This study has been prepared by the staff of the Asian Infrastructure Investment Bank (AIIB), with close support from Professor Zhi Liu and McKinsey and Company as consultants to the Bank. The study team is also grateful for the views and support provided by various partners. The study does not necessarily represent the views of AIIB, its Board of Directors or Shareholders.
OUTLINE

• Key trends and urban infrastructure demand in Asia
• Role of cities in Asia
• AIIB’s vision
• AIIB’s comparative advantages
• AIIB’s guiding principles
• AIIB’s implementation approach
  – Cities
  – Investment areas
  – Financing instruments
  – Partnerships
• AIIB’s monitoring framework
ASIA HAS BEEN URBANIZING AT AN UNPRECEDENTED SCALE AND SPEED, AND THIS TREND IS EXPECTED TO CONTINUE

**340M** ADDITIONAL PEOPLE ARE EXPECTED TO LIVE IN ASIAN CITIES**1** BY 2025

**1.2B** BY 2050

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**Urban population at midyear, 1950-2050 (Millions)**

<table>
<thead>
<tr>
<th>Western Asia</th>
<th>Africa</th>
<th>Latin America and the Caribbean</th>
<th>Northern America</th>
<th>Europe</th>
<th>Asia-Pacific region</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>2,000</td>
<td>1,500</td>
<td>1,000</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>2000</td>
<td>2,500</td>
<td>2,000</td>
<td>1,500</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>2050</td>
<td>3,000</td>
<td>2,500</td>
<td>2,000</td>
<td>1,500</td>
<td>1,500</td>
</tr>
</tbody>
</table>

**Population in millions in 2025**

- ≤1 (1,257)
- 1-5 (373)
- 5-10 (40)
- >10 (26)

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**1** For the purposes of this study, a city is defined as a metropolitan area with a residential population exceeding 150,000 at the appropriate time horizon of the project

**2** Consultant’s analysis is based on a sample of 1,696 cities in Asia
ASIA HAS ALSO BEEN MORE AFFECTED BY CLIMATE CHANGE THAN OTHER REGIONS

Source: Germanwatch, Munich RE NatCatSERVICE

>1 billion people in Asia will be affected by 2050

World map of the Global Climate Risk Index 1996-2015

Counties most affected by extreme weather events (1996-2015)
1. Honduras
2. Myanmar
3. Haiti
4. Nicaragua
5. Philippines
6. Bangladesh
7. Pakistan
8. Vietnam
9. Guatemala
10. Thailand
INFRASTRUCTURE INVESTMENT TO SUPPORT THE RAPID GROWTH OF ASIAN CITIES UNDER CLIMATE CHANGE IS URGENT

• Financing infrastructure for the sustainable development of cities is important for improving economic, environmental and social outcomes in Asia

• With rapid urbanization, cities are increasingly the engines of national economies and the hubs of trade in Asia. Infrastructure is a key contributor for ensuring the connectivity, productivity, efficiency and overall competitiveness of these cities

• Cities are also where most people will live. In addition to developing new cities and new urban districts to accommodate larger urban populations, many existing cities in Asia also need to be retooled to improve livability and people’s quality of life. The residents of many Asian cities today experience inadequate access to clean water and sanitation, unreliable power supply, traffic congestion, air and water pollution, inefficient land use, and a lack of decent shelters especially for the low-income group, amongst others. They are also increasingly affected by climate change and natural disasters

• Many Asian cities lack adequate infrastructure due, in part, to the small fiscal revenue base, lack of access to finance, and weak planning and management capacity of local administrations

Source: McKinsey & Company (Cityscope 2.0), Consultant’s analysis

1 Top-600 cities in Asia are expected to account for 66% of Asia’s GDP growth in 2015-2025
ASIA’S URBAN INFRASTRUCTURE NEED IS PROJECTED TO EXCEED US$1 BILLION BY 2025

Projected urban infrastructure need of selected countries in Asia¹, Billion US$

Source: McKinsey Global Institute, Consultant’s analysis

¹ Depending on data availability, selected countries are: Jordan, UAE, Israel, Iran, Saudi Arabia, Qatar, Kuwait, Bahrain, Turkey, Russia, Vietnam, Thailand, Sri Lanka, Philippines, Pakistan, Malaysia, Indonesia, Bangladesh, China, India; Russia is included by AIIB definition; asset classes based on ports, airports railways, roads, water, telecom, power, construction (using affordable housing as a proxy)
INVESTMENTS IN CITIES OVERLAP WITH SOME SECTORS (E.G. ENERGY, TRANSPORT), BUT THEY ALSO HAVE DISTINCTIVE FEATURES – ESP. A MULTI-SECTORAL NATURE THAT REQUIRE SPATIAL INTEGRATION

