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Asian Development Bank
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Financing Sustainable Infrastructure in Asia
Agenda

• The Asia Scene
• The sustainable infrastructure gap
• The current financing landscape
• The potential for institutional investors
• The role of MDBs and partner organizations
• Conclusions
The infrastructure gap
Challenge: The Asian Infrastructure Gap

Estimated Investment Needs: $26 trillion (Climate-adjusted)

2016 - 2030

Sector:
- Power: $14.7 trillion
- Transportation: $8.4 trillion
- Telecommunications: $2.3 trillion
- Water and sanitation: $0.8 trillion

Region:
- Central Asia: $0.5 trillion
- East Asia: $6 trillion
- South Asia: $6 trillion
- Southeast Asia: $3 trillion
- The Pacific: $0.04 trillion

Current investment per year: $881 billion

Investment needs per year: $1.7 trillion
Southeast Asia’s Infrastructure Needs

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<tbody>
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<td>3.1</td>
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<td>6,202</td>
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<td>2,503</td>
<td>5.1</td>
<td>26,166</td>
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Note: * Pakistan and Afghanistan are included in South Asia. ** Climate change adjusted figures include climate mitigation and climate proofing costs, but do not include other adaptation costs, especially those associated with sea level rise.

Source: 2015 Revision of World Population Prospects, United Nations; ADB estimates.
ASEAN Infrastructure Needs and Business Opportunities are Large:

The Situation:

- 60 million people in the region lack access to electricity in 2012
- 60 million lack access to safe drinking water in 2015
- 174 million people lack access to improved sanitation facilities in 2015
- 166 million people live in urban slums in 2014
- In Metro Manila, severe traffic congestion problems cost the economy an estimated $52 million per day in lost productivity.

The Challenge:

- How do we step up infrastructure investment to support sustainable and inclusive growth in the region?

Source: ADB Key Indicators 2016; United Nations SDG Database.
GDP = gross domestic product; PRC = People’s Republic of China.

* Public sector includes central government budget only.

Note: Based on BUDGET + PPI measure. Actual budget investments except Armenia, Bhutan, Georgia, Maldives, Myanmar, and Thailand, which are planned or estimated budget investments.

Sources: Country sources for public sector investments; Private Participation in Infrastructure Database, World Bank; World Bank (2015); World Development Indicators, World Bank; ADB estimates.
The Asian Infrastructure Gap

Estimated Funding Sources

**Investment needs** per year*

$504bn

<table>
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<th>Public investment</th>
<th>Private investment</th>
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<td><strong>Current</strong></td>
<td><strong>Future</strong></td>
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<td>$133bn</td>
<td>$121bn</td>
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<td>$63bn</td>
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</table>

| **Current**       | **Future**         |
| $63bn             | $187bn             |

Private funding will need to be 300% of current levels

*excluding People’s Republic of China, in 2015 prices
Private Sector Engagement in Asian Infrastructure:

Private sector investment and project number 2012 – 2016

Why private sector investment is declining?

1. Inequitable deal structures by governments.
2. Lack of a supportive legal and regulatory framework.
3. The lack of consistency and prioritization of private sector projects.
4. The uncertainty and lack of transparency associated with bid processes.
Measures to Attract Private Participation

PPP Readiness Index, 2014 (EIU)

- Korea, Rep. of
- India
- Philippines
- China, People's Rep. of
- Indonesia
- Thailand
- Bangladesh
- Kazakhstan
- Pakistan
- Mongolia
- Armenia
- Papua New Guinea
- Viet Nam
- Kyrgyz Republic
- Tajikistan
- Georgia

- Identified pipeline of well-prepared projects
- Fair return for risk taken
- Parties able to manage construction and O&M risks
- Investment grade contractual agreements
- Enforceable dispute resolution
- Regulator that ensures competition and rational user charges
- Deepen capital markets
- Attract FDI
The current financing landscape
The Financing Landscape Has Changed

Global Financial Crisis

- Increased capital costs and regulatory oversight
  - Retreat to “core” markets and customer base
  - Limited replacement by regional lenders
  - Significant reduction of active institutions
    - Developing economies particularly affected

Project finance

- International commercial banks
  - Traditional source
The potential for institutional investors
Institutional Investors

- Investment Companies: $29 trillion
- Insurance Companies and Private Pensions: $26 trillion
- Public Pensions and Superannuation Plans: $11 trillion

