ADB Support for Infrastructure: Building Back Better from COVID-19

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COVID-19 (Coronavirus): ADB’s Response

ADB is supporting its developing members in responding to the COVID-19 outbreak through finance, knowledge, and partnerships.

$6.5 B
(18 March 2020)

$20.0 B
(13 April 2020)

Short-term emergency needs
- Protective equipment
- Health supplies
- Testing
- Communication
- Entry screening

Medium- to long-term needs
Help DMCs counter the socioeconomic impacts of the COVID-19 pandemic
<table>
<thead>
<tr>
<th>Item</th>
<th>Approvals</th>
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<tbody>
<tr>
<td></td>
<td>ADB</td>
</tr>
<tr>
<td><strong>A. Sovereign operations</strong></td>
<td></td>
</tr>
<tr>
<td>COVID-19 pandemic response option (CPR0)</td>
<td>11,990</td>
</tr>
<tr>
<td>Other projects</td>
<td>2,310</td>
</tr>
<tr>
<td><strong>B. Nonsovereign operations</strong></td>
<td></td>
</tr>
<tr>
<td>Projects</td>
<td>1,945</td>
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<tr>
<td>Revolving programs</td>
<td>204</td>
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<tr>
<td><strong>C. Asia Pacific Disaster Response Fund &amp; Technical Assistance</strong></td>
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<tr>
<td>Asia Pacific Disaster Response Fund</td>
<td>154</td>
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<tr>
<td>Technical Assistance</td>
<td>56</td>
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<tr>
<td><strong>Total</strong></td>
<td>14,090</td>
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</tbody>
</table>

**ADB Approved COVID-19 Response ($ million) as of 9 October 2020**
COVID-19 Impacts on Transport Patterns and Energy Use

Aviation: Flights per day

Electricity: % demand change

Global Energy Demand: % change

Sources: Flightradar, Apple, and IEA.
Impacts on ADB Developing Member Countries

Challenges
- Shift to less sustainable transport modes
- Financial viability of public transport operators
- Liquidity issues of power utilities
- Energy producer countries taking revenue hit

Observed Benefits
- Good air quality
- Opportunity to modernize public transport systems
- Power mix shifted towards renewables
- Power system demonstrated flexibility
Bounce-back strategy

**PHASE 1: RESPONSE**

1. Restrict non-essential travel
2. Ensure uninterrupted electricity supply
3. Protect transport and utility staff, passengers, and consumers
4. Ensure health monitoring systems in place
5. Provide necessary financial support to consumers and utilities

**PHASE 2: RECOVERY**

1. Monitor, evaluate and review
2. Implement preventive and precautionary operating measures as restrictions ease
3. Introduce advanced technology for contactless systems and agile response
4. Identify fiscal sustainability measures

**PHASE 3: ADAPTATION**

1. Mainstream measures as part of overall pandemic resilient response
2. Sustainable transport and energy systems revived, modernized, and better prepared to respond to future pandemic/disaster

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**Feedback loop, monitoring of health and quarantine instructions**

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**Note:**
- Durations of each phase is indicative.
- Preparation of each activity should commence ahead of implementation.
- In case of repeated wave of transmissions, countries may fall back to earlier phases and the process repeats.
Forward-looking ADB Support

• Preparing infrastructure investments
  • Shovel-ready jobs support return to full employment
  • Ensuring alignment with revised projections

• Health-impact and safety studies
  • Appropriate measures for safe public transport
  • Maintaining safe indoor air quality for returns to office

• Knowledge support and policy dialogue
  • Measures to jointly achieve clean air and climate benefits
  • Utility sustainability with consideration of tariff structure and subsidies
  • Assessing the impact of a “new normal” on transport needs and choices
  • Supporting robust supply chains for energy
  • Security of energy supply through modernization, digitization, and regional cooperation
Northeast Asia Power System Interconnection (NAPSI)

NAPSI is a concept to interconnect all Northeast Asian Power Systems with a focus on renewable energy to maximize:

- Economic opportunity
  - Renewable targets in all countries
  - Varying land availability and renewable resource quality
  - Optimize generation fleet across region
- System resilience
  - Larger balancing areas and mix of generation sources
  - Provides flexibility to manage variability
- Shared goals and shared solutions: reduced CO$_2$ and other pollutants
NAPSI TA

• ADB Technical Assistance to develop power system scenarios from 2016-2036 considering:
  • Electricity market analysis for Northeast Asia countries
  • Wind and solar potential assessment of Mongolia
  • Transmission and grid development for Northeast Asia interconnection

• Study evaluated least-cost system expansion
  • Isolated
  • Integrated

The technical assistance was co-financed by the Climate Change Fund, the Republic of Korea e-Asa and Knowledge Partnership Fund, and the People’s Republic of China Poverty reduction and Regional Cooperation Fund.

Net gain: savings from reduced generation costs compared to isolated grid case — transmission interconnection costs

Gross gain: net gain + value of CO₂ savings at $30/ton
NAPSI Next Steps

• Remaining barriers
  • Unharmonized regulatory regimes
  • Energy independence aspirations

• Next steps
  • Continued regional dialogue
  • More granular assessment of economic benefits and impacts (national and subnational)
  • Pursue step-wise development
    • Gobi renewable development
    • Gobi – PRC interconnection
    • PRC – Korea interconnection
Thank you