- From a sectoral perspective, investments in cities can overlap with other sectors’ investments that occur in urban areas (e.g. energy, transport). However, investments in cities also include many other areas that are beyond the scope of other sectors (e.g. resilience infrastructure, slum upgrading)
- In addition, investments in cities are often multi-sectoral in nature and require spatial integration (e.g. new town development, integrated sewerage and flood management). This create possibilities to utilize more innovative financing approaches, such as financing by land value capture, for investments in cities
- Taking a more holistic approach, infrastructure investments in cities can be broadly categorized into four areas:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Examples:</td>
<td>Examples:</td>
<td>Examples:</td>
<td>Examples:</td>
</tr>
<tr>
<td>• Metro; light rail; tram; bus transport; bus rapid transit; ferry</td>
<td>• Water supply; sewerage; wastewater treatment; solid waste collection and disposal</td>
<td>• Industrial parks; special economic zones</td>
<td>• Education sector: Public schools; universities</td>
</tr>
<tr>
<td>• Low-carbon infrastructure (e.g. infrastructure for electric cars; pedestrian and non-motorized transport facilities)</td>
<td>• Urban drainage; storm water management; flood protection; water resource management; sponge city; green infrastructure</td>
<td>• Commercial business districts</td>
<td>• Health sector: Public hospitals; clinics</td>
</tr>
<tr>
<td>• Multi-modal hubs; integrated traffic corridor</td>
<td>• Green buildings; public rental housing; public spaces</td>
<td>• Neighborhood (slum) upgrading</td>
<td></td>
</tr>
<tr>
<td>• Transit-oriented development</td>
<td>• Urban data infrastructure</td>
<td>• Urban redevelopment/ regeneration</td>
<td></td>
</tr>
<tr>
<td>• Street; urban road</td>
<td>• Electricity distribution</td>
<td>• New city/district development; satellite cities</td>
<td></td>
</tr>
</tbody>
</table>

Cross-cutting theme: Innovative and technological solutions (e.g. smart grid; smart metering; smart signaling; smart lighting; e-road pricing)
WATER AND WASTE (1): WATER SCARCITY WILL BE A GLOBAL PROBLEM WITH SIGNIFICANT IMPACT IN MANY PARTS OF ASIA

Water stress, per cent of total renewable water withdrawn, BAU medium growth

How many people live in water short areas¹?

- 4.7 Bn people, 70% of 2010 pop.
- Increase by 90% compared to 2010

How much GDP is generated in water scarce regions?

- 63 trillion USD²
  1.5 x 2010 total GDP
- Increase by 570% compared to 2010

Source: IFPRI, Consultant’s analysis

¹ >40% water stress
² Year 2000 prices
WATER AND WASTE (2): ASIA’S WATER MARKET IS EXPECTED TO GROW BY OVER 4% PER ANNUM IN THE NEAR TERM, DRIVEN BY STRONG FUNDAMENTALS

Asia water market\(^1\) has experienced strong growth...

<table>
<thead>
<tr>
<th>Market size (revenues), USD bn</th>
<th>2007</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>174</td>
<td>225</td>
</tr>
</tbody>
</table>

\(^{+4\%}\)

... driven by real fundamentals

- **Growing water scarcity** (by 2030, 40% of needs will not be covered by accessible resources)
  - **Economic growth in emerging markets** (e.g., China, India, Vietnam, GDP will grow >6% p.a. over the next 10 years)
  - **Population growth** (340m people move to cities alone)
  - **Increase of water-intensity in some industrial sectors** (e.g., O&G, Mining)

- **“Emerging 440” cities will generate 47% of all global growth\(^3\)** (because of a growing middle-class and need for better sanitation in rapidly growing cities)

- **Tightening pollution and reuse regulations** in developed and emerging markets

- **Growing corporate awareness of water risks** (internal and external)

\(^1\) Includes both capital expenditure and operating expenditure; excluding agriculture; for Asia-Pacific not including the Middle East

\(^2\) AAGR: Average annual growth rate

\(^3\) GDP growth measure at real exchange rate by geography, 2007-2025

Source: GWI, Consultant’s analysis
AFFORDABLE HOUSING: THE DEVELOPMENT OF AFFORDABLE HOUSING IS PROJECTED TO BE A US$9-11 TRILLION GLOBAL CONSTRUCTION OPPORTUNITY

