

STRATEGY 2030 OPERATIONAL PLAN FOR PRIORITY 4 MAKING CITIES MORE LIVABLE, 2019–2024

SEPTEMBER 2019



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Operational Priority 4 Making Cities More Livable



Strategic Operational Priorities

Improve coverage, quality, efficiency, and reliability of services in urban areas

Strengthen urban planning and financial sustainability of cities

Improve urban environment, climate resilience, and disaster management of cities

Operational Approaches





- Foster integrated city development
- Combine policy reforms, capacity development, institutional strengthening, and knowledge management
- Develop pilots and leapfrog to the latest technologies



- Prepare and implement smart city plans
- Enhance city competitiveness and productivity
- Support localization and implementation of Sustainable Development Goals



- Support infrastructure and services in urban areas
- Scale up the use of proven digital technologies
- Ensure water security and adequate waste management
- Provide energy security
- Promote public mass transport
- Support pro-poor and inclusive cities with social services, and safe and healthy urban environments



- Prepare integrated urban plans
- Support inclusive and participatory planning
- Use differentiated approaches to different categories of cities



- Support cities to maximize their internal financial resources
- Promote land-based financing
- Develop innovative external sources of financing



- Support utilities and service providers to develop public-private partnerships
- Support urban governance improvement of utilities



- Support environment improvement projects
- Promote energy-efficient and environment-friendly technologies and processes
- Support risk-sensitive land use management
- Promote circular economy practices
- Adopt nature-based solutions



- Support resilient cities
- Strengthen disaster preparedness and emergency response plans
- Support cities to localize nationally determined contributions
- Adopt a systems approach to urban infrastructure resilience

Sub-pillars

Performance of urban and social services service providers improved

 Provision of urban infrastructure and services improved

 Regulatory, legal, and institutional environment for more inclusive planning improved

 Reforms and policies for improved financial sustainability of cities implemented

• Urban environment improved

• Capacity of cities for climate resilience and disaster risk management improved

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ABBREVIATIONS

ADB - Asian Development Bank

CDIA – Cities Development Initiative for Asia

DMC – developing member country

FCAS - fragile and conflict-affected situations

GHG – greenhouse gas

PPP – public-private partnership SDG – Sustainable Development Goal

TA - technical assistance

UCCRTF - Urban Climate Change Resilience Trust Fund

UMIC – upper middle-income country

STRATEGIC OPERATIONAL PRIORITIES

A. Overview

- 1. Strategy 2030 of the Asian Development Bank (ADB) identified "making cities more livable" as one of its seven operational priorities. This operational plan sets out the direction and approach for ADB to help its developing member countries (DMCs) build livable cities that are green, competitive, inclusive, and resilient. It also details ADB's strategic operational priorities to provide support to cities in DMCs to help them develop the right institutions, policies, and enabling environments to become more livable.
- 2. Cities in Asia and the Pacific have unprecedented opportunities to transform the well-being of their citizens and to catalyze economic development through increased urbanization by 2030. At the same time, however, these cities face several challenges, including rapid rates of urbanization, growing infrastructure deficits, increasing risks of climate change and disasters, environmental stress, aging societies, fast-paced technological advancement, and emerging threats like cyberattacks and terrorism. Such challenges are often most apparent and difficult to address in urban settings, which are characterized by complexity and uncertainty.
- 3. The operational plan is envisioned as a cross-sector and cross-thematic platform for urban development investments, technical assistance (TA), and knowledge work. "Livability" is a term often used to describe the quality of life and community well-being, supported by strong governance systems and practices. Although definitions vary, at the heart of the envisioned transformation of a city to become more livable is an integrated planning approach to the provision of infrastructure and services and other public goods based on economic competitiveness, environmentally sustainable growth, social and financial inclusion, and resilience. This plan will help ADB and cities in DMCs adopt a holistic approach to achieve livable cities with the following strategic areas:
 - (i) improve the coverage, quality, efficiency, and reliability of services in urban areas to make them energy-efficient, gender-responsive, inclusive, and sustainable by supporting integrated development, building capacities, and promoting high-level technologies;

¹ ADB. 2018. Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific. Manila.

The definition of a city varies from country to country; there is no universally accepted definition. ADB understands it in the wider context of urban and peri-urban areas and towns.

- (ii) strengthen urban planning and financial sustainability of cities by promoting inclusive and participatory processes and supporting cities to develop and efficiently use their financial resources; and
- (iii) improve urban environments, climate resilience, and disaster management through, for example, enhancing resources and building capacity.

B. ADB Experience and Initiatives

- 4. ADB's Strategy 2020 helped ADB and DMCs address challenges to efficient, sustainable, and equitable development of cities.³ The Urban Operational Plan also provides ADB and DMCs with a framework to formulate specific operational activities to achieve sustainable urban development based on the 3E (economy, environment, and equity) themes for developing green, competitive, inclusive, and resilient cities.⁴
- 5. Similarly, the Sustainable Transport Initiative Operational Plan adopts sustainable transport as its guiding principle, focusing on basic access and the development needs of individuals, businesses, and communities in a manner consistent with good human health.⁵ Sustainable transport promotes equity and supports affordable and efficient operations, competitive economies, and balanced regional development. Environmentally, it optimizes the use of land, minimizes noise, and limits greenhouse gas (GHG) emissions and waste within the planet's ability to absorb them. Moreover, it encourages the use of renewable resources at or below their rates of generation, and the use of nonrenewable resources at or below the rates of development of renewable substitutes.
- 6. ADB's Environmental Operational Plan fosters the transition to green growth and addresses the causes and consequences of climate change through four mutually supportive environmental directions: (i) promoting a shift to sustainable infrastructure, (ii) investing in natural capital, (iii) strengthening environmental governance and management capacity, and (iv) responding to climate change. The operational plan for health provides a wide range of integrated strategies and solutions to assist DMCs in meeting the United Nations goal of expanding public and private health services. It focuses on three ADB strengths: (i) health infrastructure, (ii) health governance, and (iii) health financing.
- 7. ADB has consistently worked with DMCs to strengthen its urban sector portfolio through a more integrated approach—prioritizing systemic benefits and improvement in the quality of life in cities. Urban sector operations have made significant progress, as new approvals in the sector steadily increased from \$1.2 billion in 2010 to \$2.3 billion in 2018 and are expected to exceed \$3.0 billion per year by 2024. This increase is coupled with diversification of the portfolio that, while continuing its focus on urban water supply and wastewater management, now includes integrated urban planning, solid waste management, sanitation and fecal sludge management, flood risk management and

³ ADB. 2008. Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank, 2008-2020. Manila.

⁴ ADB. 2013. *Urban Operational Plan*, 2012–2020. Manila.

⁵ ADB. 2010. Sustainable Transport Initiative Operational Plan. Manila.

⁶ ADB. 2013. Environment Operational Directions, 2013–2020: Promoting Transitions to Green Growth in Asia and the Pacific. Manila.

ADB. 2015. Health in Asia and the Pacific: A Focused Approach to Address the Health Needs of ADB Developing Member Countries.

Manila.

sustainable urban drainage systems, urban transport, climate-resilient infrastructure, city regions, economic corridors, and low-carbon transformation.

- 8. ADB has been able to leverage resources for livable cities through various trust funds and programs, including those established under the Urban Financing Partnership Facility (such as the Urban Environmental Infrastructure Fund and the Urban Climate Change Resilience Trust Fund) and Water Financing Partnership Facility.⁸ These trust funds have supported the development of innovative components in projects, such as integrated city development strategies, climate risk and vulnerability assessments, riverbank improvements with flood risk management and urban greenbelts, and development of city regions and economic corridors. As an example, the Cities Development Initiative for Asia (CDIA) supports cities in building their capacities and enhancing their readiness for faster project preparation and implementation. From 2007 to 2018, the CDIA commissioned 95 project preparation studies covering 95 cities in 19 DMCs, of which 84 studies were completed in 82 cities, and 67 studies are now linked to downstream financing of about \$9.9 billion.⁹
- 9. Similarly, the Urban Climate Change Resilience Trust Fund (UCCRTF) supports cities in building their capacities for incorporating climate change resilience principles in their planning and operations. From 2014 to 2018, the UCCRTF supported 46 projects totaling \$99 million, comprising TA and investment grants in 30 cities in eight DMCs. The Water Operators Partnerships initiative also promoted knowledge sharing and capacity building of water utility operators by forging mentorships between experienced utilities and utilities needing help to improve their services. The Climate Change Fund supports low-carbon and climate-resilient development in DMCs and addresses the risks and impacts of climate change; the Global Environmental Facility promotes sustainable integrated urban development; and the Climate Investment Funds catalyze transformations in clean technology, energy access, climate resilience, and sustainable forests. Other relevant funds administered by ADB include the Asia-Pacific Project Preparation Facility, High-Level Technology Fund, and Integrated Disaster Risk Management Fund (footnote 8).

