in the region. With operational priority 2 on accelerating progress in gender equality, ADB will build women's resilience to climate change and disaster impacts and environmental degradation through greater access to technologies and finance, support for diversification of livelihoods, and increased participation in community-led solutions, among others.

---

<sup>15</sup> The results of the ongoing reviews by the Independent Evaluation Department and the Energy Sector Group on the energy sector and ADB's Energy Policy (2009), which are expected to be completed in 2020, will guide ADB's activities in the energy sector.



# OPERATIONAL APPROACHES

## A. Approaches

30. **Apply an integrated approach in planning.** ADB will use a proactive, climate and disaster risk-informed, needs-based, country-focused approach by tailoring financing, capacity development, and knowledge support to the needs and circumstances of each DMC and focus on pockets of vulnerability in DMCs. ADB will aim to deliver integrated climate, DRM, and environmental sustainability solutions to support the achievement of the SDGs and DMC commitments under the Paris Agreement on Climate Change. It will also employ approaches to optimize multiple benefits and co-benefits by design in all areas and in coordination with work carried out under other Strategy 2030 operational priorities.

31. **Promote innovative technology.** ADB will use its procurement systems to give DMCs access to the most advanced clean technology and promote the use of assessment tools such as remote sensing in its projects. ADB will employ concessional financing in a judicious manner to help address elevated technology costs or risks, such as through ADB trust funds like the High-Level Technology Fund or the Asia-Pacific Climate Finance Fund.

32. **Expand private sector operations.** ADB will increase upstream engagement with the private sector on climate investment, including through public-private partnerships (PPPs), to mobilize capital at speed and scale in line with its nonsovereign operations target for climate operations.<sup>16</sup> To scale up private sector climate and environment operations, ADB must

- (i) support pipeline development in sectors such as clean energy, sustainable transport, agribusiness and sustainable blue economy, which contribute to GHG mitigation, climate and disaster resilience, and/or environmental sustainability;
- (ii) support Private Sector Operations Department staff capacity on mainstreaming climate change, disaster risk, and environmental considerations into projects, and enhance the quality of nonsovereign operations;
- (iii) enhance internal knowledge and capacity to assess and provide advice to private sector clients on climate, disaster, and environmental risks and opportunities;
- (iv) support the development of guidelines to mainstream climate change, resilience, and environmental sustainability into nonsovereign operations;
- (v) support early-stage engagement with clients to maximize climate change mitigation, climate and disaster resilience, and environmental benefits of nonsovereign operations;

<sup>16</sup> \$1 billion annually in climate finance approvals from ADB's own sources. ADB. 2018. *Development Effectiveness Report 2017 Private Sector Operations*. Manila.



- (vi) play a major role in financing climate-related private sector projects in Asia and the Pacific, including support for greater use of cutting-edge renewable energy throughout the region, through ADB private sector financings and investments;
- (vii) support access to project preparation funding and concessional finance from ADB trust funds or external climate finance sources such as the Green Climate Fund; and,
- (viii) further develop innovative financing approaches, such as green bonds and climate bonds, to mobilize private sector financing.

33. **Promote access to finance.** ADB will increase efforts to facilitate DMC access to external public and private finance for the environment, climate change, mitigation, and climate and disaster resilience from a variety of sources, including the Green Climate Fund, and through support for innovative financing mechanisms, such as carbon markets, green finance catalyzing facilities, green and blue bonds, and blue credits for avoided cost. ADB will continue to use concessional finance in a targeted and catalytic way so as to maximize delivery of development outcomes. ADB will seek, wherever possible, to mobilize additional finance, including from the private sector, in the form of cofinancing or parallel financing. ADB will also assess how financing mechanisms can be adapted to better serve the poorest and most vulnerable populations in DMCs, including the use of grants and concessional finance to build climate and disaster resilience, and meet adaptation needs. ADB will catalyze financing for projects that will help protect and restore marine ecosystems and promote sustainable blue economies through green and blue finance approaches. ADB financing will also support the greening of existing infrastructure and help mobilize additional investments in key sectors, such as clean energy, sustainable transport, natural resources management, ecosystem services, biodiversity, sustainable tourism, and pollution prevention and control.

34. **Employ a structured, systematic, evidence-based approach.** ADB will use such an approach for assessment, design, preparation, implementation, and effective tracking, monitoring and evaluation for climate, DRM, and environmental interventions. Promote positive links between food and energy security needs, and address trade-offs at project, sector, and country levels.

35. **Support institutional development and policy frameworks conducive to ambitious climate, and climate and disaster resilience and environmental actions in DMCs.** ADB will promote mainstreaming of climate, DRM, and environment actions into DMC development planning, including through the NDCs; support the integration of gender equality as well as support policy reform and harmonization; build institutional capacity at all levels; and assist DMCs in making positive policy choices in tackling climate, DRM, and environmental issues and challenges.

## B. Expected Results

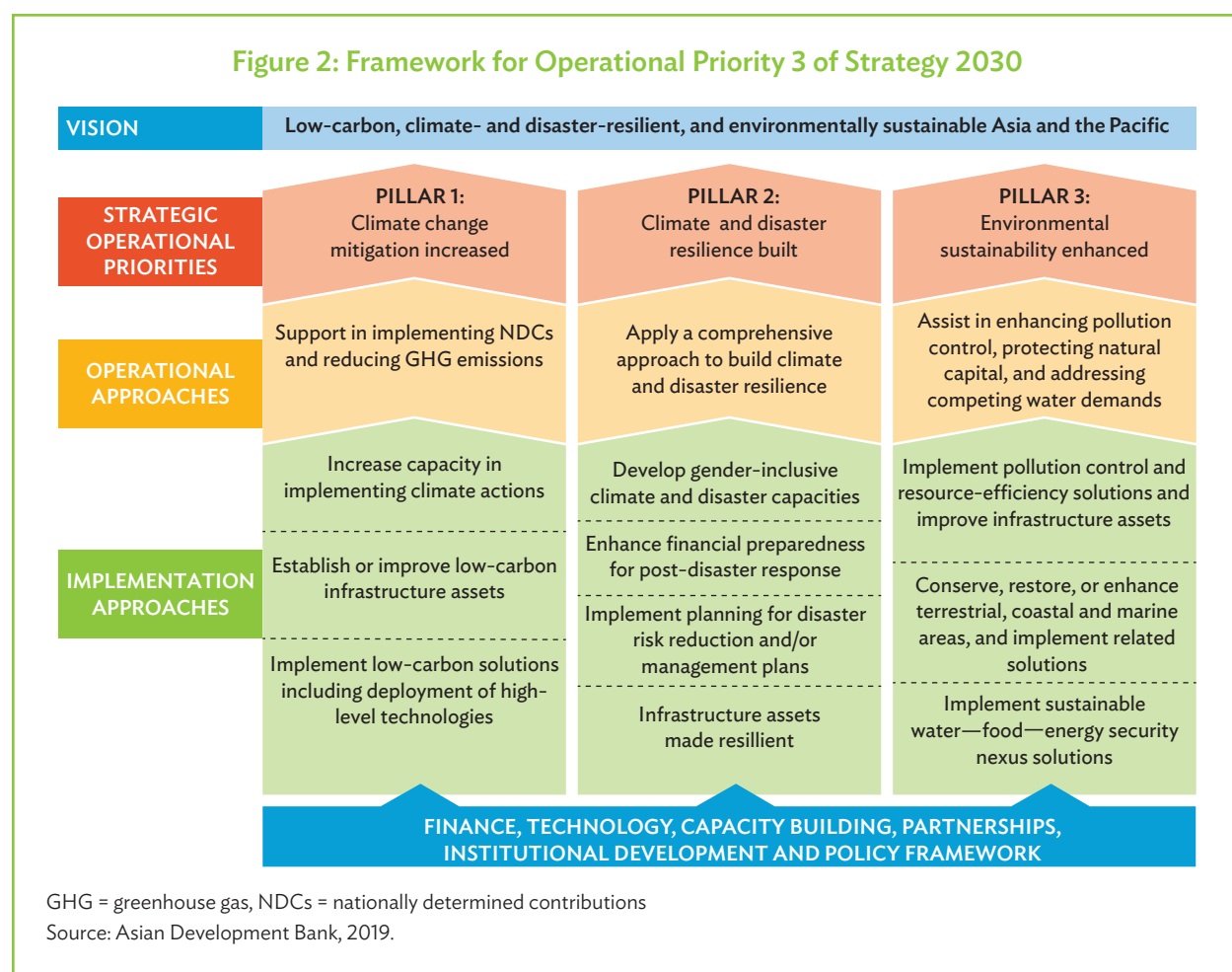
36. ADB will measure increased mitigation of climate change through GHG emissions reductions in tons of carbon dioxide equivalent per year. ADB will monitor total volume of additional climate finance mobilized, people with increased capacity in implementing mitigation and low-carbon development actions, low-carbon infrastructure assets established or improved, renewable energy capacity installed and low-carbon solutions promoted and implemented.

37. ADB will measure the built climate and disaster resilience in terms of the number of people with strengthened climate and disaster resilience, including those related to integrated flood risk

management measures; resilience-building initiatives, including those that build climate and disaster resilience capacity of women and girls; financial preparedness for post-disaster response; and new and existing infrastructure assets made climate and disaster resilient.