<table>
<thead>
<tr>
<th>Countries in Asia</th>
<th>Substandard housing of total urban housing¹, %</th>
<th>Substandard housing units in urban areas¹, Million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nigeria</td>
<td>63</td>
<td>11</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>62</td>
<td>6</td>
</tr>
<tr>
<td>Pakistan</td>
<td>47</td>
<td>4</td>
</tr>
<tr>
<td>Philippines</td>
<td>41</td>
<td>4</td>
</tr>
<tr>
<td>India</td>
<td>33</td>
<td>28</td>
</tr>
<tr>
<td>Iran</td>
<td>30</td>
<td>4</td>
</tr>
<tr>
<td>China</td>
<td>29</td>
<td>62</td>
</tr>
<tr>
<td>Brazil</td>
<td>27</td>
<td>11</td>
</tr>
<tr>
<td>Indonesia</td>
<td>23</td>
<td>7</td>
</tr>
<tr>
<td>Russia</td>
<td>12</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Turner and Townsend; Gardiner and Theobald 2011; AECOM; Eurostat; UN Stats; McKinsey Global Institute Cityscape database; US Department of Housing and Urban Development; Global Construction 2025 report; Mexico Chamber of Commerce; McKinsey Global Institute analysis

¹ Based on 2009 data (latest available) except for India (based on 2012 data)

Note: Numbers may not sum due to rounding
SAMPLE OF MDBS AND COMMERCIAL BANKS INVEST MOST INTO WATER AND WASTE, ENERGY AND URBAN TRANSPORT

<table>
<thead>
<tr>
<th>Economic development zone</th>
<th>MDBs</th>
<th>Non-MDB</th>
<th>No. of projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban transport</td>
<td>1,991</td>
<td>1,157</td>
<td>48</td>
</tr>
<tr>
<td>Resilience infrastructure</td>
<td>2,027</td>
<td>879</td>
<td>19</td>
</tr>
<tr>
<td>Water and Waste</td>
<td>3,482</td>
<td>3,007</td>
<td>70</td>
</tr>
<tr>
<td>Energy</td>
<td>2,643</td>
<td>69</td>
<td>69</td>
</tr>
<tr>
<td>Economic development zone</td>
<td>270</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Housing and community</td>
<td>973</td>
<td>126</td>
<td>14</td>
</tr>
<tr>
<td>Technology infrastructure</td>
<td>385</td>
<td>1,118</td>
<td>17</td>
</tr>
</tbody>
</table>

Investment in sustainable cities USD millions, 2015-2017

1 Includes International Bank for Reconstruction and Development (IBRD) and International Development Association (IDA)
2 Supplemented with Preqin data

Source: IJ Global, ADB, World Bank, EBRD, IFC, Consultant's analysis
WITH INCREASING DECENTRALIZATION, COLLABORATION WITH BOTH NATIONAL AND SUB-NATIONAL GOVERNMENTS IS IMPORTANT FOR THE SUSTAINABLE DEVELOPMENT OF CITIES

• Many Asian countries have been adopting fiscal decentralization. The mandates/areas of responsibilities and financial resources that sub-national governments have are generally influenced by the level of decentralization in their respective countries.

• There are some sub-national governments that have relatively strong creditworthiness and are able to tap into their respective domestic financial markets, such as through the issuance of municipal bonds.

• However, despite the increasing empowerment to govern, many sub-national governments still have a small own-source revenue base and are often supplemented by inter-governmental transfers and grants. These sub-national governments are actively collaborating with other MDBs as well as international and regional urban initiatives to strengthen their management capacity and expand their revenue base.

![Share of local revenue to total national revenue (2011)](chart1)

Source: ADB (Frameworks for central-local government relations and fiscal sustainability, 2016)

1 Local revenue excludes inter-governmental transfers and grants.
AIIB’s Vision is to support cities in Asia to be green, resilient, efficient, accessible and thriving (GREAT)

AIIB’s long-term aspiration:
Be a trusted banker in providing financing solutions for cities in Asia to achieve their GREAT objectives, with distinct capabilities to support sub-national entities in addition to national governments, and to mobilize private capital

Reflects 2 key considerations:

A  AIIB’s Role: “Provide financing solutions”
• AIIB’s primary role as a multilateral development bank, with focus on infrastructure financing

B  AIIB’s Client-Centered Orientation: “For cities in Asia to achieve their GREAT objectives”
• AIIB will support cities in achieving their broader visions and in contributing to global goals, such as the Sustainable Development Goals, New Urban Agenda, Paris Agreement on Climate Change, and Sendai Framework on Disaster Risk Reduction
AIIB IS WELL-POSITIONED TO INVEST IN CITIES GIVEN ITS ABILITY TO DIRECTLY FINANCE SUB-NATIONAL ENTITIES AND TO PROVIDE SOVEREIGN/NON-SOVEREIGN FINANCING WITHIN ONE BALANCE SHEET

