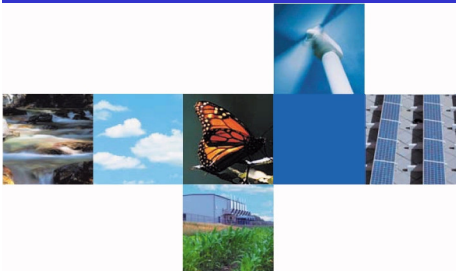


Standing Committee on Finance

October 19, 2005
Calgary

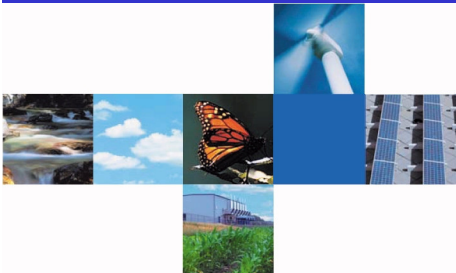
Clean Air Renewable Energy Coalition

Mark Rudolph - Coordinator, Clean Air Renewable Energy Coalition
John Keating - CEO, Canadian Hydro Developers



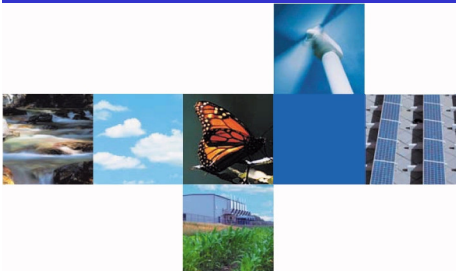
Building an Industry:

Serving the Economy
of the Future



Clean Air Renewable Energy Coalition

- Founded in December 2000 by Suncor Energy Inc. and Pembina Institute
- Brings together a “Counter-Intuitive Group of Strange Bedfellows”, not the “Usual Suspects”
- Includes 22 members (industry, ENGOs, municipalities)
- Laser focussed on advancing Green Power (as defined by Eco Logo) in Canada
- Members forced to ‘check their biases at the door’ in working on Coalition matters



Who We Are

AIM PowerGen Corporation

Axor

BC Hydro

BP Canada Energy Company

Canadian Hydro Developers

Cloudworks

Enbridge

ENMAX

EPCOR

Federation of Canadian Municipalities

Friends of the Earth

Integrated Gas Recovery Services

International Institute for Sustainable Development

Ontario Power Generation Inc.

Pembina Institute

Pollution Probe

Shell Canada Limited

Suncor Energy

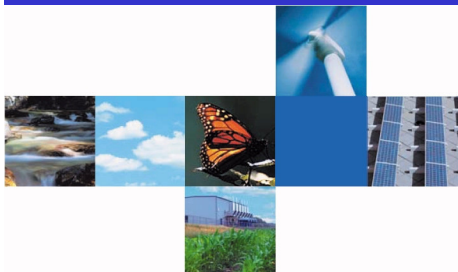
Toronto Atmospheric Fund

Toronto Environmental Alliance

Toronto Hydro

Western GeoPower Corp.

World Wildlife Fund Canada

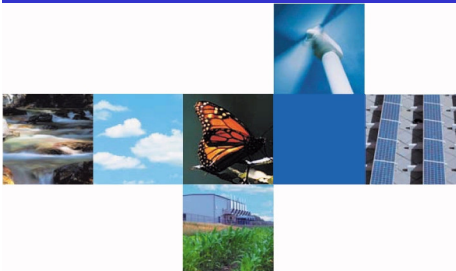


What is our Vision?

*Building an Industry:
Serving the Economy of the Future*

What is our goal?

*“To have low-impact renewable energy
account for a minimum of 7 %
of Canada’s electricity production in 2010,
and 15 % by 2020”*

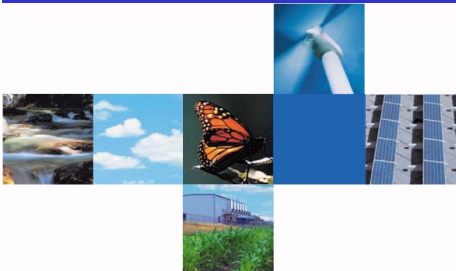


The Potential Ahead of Us

Current Status and goals in MW

2005		2010	2012	2014	2016	2020
590 (wind)	Coalition Targets (incl. existing MW)	11,900 (all)	16,200 (all)	21,300 (all)		35,600 (all)
~1,600 (biomass)	Current RPPI/WPPI	5,500 (all)				
~2,000 (small hydro)	New RPPI/WPPI			12,000 (all)		
12 (solar PV)	Current provincial initiatives	>4,000 (wind)			~8,000 (wind)	