38. ADB will measure enhanced environmental sustainability in terms of people benefiting from strengthened environmental sustainability, including pollution control enhancing infrastructure assets are established or improved; pollution control and resource efficiency solutions implemented; terrestrial, coastal and marine areas conserved, restored, and/or enhanced, and related solutions implemented; and solutions for sustainable water–food–energy security nexus solutions implemented.

39. The theory of change for operational priority 3 of Strategy 2030 is presented in Figure 2. This sets out how a vision for a low-carbon, climate- and disaster-resilient, and environmentally sustainable Asia and the Pacific can be achieved through the operational and implementation approaches linked to each of the three pillars of the operational plan.



## C. Major Outcomes and Activities

### 1. Climate Change Mitigation Increased

40. Across all operations, ADB will focus on promoting the reduction of GHG emissions and enhancement of carbon sinks through activities that target high GHG-emitting sectors which present the highest potential for achieving GHG emission reductions in alignment with the goals of the Paris Agreement on Climate Change.<sup>17</sup> Where required, ADB's private sector operations will make use of concessional resources for blended finance solutions in order to accelerate the scaling up of climate change mitigation and environmental sustainability projects, including projects that are procured through PPPs.

41. **Clean energy, including renewable energy and energy efficiency.**<sup>18</sup> ADB will

- (i) support DMCs in implementing key climate mitigation and adaptation actions outlined in their NDCs, drawing on assessments of appropriate financing approaches, technology needs and trends, climate and disaster risk, environmental sustainability, and contribution of actions to the SDGs;
- (ii) promote renewable energy and energy efficiency through investments, grants, TA, and mobilization of cofinancing, including from the private sector and through carbon markets; promote clean technology, including carbon capture, utilization, and storage; and support knowledge and capacity development, while maximizing access to energy for the poor; and
- (iii) assist DMCs in the implementation of energy sector reforms, improvement of legal and regulatory frameworks, and support good governance to encourage public and private climate investment. An example is a policy-based loan in Indonesia that will improve the enabling policy environment to increase public and private investments in the country's energy sector.<sup>19</sup>

42. In addition, ADB will help to identify and support the deployment of high-level clean energy technologies, such as renewable energy combined with energy storage. ADB's Renewable Energy Sector Project in Cook Islands will leverage battery storage to facilitate the expansion of solar photovoltaic-based power generation systems in Rarotonga, reducing fossil fuel consumption and enhancing energy security.<sup>20</sup>

43. **Sustainable transport.** ADB will

- (i) conduct studies and sector dialogues to develop operational pipelines in the new fields of sustainable low-carbon transport, including urban public transport, railways, multimodal logistics, and intelligent transport systems; and
- (ii) identify and implement clean high-level technology options, including transport-related air quality improvement and low-emission vehicles.

<sup>17</sup> United Nations Framework Convention on Climate Change. 2015. *Paris Agreement*. Paris.

<sup>18</sup> For the purposes of this operational plan, "clean energy" will be defined as encompassing renewable energy and energy efficiency and any other related activities, which fall under the joint MDB methodology on climate mitigation finance.

<sup>19</sup> ADB. 2017. Indonesia: Sustainable and Inclusive Energy Program (Subprogram 2).

<sup>20</sup> ADB. 2018. Cook Islands: Renewable Energy Sector Project.

44. For example, ADB is supporting urban metro rail and trolley bus projects in the PRC, India, and Viet Nam; railway electrification and rehabilitation in Azerbaijan and Uzbekistan; bus rapid transit in Pakistan; and “green” vehicles in the PRC.

45. **Sustainable urban development.** ADB will

- (i) deepen long-term engagements with a few cities to develop, test, and learn from upgrading, expanding, or replacing urban infrastructure; and utilizing clean high-level technologies including green buildings and efficient cooling systems and climate- and disaster-resilient approaches while ensuring that new and current infrastructure assets are made environmentally sustainable and resilient to future climate impacts;
- (ii) build local capacity to assess opportunities to achieve local environmental improvement objectives, such as better air quality while also reducing GHG emissions; and
- (iii) support new partnerships with climate finance providers, particularly the private sector, for increasing investments in climate- and disaster-resilient, low-emission urban infrastructure and services, including through innovative PPPs. An example incorporating these approaches is the Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Sector Project in Mongolia.<sup>21</sup>

46. **Climate-smart agriculture and sustainable land-use management.** In most DMCs, climate-smart agriculture and better land-use management, including through the reduction of deforestation and forest degradation, is the most cost-effective form of GHG emission reduction and contribute to disaster resilience and environmental sustainability. Examples include promoting ecosystem- and community-based adaptation; utilizing low GHG emission technologies, such as solar water pumps and more efficient irrigation systems; identifying crop varieties with lower water demands; and integrating agroforestry principles in agriculture projects.

## 2. Climate and Disaster Resilience Built

47. ADB support to strengthen DMC climate and disaster resilience will seek to support enhanced DMC understanding of climate and disaster risk, integrate climate and disaster resilience into DMC development plans and initiatives, address the DRM–climate change adaptation intersection, and develop disaster risk financing capabilities. Support includes stand-alone investments in DRM (e.g., flood risk management in Indonesia and Viet Nam, seismic retrofitting of schools in Armenia and Nepal); and embedded investments that factor DRM into sector projects (e.g., cyclone early warning systems as part of urban development in coastal towns). ADB will apply a comprehensive and integrated approach to strengthen climate and disaster resilience, including the following:

48. **Physical resilience.** ADB will support climate and disaster risk assessments of existing and planned infrastructure including risks to ecosystem services, risk-sensitive land-use planning, incorporation of structural climate- and disaster-resilient measures into infrastructure projects, (including post-disaster operations) investments in structural disaster risk reduction measures such as flood protection infrastructure, and improved operation and maintenance of infrastructure. For

---

<sup>21</sup> ADB. 2018. Mongolia: Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Sector Project.

example, ADB's Sustainable and Climate-Resilient Connectivity Project in Nauru will upgrade and climate-proof the country's main harbor through structural measures and better management.<sup>22</sup>

49. **Financial resilience to disasters.** ADB will support

- (i) better financial management of disasters, providing more timely and adequate flows of financing for post-disaster risk through contingent disaster financing;
- (ii) increased availability and coverage of disaster insurance and capital market risk transfer solutions;
- (iii) development of comprehensive disaster risk financing solutions incorporating cost-effective blending of risk retention (e.g., government reserves and annual contingent budget lines) and risk transfer solutions; and
- (iv) enhanced capabilities to use post-disaster financing effectively.

50. **Social and institutional resilience.** ADB will support enhanced risk governance and leverage poverty reduction and social protection programs to build community resilience to climate change and disasters and channel post-disaster support to affected poor households. In particular, ADB will build women's resilience to climate change and disaster impacts through greater access to technologies and finance, diversification of livelihoods, and increased participation in women-led solutions, among others. In Myanmar, ADB is supporting the government to develop a national framework for community disaster resilience and implement post-disaster recovery projects involving community-based interventions, and is implementing a TA to enhance the capacity for understanding climate and disaster risk, undertaking disaster-resilient investments in the agriculture and rural development sector, and increasing awareness and capacity for disaster risk financing among national and local government authorities as well as the private sector.

51. **Eco-based resilience.** ADB will enhance its support for nature-based climate and disaster solutions, including upper watershed restoration, wetlands restoration, mangrove rehabilitation, and installation of detention basins and retention ponds to reduce flooding, storm surges, and coastal erosion. ADB is applying this approach in the Jiangxi Pingxiang Integrated Rural-Urban Infrastructure Development Project in the PRC, which supports flood protection works, river and wetlands rehabilitation, irrigation system upgrades, and wastewater treatment.<sup>23</sup> ADB will promote sustainable freshwater use and groundwater extraction; and support initiatives on good stewardship of water resources.

### 3. Environmental Sustainability Enhanced

52. ADB will assist DMCs in improving environmental management, with a focus on controlling and reducing pollution and maintaining and enhancing natural capital. Concurrently, ADB will support DMCs to transition to a circular economy, where waste and pollution are "designed out," resources are used efficiently, and economic growth is decoupled from the use of natural resources. The activities will contribute to SDG 12 (responsible consumption and production), SDG 14 (life below water), and SDG 15 (life on land), among others.

<sup>22</sup> ADB. 2018. Nauru: Sustainable and Climate-Resilient Connectivity Project.

<sup>23</sup> ADB. 2019. PRC: Jiangxi Pingxiang Integrated Rural-Urban Infrastructure Development Project.

53. **Pollution control and resource efficiency.** ADB will support DMCs to decouple economic growth from environmental degradation, seeking opportunities to promote a circular economy.<sup>24</sup> This will be done in a cross-sectoral and thematic manner with strong linkage to operational priority 4 of Strategy 2030—making cities more livable—and operational priority 5 of Strategy 2030—promoting rural development and food security. Specific attention will be given strengthening DMC capacity to appropriately treat and reduce air emissions and wastewater discharges, as well as solid waste from both domestic and industrial sources as indicated below.

54. **Air quality management.** ADB will assist DMCs in tackling existing sources of air pollution while managing emissions from future development, through support for long-term, systematic, integrated approaches to air quality management at the national and local levels. Building on ADB experience in the PRC and Mongolia, support will be provided through TA and multisector investments and will be focused on localities where air quality levels significantly exceed World Health Organization ambient air quality guidelines and human health is most at risk.