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

10. **Urbanization.** Urbanization, especially in developing countries, is one of the most significant global trends that will define the future. Urban populations in Asia and the Pacific increased from about 20% of the region's population in the 1950s to 48% in 2018. By 2030, these cities are projected to have 55% of the region's population, an estimated 2.5 billion people.¹¹

⁸ ADB. Funds. https://www.adb.org/site/funds/funds.

ODIA is an ADB-managed Trust Fund that works closely with medium-sized cities in Asia and the Pacific with the overall aim of bridging the gap between the city's development plans and the financing and implementation of their priority infrastructure projects. CDIA was established in 2007 with the intent of improving the lives of 1.6 billion people in cities in Asia and the Pacific. http://cdia.asia/

¹⁰ ADB. Water Operators Partnerships. https://www.adb.org/sectors/water/financing-program/water-operators-partnerships.

¹¹ United Nations, Department of Economic and Social Affairs, Population Division. 2018. World Urbanization Prospects: The 2018 Revision. New York.

- 11. Rapid urbanization is often linked to improved economic opportunities, better access to health and education services, and better living conditions. Yet, it also creates resource scarcity, climate change impacts, and conflicts generating refugees and internally displaced persons. Further, the rate of urbanization and uncontrolled urban growth are compounding the existing challenges of environmental degradation, increased social inequality, disaster risks, and massive shortfalls in urban infrastructure. Cities occupy only 2% of the world's land but consume 75% of its resources, and they produce a similar percentage of global waste with devastating impacts on the environment and health of their citizens.¹²
- 12. **Infrastructure deficits.** Cities in Asia and the Pacific require considerable resources to (i) provide facilities and services to growing populations and (ii) address existing infrastructure deficits. While cities in general contribute about 80% of global gross domestic product, about 300 million people still have no access to safe drinking water, 1.7 billion people lack basic sanitation, and 80% of wastewater generated by cities is discharged into water bodies without primary treatment. Asia is also the continent generating maximum municipal solid waste, with its cities expected to generate 1.8 billion tons of waste per year by 2025.
- 13. ADB estimates that Asia and the Pacific will need to invest \$26.2 trillion during 2016–2030 (or \$1.7 trillion per year) for infrastructure (excluding soft services such as health and education) to maintain growth, eradicate poverty, and respond to climate change—the majority of which can be expected to be invested in cities. In addition to investment in (i) the development of new and (ii) the rehabilitation of existing infrastructure, the quality of infrastructure requires urgent attention. The business case for sound planning, investments in bridging the infrastructure gap, emphasis on quality infrastructure, and sustainable operation and management (including robust asset management plans) is well demonstrated.
- 14. **Environmental stress and degradation.** Uncontrolled urbanization, lack of effective planning, and excessive use of natural resources exacerbate the existing levels of environmental degradation in cities in the region, resulting in the loss of protective ecosystems (e.g., water sources, and riparian and coastal buffer zones) and environmental risks (e.g., land subsidence because of the unregulated use of groundwater resources). Environmental pollution (including air, soil, and water) and inadequate management of solid waste; sewage; hazardous waste from domestic, commercial, and industrial sources; and vehicular emissions in urban centers threaten well-being and resource availability regionally and globally. About 4.5 million people worldwide die each year from causes related to poor urban air quality. Plastic pollution is another critical emerging transboundary issue, with most plastics finding their way into drainage systems, waterways, and eventually into oceans. About 12% of all waste generated in the region is plastic, and about 90% of floating marine debris is made of plastic, mostly originating from land-based sources such as mismanaged landfills and dumpsites, stormwater drainage, sewage, industrial facilities, and coastal tourism.

¹² ADB. 2013. Urban Operational Plan, 2012–2020. Manila.

ADB. 2016. Asian Water Development Outlook 2016: Strengthening Water Security in Asia and the Pacific. Manila.

¹⁴ United Nations Environment Programme. 2017. Asia Waste Management Outlook. Nairobi.

¹⁵ ADB. 2017. Meeting Asia's Infrastructure Needs. Manila.

International Energy Agency. 2016. Energy and Air Pollution: World Energy Outlook Special Report 2016. Paris.

¹⁷ S. Kaza et al. 2018. What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. Washington, DC: World Bank.

- 15. **Climate change and disaster risk.** GHG emissions from the region have risen rapidly, from 25% of the global total in the 1990s to 40% in 2012. Indeed, the region could generate nearly 50% of all GHG emissions worldwide by 2030. Further, the high rate of urbanization is causing energy consumption and fossil fuel use to grow rapidly. Cities consume 60%–80% of total energy supplied in the region and generate about 75% of its carbon emissions. Cities in the region are also suffering from increasing vehicular emissions, unmanaged solid waste disposal, and high-energy use, all of which aggravate the global carbon footprint.
- Asia and the Pacific is the most disaster-affected region in the world, home to more than 40% of disasters and 84% of people affected. Cities, particularly those in low-lying areas along the coastlines, are increasingly vulnerable to climate change risks and disasters. The risks will be further aggravated by climate change impacts, such as sea level rise, increased and erratic rainfall, and other extreme weather events. Coastal areas are particularly vulnerable; in the Pacific, sea level rise is likely to be 4 times faster than the global average. About 300 million people are at the risk of coastal flooding, which is expected to reach 400 million people by 2025, and 6 out of 10 of the world's most vulnerable countries to climate change impacts are in the region (i.e., Cambodia, India, Lao People's Democratic Republic, Pakistan, the Philippines, and Viet Nam).²¹
- 17. **Social dimensions of migration, informal settlements, and aging societies.** Cities are also facing the increasing challenge of refugees, internally displaced persons, and rural migrants. About 31.1 million persons were internally displaced because of conflict, violence, and natural disasters in 2016.²² Moreover, about 564 million of the world's 881 million slum dwellers are in Asia and the Pacific, with limited or no access to basic infrastructure services. Informal settlements, which are usually located along transport rights-of-way, coastal areas, riverbanks, and low-lying or flood-prone areas, are especially vulnerable to the impacts of climate change.²³
- 18. The numbers of elderly people and persons with disabilities in the region are also increasing at a fast pace and will be disproportionately and negatively affected by rapid urbanization, growing infrastructure deficits, and increasing climate change and disasters. By 2030, Asia and the Pacific will be the second-fastest aging region in the world, where at least 66% of the population is expected to live over age 60.24 At the same time, by 2030, 60% of urban residents will be under age 18.25 Considering the increasing role of youth in cities as well as the rapid increase in the proportion of young migrants in the region, effective measures of youth employment with well-paying jobs and other age-differentiated approaches will need to be taken.

¹⁸ ADB. 2016. Low-Carbon Growth in Asia: 12 Things to Know. 7 November. https://www.adb.org/news/features/low-carbon-growth-asia-12-things-know.

¹⁹ ADB. 2015. Climate Change Resilience in Asia's Cities. 6 May. https://www.adb.org/news/infographics/climate-change-resilience-asias-cities.

United Nations Office for the Coordination of Humanitarian Affairs (OCHA) Regional Office for Asia and the Pacific. 2017. 2016 Year in Review. https://ocharoap.exposure.co/2016-year-in-review.

²¹ ADB. 2017. Climate Change and Disasters in Asia and the Pacific. https://www.adb.org/news/infographics/climate-change-asia-and-pacific.

²² Internal Displacement Monitoring Centre and Norwegian Refugee Council. 2017. *Global Report on Internal Displacement*. http://www.internal-displacement.org/global-report/grid2017/.

United Nations Human Settlements Programme and United Nations Economic and Social Commission for Asia and the Pacific. 2015. The State of Asian and Pacific Cities 2015. London.

²⁴ United Nations. 2015. World Population Ageing. New York.

²⁵ Cities Alliance and United Nations Human Settlements Programme. 2016. Youth and the City. Nairobi.

