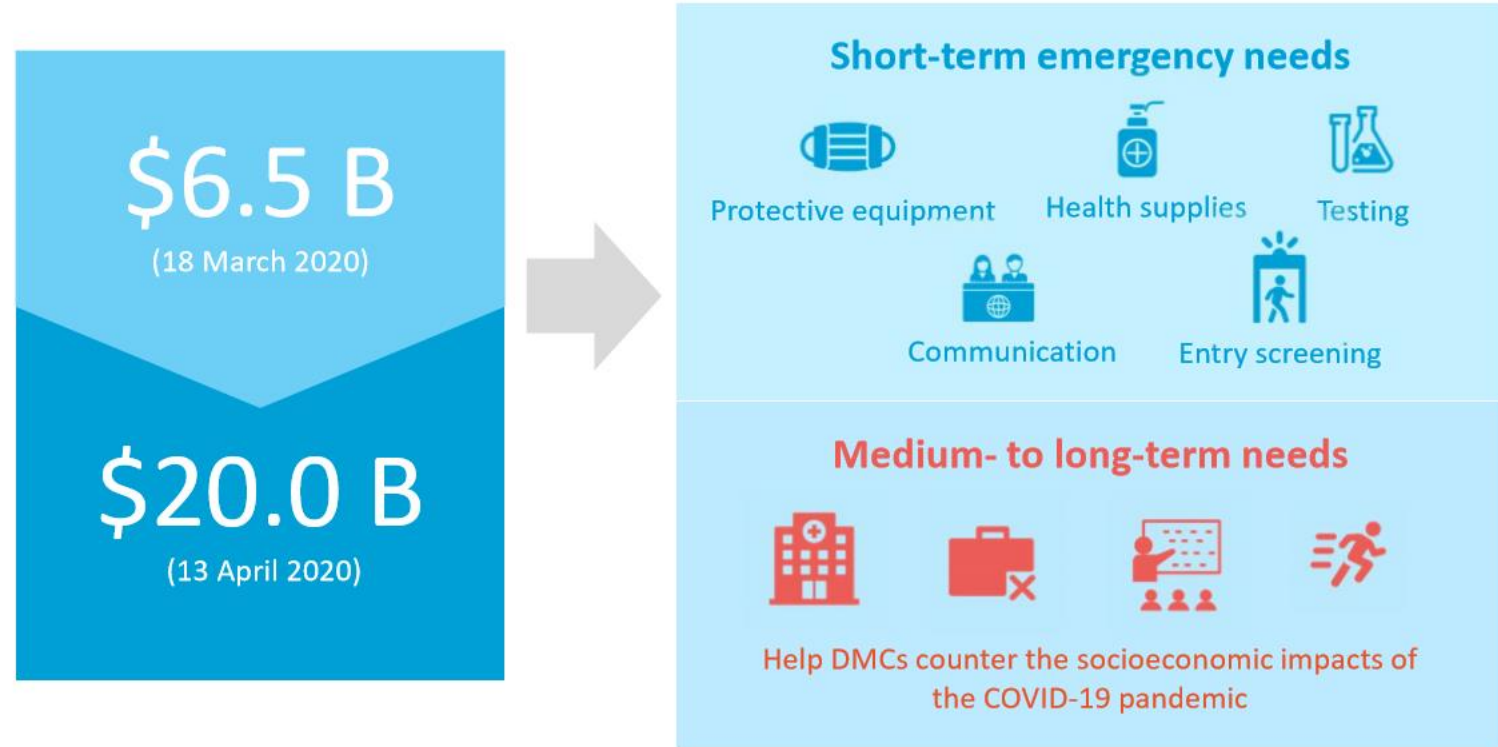


ADB Support for Infrastructure: *Building Back Better from COVID-19*

Sujata Gupta, Director
Shannon Cowlin, Principal Energy Specialist
Sustainable Infrastructure Division, East Asia
Department, ADB