55. Key interventions are:

- (i) identifying current levels and sources of air pollution as well as air quality management action plans and policy reforms;
- (ii) improving air quality regulations, monitoring and enforcement, and monitoring of progress towards the achievement of World Health Organization ambient air quality guidelines; and
- (iii) ensuring integrated and holistic investments in urban development, sustainable transport clean energy as well as addressing air pollution sources from open burning of crops and solid waste and indoor air pollution from heating and cooking sources.

56. There are significant opportunities for the energy and transport sectors to invest in infrastructure-related, high-level technologies to address air pollution, including e-vehicles, renewable energy, energy efficiency, and pollution control technologies for thermal heat and power sources. There are also opportunities for cross-sector engagement with the health and education sectors on awareness raising and health impact assessments.

57. **Freshwater and marine pollution management.** Building on experience in wastewater treatment, solid waste management, river restoration, and watershed management, ADB will scale up investment with a focus on cities, river basins, and coastal areas. ADB will assist DMCs in preparing investments from “source to sea,” including in integrated solid waste management, wastewater treatment, and management of nonpoint pollution sources such as nutrients from agriculture run-off. Circular economy approaches and enhanced material recovery and recycling will be promoted and mainstreamed by ADB in investments. ADB’s support will include (i) the development of government-led action plans at the national, provincial, or city levels; (ii) policy and regulatory reform that promotes the transition to a circular economy and waste management; (iii) the preparation of pollution-reducing investments; (iv) and knowledge sharing on solutions and facilitation of partnerships. Investments will also be catalyzed by ADB through private sector engagement, PPPs, and innovative financing mechanisms. High-level and digital technologies will be utilized for monitoring pollution pathways and impacts, engaging youth and communities, and disseminating knowledge.

<sup>24</sup> That is, new product designs and manufacturing approaches that reduce waste and pollution and keep products and materials in use for as long as possible.



58. **Natural capital management.** ADB will assist DMCs to achieve the goals and targets of the multilateral environment conventions related to natural capital management and biodiversity, such as the Convention on Biological Diversity. Focus will be given to addressing the drivers of natural capital loss and degradation within terrestrial, freshwater, and marine ecosystems, as well as the promotion of sustainable natural resource management. Integrated solutions will be sought from a perspective of the entire goods and services that the ecosystem provide such as support for food security, flood control and livelihoods, as well as the linkages between natural capital and economic sectors such as agriculture and tourism. Specific attention will be given to sustainable forest and water management, as well as coastal and marine resource management.

59. **Sustainable land, forest, and water management.** ADB will promote sustainable land, forest, and water management to address pollution, protect and restore biodiversity, and address climate change and disaster risks, while supporting community livelihoods. Restoration of degraded land and soil can be incorporated into climate-smart agriculture. ADB will scale up nature-based approaches to environmental management, climate change, and DRM. This will include support for restoration, conservation and sustainable use of a range of important habitats, including, but not limited to rivers, floodplains, wetlands, and watersheds; forests, peatlands and grasslands, estuarine and coastal ecosystems; as well as urban ecosystems and greenspaces. Where appropriate, as demonstrated in project preparation work for flood risk management in Indonesia and the Philippines, these approaches can be integrated with physical infrastructure designs to increase climate and disaster resilience.

60. **Coastal and marine resource management.** In line with ADB's Action Plan for Healthy Oceans and Sustainable Blue Economies (Box 1), ADB will expand its investments and TA in the prevention of land-based pollution sources and the improvement of coastal and marine resources management and protection. ADB will focus on capacity development and investments covering management of transboundary seascapes, marine-protected areas management, ecosystem-based approaches to fisheries management, sustainable use of coastal and marine resources and river deltas, addressing climate change impacts, and threatened species protection. ADB will continue its support for cross-border infrastructure, including greening of ports and sustainable management of maritime corridors.

61. In some DMCs, ecotourism investments can be explored, with interventions combining sustainable natural resource management, covering terrestrial, freshwater and marine ecosystems, and enabling infrastructure such as water supply and sanitation, wastewater treatment, and integrated solid waste management. ADB will facilitate investments through policy dialogue; technical support for project preparation, including economic valuation of natural capital costs and benefits; as well as green and blue financing mechanisms. Such investments will seek to provide multiple benefits, including support for livelihoods, food security, and livable cities.

### Box 1: ADB Action Plan for Healthy Oceans and Sustainable Blue Economies and the ADB Oceans Financing Initiative

The Action Plan for Healthy Oceans and Sustainable Blue Economies (launched in May 2019) commits Asian Development Bank (ADB) to expanding its investments and technical assistance in ocean health and the blue economy to \$5 billion between 2019 and 2024. The action plan has four focus areas:

- (i) blue economy: creating inclusive livelihood and business opportunities in sustainable tourism and fisheries;
- (ii) ecosystem management: protecting and restoring coastal and marine ecosystems and key rivers;
- (iii) pollution control: reducing land-based sources of marine pollution including plastics, wastewater, and agricultural runoff; and
- (iv) sustainable infrastructure: improving sustainability in port and coastal infrastructure development.

To achieve the action plan, it highlights the importance of catalyzing the use of high-level and digital technologies; strengthening policy and regulatory frameworks; sharing knowledge; supporting regional cooperation; and engaging women, youth, and communities.

The ADB Oceans Financing Initiative will support developing member countries to develop bankable investments across the four focus areas of the Action Plan for Healthy Oceans and Sustainable Blue Economies. It includes the following support:

- (i) blue finance frameworks: developing detailed principles, criteria, and indicators for selecting projects and measuring impacts;
- (ii) bankable projects: working with governments and other partners to develop innovative and bankable projects;
- (iii) innovative instruments: supporting the development of financing mechanisms that reduce investment risks, such as blue bonds, blue credits for avoided cost, and first loss guarantees; and
- (iv) access to funds: increasing access to funds from ADB, development partners, donors, and the private sector.

The initiative will first be piloted in Southeast Asia with support from the Association of Southeast Asian Nations (ASEAN) Catalytic Green Finance Facility (under the ASEAN Infrastructure Fund), the Republic of Korea, and Worldwide Fund for Nature.

Source: ADB. 2019.

62. **Crosscutting areas to address pollution and natural capital degradation.** In addition to the activities mentioned in paragraphs 52–61, ADB will take a comprehensive, crosscutting approach to help address the issues from multiple perspectives, particularly infrastructure, governance, business, and finance.

63. **Sustainable infrastructure design.** ADB will strengthen the integration of sustainable design principles into infrastructure planning and design. This can include promoting and understanding of disaster risk as well as smart and green infrastructure planning and design, integrating biodiversity; resource use efficiency, including sustainable sourcing of materials across supply chains; improved energy and water efficiency; and pollution management. ADB will facilitate support for infrastructure planning by providing technical and knowledge services as well as training based on best practices. ADB will focus its efforts to support the integration of biodiversity and ecosystem services on linear infrastructure such as roads and railways, renewable energy and transmission and distribution lines, biodiversity in agriculture landscapes, and environmental flows in hydropower projects. ADB will ensure that biodiversity is fully protected and that pollution impacts and risks are addressed by conducting assessments and integrating solutions into the project design and implementation,



building on the experience in, for example, developing a state-of-the-art power plant in Bangladesh that adopted zero-discharge technology thereby minimizing its water consumption and impacts on the endangered Ganges River dolphin. To monitor and protect wildlife, ADB will promote the use of advanced technologies, remote sensing, and cameras with artificial intelligence to transmit monitoring images in real time.

64. **Environmental governance.** ADB will support DMCs in strengthening their capacity to integrate the environmental dimensions of the SDGs into their national policies, plans, and programs and to address implementation issues so that green growth can be driven domestically and sustained. ADB will support DMCs on the preparation of policy and regulatory reforms to address environmental and climate change challenges, for example, using market-based instruments to drive reforms, including incentives for private sector action, and where appropriate, conducting strategic environmental assessments for national, subnational, and sector planning.

65. ADB will give greater attention to the monitoring and enforcement of existing environmental laws and regulations, including for those covering pollution control and wildlife trafficking. To combat environmental crime, ADB will support legal and institutional reforms, capacity building in law enforcement and adjudication, and measures to reduce demand for illegal wildlife products through large-scale awareness and behavior change campaigns. ADB will also continue to support the strengthening of country safeguard systems to assist DMCs in developing systems and capacity consistent with international best practices. This includes further strengthening of stakeholder engagement, meaningful consultation and grievance redress mechanisms, with attention to risks to vulnerable groups. ADB will also consider selected use of these systems following the requirements in the Safeguard Policy Statement (2009) and building off of lessons learned from current work on the assessment of country safeguard systems in India, Indonesia, and Sri Lanka.

66. **Green businesses, jobs, and technologies.** Transitions to low-carbon and environmentally sustainable growth will create and expand new business opportunities and require new technologies and job skills in areas such as clean energy, pollution control, ecosystem management, and environmental monitoring. ADB can support this transition through technical and vocational education and training, as well as engagement with the private sector on emerging labor market needs. ADB will also continue and expand its support to green business development to more effectively mobilize private sector resources for green growth. In line with this, ADB will continue to support DMCs in promoting policy reforms, knowledge, and capacity building to enable greater private sector participation in environmental management through TA to promote green business development in country plans and programs. ADB will also continue to support and expand investments in infrastructure and technologies that reduce pollution and increase resource efficiency in the private sector, such as clean energy and wastewater treatment, and scale up sustainable agribusiness, including measures to green supply chains. Additionally, ADB will explore private sector investments promoting markets for environmental goods and services by entering new areas such as sustainable tourism. In all these areas, sound environmental management will be supported, including application of ADB's Safeguard Policy Statement.