19. **Governance and institutional capacity.** Cities across Asia and the Pacific are facing unprecedented challenges in delivering effective urban governance and services in line with rapid urban growth. Cities and urban regions, particularly small and medium-sized cities and towns, frequently face governance challenges, including weak institutional structures, overlapping legal and regulatory frameworks, lack of coordination, blurred administrative boundaries, corruption, poor public services, lack of own-source revenue, and capacity constraints, despite the increasing level of decentralization. Rapid urban growth requires a shift toward promoting collaboration, integrated service delivery, and joint financing and system approaches, as well as appropriate governance models. Moreover, cities need to develop their funding and organizational capacity to meet infrastructure demand. Increased civil society engagement with local governments will facilitate better governance and social inclusion as it relates to social accountability to citizens.

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OPERATIONAL APPROACHES

A. Approaches

- 20. **Transformative opportunity.** Notwithstanding the challenges outlined above, ADB recognizes the transformative effect of developing and enhancing livable cities across Asia and the Pacific. Cities are economic powerhouses and innovation hubs that improve livelihoods and trigger prosperity. They create large markets; attract investment, knowledge, talent, skills, and management; and generate new ideas, well-paying jobs, economic opportunities, and wealth. ADB support to cities, through meaningful long-term cross-sector collaboration, will help them become more livable by enhancing urban infrastructure and services, nurturing healthy ecological catchments, fostering inclusive and participatory planning processes, promoting well-connected urban and regional value chains and global production networks, and strengthening governance and citizen engagement.
- 21. **Support global agenda with city-level plans.** ADB will help cities understand their challenges and opportunities and prepare their own visions, plans, and road maps to become more livable. Recognizing that no global template for a livable city exists, ADB will support cities in DMCs through lessons learned and best practices in preparing their plans, prioritizing investments and actions, allocating resources, and monitoring implementation to achieve the goal of livability. Moreover, cities can learn from approaches followed for implementing the Sustainable Development Goals (SDGs), specifically SDG 11—making cities and human settlements inclusive, safe, resilient, and sustainable—and the New Urban Agenda of the United Nations Human Settlements Programme (UN Habitat).²⁶ ADB's support for the development of quality infrastructure will be guided by the G20 Principles for Quality Infrastructure Investment.²⁷

B. Expected Results

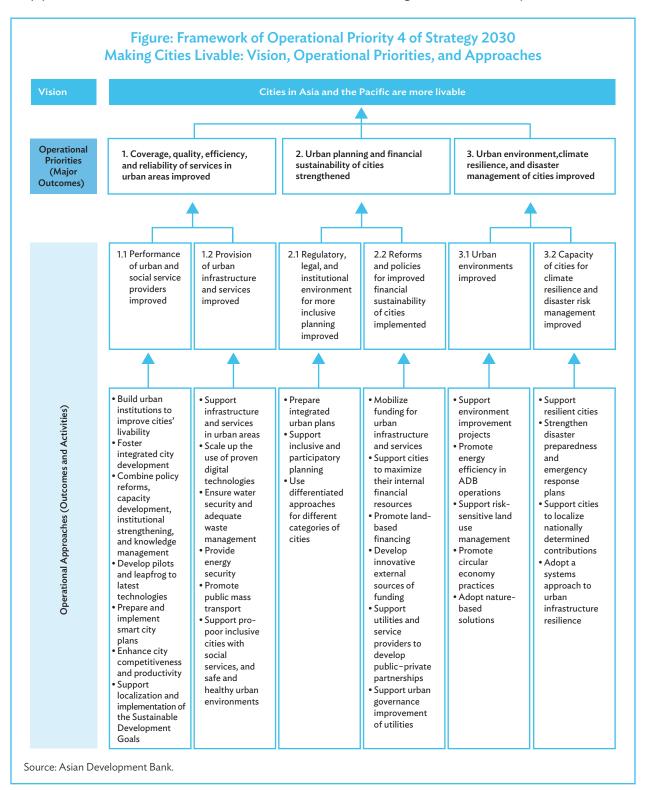
22. The vision for the operational plan is "cities in Asia and the Pacific are more livable." More details on the major outcomes and operational approaches corresponding to the theory of change are in the figure on page $8.^{28}$ The major outcomes are as follows:

The New Urban Agenda represents a shared vision that urbanization can be a powerful tool for sustainable development for both developing and developed countries. UN Habitat. 2016. *The New Urban Agenda*. http://habitat3.org/the-new-urban-agenda/.

The six G20 principles for quality infrastructure investment are: (i) maximizing the positive impact of infrastructure to achieve sustainable growth and development, (ii) raising economic efficiency in view of life cycle cost, (iii) integrating environment considerations in infrastructure investments, (iv) building resilience against natural disasters and other risks, (v) integrating social considerations in infrastructure investment, and (vi) strengthening infrastructure governance.

Theory of change is a method that applies evidence-based causal analysis to explain how given interventions(s) can be expected to result in specific development changes. United Nations Development Group. 2017. UNDAF Companion Guidance: Theory of Change. New York

- (i) coverage, quality, efficiency, and reliability of services in urban areas improved;
- (ii) urban planning and financial sustainability of cities strengthened; and
- (iii) urban environment, climate resilience, and disaster management of cities improved.



C. Major Outcomes and Activities

- 1. Coverage, Quality, Efficiency, and Reliability of Services in Urban Areas Improved
- 1.1 Performance of Urban and Social Service Providers Improved
- 23. **Build institutions to improve cities' livability.** Recognizing that effective institutions in cities are critical to improving livability and providing improved services in urban areas, ADB will focus on improving urban institutional capacities. ADB will support urban institutions in improving governance, strengthening their internal systems and processes, and building skills for project management and sustainable operation and management of assets and provision of services. ADB will leverage its extensive experience of working in the region by collating lessons, good practices, and innovative approaches, and disseminating them to cities in DMCs. Support will include the development of appropriate policy and regulatory frameworks, tariff policies, business models such as design—build—operate contracts or operation and maintenance—embedded construction contracts, asset management systems, and creation of enabling environment for private sector and civil society. ADB will also undertake expanded and enhanced analytical and knowledge work to help cities in this regard.
- 24. **Foster integrated city development.** Based on the specific needs of cities in DMCs, ADB support will include an appropriate mix of interventions in various sectors and thematic areas (e.g., multisector projects or programmatic approaches with holistic planning and a sequence of specific solutions); infrastructure investments, policy advice, capacity building, institutional strengthening, and knowledge management; and sovereign and nonsovereign finance modalities. Contributions of sector and thematic areas to the operational plan are described in detail in Appendix 1. Country partnership strategies, country operations business plans, and finance modalities will be the key instruments in planning and integrating the solutions through deeper country engagement and stronger resident missions.
- 25. Combine policy reforms, capacity development, institutional strengthening, and knowledge management. ADB will support cities in supplementing infrastructure investments with policy reforms, capacity development, institutional strengthening, and knowledge management for maximizing impacts. This will help cities meet infrastructure needs and align policy, institutional, legal, financial, and regulatory frameworks for strengthening institutions and sustainable service delivery. A lesson learned from past urban sector projects is that investments should be coupled with sustainable and vibrant institutions and effective governance systems to sustain and maximize their impacts (e.g., infrastructure investments under a project loan or a multitranche financing facility could be combined with a policy-based loan).
- 26. **Develop pilots and leapfrog to the latest technologies.** ADB will support cities in DMCs to test new technologies and leapfrog to the use of the latest solutions. These will include technologies that are new to DMCs (e.g., the use of big data and data analytics for transport planning based on commuter data collected from smart cards or credit cards, which is used extensively in Seoul, Republic of Korea) or technologies that are still new to most cities in the world (e.g., the use of artificial intelligence algorithms in urban water supply network management for leak detection and water loss control, and blockchain for land registry).