North-East Asia Development
Cooperation Forum 2020
15 October 2020







ADB Approved COVID-19 Response

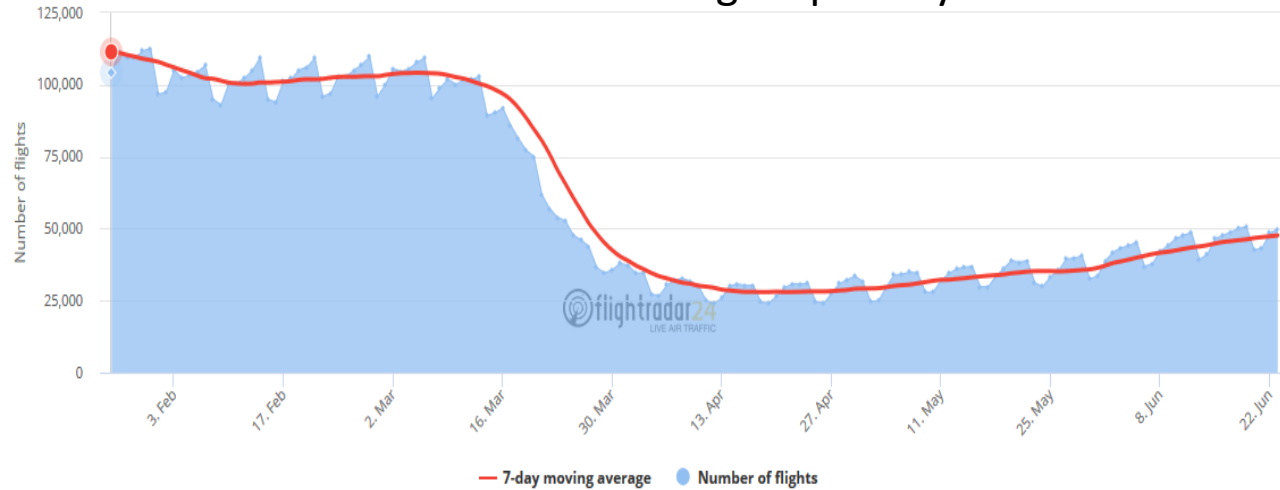
(\$ million) as of 9 October 2020

	Approvals		
Item	ADB	Cofinancing	Total
A. Sovereign operations	11,990	6,870	18,860
COVID-19 pandemic response option (CPRO)	9,680	6,481	16,161
Other projects	2,310	389	2,699
B. Nonsovereign operations	1,945	1,200	3,145
Projects	204	25	229
Revolving programs	1,742	1,175	2,917
C. Asia Pacific Disaster Response Fund & Technical Assistance	154	8	162
Asia Pacific Disaster Response Fund	56		56
Technical Assistance	98	8	106
Total	14,090	8,078	22,168