67. Further, ADB will work to promote the efficient use of natural resources and the greening of supply chains by advocating corporate sustainability planning and certification programs. This can build off, for example, recent efforts to improve the resilience of Mongolia's cashmere garment industry. ADB's tourism sector support will also help develop public infrastructure and environmental

management of tourist destinations and help catalyze private investment and job creation. ADB will also consider financing of sustainability initiatives by small and medium-sized enterprises across different sectors.

68. **Water–food–energy security nexus.** ADB will strengthen its support to ensure that nexus considerations and solutions are incorporated in sector operations, such as through its country water assessments and knowledge activities.<sup>25</sup> ADB will raise awareness of the nexus and provide guidance on how to address interdependencies in operations as a part of the knowledge support agenda. This will involve examining both the possible benefits of taking a more cross-sector perspective and the need to deal with trade-offs where necessary. For instance, in Viet Nam, a link was identified between water productivity in irrigation and the energy use in producing fertilizer. It showed that the extra energy demand for pumping in drip and sprinkler irrigation systems can be offset by energy savings from reduced fertilizer use associated with targeted irrigation applications. In the PRC, ADB carried out a comprehensive analysis of water use in energy production, demonstrating the close links between water and energy sectors. It calls for a range of planning, regulatory, and market-based approaches for minimizing the impact of energy production and consumption on water resources.<sup>26</sup>

69. In addition, ADB will assist DMCs to formulate public policies and investments to help decision makers allocate and rationally manage water use across the food, energy, industrial, and municipal spectrum in the context of integrated water resources management, while also taking into account considerations of environmental sustainability and GHG emissions.<sup>27</sup> Action plans prepared will describe design and implementation arrangements to address the increased demand for food and water, supported by effective global partnerships in knowledge, innovation, policy research, and finance. The nexus also requires integration across ADB operations at policy, strategy, program, and project levels; a focus will be on ensuring policy coherence, thereby providing a common impact pathway to more efficient resource use. At the program and project level, ADB will introduce interventions to encourage innovative cross-sector designs that enhance the envelope of benefits, and highlight those projects where attention is needed to address negative influences on other sectors through mitigation measures.

---

<sup>25</sup> The water operational plan already recognized the interconnectivity among water, food, and energy and that interventions in one sector can have consequences for other sectors. Its 2018 midterm review re-emphasized that pursuing integrated solutions is essential to achieve maximum development impact as well as efficiency and sustainability.

<sup>26</sup> ADB. 2017. *Water–Energy Nexus in the People’s Republic of China and Emerging Issues*. Manila.

<sup>27</sup> ADB. 2011. *Water Operational Plan, 2011–2020*. Manila.



# IMPLEMENTATION

## A. Interdepartmental Cooperation

70. Cooperative mechanisms are in place to support the implementation of the operational plan within ADB. Thematic and sector groups relevant to promoting, integrating, and operationalizing approaches under this operational plan have committees with representation from various departments, including operations departments (Appendixes 1 and 2). Departmental representatives are actively contributing to the mainstreaming of climate change, climate and disaster resilience, and environmental sustainability into their operations. In addition, ADB will convene an interdepartmental “oceans group” to coordinate and support the implementation of the Action Plan for Healthy Oceans and Sustainable Blue Economies (footnote 6).

## B. Strategic Partnerships and Coordination

71. **Promote dialogue on climate change, disaster, environment, and nexus issues.** ADB clean energy, transport, and water forums bring together representatives of DMC governments, investors, finance institutions, technology suppliers, development partners, and other stakeholders to discuss emerging issues in various sectors. ADB will continue to use available opportunities to support and to participate in global, regional, and national dialogues. Similarly, ADB will continue to support and to participate in national and regional initiatives to raise awareness of and to identify solutions for the water–food–energy nexus, particularly processes that go beyond the sector-based forums and capitalize on its convening strength within sectors in DMCs to promote new ideas.

72. **Support global and regional policy processes.** ADB will continue to support and participate in regional and global processes, including the Conference of the Parties to the United Nations Framework Convention on Climate Change, Global Platform for Disaster Risk Reduction, ministerial conferences on disaster risk reduction, biennial Asia-Pacific climate change adaptation forums, World Economic Forum, and Association of Southeast Asian Nations and Asia-Pacific Economic Cooperation meetings. ADB will also support and participate in key regional and global forums and processes on oceans health and blue economy.<sup>28</sup>

---

<sup>28</sup> There is no widely accepted definition of blue economy. The World Wide Fund for Nature defines a sustainable blue economy as a marine-based economy that: (i) provides social and economic benefits for current and future generations; (ii) restores, protects, and maintains the diversity, productivity, resilience, core functions, and intrinsic value of marine ecosystems; (iii) is based on clean technologies, renewable energy, and circular material flows. The blue economy, which includes livelihoods and other economic benefits derived from oceans, is estimated at between \$3 trillion to \$6 trillion per year globally.

73. **Improve collaboration and coordination among multilateral development banks and other development partners.** Multilateral development banks (MDBs) and bilateral financing institutions are committed to scaling up support, individually and collectively, for their developing country clients to enable them to deliver on the 2030 Agenda for Sustainable Development. MDBs have initiated some workstreams to collaborate and coordinate on issues such as climate adaptation, climate finance tracking and reporting, environmental and social standards and practices, and measuring finance mobilized from private sector, and these will continue to be built upon and strengthened. For example, ADB will look to strengthen collaboration between MDBs on ocean health issues (such as marine pollution), blue economy development and blue finance, including development of a blue finance framework and innovative financing mechanisms.<sup>29</sup>

74. Further, MDBs are elaborating a framework to make their operations aligned with the Paris Agreement on Climate Change based on six building blocks, including aligning their operations with mitigation and climate resilience goals, ramping up climate finance, providing capacity-building support for countries and other clients, and emphasizing climate reporting (see Box 2). Participation in platforms and mechanisms such as the NDC Partnership and the InsuResilience Global Partnership can also help enhance collaboration among MDBs.

75. Collaboration with development finance institutions on environmental and social standards focus on harmonization in project implementation, capacity building, and promotion of international good practices in project design and implementation. Partnerships with the United Nations agencies on the environment and with international and regional networks, institutions, and nongovernment organizations will be leveraged to tap into the expertise, resources, and networks of these organizations.

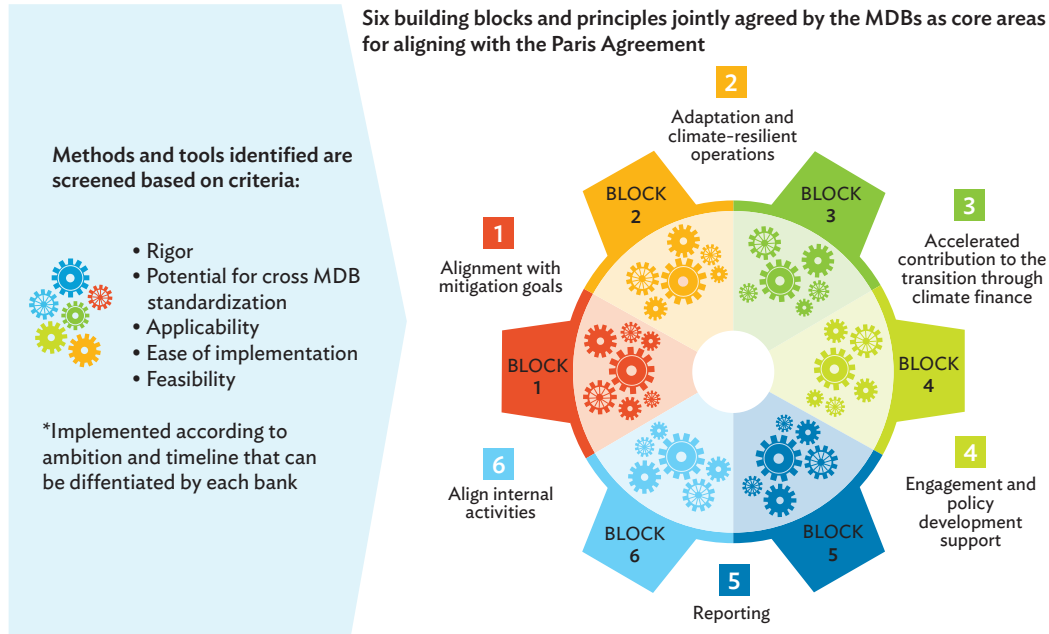
76. **Develop new forms of collaboration.** Given the dynamic developments in technology, finance, and policy knowledge and needs, as well as the wealth of available knowledge and opportunities for partnership, ADB will explore and develop new modalities for collaboration. A priority will be to periodically bring together key actors involved in development and climate finance, such as institutional investors, commercial finance, infrastructure funds, and insurance companies, to improve awareness of challenges and opportunities. In addition, ADB will explore engaging with such partners through temporary secondments or staff exchange programs, interactive e-learning tools, more flexible rules of engagement with nonstate actors, deeper collaboration with think tanks and universities, and other modalities.

---

<sup>29</sup> Blue finance refers to funds for marine conservation.

