Low-carbon future: A case for concerted action by national and local authorities

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Case for action: Dangers of delay

• Necessary emissions path for 50-50 chance of 2°C:
  – **under 35Gt** in 2030; **under 20Gt** in 2050; zero by end century

• High-carbon infrastructure & capital investment lead to technological “lock-in” for decades
  – **80%** of energy-related CO₂ by 2035 under 450ppm scenario, are already **locked-in** (IEA, WEO, 2011).

• Strong action in all regions of world, in all economic sectors is required
  – zero emissions from electricity around mid-century
  – negative in major sectors well before end of century
Case for action: Local benefits

• Next decades embody coincidence of (i) global structural transformation (urbanisation, energy systems, land use) and (ii) need for transition to low-carbon

• Around $90 trillion of infrastructure investment over 15 years is required for transformation. Going low carbon costs only a few trillion more

• Could stimulate dynamic, innovative and creative growth

• Most of necessary investment is in national interest, even without valuing emissions reductions

• Benefits include improved energy security, resource efficiency, fiscal innovation, local pollution & health, etc.

Value of the premature deaths from PM2.5 air pollution

Source: NCE estimate, based on WHO mortality data

[Bar chart showing the percentage of GDP lost due to premature deaths from PM2.5 air pollution in various countries, with China having the highest percentage.]
Stock of climate-related laws: Legislative activity is growing

- 4th GLOBE Climate Legislation Study, 2014
  - 487 climate-related laws in 66 study countries
  - Flagship legislation in 2013 in 8 countries
The Stock of Laws (1997)
The Stock of Laws (2013)
Key focus areas for legislation

- Carbon pricing: 10%
- Energy Supply: 50%
- Energy Demand: 35%
- REDD+ & LULUCF: 20%
- Transportation: 20%
- Adaptation: 20%
- Research & development: 20%
- Institutional & administrative arrangements: 50%
2015 Global Climate Legislation Study

- 2015 Study expanded to cover 100 countries (spring 2015)
  
  Algeria, Angola, Austria, Belarus, Belgium, Belize, Botswana, Bulgaria, Burkina Faso, Cameroon, Cuba, Egypt, Finland, Greece, Grenada, Hungary, Iran, Iraq, Ireland, Kuwait, Libya, Madagascar, Myanmar, Portugal, Romania, Singapore, Slovakia, Spain, Tajikistan, Trinidad and Tobago, Tuvalu, Uganda, Uzbekistan, Vanuatu.

- Focus on elements of effective legislation
  
  - Information
  - Targets & Policies on mitigation and adaptation
  - Institutional arrangements
  - Finance
Challenges ahead for legislators

- Shift towards **bottom-up** framework driven by “**nationally determined**” actions
  - **Changing role** of national legislators vis-à-vis UNFCCC
- **Ensuring consistency** between international pledge and national policy & legislation: getting involved ahead of Paris
- **Driving high ambition** while balancing national interests, international objectives and equity considerations
  - Local benefits of climate action
  - Legislator’s dialogue: consistency & comparability among national systems
- Making national legislation **compatible with international MRV** requirements and best practices
- Effectiveness of **national actions and legislation** are at the centre of success
Thank you

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The 4th edition of the study is now available via The GLOBE App (search for “GLOBE Climate”)

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