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Regulating Renewable Energy and the Pacific Carbon Trust (PCT)

Sarah D. Hansen

Miller Thomson Seminar: CleanTech, Green Energy and Environmental Update November 18, 2009

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Regulating Renewable Energy









- Environmental Assessment Act and CEAA – review panels & permits
- Greenhouse Gas Reductions Act
 - "public sector organizations"
- Local Government (Green Communities) Statues Amendment Act – Bill 27 - Water conservation, sustainable communities and the reduction of GHGs

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- Overview: CEAA applies when a federal authority either:
 - proposes a project,
 - provides financial backing to a project,
 - provides a license/permit/approval to the project,
 - sells/leases federal land to enable the project, or
 - the projected is not excluded under the regulations









- Joint review panels where there is both federal & provincial interests and both governments enter into an EA agreement
- Scope of assessment TORs
- First Nations consultation requirements
- Opportunities for equity sharing
- Project planning in advance



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Local Government Mechanisms

- Greenhouse Gas Reductions Target Act
 - "public sector organizations" current definition:
 - Provincial Government (all ministries & agencies);
 - schools, colleges, universities;
 - health authorities; and Crown corporations.
 - Emission reduction targets and action plans
 - Voluntary participation of municipal governments (130 towns/cities - Carbon Neutral Local Governments Charter)





Local Government Mechanisms









 will require local governments to set greenhouse gas reduction targets in their Official Community Plans and Regional **Growth Strategies**





Local Government Mechanisms







Greater Vancouver Water District Act

 The Act provides for the continuation, structure and operation of a greater board with responsibility for providing water services in the Lower Mainland





Case Study: City of North Vancouver – Community District Energy Systems

- Hydronically heated buildings
- Regulatory framework
- Lonsdale Energy Corp
- Community Energy Agreement



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Pacific Carbon Trust (PCT)

Provincial Crown corp. that sells emission credits to polluters

What is carbon neutral?

"Reduces avoids, or sequesters GHG" resulting in a zero net emission (\$25/tonne)

Mandate?

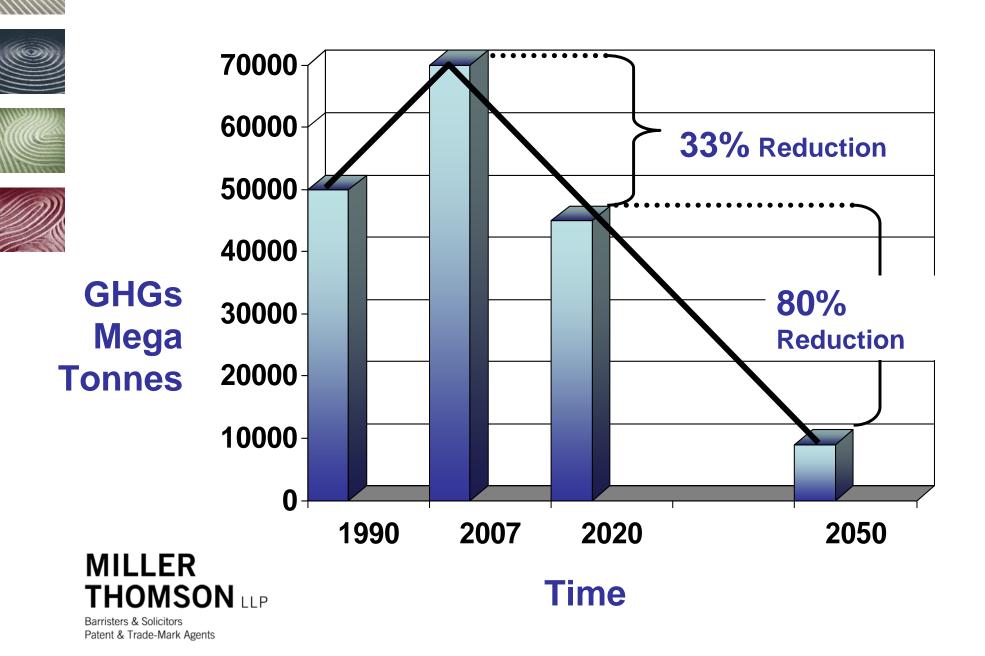
To offset 700,000 – 1M tonnes of greenhouse gas (GHG) emissions annually by 2010

What projects are eligible?