### Box 2. Aligning ADB Operations with the Paris Agreement on Climate Change

Going beyond the specific 2030 climate (finance) targets, in 2018, the Asian Development Bank (ADB) and other multilateral development banks (MDBs) committed to aligning all new operations against the mitigation and climate-resilience goals of the Paris Agreement, ramping up climate finance, providing capacity-building support for countries and other clients, plus an emphasis on climate reporting. Below illustrates the six building blocks and principles jointly agreed by the MDBs as core areas for aligning with the Paris Agreement.



Concretely, ADB will start monitoring and reporting on “Paris-aligned” and “non-aligned” finance flows. This will be based on assessing if projects are consistent with the different countries’ low-emissions development pathways, and if they are compatible with the overall climate change mitigation objectives of the Paris Agreement.

With regards to adaptation, ADB will continue to actively manage climate change risks and identify opportunities to make ADB operations more adaptive and resilient against the impacts of climate change. Non-aligned projects can still be financed, but in those cases developing member countries should be engaged on putting in place long-term strategies and accelerate the transition to low-emissions and climate-resilient development pathways.

Source: ADB. 2018. MDBs Announce Joint Framework to Combat Climate Change. News release. 3 December.

## C. Emerging Areas

77. Emerging areas requiring increased expertise and knowledge are:

- Climate change.** This includes climate change mitigation in land use, land-use change, and forestry; private sector adaptation investment; access to climate finance; and innovative financing.

- (ii) **Disaster risk management.** This includes community resilience, resilient infrastructure, and disaster risk financing.
- (iii) **Environment.** This includes water and air quality management, integrated solid waste management, recycling technologies and circular economy; natural capital conservation and restoration, including ocean health; blue economy (fisheries and tourism); nature-based approaches for environmental management; and occupational and community health and safety.
- (iv) **Water–food–energy nexus.** This involves water efficiency and productivity, integrated water resources management, water–energy nexus, and water financing and governance.

## D. Knowledge Priorities

78. **Develop knowledge solutions and capacity development support.** ADB will help improve access to knowledge and information, including country-level and subnational data on climate impact, policy, finance, and projects and on disaster risk; refine understanding of the economic impact and benefits of climate mitigation and climate and disaster resilience; enhance readiness for accessing external climate finance; capture and disseminate lessons from scaling up climate finance; and implement targeted training and awareness-raising programs in climate change, climate and disaster resilience, and the environment. For the environment, ADB will develop knowledge on application of new technologies and best practice, along with analyses of investment constraints and opportunities, and new finance mechanisms.

79. **Strengthen partnerships and networks.** ADB will support knowledge and action networks; promote regional dialogue on climate, disaster risk, environment, oceans, and water–food–energy nexus issues; coordinate support for NDC implementation with other development partners; support international climate and disaster risk policy processes; enhance collaboration and coordination among MDBs including on key ocean health issues; and develop new forms of collaboration with nonstate actors, academia, and other stakeholders. ADB will also develop partnerships in emerging areas of work such as air pollution and health, the circular economy, and ocean health.

# IV

## STRATEGY 2030 OPERATIONAL PRIORITY RESULTS

80. The following are the Strategy 2030 operational priority results under the operational plan. These will be monitored under ADB’s corporate results framework<sup>30</sup> and will be reported annually in the Development Effectiveness Review.

| Pillar | Description                            | Indicator with Achievement Rate Target  | Sub-pillars   |
|--------|--|---|---|
| 1      | Mitigation of climate change increased | Total annual greenhouse gas emissions reduction in tons of carbon dioxide equivalent per year | <ul style="list-style-type: none"> <li>Access to climate finance increased</li> <li>DMCs capacity to implement climate actions enhanced</li> <li>Low-carbon infrastructure improved</li> <li>Renewable energy capacity increased</li> <li>Low-carbon development solutions implemented</li> </ul>   |
| 2      | Climate and disaster resilience built  | People with strengthened climate and disaster resilience                                      | <ul style="list-style-type: none"> <li>Integrated flood risk management measures supported</li> <li>Resilience-building initiatives implemented</li> <li>Finance preparedness for post-disaster response enhanced</li> <li>Planning for climate change adaptation and disaster risk management improved</li> <li>Infrastructure assets made more resilient</li> </ul>   |
| 3      | Environmental sustainability enhanced  | People benefitting from strengthened environmental sustainability                             | <ul style="list-style-type: none"> <li>Pollution control infrastructure assets implemented</li> <li>Pollution control and resource efficiency solutions promoted and implemented</li> <li>Conservation, restoration, and enhancement of terrestrial, coastal, and marine areas implemented</li> <li>Solutions to conserve, restore, and/or enhance terrestrial, coastal, and marine areas promoted and implemented</li> <li>Water, food, and energy security nexus addressed</li> </ul> |

DMC = developing member country.

<sup>30</sup> ADB. 2019. *ADB Corporate Results Framework, 2019-2024*. Manila



# APPENDIX 1

# CONTRIBUTION OF SECTOR AND THEMATIC AREAS TO THE OPERATIONAL PLAN

| Sector and Thematic Group | Contribution to Operational Plan: Tackling Climate Change, Building Climate Resilience, and Enhancing Environmental Sustainability  |
|---------------------------|---|
| Education                 | <p>Ensure that the curriculum across education levels reflects the importance of sustainability and that teachers and other officials are trained accordingly.</p> <p>Support environment-friendly and climate- and disaster-resilient new social infrastructure and retrofit existing education buildings to enhance efficiency and to demonstrate such practices.</p> <p>Target skills development of new entrants and existing workers for green jobs with relevant partners.</p>  |
| Energy                    | <p>Increase deployment and adoption of low-carbon technologies in renewable energy projects to contribute to the reduction of greenhouse gas (GHG) emissions.</p> <p>Increase supply- and demand-side energy efficiency to contribute to the reduction of GHG emissions and to temper the need for additional power generation.</p>   |
| Finance                   | <p>Develop financial policy and solutions to catalyze investments toward low-carbon projects and green infrastructure, risk transfer and risk sharing within the broader context of smart climate solutions, and comprehensive and sustainable disaster risk management.</p> <p>Implement the Asian Development Bank (ADB) Oceans Financing Initiative to support ADB developing member countries (DMCs) to catalyze financing for projects that will help protect and restore marine ecosystems and promote sustainable blue economies. The initiative will leverage public sector funds to create investment opportunities able to attract financing from a range of sources, including the private sector.</p> |
| Health                    | <p>Institute actions to mitigate and enhance the climate change and disaster resilience of health facilities and the health system, in general, such as through adopting low-carbon technologies and decreasing medical waste.</p> <p>Monitor direct and indirect costs of adverse health impacts of climate change and disasters.</p>  |
| Transport                 | <p>Encourage mitigation, adaptation, disaster resilience, and environmental sustainability.</p> <p>Improve environmental sustainability in port and coastal transport infrastructure development.</p>   |
| Urban                     | <p>Support cities in mainstreaming urban climate change resilience and disaster risk considerations in urban planning, policy development, and investment decision processes, possibly aided by information and communication technology and geospatial tools for better decision making.</p> <p>Support the promotion of a transit modal shift including mass transport and nonmotorized modes as a way to reduce dependence on fossil fuels.</p>  |



| Sector and Thematic Group | Contribution to Operational Plan: Tackling Climate Change, Building Climate Resilience, and Enhancing Environmental Sustainability  |
|---------------------------|---|
|                           | <p>Support investments in urban flood protection systems as well as measures to climate-proof urban infrastructure utilities.</p> <p>Generalize the use of smart technologies to improve city environmental performance, monitoring, and management.</p> <p>Develop comprehensive disaster-resilient solid waste management systems from collection to disposal, including considerations for investing in waste-to-energy technologies.</p> <p>Implement an urban water cycle approach to encourage water reuse and energy-efficient systems in wastewater management, as well as the use of nature- and eco-based solutions and recovery and reuse of biosolids.</p> <p>Increase diversification of water resources and their improved management for cities to anticipate and minimize water crises.</p> <p>Prioritize the use of renewable energy in urban services.</p>  |
| Water                     | <p>Strengthen integrated water resources management and climate and disaster resilience in ADB operations, including improved risk management to mitigate floods, droughts, coastal erosion, and other water-related disasters.</p> <p>Promote the sustainable use of surface and groundwater resources and protection and restoration of freshwater, coastal, and marine ecosystems.</p> <p>Support the improved management and reduction of point and nonpoint source pollution of freshwater and the marine environment from urban centers, industry, agriculture, and other land-based sources of pollution.</p> <p>Promote cross-sector approaches to address the water-food-energy nexus including improvements in water productivity.</p>  |
| Gender                    | <p>Assist DMCs in accelerating integration of gender equality in national and subnational policies, strategies, and action plans on climate change and disaster risk management in line with global commitments.</p> <p>Expand green and brown job opportunities for women and access to finance for women-owned and women-led green businesses.</p> <p>Support the engagement of women in addressing ocean health issues and benefiting from blue economy opportunities (e.g., through support for expanding inclusive livelihood and business opportunities in sustainable tourism and fisheries).</p> <p>Build women's resilience to climate change and disaster impacts and environmental degradation through greater access to climate-smart technologies; diversification of livelihoods and asset building; disaster insurance and other financial safety nets; participation in community-led solutions (e.g., early warning systems, community infrastructure designs, and use of knowledge in nature-based solutions); enhanced knowledge, preparedness, and skills; and active participation in related decision-making process at all levels.</p> |
| Governance                | <p>Sharpen analysis of the political economy of climate change and disaster risk management interventions to inform policy and institutional development and reform.</p> <p>Support strengthening of policy and regulatory frameworks for good governance of natural resources and environmental management.</p>  |

