

WATERLOO



CCRE Annual Energy Leaders Roundtable

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Hockley Valley Resort,
Orangeville,
April 4th, 2013

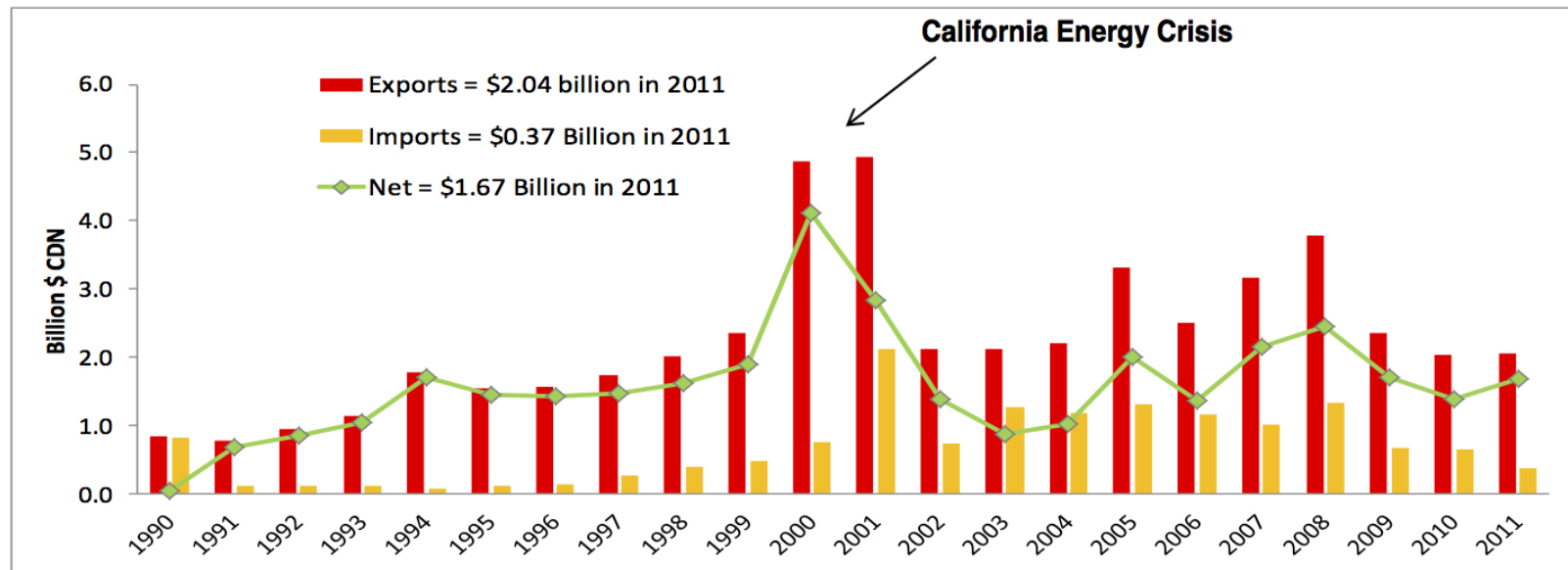


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» Examine the factors affecting electricity trade and discuss how it can be facilitated.

- potential economic significance of moving beyond provincial boundaries to a regional view of electricity
- constitutional, legal and political aspects of interprovincial trade – provincial and federal roles
- interprovincial trade in the context of international trade – the impacts of FERC reciprocity rules, public/private ownership interfaces, transmission access arrangements
- transmission connections – critical facilitator or justified by need?
- moving forward – increased federal role or individual provincial initiatives

