

Toward harmonized actions for low carbon economy transformation in the Northeastern Asian Region

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- **2°C emissions path: 50 GtCO₂(2030); 0 GtCO₂(2100)**
- **Carbon budget 275 Gt**
- **Energy Transformation for 2°C: 60%RE(2035); 100%L-C electricity (2035)**
- **Increasing challenge to developing countries:** access to capacity building, technology, finance and knowledge sharing to meet the challenge of energy transformation
- **Risks of climate change > Risks of mitigation**
- **Ambitious mitigation is possible**
- **Delaying mitigation will be substantially costly**

Korea's contribution to global efforts toward low carbon economy transition

- Adopted green growth as the foundation of future economic development (2009)
- Facilitated the launching of the Global Green Growth Institute
- Voluntary mitigation plan for 2020
- Became the host country of the Green Climate Fund (GCF)
- Implemented nationwide CO₂ Cap&Trade system
- Contributed additional USD\$100 M to GCF for CB for DC
- Ambitious mitigation plan for 2030

Barriers, costs, and possibility for tripartite collaboration for low carbon transformation

- The costs of RE > the costs of conventional fuels
 - Need to reduce system integration cost of RE
 - Pricing carbon emission and its institutional feasibility
 - Need to pass the test of public acceptance as well as private profitability
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- ① Expand LNG
 - ② Launch transnational electricity and natural gas grid
 - ③ Seek best practice nuclear safety regulations
 - ④ Establish regional carbon market