

East Asia Low Carbon Green Growth Roadmap Forum
Seoul, 25-26 April 2012



Track 5: Formulating and Implementing Low-carbon Development Strategies



Makiko Koriyama
 Lead Consultant
 Low Carbon Green Growth Roadmap project
 Environment and Development Division



About this chapter

- Low carbon green growth is about harmonizing environmental protection and economic growth and using climate action to drive economic growth.
- Requires mainstreaming climate change mitigation and adaptation into the national development planning process.
- This chapter aimed to combine the policy instruments highlighted in the previous sections to support low-carbon development.
- Provides insights on how specific policies can support low-carbon development strategies.



Low-carbon (or low-emissions) development strategy

- A forward-looking national development plan or strategy that encompasses low-emissions and/or climate resilient economic growth.
- Enables countries to align climate and development priorities in the planning process.
- Many developing countries in the Asia-Pacific region have prepared or are preparing such strategies.
 - ▣ Example: Republic of Korea, China, Japan, Indonesia, Maldives etc.



Components of a Low-carbon strategy

- | | |
|--|--|
| <ul style="list-style-type: none"> ▣ Vision ▣ Assessments – GHG inventories and projections, vulnerability assessments etc. ▣ Short- to long-term targets and goals (economy-wide or sector-specific) | <ul style="list-style-type: none"> ▣ Policy measures ▣ Specific programmes and projects ▣ Implementing plans ▣ Funding mechanisms ▣ Investment plans ▣ Institutional capacity and coordinating mechanisms ▣ Monitoring and evaluation plans |
|--|--|



Institutional Arrangements

- Low carbon development strategies will require engagement across ministries and sectors, backed by political commitment at the highest level.
 - ▣ Planning, finance, environment, industry, trade, agriculture, forestry, transport and construction ministries etc.
- Examples from the region:
 - ▣ Presidential Committee on Green Growth of the Republic of Korea
 - ▣ Bappanas, the planning ministry of Indonesia
 - ▣ National Development and Reform Commission of China
 - ▣ Green Technology Council and a Cabinet Committee on Green Technology chaired by the Prime Minister in Malaysia



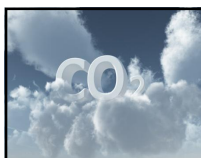
Nationally Appropriate Mitigation Action (NAMA)

- NAMAs are voluntary mitigation actions that developing country governments propose through the UNFCCC secretariat.
- Allows DCs to be recognized for their mitigation actions based on their country context.
- Offers opportunities for attracting finance and technology transfer.
- Low-carbon development strategies can provide the basis for planning, developing and implementing NAMAs.
- Many countries of this region have submitted their NAMAs to the UNFCCC.



Measurement, reporting and verification (MRV)

- A system for measurement, reporting and verification needs to be introduced
 - ▣ to monitor emissions and reductions
 - ▣ promote transparency of financial flows and the deployment of technological support that are provided to a specific NAMA.
- Needs to be supported by national greenhouse inventory.



Greenhouse Gas Inventories

- Establishment of a GHG inventory is an essential component of mitigation action of any country.
 - ▣ Collect and analyze data to keep track of progress of mitigation actions.
 - ▣ Understanding emissions and emission removal trends.
 - ▣ Basis for target and goal setting for GHG reductions.
 - ▣ Central tool to support the MRV process for NAMAs.



Setting Targets

- Goals and targets are instrumental for aligning sector-specific and climate change policies and decreasing uncertainty for business and encouraging investments.
- Many countries have already set targets:
 - ▣ China: 40-45 per cent reduction in emission intensity 2005 levels by 2020.
 - ▣ Indonesia: Voluntary target of emissions reduction by 26 per cent by 2020 (up to 41 per cent),
 - ▣ Maldives: Carbon neutral by 2020.
 - ▣ RoK: 30 per cent carbon emissions reduction by 30 per cent from BAU by 2020.



Developing Low-Carbon Infrastructure



- One of the main determinants of carbon intensity of economic growth patterns.
- Focus on less carbon intensive infrastructure: on low-carbon cities, green buildings, shift from road to rail, solid waste management and design of energy efficient systems.
- In addition, technological innovation and the introduction of better technology and next generation tech. to reduce the carbon intensity of growth.
- For example: renewable energy and decentralized systems; smart grids; CCS; and hydrogen and fuel cells.
 - ▣ Republic of Korea: Jeju Island Smart Grid Test bed
 - ▣ Indonesia's renewable energy policy
 - ▣ India's Solar Mission



Carbon Price



- Putting a price on carbon is crucial for reducing carbon emissions, decreasing carbon intensity and stimulating green growth.
- Key tool for stimulating technology innovation and reducing costs for the deployment of low-carbon technologies.
- Carbon tax and/or cap-and-trade scheme
- Many countries have acted on this already:
 - ▣ Australia's carbon pricing scheme
 - ▣ China's domestic emissions trading scheme (planned)
 - ▣ Republic of Korea's Emissions Target Management Scheme
 - ▣ Tokyo Metropolitan Government's emissions trading scheme at the city level (energy related CO₂).

Green Growth



 UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific

Promoting Low-Carbon Lifestyles

- Pricing policies, standards, incentives, education, communication campaigns and labeling to impact people's behavior and decisions to promote sustainable consumption.
- Financial incentives for engaging consumers and households:
 - ▣ RoK: Green credits cards
 - ▣ Japan: Eco-point programme (energy-efficient electrical appliances and environmentally friendly housing).

Green Growth



 UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific

Accompanying factsheets and case studies

Fact sheet:

- Cap-and-trade scheme
- Carbon capture and storage
- Carbon pricing
- Low-carbon development plan
- Nationally appropriate mitigation action
- Smart grid

Case study:

- Australia's carbon pricing scheme
- Brazil's National Plan on Climate Change and Law
- China's carbon trade
- China's mitigation targets

- European Union's emissions trading system
- India's solar mission
- Indonesia's renewable energy policy
- RoK's Emissions Target Management Scheme
- RoK's National Strategy on Green Growth and 5 Year Plan
- RoK's Framework Act on Low Carbon, Green Growth
- RoK's investment plan for green growth
- RoK's smart grid development
- UK carbon budget
- US's hydrogen economy



Thank you for
your attention



Questions for Discussion:

- Q1: Do you think that low carbon actions could generate economic opportunities? Or, do you think that it is a burden on society? What do you think is the approach for maximizing the economic opportunity from low carbon actions and minimizing the burden on the economy?
- Q2: What kind of low carbon actions do you think your country can take? Please list the actions starting with those with the highest potentials for emissions reductions to those with lower potentials.
- Q3: The Roadmap highlights the development of low-carbon development strategies to combine national economic development and climate planning in a more integrated approach. What are some of the policies and strategies that are being developed or implemented in your country?

Questions for Discussion

- Q4: How were these national strategies formulated and implemented? What are some of the challenges that were encountered?
- Q5: What are some of the Nationally Appropriate Mitigation Actions (NAMAs) that are being developed or implemented in your country? How were they developed and which ministries were engaged in this process? What kind of institution is responsible for overseeing the development, implementation and monitoring of NAMAs? What are the obstacles that have been encountered?

