Mitigating the effects of climate change:
The Québec Cap & Trade Program

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Mitigating the effects of climate change: The Québec Cap & Trade Program

Overview

1. Context & Objectives
2. What is a cap and trade system?
3. The Québec system
4. Linking with California
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1. Context & Objectives

Climate change in Québec...

- Major climate events over the last years: record floods (Saguenay – 1998, Richelieu River – 2011) melting permafrost, shoreline erosion (St-Laurence River major storm – 2010), intense winds
- No single season colder than normal over the last 15 years
- Daily mean temperatures in southern Quebec increased by 0.2C to 0.4C each decade
1. Context & Objectives

... and in the world

- **Greenhouse gas levels** in the atmosphere at a level not seen in 800,000 years (source: UN and NASA)
- Combined **average temperature** across global land and ocean surfaces for June 2014 was record high for the month (source: NOAA)
- September **Arctic sea ice** is now declining at a rate of 11.5 percent per decade (source: NASA)
- **Scientific consensus** about human-induced climate change (source: UN, World’s leading national science academies including Brazil, Canada, China, France, Germany, Italy, India, Japan, the UK and the US)
1. Context & Objectives
Québec and Alaska facing climate change

- Melting permafrost: endangering coastlines, northern communities that are built on permafrost, and forests (recent major spruce budworm outbreak)
- Access to new natural resources vs sustainable development
- New maritime route: Northwest Passage
1. Context & Objectives

Thinking ahead for the next generations

- **Consensus** among the population and the political class in QC: climate change is real and must be addressed
- **Best** greenhouse gas (GHG) emission record in Canada
- Running on **green energy**: 97% of Québec’s electricity comes from hydropower
- On target: GHG reduction of 6% below 1990 level in 2012
- Our objectives: **to do more**
  - Reduce Québec’s GHG emissions to 20% below 1990 levels by 2020
  - Strengthen Québec’s resilience to climate change impacts
1. Context & Objectives

Thinking ahead for the next generations

- Québec government initiatives to reduce GHG emissions:
  - 2006-2012 Climate Change Action Plan
  - 2013-2020 Climate Change Action Plan
    - The Cap and Trade system constitutes the Government of Québec’s primary strategic tool for fighting climate change
  - 2013-2020 Strategy for Climate Change Adaptation
1. Context & Objectives

From WCI to linking with California

History

- Quebec joins WCI (2008)
- Creation of WCI Inc. (2011)
- Regulation respecting a C&T system (2011)
- Beginning of the 1st compliance period (January 1st, 2013)
- Authorization to implement a C&T system (Bill 42, 2009)
- Modifications to the Regulation on mandatory reporting (2011)
- Modifications to the Regulation allowing the linking of Quebec and California’s C&T systems (Dec. 2012)
- Linking of Québec and California’s C&T systems (January 1st, 2014)
2. What is a cap and trade system?
Definition and advantages

- An **flexible economic tool** for reducing greenhouse gas (GHG) emissions.
- The "cap" sets a limit on emissions, which is lowered over time to reduce the amount of pollutants released into the atmosphere.
- The "trade" creates a market for “carbon allowances” (or “carbon credits”), helping companies innovate in order to meet, or come in under, their allocated limit. The less they emit, the less they pay.
2. What is a cap and trade system?

Video
2. What is a cap and trade system?

Advantages 1/3

- Send a **carbon price signal** to economic stakeholders
- Integrate the **cost of carbon** into business decisions
- **Cap** provides certainty in GHG reduction over time
- Price determined by **market**, but stabilized by **price floor** and **ceiling**
- Stimulate **economic development** and **jobs opportunities** – The Green Economy
2. What is a cap and trade system?

Advantages 2/3

- **Efficiency**: Provide many options to comply with the regulatory obligations:
  - Encourages companies under the system to improve their energy efficiency or their production methods, but using or develop new technologies
  - Surplus of emission units can be traded on the carbon market = **profits**
  - Buy emission units at auction, sold by other carbon market participants or offset credits sold by promoters (all three are interchangeable and have the same value, regardless of which WCI partner government issued them)
2. What is a cap and trade system?

Advantages 3/3

- Generates **substantial revenues** for participating States
- Revenues can be used to:
  - Finance action plan to fight climate change
  - Reduce State’s dependence on imported oil (energy efficiency)
  - Encourage the use of renewable energy and clean technologies
  - Stimulate the innovation
  - Create green and sustainable jobs
  - Prepare the communities to adapt to the effects of climate change
  - Lower taxes in low and medium-income households
3. The Québec system

Scope

- Since January 1, 2013
  - Industry and Electricity: approximately 60 companies or 80 facilities
- As of January 1, 2015
  - Fuel distribution
  - Approximately 20 additional companies
- Threshold:
  - 25 kt CO2 eq. per year
- 85% of Quebec’s GHG emission will be covered by the C&T
3. The Québec system

Annual emission unit caps

- 2013: 23.20 million (industry & electricity)
- 2014: 23.20 million
- 2015: 65.30 million (fossil fuels)
- 2016: 63.19 million
- 2017: 61.08 million
- 2018: 58.96 million
- 2019: 56.85 million
- 2020: 54.74 million
3. The Québec system

Government Auctions

- Quarterly auctions of emission units using an electronic platform
- Open to everyone (emitters and CITSS participants)
- Financial guarantee and pre-registration required
- **Minimum price** of $10 in 2012, increasing by 5% plus inflation per year until 2020 ($11.39 in 2014)
- Secret bids with a single bidding period
- Sale price = lowest bid for which the last unit is sold
- Purchase limit and holding limit to prevent manipulation
- All auction income transferred to the Green Fund
3. The Québec system

To summarize 1/2

• **Main economic tool** of the 2013–2020 Climate Change Action Plan

• The **cap** on emission units will drop every year starting in 2015, while the price of the emission units sold at auction will increase every year.

• These two factors will encourage companies to find more cost-effective ways of complying with their legal obligations:
  
  • Investing to improve **energy efficiency**, acquiring green technology, or upgrading their production lines to reduce their GHG emissions.
  
  • **Buying/selling** their emission allowances on the carbon market.
3. The Québec system

To summarize 1/2

$\$\$ from the auctions $\rightarrow$ Green Fund $\rightarrow$ 2013-2020 Climate Change Action Plan
4. Linking with California

A new market

- The Agreement between Québec and California linking their two cap-and-trade systems entered into force on **January 1st, 2014**
- Québec and California cap-and-trade laws and regulations have been harmonized in order to integrate the two systems
- Emission allowances of Québec and California are recognized by both parties and fully fungible
- The Compliance Instrument Tracking System Service (CITSS) is now a common platform allowing Québec and California C&T participants to buy and sell allowances issued by the two states
4. Linking with California

Next steps

- 4th Québec auction: August 26, 2014
- Joint Québec-California auction:
  - Mock auction: August 7, 2014
  - First joint auction: November 2014
- Broadening the WCI regional carbon market (additional partners)
5. Pricing carbon

A growing movement

• 15 cap-and-trade systems currently in operation in the world (EU ETS, RGGI, China, etc.)
• Initiatives by President Obama and China
• Raising awareness about carbon pricing (OECD, IMF, WB, insurance firms)
• UN SG Ban Ki-Moon Climate Change Summit (September 2014)
• UNFCCC agreement to be concluded in Paris in 2015

What would be the cost of inaction on future generations?
MERCI!

For more information:

www.mddeelcc.gouv.qc.ca/climatechange
www.wci-inc.org

#QuebecLA