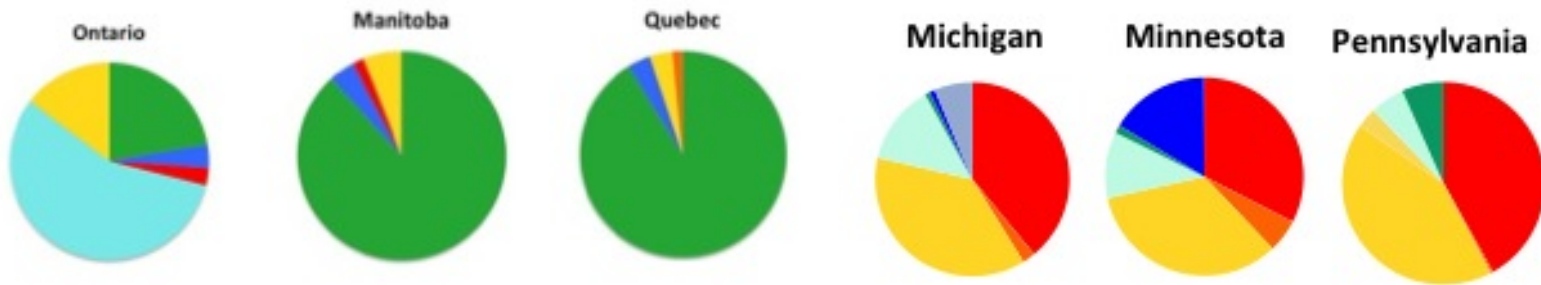
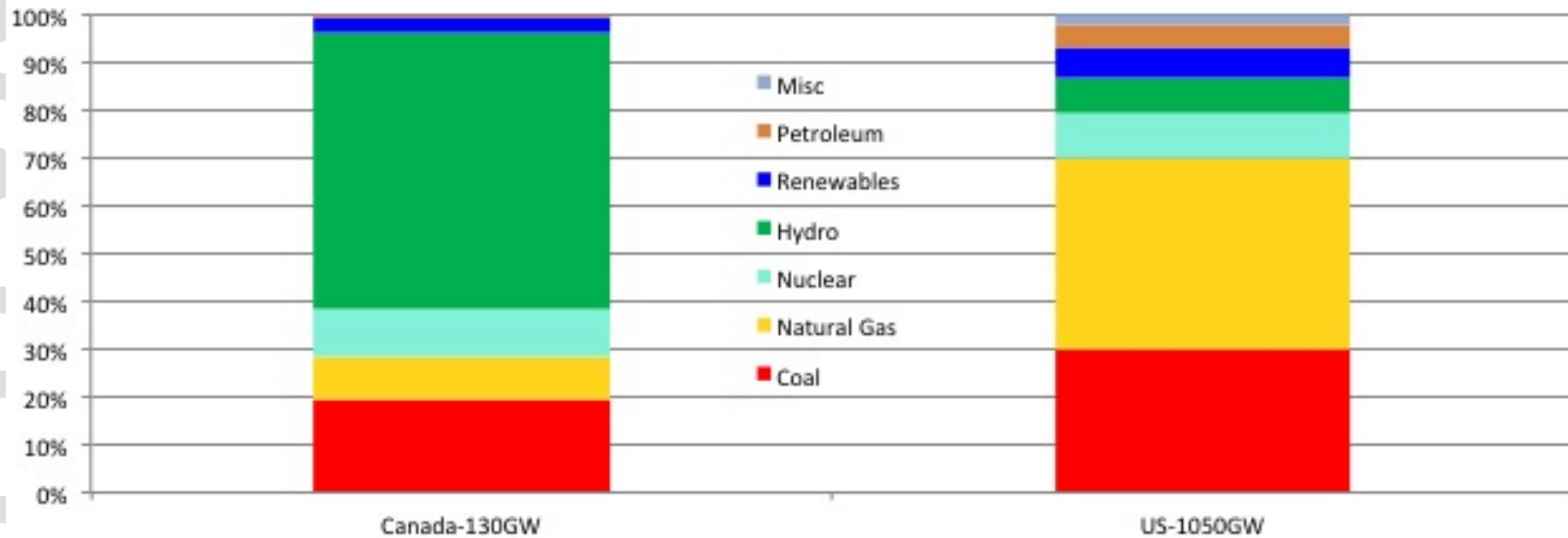
Total Energy Trade: \$125 Billion
Total Electricity Trade: \$2 Billion



US-Canada Electricity Trade Revenue, 1990-2011 (Canadian Electricity Association 2011)