- 27. **Prepare and implement smart city plans.** Cities in Asia and the Pacific are at different development levels in terms of absorption capacity to adopt technologies and digital solutions, so ADB recognizes that the use of smart digital technologies requires building not only cities' technical capacity but also their human resources, governance, and organizational capacities. ADB will support the development of systems in cities to generate, capture, analyze data, and mainstream the use of data-driven and evidence-based decision making for implementing smart city plans. ADB will also support cities to develop individualized, gender-responsive, and inclusive smart city plans to build their technical and organizational capacities to benefit from new technologies and digital solutions. It will also help them participate in twinning initiatives to (i) share best practices, (ii) explore potential complementary strengths, and (iii) gain access to real-time data and analytical tools and high-level technologies to develop their plans.
- Enhance city competitiveness and productivity. Cities are central places of production and 28. consumption; they facilitate economic growth, accounting for more than 70% of global gross domestic product. A competitive city creates large markets; acts like a magnet to attract investments, knowledge, talent, skills, and management; and generates new ideas, well-paying jobs, economic opportunities, and wealth. Cities can use commonly available indexes to benchmark themselves on competitiveness, such as the global competitiveness index²⁹ and the ease of doing business index.³⁰ By examining these indexes, ADB can help the region's cities become more competitive by providing support for strategic physical infrastructure and appropriate nonphysical interventions, including building the capacities of institutions and enabling environments that reduce the cost of doing business and promote innovation, productivity, and sustainability. Cities must also stimulate investments in manufacturing and services and integrate their economy with regional value chains and global production networks to create highquality jobs and boost growth. Since most cities in the region have a high proportion of youth (which is seen as a demographic dividend), ADB will help promote youth entrepreneurship, employment, creativity, and innovation, alongside women's employment and entrepreneurship and support to micro and small and medium-sized enterprises.
- 29. **Support localization and implementation of Sustainable Development Goals.** ADB will support DMCs and cities to achieve the SDGs by helping them prepare and implement local SDG plans. Although SDG 11 is devoted to cities with the aim of making them inclusive, safe, resilient, and sustainable, most SDGs have targets related to the responsibilities of local and regional governments, particularly to their roles in sustainable urban development and management and improving quality of life. One lesson learned from the Millennium Development Goals is that cities often lack the capacity to achieve the targets locally. Thus, ADB will work with cities, local authorities, financial intermediaries, and communities in preparing and implementing local SDG plans while recognizing that each DMC and city has the primary responsibility for its own economic and social development. Such plans will include the mobilization of financial resources as well as capacity building and the transfer of lessons, good practices, and environmentally sound technologies to cities.

²⁹ City competitiveness is defined as the set of institutions, policies, and factors that determine the level of productivity of a city or country. The level of productivity, in turn, sets the level of prosperity that can be reached by an economy. World Economic Forum. 2017. *The Global Competitiveness Report 2017–2018*. Geneva.

World Bank. 2018. Doing Business 2018: Reforming to Create Jobs. Washington, DC.

1.2 Provision of Urban Infrastructure and Services Improved

- 30. Support infrastructure and services in urban areas. As outlined in Strategy 2030, providing integrated solutions to build green, competitive, inclusive, and resilient cities requires comprehensive planning of crosscutting approaches to promote urban mobility, urban health, education, gender equality, and environmental sustainability with focus on urban poverty reduction, especially in informal settlements and peri-urban areas. ADB support will focus on improving access to quality infrastructure and services (water supply, sanitation, power, transport, and social services) that are energy-efficient, pro-poor, gender-responsive, disabilities-inclusive, and sustainable while promoting a smart and digitalized city.31 ADB will help cities improve water security, governance, and resource efficiency to provide affordable, safe, efficient, and effective water, sanitation, affordable housing, and waste management services. ADB will support mass public transport, urban mobility, and accessibility for seamless intermodal transition that benefits all citizens (especially women, elderly people, and persons with disabilities), thereby creating a safe and healthy urban environment to improve the quality of life for residents. ADB will strategically support infrastructure and services to promote sustainable tourism that considers current and future economic, social, and environmental impacts of such interventions, and addresses the needs of tourists, local industry, and host communities. Finally, ADB will support cities in developing the right institutions, policies, and enabling environments to become more competitive and productive.
- 31. **Scale up the use of proven digital technologies.** Livability in cities can be improved using proven digital technologies to deliver more efficient and responsive services to residents. ADB will work with cities to scale up the use of proven technologies and digital solutions such as (i) space-based technologies, earth observation, and geographic information systems; (ii) financial technology; (iii) nanotechnology in water treatment; (iv) smart water supply network management using information and communication technology (ICT), real-time data generation, supervisory control and data acquisition, sensors, advanced flow and pressure devices, data loggers, automatic meter readers, and smart meters; (v) nonrevenue water reduction technologies; (vi) desalination; (vii) biomonitoring for water quality; (viii) trenchless technologies in pipe laying; (ix) waste-to-energy from municipal solid waste or sludge from wastewater treatment; and (x) other forms of technology-based solutions. Successful examples in DMCs include digital payment systems, digital solutions for citizen services and internet of things-based solutions, data on citizen services collected through mobile apps, and data on women's safety.
- 32. **Ensure water security and adequate waste management.** ADB support will integrate components related to water supply, wastewater management, flood risk management, solid waste management, source protection, and integrated water resources and drought management. Water security will be addressed at the river basin level to ensure that cities adopt sound water resources management practices. High levels of nonrevenue water are a widespread challenge for most cities, and require solutions that will incorporate technical, financial, and governance components. Similarly, integrated sanitation solutions will include interventions to (i) plan and deliver services for good quality and sustainable sanitation services; (ii) safely manage human waste along the whole sanitation service chain; (iii) prioritize the unserved, particularly those in low-income and vulnerable communities;

A commonly used working definition of a "smart city" is a city that makes efficient and effective use of data, technologies, and available resources to improve core functions of city planning, management, and efficient service delivery; more effective engagement with citizens and the private sector; and inclusion and accountability.

- (iv) consider effective resource recovery and re-use; (v) adopt a diversity of technical solutions for adaptive, mixed, and incremental approaches; and (vi) combine, as appropriate, decentralized and centralized sanitation solutions, and fecal sludge management.
- 33. **Provide energy security.** To help provide energy security, ADB will continue to carry out analytical work to address intermittent energy supply and support constant low-carbon emission and efficient energy supply using renewable energy. Increased energy efficiency in buildings will reduce demand for energy and environmental impacts. Solutions will come from smart cities with reliable and affordable supplies of electricity through smart grids and distributed systems. Increased access to heating and cooling systems using renewable energy will augment the lives of poor people in urban areas while reducing pollution.
- 34. **Promote public mass transport.** The challenge is to develop affordable, financially sustainable, accessible, and reliable public transport systems throughout the region, which can be addressed through building high-capacity transit systems in populated cities, linking transport planning to land use and labor markets, and implementing smart solutions and payment systems to better organize and manage existing transport infrastructure. There are key opportunities for cities to switch to high-capacity and low-carbon transport systems that are affordable for poor and vulnerable people, such as by integrating nonmotorized transport with mass public transport. The opportunity for leveraging private sector and public-private partnerships (PPPs) for urban transport infrastructure innovation, investment, management, and operation will be evaluated where applicable.
- 35. Support pro-poor and inclusive cities with social services, and safe and healthy urban environments. ADB will help cities provide complementary and gender-responsive social services such as education, health, vocational training, affordable housing, open public spaces, social protection, and sports. It will support human capital development, which will play a critical role in enhancing productivity using new technologies and the acquisition of higher-level skills, by boosting reliable and timely access to employment centers; educational opportunities; services; and other basic needs of students, workers, and entrepreneurs. ADB support for improving the quality of urban health services will include monitoring and control of noncommunicable diseases, improving road safety, and reducing road crashes. ADB will help cities enhance social services for persons with disabilities, including personal assistance, peer counselling, and early childhood intervention for children with disabilities and their families. It will work to address social dimensions of urbanization, such as migration (both rural-urban migrants and displaced persons), vulnerability, resilience, and informal settlements, with age-friendly planning, disability inclusion through universal design, and affordability of basic services and access by the urban poor.
- 36. ADB will also support cities to be more gender-responsive through women-friendly city designs that include inclusive zoning, affordable housing, pram-friendly sidewalks, streetlights and CCTV cameras, gender-based violence victim shelters, and sanitation facilities; women's participation in urban planning and governance; gender mainstreaming in urban transport by reflecting women's personal security and mobility constraints and assessing gendered travel patterns, universal design, and last-mile transport; women's employment and entrepreneurship support through incubators, finance, and technical and vocational education and training; and smart technology application incorporating the special needs of women (e.g., through multimodal ticketing that keeps prices down in support of women's short and multiple travel patterns, women's safety smartphone apps, and digital finance for women-led enterprises).