| Sector and Thematic Group  | Contribution to Operational Plan: Tackling Climate Change, Building Climate Resilience, and Enhancing Environmental Sustainability   |
|--|--|
| Rural Development and Food Security (Agriculture)                            | <p>Scale up climate-smart agriculture, flood risk management, drought resilience, and sustainable agribusiness value-chain development to transform the food system into a more productive, resilient, and cost- and resource-efficient food supply system.</p> <p>Integrate highly scattered food and input markets and agribusiness value chains with upgraded transport, logistics and market infrastructure, and policy reforms to reduce food and resource waste in collaboration with private companies and farmer groups.</p> <p>Scale up the adoption of clean technologies, safe biotechnologies, mechanization, and digital technology applications to develop a system to supply more food with less water, energy, and labor.</p> <p>Scale up the adoption of sustainable agriculture practices to align them with national and industry standards.</p> <p>Support sustainable carbon sink development and conservation of biodiversity, such as sustainable watershed management, agroforestry and conservation forestry, and coastal resource management, leveraging private conservation investment funds.</p> <p>Support the improved management and reduction of nonpoint source pollution of the marine environment from agriculture.</p> <p>Scale up support for the sustainable development of fisheries.</p> <p>Encourage landscape-based multisector investments to address the water-food-energy nexus.</p> |
| Regional Cooperation and Integration   | <p>Support technology transfer and diffusion operations for clean energy and climate-friendly agriculture, low-carbon mainstreaming in cross-border transport operations in support of sustainable production networks and value chains, regional emissions trading, and regional disaster risk financing.</p> <p>Support regional cooperation on ocean health issues, transboundary marine ecosystems, and the development of marine economies through policy dialogue, action, and investment planning.</p>  |
| Public-Private Partnership   | <p>Support requests from regional departments that reflect their emphasis on promoting activities for scaling up support for private sector investment in climate adaptation and mitigation through clean energy, sustainable transport projects, urban development interventions, circular economy, and blue economy.</p>   |
| Operational Plan 1 (Addressing remaining poverty, and reducing inequalities) | <p>Advance innovations in technology to improve delivery systems, and strengthen efforts toward building resilience, including climate and disaster resilience, among vulnerable populations.</p> <p>Develop enabling environment for generating quality jobs. Forecast-based financing, linking weather forecasts and early warning systems to social protection, can help trigger timely humanitarian action or deliver cash transfers in advance of shocks and stresses.</p> <p>Employ approaches such as developing graduation approaches that build on conditional cash transfer and livelihood programs, addressing disability inclusion, developing elderly care, and strengthening cross-sector collaboration including in the area of disaster and climate resilience of poor households and communities.</p> <p>Optimize the “One ADB” principle by strengthening collaboration between human capital, climate change and disaster risk management, and livable cities teams to address water, climate change, disaster resilience, and transport where there are clear benefits and established evidence for improved outcomes.</p>   |

| Sector and Thematic Group   | Contribution to Operational Plan: Tackling Climate Change, Building Climate Resilience, and Enhancing Environmental Sustainability   |
|---|--|
| Operational Plan 2<br>(Accelerating progress in gender equality)      | <p>Assist DMCs in accelerating integration of gender equality in national and subnational policies, strategies, and action plans on climate change and disaster risk management in line with global commitments.</p> <p>Expand green (and brown) job opportunities for women (e.g., renewable energy, urban solid waste recycling, ecotourism, climate-smart agribusiness) and access to finance for women-owned/led green businesses</p> <p>Build women's resilience to climate change and disaster impacts and environmental degradation through greater access to: (i) climate-smart technologies; (ii) diversification of livelihoods and asset building; (iii) disaster insurance and other financial safety nets; (iv) participation in community-led solutions (e.g., early warning systems, community infrastructure designs, use of knowledge in nature-based solutions); (v) enhanced knowledge, preparedness, and skills; (vi) active participation in related decision-making process at all levels (including support to women's groups' access to climate financing).</p>  |
| Operational Plan 4 (Making cities more livable)                       | <p>Support cities in mainstreaming urban climate change resilience and disaster risk considerations in urban planning, policy development, and investment decision processes - possibly aided by ICT and geospatial-based tools for better decision making.</p> <p>Support the promotion of transit modal shift including mass transport and nonmotorized modes as a way of reducing dependence to fossil fuels.</p> <p>Support investments on urban flood protection systems and measures to climate and disaster-proof urban infrastructure utilities.</p> <p>Generalize use of smart technologies to improve city environmental performance monitoring and management (water losses and energy consumption, solid waste, etc.).</p> <p>Develop comprehensive, climate- and disaster-resilient solid waste management systems - from collection to disposal, including considerations for investing in waste-to-energy technologies.</p> <p>Implement an 'urban water cycle' approach to encourage the use of water re-use and energy efficient systems in wastewater management, as well as the use of nature-based and eco-based solutions and the recovery and reuse of biosolids.</p> <p>Increase diversification of water resources for cities (surface water, ground water, desalination, rainwater) to anticipate and minimize water crisis occurrences.</p> <p>Prioritize the use of renewable energy in urban services.</p> |
| Operational Plan 5<br>(Promoting rural development and food security) | <p>Upscale Climate Smart Agriculture, flood mitigation, drought resilience and sustainable agribusiness value chain development to transform the food system into more productive, resilient, and cost- and resource efficient food supply system.</p> <p>Integrate highly scattered food and input markets and agribusiness value chains with upgraded transport, logistics and market infrastructure and policy reforms to reduce food and resource wastes in collaboration with private companies and farmers' groups.</p> <p>Scale up the adoption of clean technologies, safe biotechnologies, mechanization and digital technology applications to develop a system to supply more food with less water, energy, and labor.</p> <p>Scale up the adoption of sustainable agricultural practices such as Good Agriculture Practice to align them with national and industry standards in DMCs.</p> <p>Support sustainable carbon sink development and conservation of biodiversity, such as sustainable watershed management, agroforestry and conservation forestry, and coastal resource management, leveraging private conservation investment funds.</p> <p>Encourage landscape-based multisectoral investment to address the water-food-energy-climate change nexus.</p>  |

| Sector and Thematic Group   | Contribution to Operational Plan: Tackling Climate Change, Building Climate Resilience, and Enhancing Environmental Sustainability   |
|---|--|
| Operational Plan 6<br>(Strengthening governance and institutional capacity) | <p>Support good governance and better performing institutions for achievement of risk-informed development and enable efficient use of climate funds to increase government readiness to respond to disasters and strengthen climate and disaster resilience.</p> <p>Sharpen analysis of political economy of climate change and disaster risk management interventions to inform policy and institutional reform.</p> <p>Promote increased public sector investments in renewable energy development in a conducive policy environment that incentivizes public-private partnerships.</p> |
| Operational Plan 7 (Fostering regional cooperation and integration)         | <p>Promote technology transfer/diffusion for clean energy and climate friendly agriculture.</p> <p>Promote low carbon cross-border transport operations (e.g. railways, ports) in support of sustainable production networks and value chains.</p> <p>Promote of regional emissions trading and regional disaster risk financing.</p>  |

Source: ADB. 2019

# APPENDIX 2

## INTERDEPARTMENTAL COOPERATION MATRIX

| Group or Department   | Membership and Representation   |
|---|---|
| <p><b>Climate Change and Disaster Risk Management Thematic Group Committee</b></p> <p>Deliver an enhanced program of assistance to ADB and DMCs through strategic guidance, technical support, and knowledge leadership to address both the causes and consequences of climate change and disaster risks.</p> | <ul style="list-style-type: none"> <li>(i) Co-chair: Director, Energy Division, South Asia Department</li> <li>(ii) Chief of Rural Development and Food Security Thematic Group</li> <li>(iii) Deputy Director General, Private Sector Operations Department</li> <li>(iv) Director, Regional Cooperation and Operations Coordination Division, Central and West Asia Department</li> <li>(v) Principal Climate Change Specialist, Environment, Natural Resources, and Agriculture Division, Southeast Asia Department</li> <li>(vi) Principal Climate Change Specialist, Energy Division, Southeast Asia Department</li> <li>(vii) Assistant Treasurer, Funding Division, Treasury Department</li> <li>(viii) Director, Urban Development and Water Division, Southeast Asia Department</li> <li>(ix) Resident mission representative</li> <li>(x) Chief of Governance, Thematic Service Advisory Cluster</li> <li>(xi) Deputy Director General, Pacific Department</li> <li>(xii) Deputy Director General, Economic Research and Regional Cooperation Department</li> <li>(xiii) Director, Sustainable Infrastructure Division, East Asia Department</li> <li>(xiv) Director, Energy Division, Central and West Asia Department</li> <li>(xv) Director, Safeguards Division, Sustainable Development and Climate Change Department</li> <li>(xvi) Principal Planning and Policy Economist, Operations Planning and Coordination Division, Strategy, Policy and Partnerships Department</li> <li>(xvii) Senior Counsel, Office of the General Counsel</li> </ul> |