A. Learning from other MDBs and client feedback

- MDBs’ investments in cities are predominantly through loans
- Clients have generally expressed preference for AIIB to have a simple, timely and flexible investment/project appraisal approach

B. AIIB’s comparative advantages

- Ability to directly finance not only national governments, but also sub-national entities (e.g. provincial/city governments, state-owned/municipal-owned enterprises)
- Ability to provide sovereign-backed and non-sovereign-backed financing within the same balance sheet

C. AIIB’s current challenges

- Yet to build strong client relationships with cities
- Yet to build deeper institutional capacities for more complex investments in cities

Opportunities for AIIB:

- In addition to national governments, sub-national entities represent a large potential client base for AIIB
- AIIB may consider supporting urban public-private partnerships (PPP) and commercially-financed solutions given its sovereign and non-sovereign financing instruments
- AIIB may consider positioning itself to develop more innovative and flexible financing mechanisms to support cities
- Where possible, AIIB may consider streamlining its team organization and processes to speed up project appraisal without compromising on project quality

While AIIB will act in a timely manner to seize these opportunities, the Bank also recognizes that it will take time to build trusted client relationships with cities, develop innovative financing instruments, and establish suitable conditions/market confidence to support the adoption of its innovative financing instruments

Source: ADB, EBRD, IFC, World Bank, Consultant’s analysis
AIIB’s investments in cities will be guided by 3 principles:

1. Client-driven
   - Maintain flexibility to finance national governments, sub-national entities and private sponsors
   - Proactively seek to build trusted client relationships with sub-national governments

2. Outcome-driven
   - Be delivered within urban metropolitan areas to largely benefit urban populations
   - Promote elements of green development, resilience, efficiency, accessibility and/or economic growth to support cities towards becoming GREAT\(^1\). Especially through projects that are integrated across sectors

3. Financial viability-driven
   - Prioritize projects that are financially sound and viable
   - Maintain flexibility to selectively support projects that do not initially offer sufficient financial returns to attract standalone private financing but present significant economic benefits with high social value

Given that AIIB is still a relatively young institution, the Bank will adopt a gradual and focused approach in its infrastructure investments in cities

---

\(^1\) It is notable that AIIB will seek to ensure environmental and social soundness and sustainability in all of its projects, including its infrastructure investments in cities, as set out in AIIB’s Environmental and Social Framework and Policy. The Bank will aim to address environmental and social risks and impacts during project identification, preparation and implementation. Through the projects that the Bank finances, AIIB will be supportive of social development and inclusion that are critical for sound development in a manner consistent with AIIB’s Articles of Agreement
16

CITIES (1): AIIB IS OPEN TO WORKING WITH CITIES OF ALL SIZES, FROM SMALL CITIES TO MEGACITIES

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Megacities</strong></td>
<td></td>
<td></td>
<td></td>
<td>Tianjin, China (457)</td>
</tr>
<tr>
<td>Population: &gt;10m</td>
<td>26</td>
<td>17%</td>
<td>5.6</td>
<td>Karachi, Pakistan (157)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bangalore, India (146)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Jakarta, Indonesia (453)</td>
</tr>
<tr>
<td><strong>Large cities</strong></td>
<td></td>
<td></td>
<td></td>
<td>Moscow, Russia (822)</td>
</tr>
<tr>
<td>Population: 5-10m</td>
<td>40</td>
<td>20%</td>
<td>4.4</td>
<td>Riyadh, Saudi Arabia (458)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ankara, Turkey (133)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ho Chi Minh City, Vietnam (95)</td>
</tr>
<tr>
<td><strong>Midsize cities</strong></td>
<td></td>
<td></td>
<td></td>
<td>Phnom Penh, Cambodia (23)</td>
</tr>
<tr>
<td>Population: 1-5m</td>
<td>373</td>
<td>20%</td>
<td>9.7</td>
<td>Dushanbe, Tajikistan (3.1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Abu Dhabi, UAE (130)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tashkent, Uzbekistan (22)</td>
</tr>
<tr>
<td><strong>Small cities</strong></td>
<td></td>
<td></td>
<td></td>
<td>Manama, Bahrain (23)</td>
</tr>
<tr>
<td>Population: 150k-1m</td>
<td>1,257</td>
<td>21%</td>
<td>2.5</td>
<td>Muscat, Oman (61)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Colombo, Sri Lanka (19)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chiang Mai, Thailand (2.7)</td>
</tr>
<tr>
<td><strong>Other areas</strong></td>
<td>–</td>
<td>2%</td>
<td>11.2</td>
<td></td>
</tr>
</tbody>
</table>