2. Urban Planning and Financial Sustainability of Cities Strengthened

2.1 Regulatory, Legal, and Institutional Environment for More Inclusive Planning Improved

- 37. **Prepare integrated urban plans.** Preparing integrated urban plans in an inclusive and participatory manner will be a key driver to achieving more efficient, equitable, and sustainable outcomes. ADB will promote an integrated planning process combining, as appropriate, inputs from diverse analyses such as spatial land use, open spaces, urban mobility, transit-oriented development, sector-specific infrastructure, sustainable tourism development, heritage conservation, and strategic master plans. Such plans could also be integrated with economic plans for growth and employment; river basin-based plans for integrated water resources management; regional plans such as metropolitan, meta-regions, peri-urban areas, and city-cluster-based plans; and industrial or economic corridor-based plans. For example, an economic corridor project could include comprehensive plans for infrastructure, industrial development, skill enhancement, job creation, and policy reforms, and be implemented through a series of specific project and policy-based loans. ADB will support cities to incorporate, in their integrated urban development plans, holistic approaches to sustainable tourism development and management of sites of historical, cultural, and natural heritage with regard to their identification, protection, conservation, and presentation.
- 38. **Support inclusive and participatory planning.** Inclusive cities allow all categories of population, including marginalized social groups, to equally benefit from opportunities such as access to jobs, services, technology, and financial tools created by urban growth. ADB recognizes infrastructure accessibility as a catalyst for overcoming vulnerability and will seek to enhance the extent to which urban infrastructure operations ensure equitable access and affordability for the poor, persons with disabilities, and those marginalized including rural migrants and displaced persons. ADB will promote cities' efforts to include in their processes a diverse range of project beneficiaries and stakeholders such as women, children, youth, the poor and vulnerable, the disabled, ethnic minorities, informal settlers, and other marginalized groups.
- 39. Pockets of poverty and fragility at the subnational level frequently occur within urban settings, especially in peri-urban areas; as such, they are a priority for building livable cities. ADB will thus encourage that all groups are informed, engaged, and empowered to participate in and benefit from ADB interventions, including development of integrated plans; project design; and implementation, operation, and management of services. ADB will promote improved capacity and access to spatial data at both the city and national level to inform identification of pockets of vulnerability, disaster preparedness, responsive decision making, and investment prioritization.
- 40. **Use differentiated approaches for different categories of cities.** The plan will prioritize support for the poorest and most vulnerable DMCs, including fragile and conflict-affected situations (FCAS) and small island developing states. Support to cities in FCAS will prioritize essential infrastructure and basic human needs, targeted social assistance, and national- and city-level institutional strengthening and governance reforms toward more functional urban environments. Activities in cities in FCAS will incorporate processes that promote peace building, social cohesion, and cultural identity, recognizing the complex and fragile settings in their urban environments. Support to cities in small island developing states will prioritize enhancing urban climate change and disaster resilience, promoting environmental sustainability, and improving regional connectivity through internet access for business development and private sector participation.

41. Support to cities in lower-income and lower-middle-income countries will build on geographic and economic advantages to develop competitiveness, including improving basic services. It will prioritize equitable and sustainable growth; green, inclusive, and resilient urban infrastructure; and social services and social protection, and integrated urban and spatial planning reforms. Support to cities in upper middle-income countries (UMICs) will focus on private sector development, urban climate change resilience, smart technology solutions, low-carbon growth, and sustainable supply chains. As urban inequity is a globally emerging challenge in UMICs, ADB will help address this through targeted support for the urban poor. Promoting innovation, knowledge management, and sharing best practices will also be increasingly important elements of ADB engagement with UMICs.

2.2 Reforms and Policies for Improved Financial Sustainability of Cities Implemented

- 42. **Mobilize funding for urban infrastructure and services.** Urban infrastructure finance is vital not only for new urban infrastructure and services but also for operating, maintaining, and rehabilitating existing infrastructure for urban renewal and sustainable urban development. Mobilization of finance is often challenged by the absence of creditworthy entities, opaque credit structures, and poor cost-recovery mechanisms compounded by the reluctance of governments and urban agencies to levy user charges. Public finance, both domestic and international, will continue to play a vital role in providing essential services and public goods and in catalyzing other sources of finance including from the private sector and civil society organizations. Other key sources of revenue, such as property taxes, publicly owned assets, and licenses, remain underutilized or undeveloped. Urban agencies often have limited financial and administrative capacity and are unable to use and mobilize their own and supplementary resources efficiently. At the same time, many DMCs are facing debt limits and other financial constraints. ADB will help cities become creditworthy and explore and adopt the most appropriate sources of funding, including debt financing in appropriate cases.
- 43. **Support cities to maximize their internal financial resources.** In most DMCs, own sources of revenue for municipal bodies are meager because of inadequate collection or low potential to increase local taxes, such as property taxes, and disorganized or repressed real estate sectors. ADB will support cities to strengthen their funding capacities by establishing suitable regulatory, legal, and institutional environments at the national and city levels and maximizing their financial resources in a holistic manner with appropriate and proportionate emphasis on different sources like taxes, tariffs, and transfers (3Ts). ADB will help cities enhance local resource mobilization by reforming property tax rates, billing, and collection; building revenue-generating projects and assets; increasing the digitalization of services, including automated record keeping and databases; reforming real estate conditions; and rationalizing user charges and cost recovery for key services like water, wastewater, solid waste, and urban transport.
- 44. For cities to unlock urban investment, additional efficient sources of both taxation and borrowing are required, involving appropriate fiscal decentralization and sharing of national resources among different levels of governments and cities through predictable and institutionalized intergovernmental transfers and external grants or subventions in line with good international practices. Allowing cities and urban service providers meaningful financial autonomy will also result from decentralized legal, financial, and technical capacity, and enhanced mandates of cities to become creditworthy and secure long-term loans, and to issue municipal or project bonds for commercial business transactions. ADB will provide support for national and subnational governments to

undertake local governance reforms, including reforms required for such entities to manage various sources of finance for making cities more livable.

- 45. **Promote land-based financing.** ADB will support DMCs in adopting sound land-based financing and land value-capture frameworks, especially for urban regeneration and new urban expansion. For example, DMCs can consider betterment levies wherein the government defines and calculates the cost of needed infrastructure improvement—determines the zone of influence of a project, distributes taxes to residents within the zone, and collects taxes before construction.³² Similarly, ADB will support land-pooling systems, wherein landowners sign ownership rights over to a single agency or government body that then develops the land for infrastructure and, after a project is done, returns a portion (e.g., 40%–60%) of the developed land to the original owners. Since the developed land will have substantially improved in value because of more infrastructure and amenities, the land-pooling system could be mutually beneficial. Indeed, many cities are increasingly using land in lieu of payments to finance infrastructure development through PPPs.³³ Therefore, strong legal and regulatory frameworks for planning and programming land development and valuation of land will allow cities to use land-based financing as an effective tool for developing infrastructure projects.
- 46. **Develop innovative external sources of financing.** ADB will help cities develop and mobilize innovative external sources of funding such as climate funds, green bonds, and disaster risk finance. ADB will play a critical role in guiding the mainstreaming of such instruments into urban finance by supporting policy development, sharing knowledge, helping build capacity, as well as through project finance and project preparation studies. For example, the Cities Development Initiative for Asia (CDIA) supports cities in preparing high-quality bankable projects and facilitating downstream financing of such projects through various sources. ADB will also support cities and national governments to increase opportunities for climate and green financing through climate-proofing activities in urban projects.
- 47. Support utilities and service providers to develop public-private partnerships. ADB efforts to enhance private sector development and PPPs in cities will include creating enabling policies and institutional and regulatory frameworks for increased PPPs and private sector development in DMCs; engaging cities upstream in pipeline development through country operations business plans and country partnership strategies; facilitating project screening and selection to identify and recommend projects for PPP implementation; providing project development, structuring, and transaction advisory services; providing public sector financial support through lending and guarantee products that can enhance projects' financial viability; and building capacity for public sector entities. Separation of asset ownership from asset operation and management, and independent regulation will be considered, as appropriate, based on lessons from past projects. Other forms of private sector participation will also be pursued, such as slum rehabilitation projects, affordable housing, adaptive re-use of unutilized or underutilized heritage sites and buildings, and promotion of community tourism. Community participation will be encouraged through the implementation of people-public-private partnerships (the 4Ps framework). Partnerships with the communities and private sector will also support public safety, especially for the urban poor, through measures such as installation of street lighting and

Infrastructure adds value to areas undergoing rapid urban growth, for example, improving transport connectivity results in higher land prices and thereby collection of higher taxes.