Canada and US installed capacity

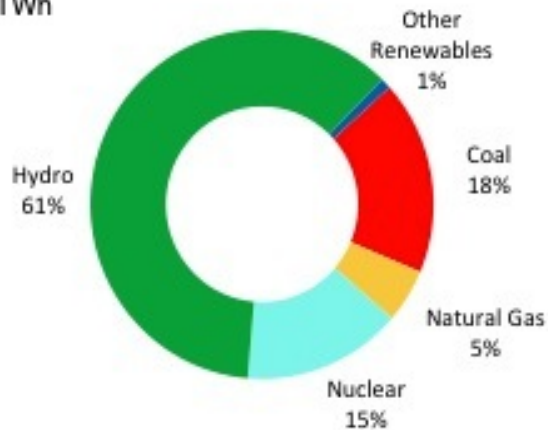


2011 installed generation capacity in Canada and the US. (Center for Energy 2012; Independent Electricity System Operator 2012b; US Energy Information Administration 2012b)

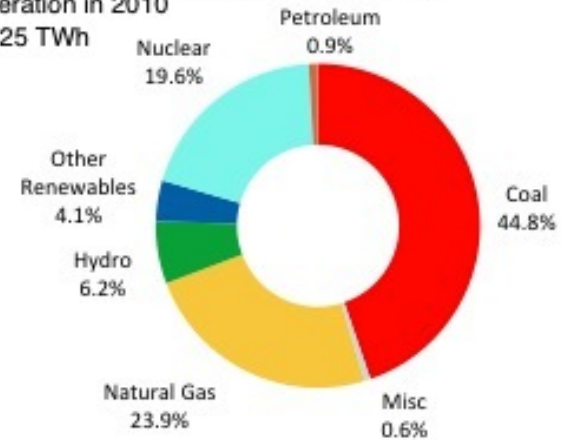
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Note: Total Electricity Generation in 2010 = 511 TWh



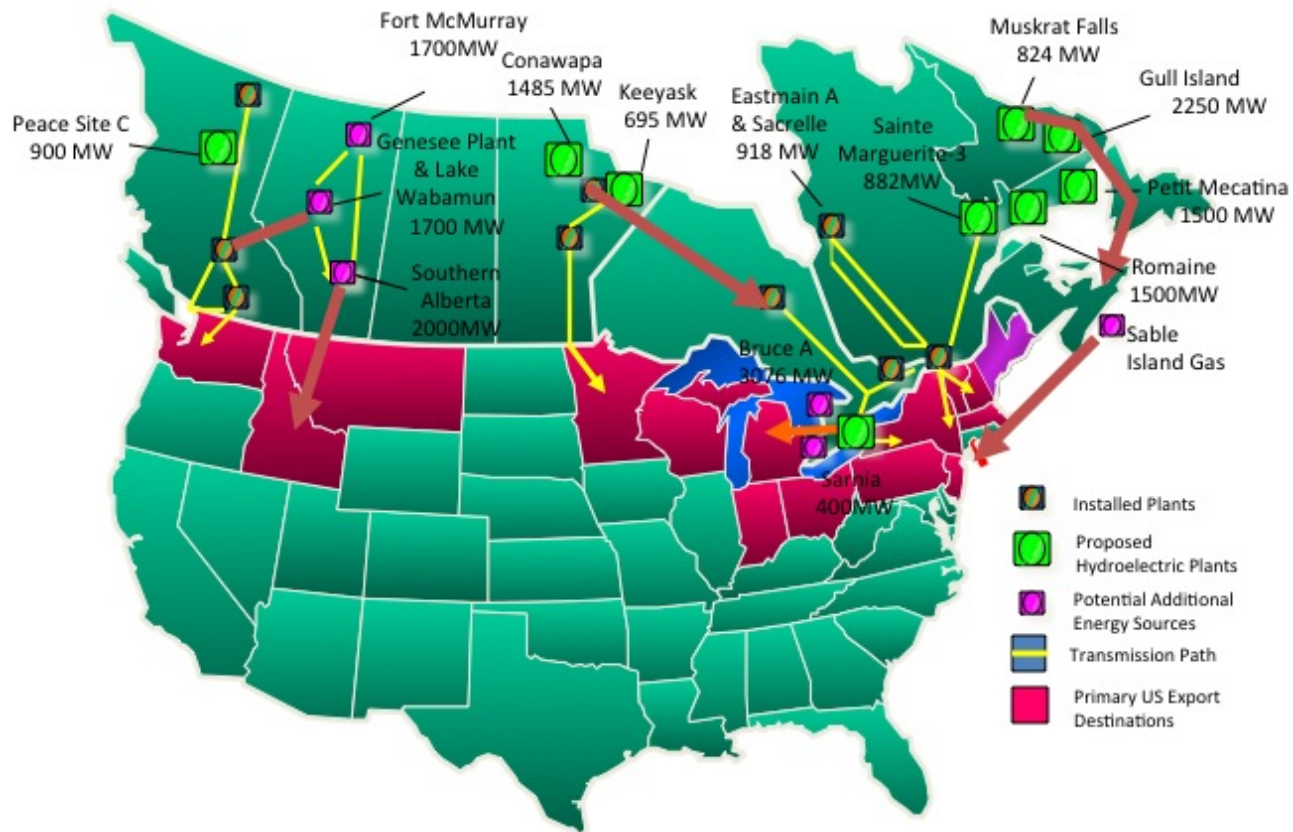
Note: Total Electricity Generation in 2010 = 4125 TWh