Source: McKinsey & Company (Cityscope 2.0), Consultant’s analysis

\(^1\) Consultant’s analysis is based on a sample of 1,696 cities in Asia.
Illustrative considerations in prioritizing cities:

1. **City vision and capabilities**
   - Has the city clearly assessed its needs and priorities — e.g. through a city development masterplan? Are these aligned to the broader national agenda?
   - Do the relevant urban authorities have capabilities in spatial planning?
   - Do the relevant urban authorities have a positive track record of delivery, esp. in projects of similar scale?

2. **Financial position**
   - Does the project sponsor have clear sources of funding, e.g. for sub-national governments: own-source revenue and/or inter-governmental transfers/grants?
   - Does the project sponsor have access to finance and/or the capacity to borrow? Does the project sponsor have a positive track record?
   - Does the project sponsor have experience in public-private partnerships (PPP)?

3. **Governance**
   - Has the relevant urban authorities been empowered with clear mandates/areas of responsibilities?
   - Does the relevant urban authorities have clear governance and regulatory policies/ regimes, e.g. to promote transparency and accountability?
   - Is there a clear PPP legislation/framework in place?
   - Are there institutional safeguards to ensure project delivery is independent of political uncertainties?

---

**CITIES (2): IN THE SHORT TERM, INVEST IN CITIES WITH HIGHER IMPLEMENTATION CAPACITY (ESTABLISHED CITY MASTERPLANS, PROJECT SPONSORS WITH SOUND FINANCIAL POSITIONS, ROBUST GOVERNANCE)**

Over the medium term, AIIB will gradually widen its investments across a larger group of cities, including those with more challenging circumstances.
INVESTMENT AREAS (1): GRADUALLY PROGRESS FROM FINANCING RELATIVELY INVESTMENT-READY TO MORE COMPLEX PROJECTS IN 3 PRIORITY AREAS, AND SUPPORT INNOVATIVE SOLUTIONS WHERE POSSIBLE

**Investment areas:**

<table>
<thead>
<tr>
<th>Investment-ready</th>
<th>Enhance urban mobility</th>
<th>Improve basic infrastructure and city resilience</th>
<th>Promote integrated development</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cross-cutting principles:</strong></td>
<td><strong>Integrated across sectors and embrace innovative solutions/proven technologies</strong></td>
<td><strong>Client-driven, outcome-driven and financial viability-driven</strong></td>
<td><strong>Cataclyze private capital</strong></td>
</tr>
<tr>
<td><strong>More complex projects</strong></td>
<td><strong>Build freestanding health/education facilities</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Legend:**
- **Short-term priority (3 years)**
- **Medium-term priority (5 years)**
- **Not prioritized under this strategy**

**Investment areas:**

**Enhance urban mobility**
- Relates to physical access within city boundaries
- **Examples:**
  - Metro; light rail; tram; bus transport; bus rapid transit
  - Low-carbon infrastructure (e.g. infrastructure for electric cars; pedestrian and non-motorized transport facilities)
  - Multi-modal hubs; integrated traffic corridor
  - Transit-oriented development
  - Street; urban road

**Improve basic infrastructure and city resilience**
- Relates to basic service provision, climate action, and disaster mitigation/adaptation
- **Examples:**
  - Water supply; sewerage; wastewater treatment; solid waste collection and disposal
  - Urban drainage; storm water management; flood protection; water resource management; sponge city; green infrastructure
  - Green buildings; public rental housing; public spaces
  - Urban data infrastructure
  - Electricity distribution

**Promote integrated development**
- Relates to more comprehensive/multi-sectoral developments in a given area; may include social facilities as part of the overall development
- **Examples:**
  - Industrial parks; special economic zones
  - Commercial business districts
  - Neighborhood (slum) upgrading
  - Urban redevelopment/regeneration
  - New city/district development; satellite cities

---

**Build freestanding health/education facilities**
- Relates to freestanding health and education facilities that would be better managed through a sectoral program/approach
- **Examples:**
  - Education sector: Public schools; universities
  - Health sector: Public hospitals; clinics

---

1 While health and education facilities are important for the sustainable development of cities, AIIB views that such facilities are better managed through a social sector approach.