ADB. 2019. Realizing the Potential of Public-Private Partnerships to Advance Asia's Infrastructure Development. Manila.

monitoring systems, and establishment of crime and emergency response protocols. ADB will also provide specialized credit lines and financial risk management mechanisms (e.g., risk-sharing structures) to private financial intermediaries to involve them in financing investments in urban infrastructure.

48. **Support urban governance improvement of utilities.** Following ADB sector frameworks and lessons from past projects, ADB will emphasize capacity development and improvement of urban governance as key objectives and integral parts of financial management and mobilization. ADB will help utilities improve their performance through cost reduction, rationalized tariffs, improved efficiency in billing and cost recovery, and enhanced management of losses and assets. Stakeholder consultations on cost recovery, user charges, and timely induction and capacity building of staff are crucial for ensuring financial sustainability. Supporting national– and state–level entities and city authorities on smart management of data is fundamental for improving cost recovery, revenue enhancement, and financial sustainability of urban services. Systems, processes, and finance of operation and maintenance for operational and financial sustainability will be ensured, and investments will be coupled with sustainable and vibrant institutions and effective governance systems to sustain and maximize impacts.

3. Urban Environment, Climate Resilience, and Disaster Management of Cities Improved

49. ADB will promote the integration of environmental sustainability, climate change, and disaster risk considerations into the urban planning process to implement green city approaches. It will build capacity for effective disaster preparedness by strengthening forecasting, early warning systems, and emergency response plans to avoid loss of life. Strategy 2030 recognizes the importance of scaling up support in tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability, and has set two important targets: (i) 75% of operations support climate change mitigation and adaptation by 2030 and (ii) climate finance from ADB's own resources reaches \$80 billion cumulatively from 2019 to 2030. A significant proportion of climate finance is likely to be delivered in urban environments. These interventions will also be anchored on the concepts and approaches on green city development to support livability of urban areas in the region.³⁴

3.1 Urban Environment Improved

50. **Support environment improvement projects.** ADB will assist DMCs in protecting and enhancing the air and water quality of cities as well as investing in identifying, conserving, and restoring natural capital. It will focus on environmental improvement projects in its portfolio, such as investments in wastewater collection and treatment, fecal sludge management, solid waste management, air quality improvement, energy efficiency, reduction of greenhouse gas (GHG) emissions, and low-carbon transformation. Such interventions will help ADB implement its action

A Green City is defined as a city able to minimize environmental impact and maximize opportunities to improve and support the natural environment. A Green City is energy-efficient and reduces reliance on nonrenewable energy sources; actively encourages waste reduction and management; includes green and resilient infrastructure, low-carbon transport, and waste cycle management; and delivers improved quality of life outcomes for residents. ADB. 2015. *Green City Development Toolkit*. Manila.

plan for healthy oceans and sustainable blue economies.³⁵ These will be supplemented by promoting improved standards and stronger regulation and enforcement of domestic, commercial, and industrial wastewater discharge and air pollutants. Cities will be supported to customize approaches for their environmentally sensitive areas to address vulnerability due to habitat damage or loss.

- 51. **Promote energy efficiency in ADB operations.** ADB will support cities to become energy efficient and low carbon while improving the quality of life for their citizens by increasing urban density; using fewer natural resources; consuming less energy for buildings, urban transport, and industry; and scaling up renewable energy use for urban facilities. Specific interventions include integrating transit and land-use planning, selecting energy-efficient buildings, and promoting energy efficiencies and recovery in processes such as optimizing electromechanical machinery in water supply and wastewater pumping and treatment.
- 52. **Support risk-sensitive, land-use management.** ADB will help cities develop risk-sensitive, land-use management approaches and integrated flood risk management through concepts such as "room for the river," at large and an anonstructural measures including hydraulic mapping and modeling as a basis for climate resilience and adaptation solutions. ADB will encourage critical and risk-sensitive infrastructure to be provided a higher level of resilience. The design and construction of physical infrastructure, such as roads, bridges, drainage, dikes, and irrigation schemes, will be adaptive to climate change risks and vulnerability. ADB will also support the development of pilots for evaluating different models for disaster risk insurance as this concept evolves further.
- 53. Moreover, the Urban Climate Change Resilience Trust Fund (UCCRTF) supports the mainstreaming of urban climate change resilience principles into city investments and ADB operations so that vulnerability and climate and disaster impacts for infrastructure and operations are addressed at an early stage in the project design process. Examples include sustainable urban drainage systems and analytical and knowledge work on integrated flood risk management, water source protection, water-sensitive urban design, and managed aquifer recharge.
- 54. **Promote circular economy practices.** ADB will work with cities to promote circular economy practices through lending, TA, and knowledge work.³⁷ For example, a wastewater treatment plant could become a resource generator providing electricity and manure from digested sludge as well as treated effluent for irrigation and industry.

The action plan will focus on four areas: (i) creating inclusive livelihoods and business opportunities in sustainable tourism and fisheries; (ii) protecting and restoring coastal and marine ecosystems and key rivers; (iii) reducing land-based sources of marine pollution, including plastics, wastewater, and agricultural runoff; and (iv) improving sustainability in port and coastal infrastructure development. ADB. 2019. Action Plan for Healthy Oceans. https://www.adb.org/sites/default/files/related/145036/Action%20Plan%20for%20Healthy%20Oceans%20and%20Sustainable%20Blue%20Economies.pdf.

The "room for the river" concept comes from the Dutch flood mitigation initiative, Room for the River Programme. It aims to give the river more room to increase its ability to manage higher water levels, and therefore improve the quality of its immediate surroundings. Room for the River Programme. https://www.ruimtevoorderivier.nl/english/.

A circular economy describes an economic system that is based on business models that replace the end-of-life concept with reducing, alternatively reusing, recycling, and recovering materials during the production or distribution and consumption processes across the micro, meso, and macro level with the aim of sustainable development. J. Kirchherr, D. Reike, and M. Hekkert. 2017. Conceptualizing the Circular Economy: An Analysis of 114 Definitions. 127. pp. 221–232.

55. Adopt nature-based solutions. Nature-based solutions, inherently energy- and resource-efficient, are a means to protect, sustainably manage, and restore natural or semi-natural ecosystems to cope with issues such as climate change, water security, food security, or natural disasters. ADB will include in its operations, as appropriate, nature-based solutions such as room for the river, sustainable urban drainage systems, urban forestry, riparian corridors, green roofs and walls, bioretention systems, street trees, roadside swales, permeable pavement, rainwater harvesting, and urban farming. ADB will work with cities in leveraging ecosystem services such as natural habitats providing food and water; cultural services such as recreation and aesthetic benefits; and regulatory services such as carbon storage and sequestration, wastewater treatment, runoff reduction, and urban heat reduction. As natural habitats in urban settings enhance biodiversity and contribute to the protection of flora and fauna, ADB will play a key role in protecting natural capital by adequately valuing it in project economic analyses.

3.2 Capacity of Cities for Climate Resilience and Disaster Risk Management Improved

- 56. **Support resilient cities.** A resilient city helps individuals, communities, institutions, businesses, and systems survive, adapt, and grow in spite of shocks and stresses, which include not only climate change or natural disasters such as typhoons, floods, and earthquakes, but also social and economic disruptive events such as terrorism, economic recessions, and cyberattacks. To mainstream resilience principles, ADB will develop and incorporate in its operations crosscutting and sector-specific resilience standards and guidelines for project design, implementation, infrastructure delivery, and operation and management of assets and services. ADB will help cities adopt innovative delivery mechanisms such as performance-based contracts for designing and managing infrastructure services that can motivate contractors or operators to recognize and manage shocks and stresses to the performance of their systems. These mechanisms will help them identify opportunities to improve the resilience of beneficiaries and stakeholders, particularly the urban poor and other vulnerable groups, through targeted infrastructure and service delivery. To ensure resilience measures are sustainable, accessible, and affordable, ADB will promote efficiency, effectiveness, economy, asset optimization, and value for money in its operations.
- 57. **Strengthen disaster preparedness and emergency response plans.** Cities can significantly reduce the loss of life from disasters through effective forecasting and early warning systems, emergency response plans, and proper communication and consultation strategies including raising awareness and training citizens. ADB will thus enable policy, institutional, and regulatory frameworks that promote and support investments in disaster preparedness and emergency response systems.
- 58. **Support cities to localize nationally determined contributions.** ADB will support cities in implementing climate change commitments under the Paris Agreement by focusing on the localization of nationally determined contributions and preparing and implementing low-carbon transformation plans. Achieving nationally determined contributions will require a transformative shift in urban development approaches and investments such as identifying and implementing interventions that reduce GHG emissions and establishing low-carbon investment pipelines for cities. Priorities for low-carbon urban infrastructure and services will target energy; transport; wastewater treatment; waste management including waste prevention, recycling, waste-to-energy, and resource recovery; housing; and efficiency improvements for the private sector, including manufacturing, services, and commercial establishments. This will be supplemented through support for low-carbon policies, capacity building, and improved governance. ADB will also help catalyze investments for low-carbon growth strategies.