Source: McKinsey Global Institute

Pension Funds

- Sovereign Wealth Funds: $6 trillion
- Infrastructure and Private Equity Funds: $3 trillion
- Endowments and Foundations: $1 trillion

$7.8 trillion under management
1% invested in infrastructure
The role of MDBs and partner organizations
Role of MDBs and partner organizations

**Assist**
- Legal and regulatory frameworks
- Project identification and due diligence
- Development of local currency capital markets

**Finance**
- Individual projects or portfolio development
- Credit enhancement
- Help to crowd in global funds

**Pioneer**
- Alternative financing techniques
- For example green bonds and credit enhancement
- Creating the right ecosystem, such as sustainability metrics and rating systems

**Convene**
- Bring the private and public sectors together.
- Crowd in other partners to support
Key financing modalities
Key Financing Modalities

- Green Bonds
- Blended Finance
- Catalyzing Green Finance
- Credit Guarantees
Green Bonds

2007
Initial issue

2017
Amounting to
$155.5 billion

2020
Expected to issue
amounting to
$1 trillion

2017
$31.5 billion

U.S.
$10.6bn (34%)

Sweden.
$2.2bn (7%)

France.
$1.1bn (3%)

Denmark.
$2.0bn (6%)

Others
Developed
$7.8bn (25%)

PRC, Hong Kong, China
$1.2bn (4%)

India
$2.0bn (6%)

Mexico
$4.0bn (13%)

Others
Emerging
$0.6bn (2%)

PRC, Hong Kong, China
$1.2bn (4%)

India
$2.0bn (6%)

Mexico
$4.0bn (13%)

Others
Emerging
$0.6bn (2%)
Blended Finance

- Combining concessional finance alongside DFI’s normal financing activities and/or commercial finance.

- Blended finance targets the provision of important benefits to society beyond those which are captured by the private sector.

- Blended Finance can confer “bankability”.
Catalyzing Green Finance

Innovative financing + Resource leveraging + Knowledge collaboration = Green Finance Catalyzing Facility (GFCF)
Credit Guarantees

ADB

Political Risk Guarantee

Commercial bank

Loan

Project borrower

Host government

Support

Government Agency/State owned enterprise

Tariff/availability payment
PPPs IN ASEAN AND ADB’S ROLE
In Asia and the Pacific, ADB provides an integrated and holistic approach to PPPs

- Regional departments’ support for PPP framework and institutions
- Provision of transaction advisory services, and
- Sovereign and nonsovereign financing of projects

What is New with ADB Office of PPP

Public-Private Partnership Monitor
A new ADB survey designed to monitor progress of PPP business environment in selected developing member countries with respect to legal and institutional framework.

Infrastructure Referee Program
Supports provision of an independent third party opinion to help public and private parties resolve disagreements that may arrive over the life of a PPP project
PPPs in the Philippines

- In the Philippines, the Government has established a robust PPP program with 55 PPP projects – (awarded and under implementation) – covering highways, airports, light rail, mass transit, railways, classrooms, a prison facility, tourism, transport terminals, natural gas pipeline and ports.

- Fifteen projects with total project costs of $6.2 billion have been awarded since 2011.

- Many of these projects promote better connectivity with ASEAN such as the Cebu-Mactan International airport upgrade.
ADB’s PPP Support for Cebu City, Philippines

- Through the Asia-Pacific Project Preparation Facility (AP3F) provides technical assistance to help improve and modernize solid waste management in Cebu City under PPP modality.
- Funds a pre-feasibility study which helps city authorities prepare strong project concept, with the private sector expected to design, build, finance, operate and maintain infrastructure delivery and quality of life for residents.
- AP3F was announced in May 2015 with approximately $73 million in initial funding including $40 million from the government of Japan, CA$20 million from Canada, and A$10 million from Australia with ADB’s $10 million contribution.
Conclusions

• The sustainable infrastructure gap requires mobilization of new funding sources.
• The private sector is an increasingly important source.
• Unlocking institutional investment is a high priority.
• There is a growing variety of other financing modalities that can complement traditional funding.
• MDBs and partners can help governments create the right environment and bring the right projects.
Conclusions cont.

• Multilateral Development Banks Can Be Critical Factor In Addressing The Financing Of The Global Infrastructure Gap.
• The Key Issue Remains. Host Governments Should Create The Environment For Viable, Scalable Infrastructure Projects Which Will Attract Widespread Private Sector Investment And Foster Financial Innovation.
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