2 While power generation typically takes place in provincial areas outside of cities, it can have spillover effects on cities (e.g. air pollution). As such, the pursuit of sustainable and green energy, in line with AIIB’s energy sector strategy, is also relevant and important for cities.
INVESTMENT AREAS (2): AIIB’S INFRASTRUCTURE INVESTMENTS IN THE 3 PRIORITY AREAS WILL BE TARGETED AT SUPPORTING ASIAN CITIES TOWARDS BECOMING ‘GREAT’

Investment areas:

**Enhance urban mobility**
Infrastructure investment contributes to:
- Better access and more efficient connectivity between residential, commercial and industrial areas, which in turn supports economic development and trade, within urban boundaries
- Green outcomes by incorporating low-carbon elements where possible

**Improve basic infrastructure and city resilience**
Infrastructure investment contributes to:
- Better access to and improve the efficiency of basic infrastructure and services (e.g. power supply, water supply, solid waste collection and disposal, etc.) within urban boundaries
- Green outcomes by reducing pollution challenges, and incorporating energy efficient/low-carbon elements where possible
- Resilience against climate change and natural disasters

**Promote integrated development**
Infrastructure investment contributes to:
- More efficient urban land use for economic/commercial hubs and residential areas, which in turn supports economic development and trade and better access to livable areas
- Green outcomes by incorporating energy efficient/low-carbon elements where possible

City objectives and global goals:

- **Green**
- **Resilient**
- **Efficient**
- **Accessible**
- **Thriving**

Support cities towards achieving GREAT

---

1 While health and education facilities are important for the sustainable development of cities, AIIB views that such facilities are better managed through a social sector approach. Thus AIIB will not prioritize health and education facilities under this strategy, unless they are part of a broader integrated development that the Bank is considering to finance.

Legend:
- Largely short-term priority (3 years)
- Largely medium-term priority (5 years)
- Not prioritized under this strategy

---

Build freestanding health/education facilities

Infrastructure investment contributes to:
- More provision and better access to health and education services (e.g. public schools, public hospitals)
## FINANCING INSTRUMENTS (1): AIIB WILL AIM TO OFFER A VARIETY OF FINANCING INSTRUMENTS, INCLUDING GOVERNMENT FINANCE, PRIVATE FINANCE AND PPP

<table>
<thead>
<tr>
<th>Financing instruments</th>
<th>Government finance</th>
<th>Private finance</th>
<th>PPP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank loans, municipal bonds, specialized</td>
<td>Debt finance, equity finance, infrastructure equity fund</td>
<td>Debt finance and equity finance (by private sector), viability gap finance</td>
<td></td>
</tr>
<tr>
<td>financial intermediary, green bonds, tax</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>incremental finance (a form of finance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>based on land value capture), local</td>
<td></td>
<td></td>
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<tr>
<td>currency financing</td>
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<tr>
<td>Credit risk of sub-national governments,</td>
<td>Commercial risks</td>
<td>Contingent liability facing the government</td>
<td></td>
</tr>
<tr>
<td>weak local debt management capacity</td>
<td></td>
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<tr>
<td>Engage by providing project finance or</td>
<td>Be a financier in the private finance market for projects with high development</td>
<td>Engage by providing finance to fill viability gap, and/or debt or equity finance</td>
<td></td>
</tr>
<tr>
<td>line of credit with sovereign guarantee,</td>
<td>impact</td>
<td>with private partners</td>
<td></td>
</tr>
<tr>
<td>sub-national government finance without</td>
<td></td>
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<tr>
<td>sovereign guarantee, and credit</td>
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<tr>
<td>enhancement for municipal bonds, and</td>
<td></td>
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<tr>
<td>mobilizing green finance</td>
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<tr>
<td>Role of AIIB</td>
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</tbody>
</table>
• **Government finance**: In addition to providing sovereign-backed financing, AIIB will seek to support sub-national entities with higher implementation capacity through sub-national finance without sovereign guarantee. Over time, the Bank will seek to widen its range of non-sovereign-backed financing instruments, and develop scalability in its more innovative financing instruments, such as local currency financing, credit enhancements for municipal bonds and green finance. As appropriate, financing to sub-national entities will be conducted in consultation with relevant national authorities.

• **Private finance**: AIIB recognizes that cities offer significant opportunities for private sector participation. The Bank will coordinate its infrastructure investments in cities with its efforts and priorities as set out in AIIB’s Strategy on Mobilizing Private Capital for Infrastructure.