59. Adopt a systematic approach to urban infrastructure resilience. ADB will promote climate-resilient urban infrastructure delivery through a systems approach to urban infrastructure resilience; it will consider and seek to enhance infrastructure systems (rather than just assets or components) within cities through interconnections and interdependencies within and between systems and to improve their holistic performance under different conditions including times of stress or disruption. ADB recognizes the importance of ensuring that the design, delivery, and operation of urban investments are adequately proofed to the projected future impacts of climate change and promoting a precautionary approach to account for future climate uncertainty. This helps improve performance, minimize social and economic shocks, and enhance the well-being of urban residents, including the poor and vulnerable.



IMPLEMENTATION

A. Interdepartmental Cooperation

- 60. Implementing this plan will require a systemic approach in ADB to develop cross-sector interventions and strengthen the "One ADB" approach.³⁸ ADB will facilitate internal systems and processes that encourage staff to work in an integrated manner for livable cities on the provision of infrastructure; capacity development; institutional strengthening; planning and finance; and mainstreaming of climate resilience and disaster risk management systems into sector frameworks, country partnership strategies, country operations business plans, sector road maps, projects, implementation plans, and monitoring and reporting systems.
- 61. Since ADB operations departments are mainly responsible for implementing ADB products and services in DMCs, they will take the lead in delivering integrated solutions to support cities, combining expertise across a range of sectors and themes and taking a strategic approach in facilitating the implementation of this plan.

B. Strategic Partnerships and Coordination

- 62. ADB recognizes the need to forge and strengthen partnerships for knowledge, innovation, and sharing lessons learned and good practices. ADB will continue to engage with other development partners, academia, think tanks, professional organizations, universities, knowledge institutions, centers of excellence, city networks, and trust funds to collaborate and form meaningful partnerships. Innovative projects can be supported through the High-Level Technology Fund, while the domestic resource mobilization trust fund can be a resource to support local governance. Engagement with global fund partners will be explored considering the wide scope of activities required to support cities and achieve greater alignment among country partnership strategies, projects, existing national or city growth strategies, and lending portfolios.
- 63. The fast pace of innovations and digital transformation necessitates more flexible approaches to engage with the private sector and benefit from cutting-edge technologies, with a controlled and shared risk to attract reliable players and partners. Partnerships with private sector organizations and foundations (e.g., Bill and Melinda Gates Foundation and Rockefeller Foundation) will be enhanced to

This approach encourages collaboration between ADB's sovereign and nonsovereign operations, synergy in knowledge activities between operations and nonoperations departments, and integrated solutions through collaboration across the sector and thematic groups.

support initiatives in capacity building, knowledge sharing, and peer-to-peer learning. Several private corporations have also developed targeted corporate social responsibility programs that can be tapped to support programs in selected DMCs. Development of PPPs will be an important factor for applying innovations from the private sector.

64. ADB will engage with citizens and civil society organizations throughout various phases of the project cycle. ADB considers engagement with civil society organizations vital to its operations because they provide a platform where voices of the most vulnerable can be heard, creating stronger links and facilitating beneficiaries' participation in ADB operations. They also provide ADB with valuable knowledge and expertise and a testing ground for innovative approaches that can be piloted. ADB will promote relevant networks and coalitions, recognizing the multiplier effect in the effective delivery of its operations.

C. Emerging Areas

ADB will continue to develop expertise in existing and emerging areas such as integrated urban planning; engineering; socio-environmental safeguards; social services; smart cities; sustainable tourism development; climate resilience; disaster risk reduction; economics; governance; subnational finance; community and civil society engagement; high-level technologies (e.g., artificial intelligence, blockchain, robotics, and internet of things-based city management systems); geographical information systems; and space-based technologies. Making cities more livable requires keeping up with fast-paced technological changes to respond to different priorities and conditions, while continuously enhancing the use of appropriate technologies. Corresponding capacity building, reskilling, and recruitment of staff and consultants will be undertaken as required. Staff skills need to be regularly developed and enhanced to integrate solutions from various sources, so ADB will organize regular visits to and training from innovation laboratories, system integrators, incubators, technology providers, and leading institutions, as well as capacity-building programs to keep abreast of the latest developments. ADB will promote collaborative and transdisciplinary research involving a diverse set of partners and stakeholders to influence both policy and practice to generate tangible outcomes.

D. Knowledge Priorities

ADB will support cities in knowledge development and dissemination for all major outputs and activities to maximize the impacts. Moreover, ADB will also collaborate across and within departments for its activities in knowledge management, including sharpening the knowledge focus in operations, especially in relation to innovative solutions; empowering members of sector groups; and strengthening external knowledge partnerships to encourage research and networking on knowledge products and services. Advanced research on cutting-edge themes and high-level technologies, and efficient collaboration with stakeholders and city networks, will help share lessons and best practices and experiment with new approaches. Further, enhancing staff learning and skills will reinforce expertise in dealing with the complexities of this plan (Appendix 2).

IV

STRATEGY 2030 OPERATIONAL PRIORITY RESULTS

67. The following are the Strategy 2030 operational priority results under the operational plan. These will be monitored under ADB's corporate results framework³⁹ and will be reported annually in the Development Effectiveness Review.

Pillar	Description	Indicator with Achievement Rate Target	Sub-pillars
1	Coverage, quality, efficiency, and reliability of services in urban areas improved	Number of people benefiting from improved services in urban areas	Performance of urban and social service providers improved Provision of urban infrastructure and services improved
2	Urban planning and financial sustainability of cities strengthened	Number of entities with improved urban planning and financial sustainability	Regulatory, legal, and institutional environment for more inclusive planning improved Reforms and policies for improved financial sustainability of cities implemented
3	Urban environment, climate resilience, and disaster management of cities improved	Number of zones with improved urban environment, climate resilience, and disaster risk management	Urban environments improved Capacity of cities for climate resilience and disaster risk management improved

³⁹ 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 Making Cities More Livable Operational Priority Area
Education	Promote university-industry links and provide cross-sector support for skill development in different sectors and small and medium-sized enterprises in partnership with industries.
	Encourage entrepreneurship through handholding and acceleration support.
	Develop learning hubs in partnership with industries to support different types of skills (e.g., cognitive, noncognitive, and occupational).
	Encourage lifelong learning through technical and vocational education and training.
	Promote workforce development.
Energy	Promote increased energy efficiency in buildings, and reduce demand for energy, thereby lessening the impact of environmental pollution.
	Contribute to smart cities with a reliable and affordable supply of electricity through smart grids and distributed systems as well as charging infrastructure for electric vehicles.
	Increase access to heating and cooling systems using renewable energy, which contributes to uplifting the poor in urban areas while reducing pollution.
Finance	Provide support to developing member countries (DMCs) and cities to enhance the efficiency and transparency of infrastructure finance and access to capital markets sourced from a more diverse source of long-term financiers.
	Help develop local capital markets and finance institutions.
	Enhance finance access for the traditionally underserved, such as poor households, vulnerable groups, and small and medium-sized enterprises.
	Establish green finance channeling mechanisms with local finance intermediaries.
	Catalyze innovative financing and funding mechanisms (e.g., disaster insurance and resilience bonds).
	Create an enabling environment for financial technology to improve the lives of urban dwellers.
Health	Improve the quality of urban health services and monitor the health effects of those residing in cities.
	Encourage urban planning and design to improve health by providing appropriate transport and housing choices, reducing wastewater overflows and pollution, and improving both citizen physical and mental health.