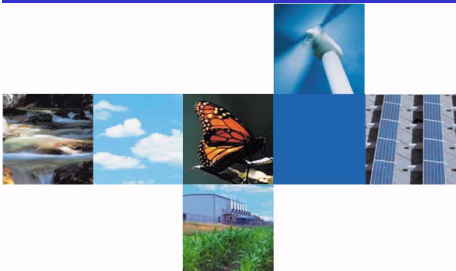
(Provincial targets mostly set for wind power)



Recommended Elements to Build an Industry

Current Status

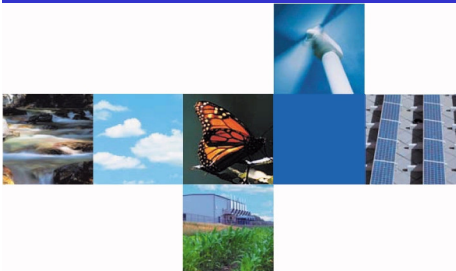
- Wind Power Production Incentive (WPPI) created in 2001 Budget to apply to 1000 MW, expanded in 2005 Budget to apply to 4000 MW
- Renewable Power Production Incentive (RPPI) announced in the 2005 Budget to apply to 1500 MW to incent non-wind low-impact renewable technologies (small hydro, biomass, geothermal, etc.)
- No incentives yet applicable for Solar PV



Recommended Elements to Build an Industry (continued)

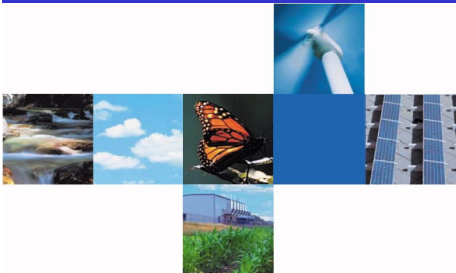
Recommended Actions:

- Expand Power Production Incentives (WPPI & RPPI) to apply to 12,000 MW of wind and non-wind technologies
 - approx. 8,500 MW Wind
 - approx. 3,500 MW non-wind
- Create a 100,000 Solar Roofs Program (Solar PV)
 - Buy-Down Program - or
 - Feed in Tariff (for 200 MW by 2015)



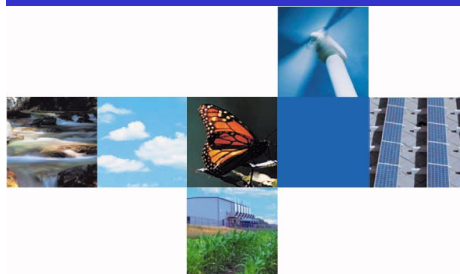
Aggregated Cost of Coalition Recommendations through 2024

Program	Costs of Recommended Measures from 2006/2009 to 2024 (million dollars)
WPPI 3 (4,464 MW)	1,107
RPPI 2 (2,036 MW)	1,082
PV Buy-Down Program (200 MW)	460
OR: 40% Solar PV Feed-In Tariff	416
TOTAL	2,605 OR 2,649

