Canadian (Cross-Border) Panel

“FRAGMENTATION NATION”

C-AGG MEETING
14 JULY, CHICAGO
(Very) Recent News & Developments

- **International & Sub-National News**
  - Oil & Gas CEO Letter – Support Carbon Pricing
  - G7 De-carbonization Pledge – 2050 and 2100 Targets
  - G7 Carbon Pricing support
  - Under 2 MOU Building – Summit Deliverable (Quebec Signatory)
  - INDC Submissions – Canadian Federal Measures (2030 Target)
- **California “Issues”**
  - Post 2020 Program & Overlapping Mechanism Discussion
  - Border Carbon Adjustment Momentum (Summer-2016)
  - Offsets Invalidation & Regulatory Compliance Inconsistencies
  - Forestry Protocol Proposed Amendments (Adopted)
  - Rice Cultivation Protocol (Adopted)
Carbon Pricing Worldwide (July 2015)

- ETS in place
- Subnational ETS in place
- ETS Being Designed
- Carbon Tax in place
- Linkages

Countries and Regions with ETS:
- Europe (EU ETS)
- Canada (Alberta, Ontario, Quebec)
- Russia
- China (Beijing, Tianjin, Shanghai, Chongqing, Hubei, Shenzhen, Guangdong)
- South Korea
- Switzerland
- Washington
- Rio de Janeiro
- Sao Paulo
- Mexico
- Brazil
- Colombia
- Peru
- Chile
- South Africa
- New Zealand
- California
- California RGGI
- California
- Kazakhstan
- Pakistan
- China
- Russia
- Ukraine
- Brazil
- Mexico
- Canada (Alberta, Ontario, Quebec)
- Taiwan
- South Korea
- Tokyo, Saitama
- Colombia
- Peru
- Brazil
- Mexico
- Chile
- New Zealand
- South Africa
- ETS in place
- Subnational ETS in place
- ETS Being Designed
- Carbon Tax in place
Canada’s 2030 Target & Measures

Markets Matter

Canada's INDC -30/2030

-30% below 2005 in 2030

GHG Forecast & Targets

Elements of INDC Plan

274 Mt

Existing Federal and Provincial Measures, 95 Mt

Gap, 34 Mt

International Purchases, 34 Mt

Oil and Gas Regulations, 14 Mt

Net drop w/ Low Oil Price, 47 Mt (production less consumption)

Land Use Accounting, 28 Mt

Industry Sector Regulations, 21 Mt

Authors: calculations using Navius modelling (Noel Metcon and Chris Bataille) from the Deep Decarbonization Pathways Project with CIGE Research Institutes

IETTA

Climate Challenges, Market Solutions
# Alberta

## New Political Landscape – New Climate Announcements

<table>
<thead>
<tr>
<th>Compliance Year</th>
<th>Stringency (Intensity Reduction for &gt;100kt)</th>
<th>Price (Unlimited Tech Fund)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>12%</td>
<td>$15/tonne</td>
</tr>
<tr>
<td><em>(1 Jan) 2016</em></td>
<td>15%</td>
<td>$20/tonne</td>
</tr>
<tr>
<td><em>(1 Jan) 2017</em></td>
<td>20%</td>
<td>$30/tonne</td>
</tr>
</tbody>
</table>
Ontario
Market Design Matters...

• MRV
• Timelines/Caps
• Scope/Coverage (Power, Transport etc.)
• Allowance Distribution (Free, Auction)
• Carbon Revenue/Fund Design
• Offset Program Design, Protocols, Early Action etc.
• Other Cost Containment Provisions (Price Floor, Reserves)
• Governance and Market Oversight
• Trading Products and Participants
• Cross-Border Cooperation, Trade
California
Snapshot of Top Priorities For IETA

• 2030 Targets & Scoping Plan - Role of Cap-and-Trade?
• CPP 111(d) – Role of Cap-and-Trade, including Offsets?
• Overlapping Mechanisms – RPS, LCFS, SCLP, Methane
• Offsets Program & Protocol Issues
• Informing & Supporting Linked Markets (Full, Partial)
• Addressing Competitiveness & Border Carbon Adjustments
• Sub-National Cooperation & Markets to COP21 (and Beyond)
EXTRA SLIDES
North America – Top Linkage Candidates?

Figure 13: Likelihood of new US states and Canadian provinces joining North America’s existing cap-and-trade markets before or other state programmes before 2020

- **Ontario**: 2% Very unlikely, 6% Unlikely, 30% Unsure/no opinion, 34% Likely, 31% Very likely
- **Washington**: 1% Very unlikely, 5% Unlikely, 52% Unsure/no opinion, 34% Likely, 8% Very likely
- **Oregon**: 1% Very unlikely, 8% Unlikely, 52% Unsure/no opinion, 32% Likely, 7% Very likely
- **British Columbia**: 5% Very unlikely, 13% Unlikely, 43% Unsure/no opinion, 34% Likely, 5% Very likely
EXTRA SLIDES

International Top Carbon Pricing Contenders & Timelines?

Figure 15: Respondents views on when the following countries will implement national carbon pricing mechanisms.
Figure 22: Instruments with the greatest potential to drive low-carbon investment

<table>
<thead>
<tr>
<th>Instrument</th>
<th>2010</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Markets</td>
<td>36%</td>
<td>58%</td>
</tr>
<tr>
<td>Regulations and standards</td>
<td>18%</td>
<td>58%</td>
</tr>
<tr>
<td>Technical innovation</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>Direct government financial support</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Taxes</td>
<td>5%</td>
<td>5%</td>
</tr>
</tbody>
</table>