### Progress of Regional Integration in Asia

(intraregional shares as % of total)

<table>
<thead>
<tr>
<th></th>
<th>Trade</th>
<th>FDI</th>
<th>Equity</th>
<th>Debt</th>
<th>Migration</th>
<th>Remittances</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2001</strong></td>
<td>53%</td>
<td>47%</td>
<td>12%</td>
<td>8%</td>
<td>42%</td>
<td>33%</td>
</tr>
</tbody>
</table>

FDI = based on inward foreign direct investment (flows data); Equity = based on equity asset holdings (stock data); Debt = based on debt asset holdings (stock data).

**Notes:**
1. Trade, equity and debt data as of January to June 2016 (H1 2016).
2. Migration data in 2001 and 2015; available every 5 years.
3. Remittance data only available starting in 2010.

**Source:** ADB calculations using data from Association of Southeast Asian Nations (ASEAN) Secretariat, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, World Bank, and national sources.
MEETING ASIA’S INFRASTRUCTURE NEEDS
Key messages

• Developing Asia needs $26 trillion (in 2015 prices), or $1.7 trillion per year, for infrastructure investment in 2016-2030
  – These are more than double ADB 2009 estimates

• The infrastructure investment gap varies across countries
  – For 25 countries in 2016-2020, the gap is 2.4% of projected GDP; excluding PRC, this gap rises to 5% of projected GDP.

• Both public and private sectors must increase infrastructure finance—reforms are key
Bridging the gap

Infrastructure investment by financing source, excluding PRC,* 2016–2020, (annual average, $ billion in 2015 prices)

<table>
<thead>
<tr>
<th>Investments ($ billion in 2015 prices)</th>
<th>Current Investment</th>
<th>Additional Public</th>
<th>Additional Private</th>
<th>Investment Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$195</td>
<td>$121</td>
<td>$187</td>
<td>$503</td>
</tr>
<tr>
<td></td>
<td>Private $62.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public $132.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equity $47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Debt $140</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 25 countries minus the PRC
Note: Numbers may not add up to total due to rounding.
Role for MDBs

• MDB infrastructure financing in Asia is 2.5% of current investment (w/o PRC and India, >10%)

• MDB finance for infrastructure will rise. For ADB
  – Scale up annual loan and grant approvals from $17.5 billion in 2016 to more than $20 billion by 2020
  – Growing share for the private sector

• Blending finance with expertise and knowledge, support policy reform, promoting regional cooperation

• Innovation for sustainability
  – MDB credit enhanced project bond
Innovations for sustainable infrastructure

ADB credit-enhanced climate bond

- In Feb 2016, ADB backed the first climate bond, a credit-enhancement to the Philippine firm AP Renewables, Inc. (APRI) for the Tiwi-MakBan geothermal energy facilities. The $225 million equivalent, local currency bond came in addition to a direct ADB loan of $37.7 million.
  - The 1st certified climate bond in the Asia-Pacific region.
  - The 1st credit-enhanced project bond in SE Asia after AFC.
  - The 1st local-currency project bond in the Philippine power sector.

- Credit-enhanced (climate) bond as an alternative to bank financing
  - Crowd-in private sector (climate) finance of infrastructure investments
  - Mobilizing cost-effective long-term capital
  - Sustainable financing for climate change mitigation & adaptation