- Projects in British Columbia
- Public Sector Organizations
- Communities
- Businesses and Individuals



Legislative Targets (Source: PCT S. MacDonald)













Core Government **Crown Corporations Boards of Educations** Universities & Colleges **Health Authorities**





Regulation Requirements

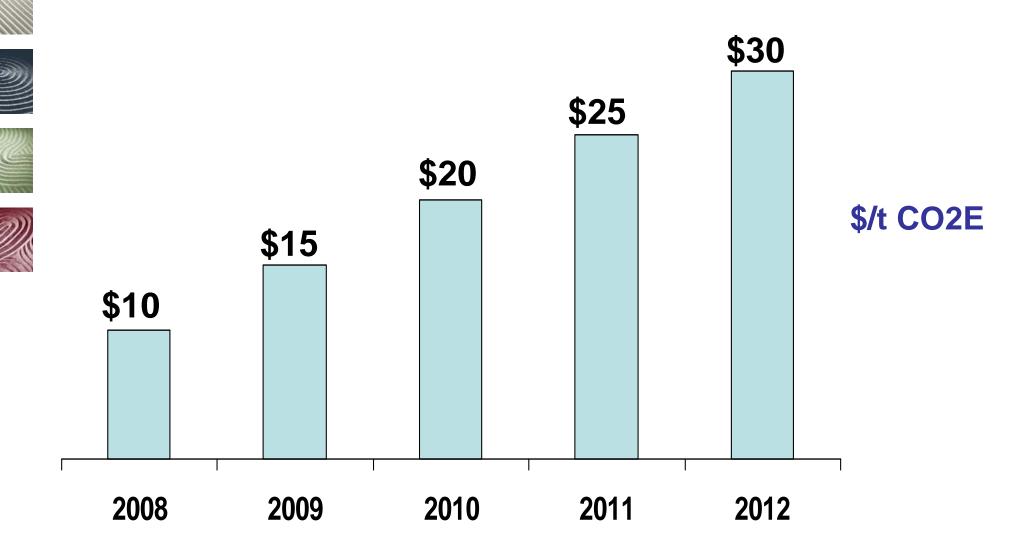
(Source PCT – S. MacDonald)

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ce PCT - S. MacDonald)								
ııcııa	~	Real	•There is an identifiable project that leads to GHG reductions •There are sound methods available to quantify the GHG emissions from the proposed project					
	2	Additional	 The offset project generates a reduction in GHG's that is over and above both the business as usual and regulatory requirements The project started after Nov. 2007 The offset sale allows the project to overcome economic/technical barriers 					
	3	Permanent	•The offset has an impact that is lasting (i.e. 100+ years)					
HSCI NC	4	Verifiable	 The impacts of the project can be readily identified, monitored, and audited post-implementation All efforts are made to minimize the residential uncertainty associated with the measurement of the project's impact 					
ney O	5	Counted Once	•There is clear, singular, ownership of the offset attributes of the project •Title of the offset must be clearly transferred through the transaction •The project and resulting offset can be registered publicly for retirement					

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Carbon Tax (Source: PCT S. MacDonald)



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Carbon Tax Advantage

(Source PCT - S. MacDonald)







Coal CO2e Increased cost / GJ (Estimated)	0.081 t/GJ \$1.75/GJ	0.081 t/GJ \$2.25/GJ
New Fuel CO ₂ e Emissions savings to switch from coal	0.055 t/GJ 0.026 t/GJ	0.000 t/GJ 0.081 t/GJ

Coal to Natural Gas

Increased Cost / tonne CO2e saving	\$67/t	\$41/t
Decreased Cost / tonne CO2e (Avoided Carbon tax 2011)	-\$25/t	-\$25/t
NET COST OF FUEL SWITCH	\$42 / t	\$16 / t



Source:

Statistics Canada; Environmental Canada; Quinsam Coal; NYNEX; Pacific Carbon Trust Analysis

Coal to Biomass











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