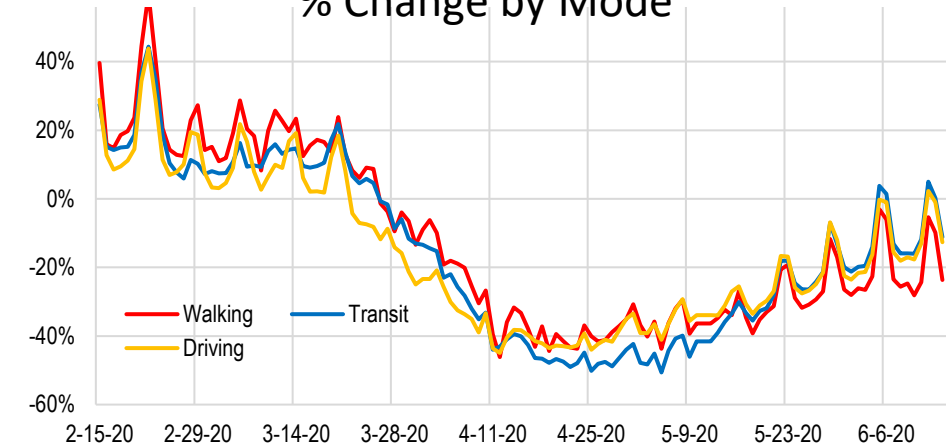


COVID-19 Impacts on Transport Patterns and Energy Use

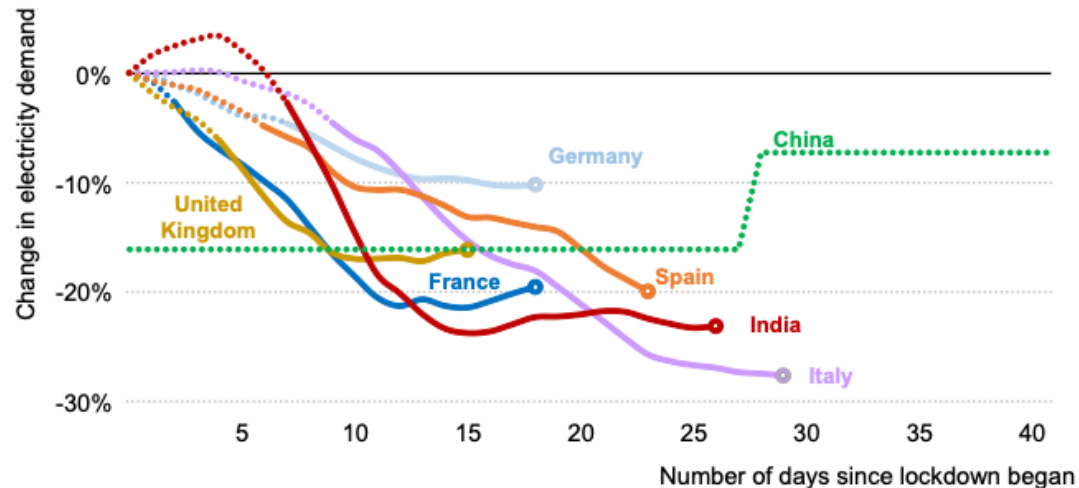
Aviation: Flights per day



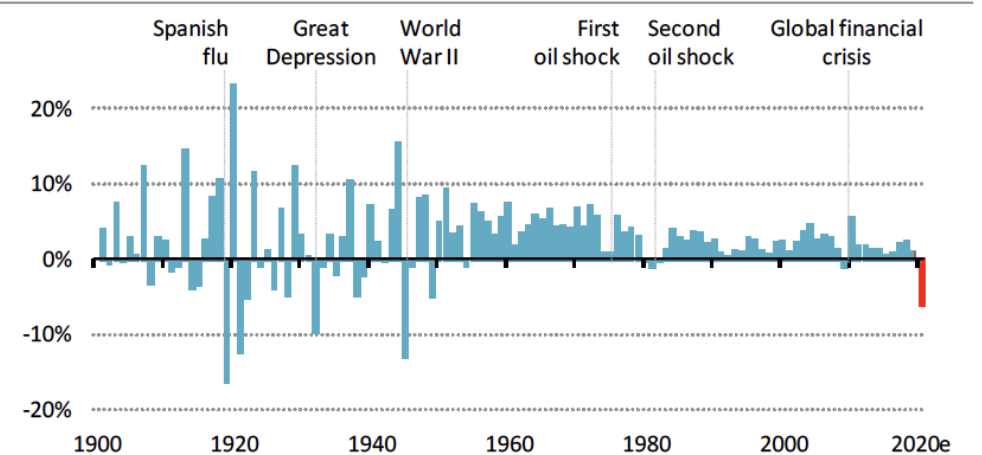
APAC Urban Transport % Change by Mode



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

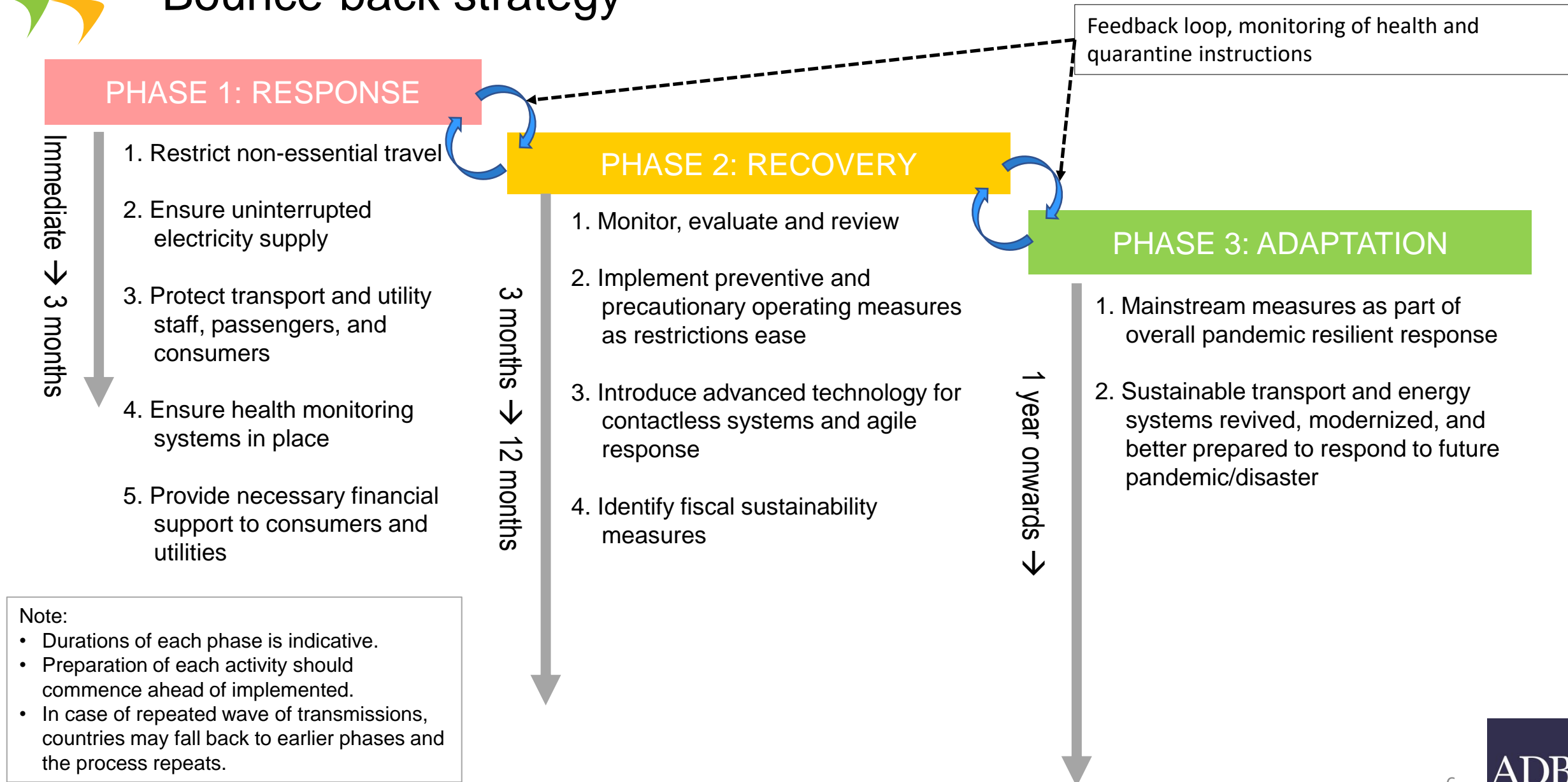
Observed Benefits



- Good air quality
- Opportunity to modernize public transport systems
- Power mix shifted towards renewables
- Power system demonstrated flexibility



Bounce-back strategy





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:

