Design Features for Emissions Trading in a North American Setting

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Introduction

- In this session we are addressing "**Design Options**" for an effective Greenhouse Gas Market
- We have seen the **EU ETS system design** for the transition years and soon for 2008-2012 – design discussions and controversy without decisions
- **In Canada** we unfortunately have **no transition** period and no clear framework yet for 2008-2012
- The **political indecision** has been most unfortunate for all players
- However, Canada's problems do illustrate some of the **underlying problems** with Kyoto design and the **challenges** we face for **2008-2012** negotiations
- Why endure the pain of Kyoto when it may be dismantled in 2012 to bring US, India, China, into the new regime?
- EU is focusing on 2008-2012 while Canada is focusing on the Post 2012 regime

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Who is TransAlta?

- Largest private sector **electrical utility** and trader in Canada
- We generate power in **Canada**, US, Mexico, and Australia
- From **coal** (58%), natural gas (29%), hydro (9%) and renewables – wind and geothermal (4%)
- We are a leader in the development of **Clean Coal Technology** (coal gasification and underground CO_2 capture and storage)
- We were an early pioneer on **carbon offset projects** and **credits** and founding member of IETA
- We have executed **trades** or contract sales between EU, US, Canada, and Japan
- We have **CDM credits** approved from Chile (with Tokyo Electric)
- We are seeking to **manage our carbon risks**, seek least cost options for regulatory compliance and hedge future liabilities

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The Canadian Political Scene

- Canada's unstable political scene (with minority governments) has badly hindered the roll out of climate policy
- Change of Government in January 2006 from Pro-Kyoto Liberals to the Kyoto skeptic Conservatives
- Their limited policy announcements so far include:
  - "Made in Canada" approach with no government purchasing of international credits
  - Canada is not capable of meeting its Kyoto targets (the gap is 35% and growing steadily)
  - In place of Kyoto they want a longer term, technology based, emissions plan
  - More focus on the US and North American cooperation and probably joins the Asia Pacific Partnership
  - Would regulate CO_2 as part of a wider Clean Air Act
- Policy Package still before cabinet but due out early in October – promise of a domestic offsets and emissions trading system for CO_2, SO_2, and NO_x?

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The Domestic Debate on Emissions Trading

- The success of the **EU ETS** has received a **poor press** in Canada (with emphasis on electricity price increases and windfall profits) – press claimed
  - It was a **"carbon tax"** to force Kyoto implementation and new government revenue source
  - **Russian "Hot Air"** came to symbolize emissions trading
  - Smoke and mirrors with **no environmental benefits**
  - ET was **exporting wealth** in a bogus license to pollute
- **IETA's vigorous efforts** were not successful in reversing the public perception – in spite of MOU with government in 2002
  - Government was **confused by divisions** within industry
  - Can subs of **European Energy companies** oppose emissions trading
  - **Brokers and traders** resisted the $15.00 price cap and infuriated emitters desperate for it
  - Some US based companies took hard line **no caps or cap and trade**
- The **policy vacuum** and the above controversy interfered with ET market development in Canada

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Design Options for Canada

- **Cap and Trade**
  - In many ways the simplest route for Canada would have been a straight forward **Cap and Trade system** under Kyoto like EU
  - But the Cap approach was resisted for so long by many companies who **rejected Kyoto** especially after the Bush announcement
  - Other options were considered including a **Baseline and Credit** system using technology standards and offsets – we operate a credits system today in Alberta for new thermal power plants since January 2005
- **International Credits**
  - The Government has not explicitly ruled out the use of CER's or ERU's for domestic compliance, but at this point these instruments are likely to be higher priced than domestic credits

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Design Options for Canada (con't)

- **Emissions Intensity**
  - The **EU and Canada split** 5 years ago on the issue of emission intensity vs. direct emission targets
  - The basic reason lies in the **nature of the Canadian economy** vs. the EU
    - Canada has the **fastest rate** of economic and population growth of any of the G-8 countries
    - Huge expansion of the **oilsands** in Alberta and oil, gas, and electricity exports
    - The huge impact of **Chinese demand** on minerals and energy
    - **US energy security** needs Canadian hydrocarbons
  - In these circumstances direct emission targets would **punish growth** while emission intensity allows growth with improved emissions technology (clean coal, emissions capture, CO_2 sequestration)
  - No other system had any political chance in Canada

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Design Options for Canada (con't)

- **The Offsets System**
  - Under Kyoto, Canada had both the toughest targets (in terms of CO_2 trends) and the greatest potential for a competitive advantage with offsets
  - Our huge **forests** and **agricultural** areas offer almost unlimited potential if:
    - The **science** can document the permanence
    - A **market system** develops for projects and credits so entrepreneurs flourish
    - Government allows a cost effective true **open market** system for emissions trading
    - Scientific proof builds **public credibility**
  - **Three related areas** are all under active development for domestic credits and trading systems of one kind or another
    - **Renewable energy** sources (especially wind) to produce green power credits for RPS
    - **CO_2 capture** and underground sequestration will be huge in the Canadian west as costs come down (IPCC Study / Canadian advantage)
    - **Bio-energy** from crop wastes and forestry wastes
  - This is a **huge potential area** for domestic and possibly international trading if oil prices remain high (plus $50.00/barrel)

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Safety Valve

- Canadian companies have been concerned with the **costs of credit purchasing** to achieve regulatory compliance and the current Canadian Government's concern to keep the money at home not export for JI or CDM credits
  - In order to get the support for ratification, the Chrétien Government proposed a **$15.00 price cap for emission credits**. The Government would buy international credits at market prices and resell them at up to $15.00 for emitters to meet regulatory compliance. Such credits would not trade. The current Government has shown no interest in this proposal given the liability for the public treasury
  - The previous and the current government have shown interest in allowing a fund for **technology credits** for major new innovations like clean coal. The credit would be issued at the time of investment as an incentive for technology change
  - There has also been consideration of **BATEA technology standards** and baseline and credit system linked to the normal schedules for capital stock renewal
- For many Canadian companies they need some cost assurance to continue production in the country (aluminum, steel, petrochemicals, etc.)

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Conclusions: The Way Forward

- We expect the **Canadian policy framework** to be out in the next month, followed by sector by sector regulations to follow in the next 12/18 months with short (2010), medium (2025) and long term (2050) targets
- **Offsets and emissions trading** likely to be part of the package, emissions intensity targets or technology targets
- Canada cannot ignore the structure of our **fossil fuel intensive economy** and our trade with US, the Americas, and the Pacific Rim (85% of exports to US)
- In these circumstances it is only right that Canada **focus on post 2012 negotiations** which involve our trading partners not the EU. A Kyoto style agreement hurts Canada competitively with those outside Kyoto
- **Emissions trading** is essential for Canadian companies to seek least cost options for compliance in a highly competitive carbon constrained world
- We believe that countries and companies which focus **too exclusively on 2008 – 2012** will pay a serious price for their **short term thinking** in Post 2012 period. When we move as we must into a global system

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