| Group or Department  | Membership and Representation  |
|--|--|
| <p><b>Environment Thematic Group Committee</b></p> <p>Contribute to mainstreaming environmental sustainability; provide specialist inputs and project support; author peer reviews and environmental impact assessments; develop new focus areas; disseminate best practices, project information, and new knowledge; enhance links with external networks and partners; and provide advice on external learning events.</p> | <ul style="list-style-type: none"> <li>(i) Co-chair: Director, Environment, Natural Resources and Agriculture Division, Southeast Asia Department</li> <li>(ii) Director, Environment, Natural Resources and Agriculture Division, Central and West Asia Department</li> <li>(iii) Director, Environment, Natural Resources and Agriculture Division, East Asia Department</li> <li>(iv) Advisor and Head, Portfolio, Results, &amp; Quality Control Unit, Pacific Department</li> <li>(v) Director, Environment, Natural Resources and Agriculture Division, South Asia Department</li> <li>(vi) Director, Climate Change and Disaster Risk Management Division, Sustainable Development and Climate Change Department; concurrently Chief of Climate Change and Disaster Risk Management Thematic Group</li> <li>(vii) Principal Investment Specialist, Office of the Director General, Private Sector Operations Department</li> <li>(viii) Principal Counsel, Office of the General Counsel</li> </ul> |
| <p><b>Climate Change Steering Committee</b></p> <p>Provide strategic direction for the Climate Change Fund (CCF); and approve policies, procedures, and membership of CCF working groups for the operation of the CCF.</p>   | <ul style="list-style-type: none"> <li>(i) Chair: Director General, Sustainable Development and Climate Change Department</li> <li>(ii) Director General, Central and West Asia Department</li> <li>(iii) Director General, East Asia Department</li> <li>(iv) Chief Economist and Director General, Economic Research and Regional Cooperation Department</li> <li>(v) Director General, Private Sector Operations Department</li> <li>(vi) Director General, Pacific Department</li> <li>(vii) Director General, South Asia Department</li> <li>(viii) Director General, Southeast Asia Department</li> </ul>  |
| <p><b>Clean Energy Working Group</b></p> <p>Review and make recommendations on clean energy activities to be supported by the CCF.</p>   | <ul style="list-style-type: none"> <li>(i) Chair: Chief of Energy Sector</li> <li>(ii) Co-chair: Director, Central and West Asia Department</li> <li>(iii) Operations department representatives from Central and West Asia Department, East Asia Department, Economic Research and Regional Cooperation Department, Pacific Department, Private Sector Operations Department, South Asia Department, and Southeast Asia Department</li> </ul>   |
| <p><b>Adaptation and Land-Use Working Group</b></p> <p>Review and make recommendations on activities related to adaptation and land use.</p>   | <ul style="list-style-type: none"> <li>(i) Chair: Director, Climate Change and Disaster Risk Management Division, Sustainable Development and Climate Change Department; concurrently Chief of Climate Change and Disaster Risk Management Thematic Group</li> <li>(ii) Principal Climate Change Specialist, Environment, Natural Resources, and Agriculture Division, Southeast Asia Department</li> </ul>  |

| Group or Department | Membership and Representation   |
|---------------------|---|
|                     | <ul style="list-style-type: none"> <li>(iii) Chief of Environment Thematic Group</li> <li>(iv) Director, Safeguards Division, Sustainable Development and Climate Change Department</li> <li>(v) Principal Climate Change Specialist, Energy Division, Pacific Department</li> <li>(vi) Advisor, Office of the Director General, South Asia Department</li> <li>(vii) Climate Change Specialist, Environment, Natural Resources and Agriculture Division, East Asia Department</li> <li>(viii) Principal Safeguards Specialist, Private Sector Transaction Support Division, Private Sector Operations Department</li> <li>(ix) Climate Change Specialist, Environment, Natural Resources and Agriculture Division, Central and West Asia Department</li> <li>(x) Senior Water Resources Specialist, Water Sector Group, Sustainable Development and Climate Change Department</li> </ul> |

#### **Treasury Department**

Mobilize and manage ADB green bonds to support low-carbon and climate- and disaster-resilient projects.

#### **Office of the General Counsel**

Assist DMCs in assessing and developing their legal frameworks to encourage climate action and disaster resilience and to enable climate investments.

#### **Economic Research and Regional Cooperation Department**

Provide direction and advice on the use of shadow pricing of greenhouse gas emissions as present in the ADB Guidelines for the Economic Analysis of Projects (2017).<sup>a</sup>

Collaborate on producing knowledge including technical reports, working papers and other publications that are useful for ADB operations in scaling up climate, disaster risk management, environment, and water–food–energy nexus initiatives.

#### **Strategy, Policy, and Partnerships Department**

Provide additional guidance on results framework indicators and planning directions and overall advice on implementing operational plans under Strategy 2030.<sup>b</sup>

ADB = Asian Development Bank, DMC = developing member country.

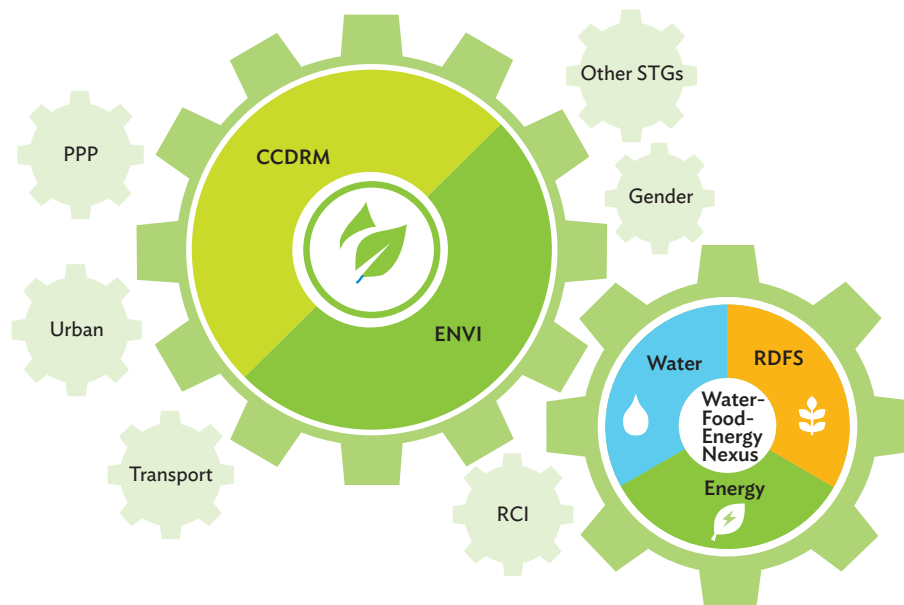
<sup>a</sup> ADB. 2017. Guidelines for the Economic Analysis of Projects. Manila.

<sup>b</sup> ADB. 2018. Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific. Manila.

Source: Asian Development Bank.

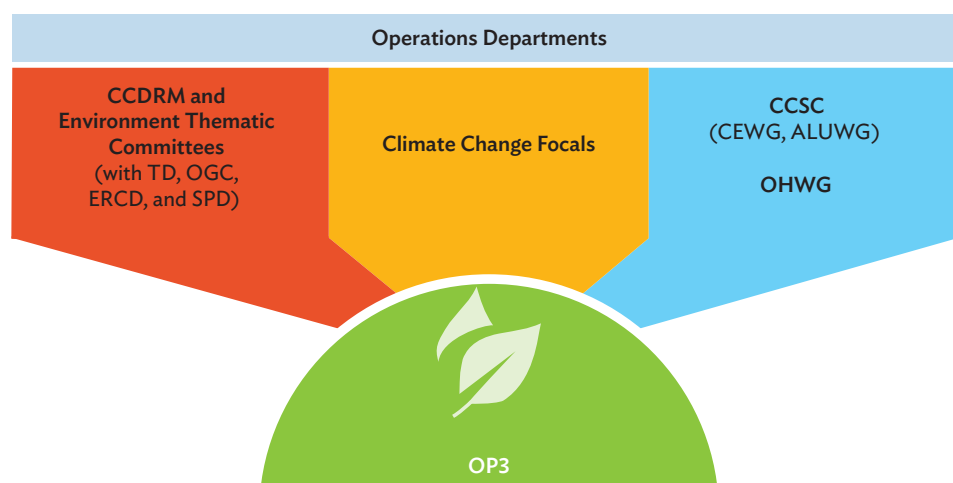
## Implementing Operational Priority 3 Across ADB

Figure A1: Sector and Thematic Group Linkages to Operational Priority 3



CCDRM = climate change and disaster risk management, ENVI = Environment Thematic Group, PPP = public-private partnership, RCI = regional cooperation and integration, RDFS = rural development and food security, STGs = sector and thematic groups.  
Source: Asian Development Bank. 2019.

Figure A2: One ADB Approach in Implementing Operational Priority 3



ALUWG = Adaptation and Land-Use Working Group, CCDRM = climate change and disaster risk management, CCSC = Climate Change Steering Committee, CEWG = Clean Energy Working Group, ERCD = Economic Research and Regional Cooperation Department, OGC = Office of the General Counsel, OHWG = Ocean Health Working Group, SPD = Strategy, Policy, and Partnerships Department, TD = Treasury Department.

Source: Asian Development Bank. 2019.