• Where necessary and possible, AIIB will also use its Special Fund to support project preparation for its investments in cities, especially where there is clear potential to improve project bankability and catalyze private investments.
PARTNERSHIPS (1): IN ADDITION TO MDBS, AIIB WILL SEEK TO COLLABORATE WITH INTERNATIONAL/REGIONAL URBAN INITIATIVES TO IDENTIFY PROJECTS EARLY AND COMPLEMENT THE BANK’S LEAN BUSINESS MODEL

Observations:
- A number of international/regional urban initiatives are assisting cities to address urban challenges, such as resilience and climate mitigation/adaptation
- One of their engagement outcomes with cities is the development and prioritization of bankable projects

Examples of international urban initiatives:

<table>
<thead>
<tr>
<th>Urban initiatives</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Resilient Cities</td>
<td>• Helping cities to become more resilient to physical, social and economic challenges. Specific projects are being developed via the implementation of individual city strategies</td>
</tr>
<tr>
<td>C40</td>
<td>• Network of the world’s megacities that are committed to addressing climate change at the city level. Various development partners and think tanks are supporting the cities to prepare and implement sustainable, low carbon and climate adaptation projects</td>
</tr>
<tr>
<td>Cities Development Initiative for Asia (CDIA)</td>
<td>• International partnership to assist medium-sized Asian cities to bridge the gap between development plans and the implementation of infrastructure investments. The initiative has prepared 101 project feasibility studies to date, of which 52 have been matched with financing</td>
</tr>
<tr>
<td>Centre for Liveable Cities (CLC)</td>
<td>• Mission is to distil, create and share knowledge on livable and sustainable cities. Works with several development partners, such as ADB and the World Bank, to provide technical assistance, including on preparing bankable infrastructure projects</td>
</tr>
<tr>
<td>Cities Alliance</td>
<td>• Network of local authorities, national governments, MDBs, NGOs, private sector foundations, universities and think tanks to address the challenges of rapid urbanization. Financial aid and technical support is provided for citywide and nationwide slum upgrading programs, city development strategies, and national policies on urban development and local government</td>
</tr>
<tr>
<td>Local Governments for Sustainability (ICLEI)</td>
<td>• Global network of more than 1,500 cities, towns and regions committed to confronting the realities of urbanization, adapting to economic and demographic trends, and preparing for the impacts of climate change and other urban challenges, so as to build a sustainable future</td>
</tr>
</tbody>
</table>

Implications for AIIB:
- AIIB will seek to identify priority projects from an early stage. This will allow AIIB to:
  - Focus resources on financing-related value propositions (e.g. financial structuring)
  - Remain lean in upstream planning and policy work (e.g. integrated master planning)
PARTNERSHIPS (2): AIIB’S CONTINUOUS EFFORTS TO BUILD AND STRENGTHEN PARTNERSHIPS WITH PRIVATE FINANCIERS WILL BE PARTICULARLY RELEVANT FOR ITS INFRASTRUCTURE INVESTMENTS IN CITIES

<table>
<thead>
<tr>
<th>Banks and institutional investors</th>
<th>Corporates and municipal financing entities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Banks (lending and intermediation)</strong></td>
<td><strong>Infrastrucure and technology providers</strong></td>
</tr>
<tr>
<td>▪ State-owned banks</td>
<td>▪ Engineering &amp; construction firms (e.g., China Communications Group, GE)</td>
</tr>
<tr>
<td>▪ Commercial banks (e.g., DBS)</td>
<td>▪ Developers (e.g., ACWA Power)</td>
</tr>
<tr>
<td><strong>Institutional investors (equity and capital markets)</strong></td>
<td>▪ Real estate developers</td>
</tr>
<tr>
<td>▪ Asset management firms (e.g., BlackRock)</td>
<td>▪ Environmental services (e.g., water, waste)</td>
</tr>
<tr>
<td>▪ Private equity and infrastructure funds</td>
<td>▪ Transportation</td>
</tr>
<tr>
<td>▪ Mutual funds</td>
<td>▪ Utilities (e.g., power)</td>
</tr>
<tr>
<td>▪ Insurance and pension funds</td>
<td>▪ Technology and solutions providers (e.g., Siemens, Microsoft)</td>
</tr>
<tr>
<td>▪ SWFs (e.g., China Investment Corp, GIC)</td>
<td>▪ SOEs/private firms (e.g., as anchor tenants)</td>
</tr>
<tr>
<td><strong>Other financial institutions</strong></td>
<td><strong>Municipal financing entities/platforms</strong></td>
</tr>
<tr>
<td>▪ Guarantee institutions (e.g., MIGA)</td>
<td></td>
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</tbody>
</table>
SUMMARY OF AIIB’S PRELIMINARY EXPECTATIONS ON ITS INFRASTRUCTURE INVESTMENTS IN CITIES

