Climate Finance at a National Level

Melissa Low
The Asia-Europe Environment Forum Annual Conference
Sustainable Development Goals and Financing: No Longer Business-as-Usual
Hanoi, 6 September 2017
International Climate Finance

• Two Key Issues:
  1. The successful mobilization, deployment, and use of climate finance for the pre-2020 period
  2. Scaling-up long-term finance, including for adaptation

• Country-driven processes in developing countries are fundamental for scaling up climate finance; strengthening national public financing management system and the overall policy environment is vital to effectively manage, leverage and monitor the effectiveness of climate finance flows

• The role of the private sector in adaptation finance needs to be further enhanced

• Better information needs to be generated for more efficient planning, including through enhanced tracking of climate finance flows, particularly for adaptation finance

(Source: UNFCCC High Level Ministerial Dialogue on Climate Finance, 16 November 2016)
Roadmap to USD 100 billion per year by 2020

- Regulatory reforms urgently needed to establish policy frameworks that create enabling environments and redirect financial and capital markets away from high-carbon sectors towards green investments
  - Eliminating inefficient subsidies
  - Carbon pricing
  - De-risking private investments in sustainable solutions
  - Eliminating existing barriers to access to finance
  - Encouraging investments in R&D in climate resilient technologies
  - Requiring sustainability disclosures from businesses
  - Enabling capital to flow towards green investment opportunities that promote transition to a low carbon and climate resilient economy/society

- Nationally determined contributions (NDCs) provide an excellent opportunity to gauge needs

(Source: UNFCCC High Level Ministerial Dialogue on Climate Finance, 16 November 2016)
Multilateral Climate Funds

- **GEF**: Global Environment Facility (GEF)
- **LDCF**: Least Developed Countries Fund (LDCF)
- **SCCF**: Special Climate Change Fund (SCCF)
- **AF**: Adaptation Fund (AF)
- **CTF**: CIFs: Clean Technology Fund (CTF)
- **SCF**: CIFs: Strategic Climate Fund (SCF)
- **GCF**: Green Climate Fund (GCF)

www.wri.org/publication/future-of-the-funds
Climate Finance at a National Level – Singapore

• What does the implementation of a new Carbon Tax mean to doing business in Singapore?

• How should the carbon tax be implemented come 2019 so that businesses can be minimally impacted?

• How can businesses look at carbon tax and the possibility of using international carbon credits as a business opportunity in a globalized world?

• What role is there for green bonds?
Facts about Singapore

• Urban city-state of just 719km²
• Tropical climate on equator
• Low-lying, gentle topography
• Highest point 164m
• Population: 5.61 million in June 2016
• Population density: 7,712 persons/km²
• GDP: S$402 billion in 2015 at current market prices
• Per capita GDP: S$72,711 in 2015
• Contribution to global emissions: 48,094.65 gigagram (Gg) CO₂eq, approx. 0.11% of global emissions (2012)
• Per capita emissions: ~12.49 tCO2/person in 2011 (Ranked 15th in 2011 by WRI CAIT 2.0)

From 2000-2012, while the economy grew at annual rate of 5.7%, GHG emissions grew at only 2.1%.

**Singapore’s 2020 pledge**
- Reduction of GHG emissions by 16% below Business-as-Usual (BAU) levels in 2020, contingent on a global legally binding agreement
- Unconditional pledge of 7 – 11% below 2020 BAU levels

**Singapore’s 2030 pledge**
- Singapore intends to reduce its Emissions Intensity by 36% from 2005 levels
- Stabilize its emissions with the aim of peaking around 2030

(Source: National Climate Change Secretariat, Climate Action Plan 2016)
Singapore’s INDC Preparation

Inter-Ministerial Committee on Climate Change

Energy System Modelling

Energy Efficiency Studies
- Economy-wide
- Industrial Sector

Public Consultation:
Climate Change & Singapore

Energy Tech Roadmaps

2012
2013
2014
2015

Inter-agency technical analysis under IMCCC
(Source: National Climate Change Secretariat, Singapore)
Mitigation Measures Across All Sectors of Economy

**Power Generation**
- Fuel mix switch
- Encourage solar

**Waste / Water**
- Incinerate sludge
- Reduce plastics incineration

**Households**
- Minimum Energy Performance Standards — air-conditioners, fridges, lighting etc.

**Buildings**
- Green Mark legislation for new and existing buildings
- Mandatory energy audits & reporting

**Transport**
- 70% modal split
- Carbon Emissions-based Vehicle Scheme

**Industry**
- Grant for energy efficient technologies
- Encourage cogeneration plants

(Source: National Climate Change Secretariat)
Inter-Ministerial Committee on Climate Change (IMCCC)