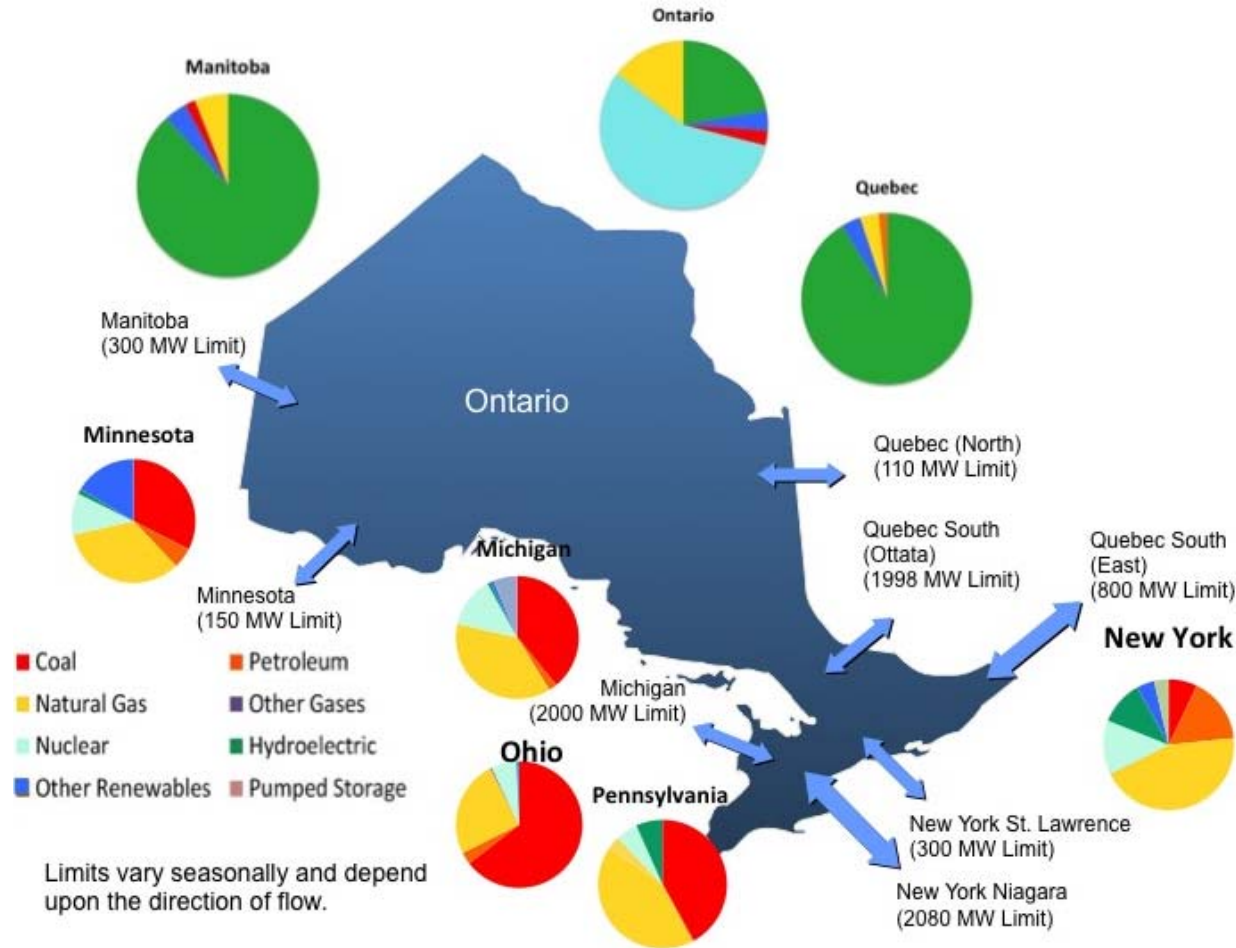


Electricity Generation in the US and Canada by Fuel Type, 2010 (Canadian Electricity Association 2011)