## APPENDIX 3

# EVOLUTION OF ADB'S CLIMATE CHANGE AND DISASTER RISK MANAGEMENT PROGRAM

| Year      | Strategic Directions  | CCDRM Initiatives   | Knowledge/ Partnerships  |
|-----------|---|---|--|
| 1987-2004 | <ul style="list-style-type: none"> <li>• Management directive regarding global environment concerns issued</li> <li>• ADB observer status at UNFCCC</li> <li>• Disaster and Emergency Assistance Policy approved</li> <li>• Renewable Energy, Energy Efficiency and Climate Change Program established</li> </ul> | <ul style="list-style-type: none"> <li>• TA: Asia Least-Cost GHG Abatement Strategies, and Building Capacity in Implementing the Kyoto Protocol</li> <li>• TA: Promotion of Renewable Energy, Energy Efficiency and Greenhouse Gas Abatement</li> </ul> | <ul style="list-style-type: none"> <li>• Study on Adaptation Strategies for the Pacific</li> </ul> |

| Year      | Strategic Directions  | CCDRM Initiatives  | Financing  | Knowledge/ Partnerships   |
|-----------|---|--|--|---|
| 2005-2009 | <ul style="list-style-type: none"> <li>• Clean energy target under the New Energy Policy: \$2 billion by 2013</li> <li>• First Asia Clean Energy Forum (2006)</li> <li>• Climate change part of environment sustainability agenda in Strategy 2020</li> <li>• Climate Change Program Coordination Unit established</li> <li>• ADB President's Advisory Group on CC and SD formed</li> </ul> | <ul style="list-style-type: none"> <li>• Cities Development Initiative for Asia founded</li> </ul> | <ul style="list-style-type: none"> <li>• Asian Tsunami Fund, Pakistan Earthquake Fund, and Asia Pacific Disaster Response Fund established</li> <li>• Carbon Market Program: APCF, FCF, and TSF launched</li> <li>• Clean Energy Financing Partnership Facility and Climate Change Fund established</li> <li>• Inception of Climate Investment Funds, ADB as implementing entity</li> <li>• Small grants for climate change adaptation approved</li> </ul> | <ul style="list-style-type: none"> <li>• Regional studies on economics of climate change published</li> </ul> |

| Year      | Strategic Directions  | CCDRM Initiatives  | Financing   | Knowledge/Partnerships  |
|-----------|---|--|---|---|
| 2010-2016 | <ul style="list-style-type: none"> <li>• <i>Priorities for Action on Climate Change</i> launched</li> <li>• Strategic Priority in ADB Midterm Review of Strategy 2020</li> <li>• ADB-PRC MOU on Climate Change</li> <li>• Revised project classification system to reflect climate change</li> <li>• IED evaluations of ADB support for climate mitigation and adaptation, and response to disasters and disaster risks</li> <li>• Institutional realignment: upgraded CCDRM Division and established thematic group</li> <li>• Operational Plan for IDRM (2014-2020)</li> <li>• Carbon-neutral ADB Annual Meeting in Frankfurt (2016)</li> </ul> | <ul style="list-style-type: none"> <li>• Asia Solar Energy Initiative launched</li> <li>• Pilot Asia-Pacific Climate Technology Finance Center established</li> <li>• Climate risk screening mandatory; AWARE climate risk screening tool, and climate risk management framework</li> <li>• Asia Leadership Program on Sustainable Development and Climate Change launched</li> <li>• Trainings on climate risk management framework and IDRM started</li> </ul> | <ul style="list-style-type: none"> <li>• Clean Energy Investment target of \$2 billion achieved in 2011</li> <li>• ADF Disaster Response Facility established</li> <li>• ADB announced \$6 billion target for climate finance by 2020</li> <li>• Rio+20: \$175 billion commitment of MDBs on sustainable transport by 2020</li> <li>• ADB is first MDB accredited to access funding from the GCF</li> <li>• First GCF project approved - Fiji climate adaptation project</li> <li>• Green bonds worth \$500 million raised in 2015; \$1.3 billion in 2016; first single project climate bond in Asia and the Pacific issued</li> <li>• \$10 million Cook Islands Disaster Resilience Program funded</li> <li>• Canadian Climate Fund for the Private Sector in Asia, UCCRTF, and IDRM Fund</li> </ul> | <ul style="list-style-type: none"> <li>• Investing in Resilience report published</li> <li>• MDBs joint initiatives: climate financing, GHG accounting, and mainstreaming climate change and sustainable transport</li> <li>• Partnerships with centers of excellence</li> <li>• Sector guidelines on CRA released</li> </ul> |

| Year | Strategic Directions  | Financing   | Knowledge/Partnerships  |
|------|---|---|---|
| 2017 | <ul style="list-style-type: none"> <li>• Climate Change Operational Framework 2017-2030: Enhanced Actions for Low Greenhouse Gas Emissions and Climate-Resilient Development established</li> </ul> | <ul style="list-style-type: none"> <li>• ADF Disaster Risk Reduction Financing Mechanism established</li> <li>• ADB and the Government of Tonga launch Tonga's first ever Climate Change Trust Fund</li> <li>• \$151 million Canadian Climate Fund for the Private Sector in Asia II launched</li> <li>• ADB and GCF sign Accreditation Master Agreement</li> </ul> | <ul style="list-style-type: none"> <li>• <i>Meeting Asia's Infrastructure Needs</i> report – including climate change adaptation and mitigation costs, Asia and the Pacific will need \$1.7 trillion per year on infrastructure investments to maintain growth momentum</li> <li>• ADB hosts Vulnerable Twenty Group of Ministers of Finance (V20) meeting on investing in climate action</li> <li>• ADB launches Climate Financing Database, first MDB to present detailed figures on its climate change projects</li> <li>• ADB invests \$1.5 million to assist Fiji's Presidency of the 23rd Conference of the Parties (COP 23) to the UNFCCC and joins the Government of Fiji's COP 23 Advisory Panel.</li> </ul> |

| Year | Strategic Directions | Financing  | Knowledge/Partnerships   |
|------|----------------------|--|--|
|      |                      | <ul style="list-style-type: none"> <li>• ADB doubles climate financing target for its Pacific developing members to over \$500 million for 2017–2020</li> <li>• Multi-donor Asia-Pacific Climate Change Finance Fund (ACliFF) launched</li> <li>• ADB signs first project-level agreement with GCF for project in Pacific</li> <li>• ADB approves \$15 million in financing for the Pacific Disaster Resilience Program</li> <li>• ADF Disaster Response Facility regularized</li> <li>• ADB hits climate financing high of \$5.2 billion</li> </ul> | <ul style="list-style-type: none"> <li>• <i>A Region at Risk: The Human Dimensions of Climate Change in Asia and the Pacific</i> - report produced by ADB and the Potsdam Institute for Climate Impact Research.</li> <li>• <i>Catalyzing Green Finance: A Concept for Leveraging Blended Finance for Green Development</i> - report calls on creation of National Green Financing Mechanisms to Accelerate Green Growth in Asia</li> <li>• <i>Disaster Risk Management and Country Partnership Strategies: A Practical Guide</i></li> <li>• ADB formally joins the NDC Partnership</li> </ul> |

| Year | Strategic Directions  | Funds/Financing   | Knowledge/Partnerships   |
|------|---|---|--|
| 2018 | <ul style="list-style-type: none"> <li>• ADB launches Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific—tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability as an operational priority</li> <li>• MDBs announce joint framework for aligning their activities with the goals of the Paris Agreement</li> <li>• NDC Advance platform launched</li> <li>• Article 6 Support Facility established</li> </ul> | <ul style="list-style-type: none"> <li>• ADB secures \$190 million in total funding from the GCF for projects in Cambodia, Mongolia, and Tajikistan</li> <li>• ADB sells €600 Million 7-Year Green Bond to spur climate financing</li> <li>• Climate financing by MDBs hits a high of \$43.1 billion</li> </ul> | <ul style="list-style-type: none"> <li>• ADB hosts 6th Asia-Pacific Climate Change Adaptation Forum (APAN 2018) - Enabling Resilience for All: Avoiding the Worst Impacts</li> <li>• ADB joins InsuResilience</li> <li>• <i>Decoding Article 6 of the Paris Agreement</i> published</li> </ul> |

ADB = Asian Development Bank, ADF = Asian Development Fund, APAN = Asia Pacific Adaptation Network, APCF = Asia Pacific Carbon Fund, AR = assessment report, CC = climate change, COP = UNFCCC Conference of the Parties, CRA = Climate Risk Assessment, FCF = Future Carbon Fund, GCF = Green Climate Fund, GHG = greenhouse gas, IDRM = integrated disaster risk management, IED = Independent Evaluation Department, IPCC = Intergovernmental Panel on Climate Change, MDB = multilateral development bank, MOU = memorandum of understanding, NDC = Nationally Determined Contributions, PRC = People's Republic of China, SD = sustainable development, SDG = Sustainable Development Goal, TA = technical assistance, TSF = Technical Support Facility, UCCRTF = Urban Climate Change Resilience Trust Fund, UN = United Nations, UNFCCC = United Nations Framework Convention on Climate Change.

Source: ADB.

## **Strategy 2030 Operational Plan for Priority 3**

*Tackling Climate Change, Building Climate and Disaster Resilience,  
and Enhancing Environmental Sustainability, 2019–2024*

Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability is one of seven operational priorities of the Asian Development Bank (ADB) under its Strategy 2030. This operational plan specifies the strategic approaches and implementation measures required to operationalize the priority. It is part of a series that includes an overview and operational plans for all seven priorities. The series was prepared by members of ADB sector and thematic groups following extensive consultations with internal and external stakeholders.

### **About the Asian Development Bank**

ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, it is owned by 68 members—49 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