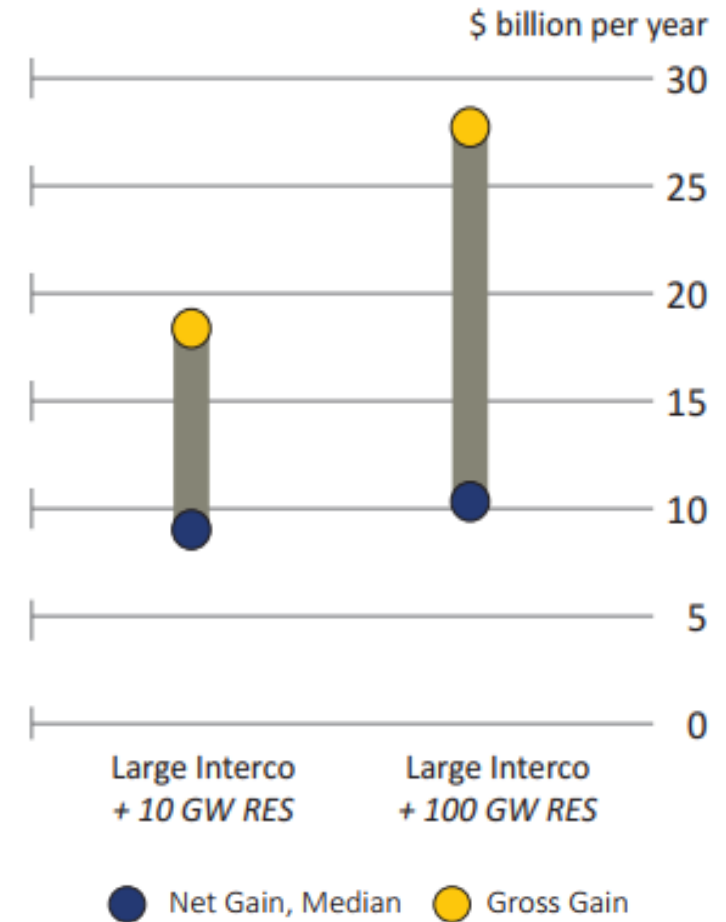
- Economic opportunity
 - Renewable targets in all countries
 - Varying land availability and renewable resource quality
 - Optimize generation fleet across region
- System resilience
 - Larger balancing areas and mix of generation sources
 - Provides flexibility to manage variability
- Shared goals and shared solutions: reduced CO₂ 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



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

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.



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