Chaired by Deputy Prime Minister and Coordinating Minister for National Security

Members:
Minister for the Environment and Water Resources, Minister for Finance, Minister for Foreign Affairs, Minister for National Development, Minister for Trade and Industry (Trade), Minister for Trade and Industry (Industry) and Minister for Transport

IMCCC Executive Committee

Chaired by Permanent Secretary (PMO) (Strategy)

Members:
PS (Environment and Water Resources), PS (Finance) (Performance), PS (Foreign Affairs), PS (National Development), PS (National Research and Development), PS (Trade and Industry), PS (Transport) and Chairman (Economic Development Board)

Resilience Working Group (RWG)
Chaired by PS (National Development) and PS (Environment and Water Resources)

International Negotiations Working Group (INWG)
Chaired by PS (Foreign Affairs)

Long Term Emissions and Mitigation Working Group (LWG)
Chaired by PS (PMO) (Strategy) and PS (Trade and Industry)

Measurement, Reporting and Verification (MRV) Task Force (inter-agency)

(Source: Singapore’s Second Biennial Update Report, 2016)
International Climate Policy affecting Singapore’s Domestic Energy Policy

UNFCCC Decisions:

• Every 4 years
  ▫ National Communication which includes GHG inventory, mitigation and adaptation policies & measures

• Every 2 years
  ▫ Progress reporting through submission of Biennial Update Reports (BUR) and participation in International Consultation and Analysis (ICA)

• IPCC / Scientific Findings (adaptation)
  ▫ Self-funded studies on risk and vulnerabilities to climate change e.g. 2nd National Climate Change Study
Singapore’s carbon tax – to be implemented in 2019

- **Rationale**: to complement existing and planned efforts to reduce emissions and increase energy efficiency, stimulate clean technology and market innovation

- **What it is**: S$10 – 20/tCO2e carbon tax affecting 30 – 40 large emitters to be implemented from 2019

- **What it does**: create a price signal to incentivize emitters to change their behavior and reduce emissions, provides sufficient time for companies to understand the new carbon tax requirements, develop monitoring and reporting plans, put in place systems, processes and capabilities to comply

- **It will likely**: increase operating costs (equivalent to 6-12% increase in current oil prices), increase household expenditure on electricity prices of between 2-4% (electricity prices have fluctuated up to 10% quarterly between 2010 and 2016)
Carbon Pricing around the World: Recent Initiatives

• In 2015:
  ▫ ETS in the Republic of Korea
  ▫ Carbon tax in Portugal, addition to the EU ETS

• In 2016:
  ▫ Greenhouse Gas Industrial Reporting and Control Act (GGIRCA) in British Columbia added a price on industrial emissions on top of province’s existing revenue neutral carbon tax
  ▫ Safeguard mechanism to Emissions Reduction Fund in Australia, a baseline-and-offset system following the abolishment of the Australian Carbon Pricing Mechanism in 2014

• In 2017:
  ▫ ETS scheduled in Ontario
  ▫ Carbon tax scheduled in Alberta
  ▫ France to introduce carbon price floor for power sector
  ▫ China’s national ETS commences

Complementary Policies needed

- Price level is important but also look out for:
  - GHG coverage
  - Sector coverage
  - Added companies
  - Design of carbon tax system
  - Regular review/ enhancements to legislation and policies (e.g. Energy Conservation Act of Singapore)
    - Mandatory GHG measurement and reporting (M&R) requirements
    - Minimum Energy Performance Standards for common industrial equipment and systems
    - Consolidated energy efficiency fund (E2F)
  - Complementary policies
    - Graduated relief or offsets for companies that require it
    - Electricity market liberalization, increased competition
    - Renewable energy generation
    - Facilitating cost pass-through: Typically, carbon cost pass-through rates have been between 51–100 percent but this has been controversial when cost includes value of emission allowances through despite receiving them free of charge and where electricity price increases create socio-economic and political challenges.

Nurturing Green Finance in Singapore

• The Monetary Authority of Singapore announced a **Green Bond Grant Scheme** to offset 100 per cent of the cost of obtaining an external review for green bonds for qualifying issuances, up to $100,000 per issuance.

• Not limited to Singapore issuers
• Qualifying bonds can be denominated in any currency but must:
  ▫ be issued and listed in Singapore
  ▫ have a minimum size of S$200 million
  ▫ have a tenure of at least three years

• A leader in sustainability, City Developments Limited, has issued the first green bond by a Singapore company to the tune of $100 million. The sole bookrunner for the transaction, DBS Bank, is also a front runner in sustainability practices.

(Source: Monetary Authority of Singapore, 2016)
Thank you!

Questions?

You may also email me further questions at esimlyx@nus.edu.sg