Sector and Thematic Group	Contribution to Making Cities More Livable Operational Priority Area
Transport	Promote livable cities through an integrated approach to improve access and mobility and provision of safe, reliable, and economical urban transport choices.
	Based on a compact city concept, promote integrated land use and transport planning through renewable energy-powered mass transit and nonmotorized transport in an integrated access and mobility system.
	Develop DMC capacity to plan, implement, manage, and finance urban transport systems.
Urban	Work on localizing global agenda on sustainable urban development and support cities to prepare and implement city-specific plans.
	Formulate urban development projects and programs to support initiatives on integrating various sectors and thematic areas, infrastructure support with reforms, sovereign with nonsovereign operations.
	Design initiatives to promote innovative technologies, use of information and communication technology, internet of things, and the fourth industrial revolution platforms.
	Enhance urban governance, planning, finance, and help cites better engage with important stakeholders.
	Promote new financing mechanisms from local, national, and international sources to support sustainable urban development.
Water	Transform urban water supply and sanitation agencies into financially autonomous and accountable corporatized service providers with an enhanced level of water services through a significant drop in water losses and appropriate use of public-private partnerships (PPPs).
	Ensure that wastewater is treated and reused, and promote city-wide inclusive sanitation systems, including sewered, nonsewered, and fecal sludge management solutions.
	Establish effective regulatory regimes and enforcement.
	Encourage sustainable use and rehabilitation of groundwater resources.
	Strengthen effective integrated water resources management approaches, including services for sustainable forest, land, and water management; nature-based solutions to urban water and flood risk management; and waste reduction and pollution prevention and management.
Gender	Encourage women-friendly city designs.
	Promote women's participation in urban planning and governance.
	Mainstream gender in urban transport.
	Support women's employment and entrepreneurship.
	Apply smart technology that incorporates the special needs of women.
	Considering that the urban migrant population comprises more than 50% young women, support cities to include provisions for this group to create spaces to meet and discuss their problems.
Governance	Facilitate the enhancement of citizen-centric approaches and effective partnerships among the government, private sector, and civil society organizations to improve service provision aimed at making cities more livable and inclusive.
	Enhance transparency and accountability of public institutions in cities, and improve their internal organizational processes, efficiencies, revenue mobilization, and resource utilization.
	Improve service delivery to citizens and enhance citizen engagement using the latest technologies.

Sector and Thematic Group	Contribution to Making Cities More Livable Operational Priority Area
Rural Development and Food Security (Agriculture)	Moderate rural–urban migration by creating decent jobs and livelihoods in rural areas by improving connectivity between urban centers and neighboring rural areas.
	Explore innovative information and communication technology options to better link rural suppliers and urban markets.
	Ensure urban food security through improved rural-urban economic linkages which include market integration and connectivity, urban agriculture, and rural suppliers-urban consumer links to promote food security.
Regional Cooperation and Integration	Encourage economic corridor operations, urban infrastructure for corridor towns, and urban economic zones for enterprise clusters.
	Integrate cities into regional value chains and global production networks through competitive advantages and innovation.
	Link urban centers across borders in climate change-related agreements backed by relevant sector interventions in cities, and share infrastructure in border cities where certain urban facilities can be shared.
	Facilitate cross-border transport through promoting the implementation of efficient regional or bilateral cross-border transport agreements.
	Facilitate implementation of cross-border power purchase agreements.
	Encourage regional tourism projects linking urban centers with cultural and historical heritage sites and ecotourism sites.
	Promote regional public goods.
	Conduct joint research on economic corridors, greenhouse gas emissions (GHG), skill migration studies, green ports, heritage restoration, and conservation measures.
Public-Private Partnership	Identify effective strategies for enhancement of the PPP environment to meet the need of DMCs and cities.
	Identify strategies and approaches to enhance the PPP environment, such as brownfield and greenfield projects and full privatization options that will reduce debt, recycle public capital, and provide an improved and more cost-efficient standard of services.
Environment	Integrate climate resilience and natural capital into urban infrastructure planning and design.
	Achieve competitive and productive cities with expanding funding sources such as green finance development.
	Encourage inclusive and participatory urban planning supported by environmental governance, comprehensive land-use and land-cover planning, and sustainable rural-urban interface for food security.
Climate Change and Disaster Risk Management	Promote an integrated approach, with coordinated and multisector planning, to address climate change mitigation and adaptation imperatives.
	Enter into long-term engagement with a few cities to develop, test, and learn from upgrading, expanding, or replacing urban infrastructure by utilizing low-emission technologies and climate-resilient approaches.
	Develop a platform for urbanization to assist DMC cities and utilities in building capacity to assess opportunities to utilize climate finance to achieve local environmental improvement objectives while reducing GHG emissions, as well as support new sources of finance and partnerships for scaling up investments in climate-resilient, low-emission urban infrastructure, and services between governments and the private sector.

Sector and Thematic Group	Contribution to Making Cities More Livable Operational Priority Area
	Link country nationally determined contribution frameworks to city-level GHG accounting to enable tracking of emissions, which could form the basis of future carbon markets (envisaged under Article 6 of the Paris Agreement) and city emission trading schemes.
Social Development	Address social dimensions of urbanization and critical issues of affordability, access, equity, and jobs.
	Promote age-friendly planning, design, and disability inclusion through universal design.
	Promote affordability of basic services and access by the urban poor.

APPENDIX 2 INTERDEPARTMENTAL COOPERATION MATRIX

Department/Group	Key Activities for Operational Priority Plan Implementation	Other Partners
Urban Sector Group Secretariat (Sustainable	Annual progress performance reporting on implementation of operational plan 4, including the corporate results framework	External knowledge partners
Development and Climate Change Department [SDCC]) Committee (urban sector directors)	Peer review of proposed projects, technical assistance papers, country partnership strategies, country operations business plans, and sector evaluation studies considering operational priority 4	Urban Financing Partnership Facility (UFPF) partners
Urban Sector Group Committee and wider	Project design and implementation leveraging support through resources from the UFPF trust funds	
Community	External representation of ADB work on livable cities in key international events	
	Cross-regional knowledge solutions, pilot innovations, and design and implementation of learning events	
	Staff training and capacity development on livable cities	
	Guidance notes and training and reporting on climate finance training and reporting	
Operations Departments	National sector (e.g., urban) development strategy, national- or city-level sector assessments, and knowledge work for preparation of country partnership strategies and country operations business plans	Key government agencies at the national, provincial, and city level
	Pipeline development on operational priority 4 with integrated cross-sector and thematic features, including use of high-level technologies	
	Inputs to the SDCC Secretariat on annual portfolio performance and key department achievements on implementation of operational priority 4	
	Engagement of developing member countries and development of their capacity on implementing operational priority 4	
	Development of country- or subregion-specific knowledge products based on best practices and experiences of implementation of ADB projects	
Knowledge Sharing and Services Center (SDCC)	Facilitation of the generation, capture, and dissemination of livable cities knowledge from various knowledge products and services	
	Support of implementation of training programs for ADB staff	

Department/Group	Key Activities for Operational Priority Plan Implementation	Other Partners
Economic Research and Regional Cooperation Department	Research, capture, and process region-wide data on livable cities	
Independent Evaluation Department	Operational priority, sector, country, and project evaluation studies	
Department of Communications	Support and advice for knowledge product production and dissemination	
	Cooperation and coordination for the maintenance of web-based knowledge-sharing tools	
Office of Information Systems and Technology	Development of real-time data access, including project-related geospatial and climate databases utilizing information created under the Spatial Data Analysis Explorer platform	
Strategy, Policy, and Partnerships Department	Corporate reporting of annual sector and operational priority 4 performance	
	Business process and document template and staff instruction improvements	
	Preparation of strategic documents related to operational priority 4	
	Corporate partnership arrangements	
	Asian Development Fund, corporate technical assistance resource allocations, and other strategic resource mobilization and management	
Budget, Personnel and Management Systems Department	Opportunities to tap resources such as experts, secondees, and interns to support analytical and knowledge work for operational priority 4	
Partnership Finance Division (SDCC)	Resource mobilization support for the replenishment of UFPF trust fund resources for work on livable cities	
Procurement, Portfolio, and Financial Management Department	Capacity building of departments and divisions working on operational priority 4 on procurement and consulting services, including through the Procurement Accreditation Skills Scheme program	

Strategy 2030 Operational Plan for Priority 4

Making Cities More Livable, 2019–2024

Making cities more livable 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.