AIIB’s infrastructure investments in cities will be client-driven, outcome-driven and financial viability-driven. Given that AIIB is still a young institution, the Bank will adopt a gradual and focused implementation approach:

➢ **Short-term (3 years)**
  - **Cities**: Invest in cities with higher implementation capacity (established city masterplans, project sponsors with sound financial positions, robust governance)
  - **Investment areas**: Invest in relatively investment-ready projects, largely in ‘enhancing urban mobility’ and ‘improving basic infrastructure and city resilience’
  - **Financing instruments**: In addition to directly financing national governments and private sponsors, support sub-national governments through sub-national finance without sovereign guarantee where possible (in consultation with relevant national authorities, as appropriate)
  - Use **AIIB’s Special Fund** to support project preparation for investments in cities, especially if there is clear potential to improve project bankability and catalyze private investments
  - In addition to MDBs and the private sector, develop **partnerships with international/regional urban initiatives**, especially those that have advanced engagements with cities and have prepared lists of prioritized bankable projects
  - Develop necessary in-house capacity for due diligence and business development, and/or management capacity for outsourcing these functions

➢ **Medium-term (5 years)**
  - **Cities**: Widen investments across a larger group of cities, including those with more challenging circumstances
  - **Investment areas**: Invest in more complex projects, and broaden the investment portfolio in cities across more sub-sectors, including in ‘promoting integrated development’
  - **Financing instruments**: Widen the range of and develop scalability in AIIB’s suite of financing instruments — e.g. local currency financing, credit enhancements for municipal bonds, green finance, etc.

➢ **Long-term (10 years)**
  - **Establish a track record as a trusted banker in providing financing solutions for cities in Asia to achieve their GREAT objectives**: this involves having a strong client base, an investment presence in a wide range of cities and investment areas, and suite of scalable financial instruments and trusted partnerships

1 Expectations will be further refined as AIIB engages with more stakeholders, and continues to learn from ongoing internal approaches and investment experiences.
TO MONITOR PROGRESS, AIIB WILL USE LARGELY INPUT AND OUTPUT MEASURES IN THE SHORT TERM; AIIB WILL ALSO SEEK TO LEARN FROM GOOD PRACTICES AND INCLUDE OUTCOME MEASURES OVER TIME

- Each of AIIB’s investments, including in cities, will be required to identify its expected results from the start of project preparation, and will be monitored for its achievement of the expected results during project implementation. For AIIB’s investments in cities, each project may consider demonstrating its contribution towards achieving one or more of the GREAT outcomes. Notwithstanding this, AIIB will need time to build the necessary capacity for project implementation and results monitoring. In the short term, AIIB will largely monitor project implementation and output. The Bank will seek to learn from other MDBs and project sponsors’ experiences and good practices over time, and where feasible, include relevant outcome measures in its results monitoring framework.

- At the portfolio level, the Bank has identified a set of high-level indicators to monitor progress in implementing the Sustainable Cities Strategy. The multi-sectoral nature of cities and challenges arising from cross-sectoral aggregation reinforce that input (i.e. investment amount) and output measures will be more feasible to monitor in the short term. Consistent with AIIB’s approach to project-level monitoring, over time, AIIB will seek to include outcome measures in its portfolio-level monitoring framework. In addition, where possible and available, AIIB’s investments in cities will be monitored in alignment with other sectors’ results monitoring frameworks (e.g. energy, transport).

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Portfolio Level Output/Outcome indicators</th>
<th>Investment amount (US$ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhancing urban mobility</td>
<td>• Number of cities where AIIB has invested in projects towards achieving one or more of the GREAT outcomes</td>
<td>• USD and percent of financing for enhancing urban mobility</td>
</tr>
<tr>
<td>Improving basic infrastructure and city resilience</td>
<td>• Where possible and available, align with AIIB’s individual sector’s results monitoring frameworks as set out in the individual sector strategies (e.g. energy, transport)</td>
<td>• USD and percent financing for improving basic infrastructure and city resilience</td>
</tr>
<tr>
<td>Promoting integrated development</td>
<td></td>
<td>• USD and percent financing for promoting integrated development</td>
</tr>
</tbody>
</table>

It is recognized that some projects may be categorized as both a sustainable city project and an individual sector project (e.g. energy, transport). A sustainable city project should be undertaken solely within the city’s boundaries, and have spatial interactions/implications with other investment areas.
THANK YOU.
LET’S CREATE TOMORROW.