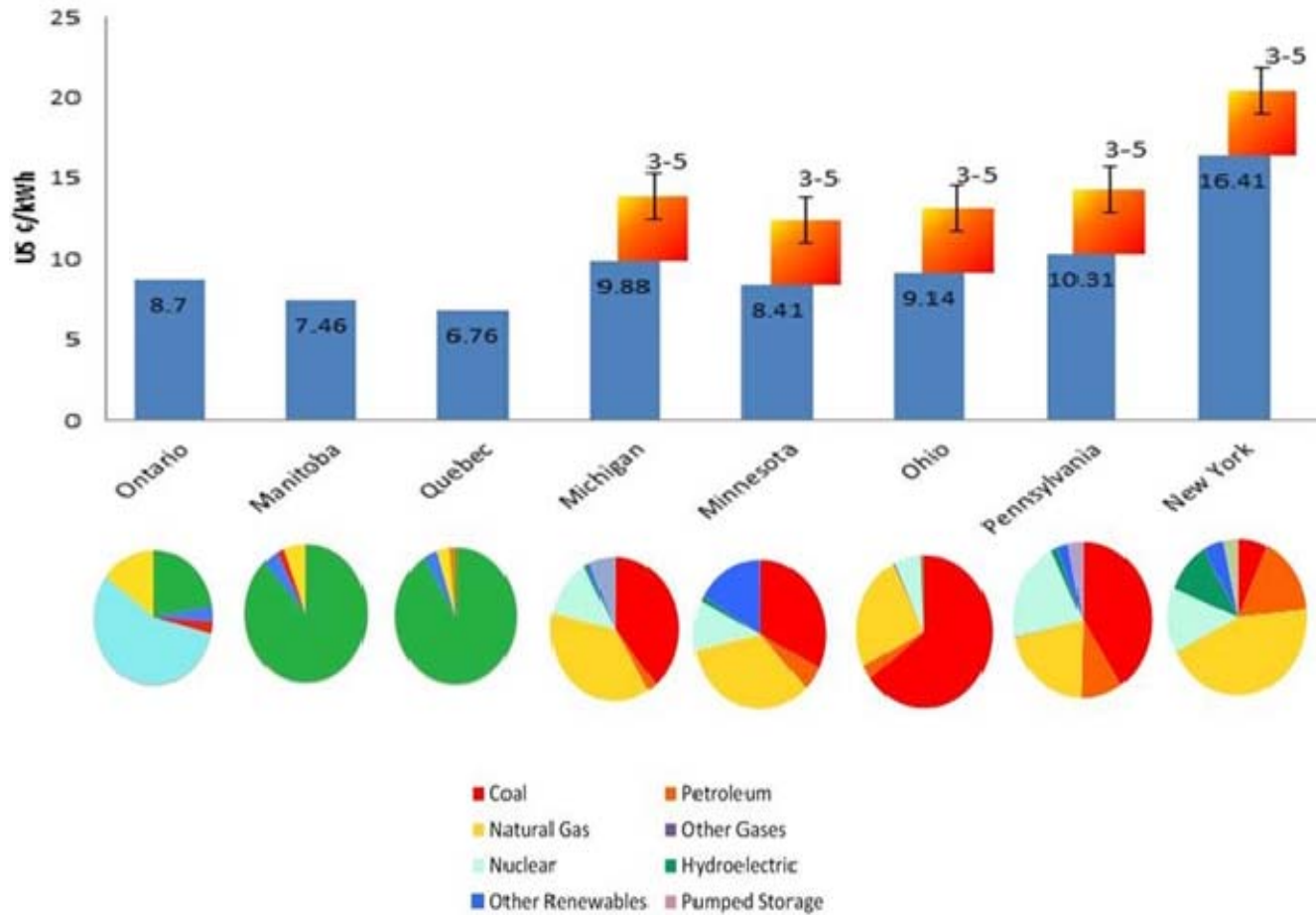
Regional Integration Opportunities

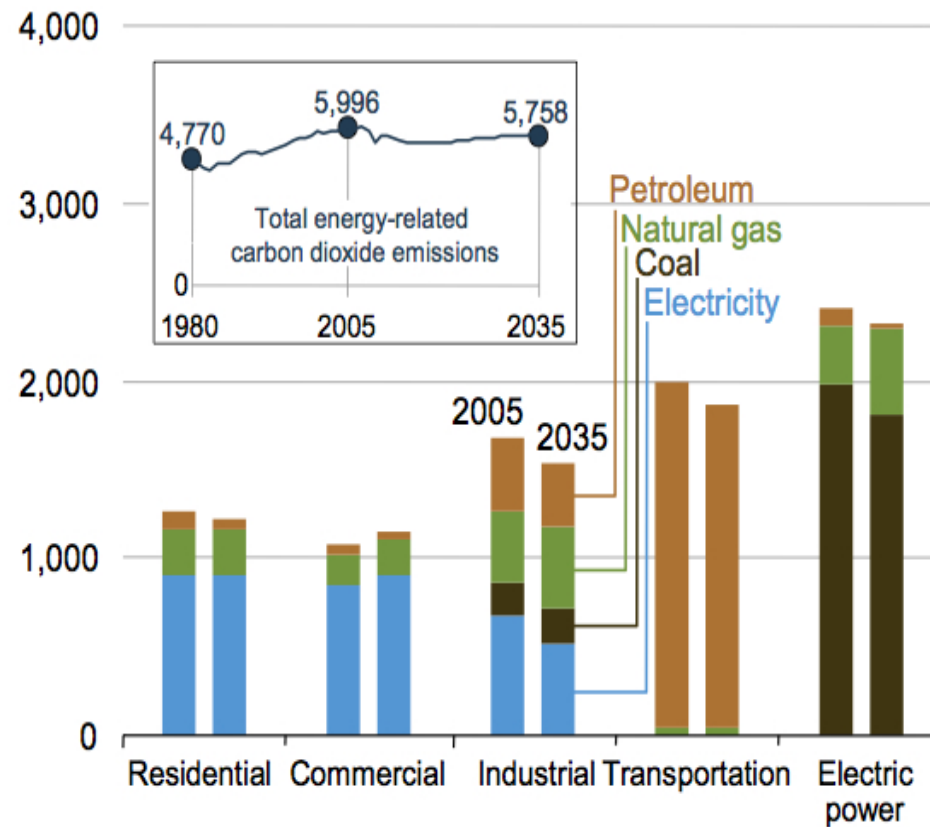






Energy Price and Energy Mix Comparison by State





U.S. energy-related CO₂ emissions by sector and fuel, 2005 and 2035 (million metric tons). (US Energy EIA 2012a)



- » Canada's low carbon electricity advantage is capable of making a major contribution to the reduction of greenhouse gases (GHGs) on a continent wide scale through a strategy that has, at its core, promotion of inter-regional trade in electricity.
- » Large scale trade in electricity, across provincial and national boundaries, is a cost effective mechanism for alignment of climate change policies required to transition to a low-carbon energy economy.
- » Enhanced electricity trade between Canada and US offers a strategic environmental and economic advantage that would benefit the entire North American economy.
- » A dramatic shift away from the 'provincial self-sufficiency paradigm' to a coherent national energy strategy congruent with climate change policies, based on inter-regional trade as the primary driver is a promising pathway for a lower carbon energy future for North America.

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