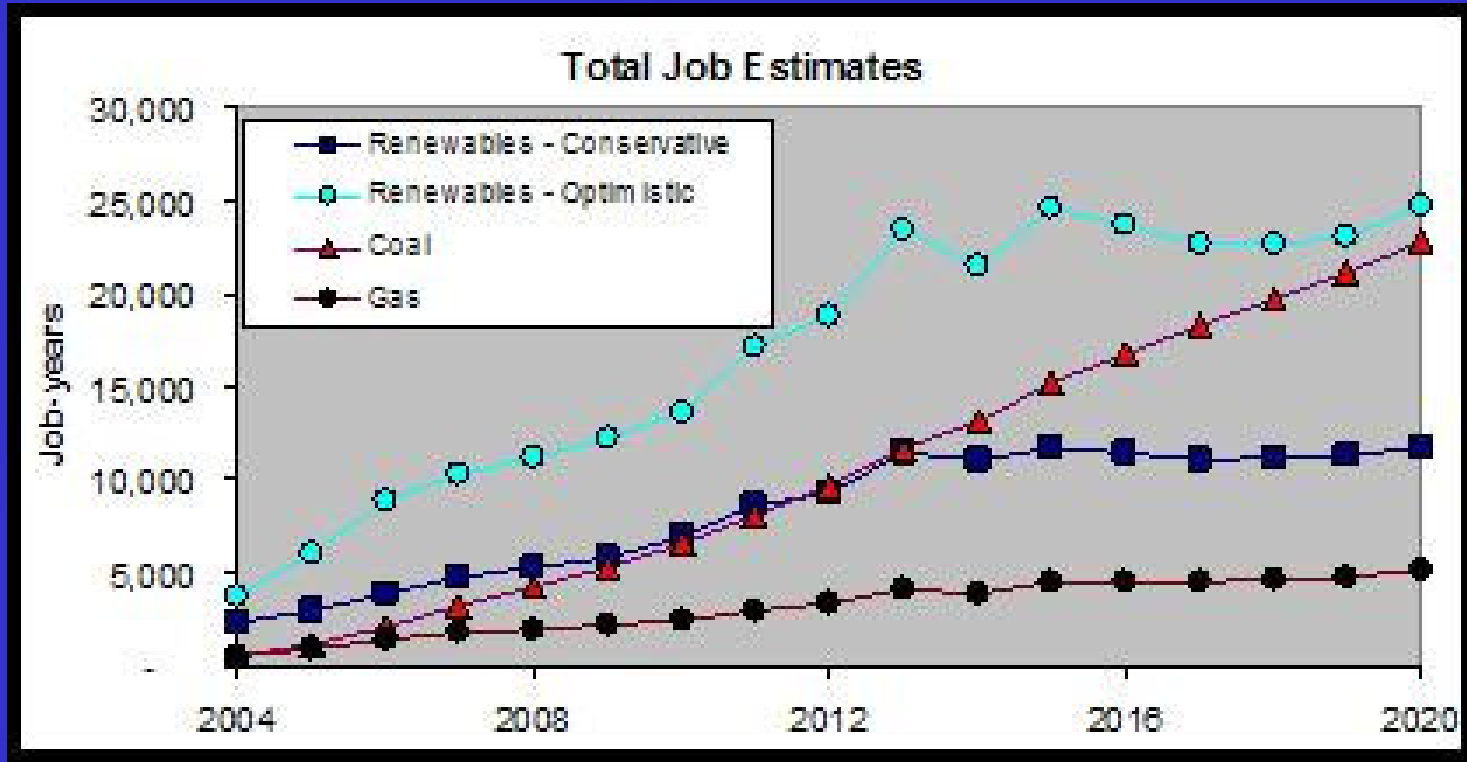


Aggregated Cost of Coalition Recommendations (Details)

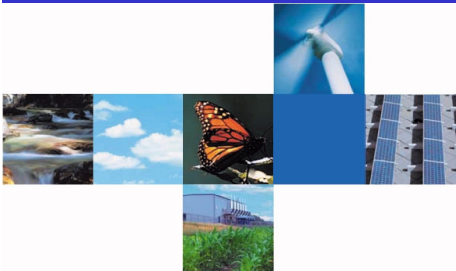
Technology	Total MW installed	Generation Share in 2013	MW financed	Capacity Factors	Financed through Programs	Cost in C\$
Onshore Wind	5,900	41.1%	3,817	27%		902,900,856
Offshore Wind	1,000	9.2%	647	36%		204,045,391
WPPI 3	6,900	50.3%	4,464			1,106,946,247
Small Hydro	1,850	23.9%	1,197	50%		524,283,297
Geothermal	200	4.9%	129	95%		107,690,623
Wave & Tidal	166	1.3%	107	30%		28,226,279
Biomass	930	19.2%	602	80%		421,693,808
RPPI 2 Total	3,146	49.3%	2,036			1,081,894,008
TOTAL	10,046	99.6%	6,500		64.7%	2,188,840,255
<i>Solar PV</i>	<i>200</i>	<i>(small)</i>	<i>200</i>	<i>17%</i>	<i>100%</i>	<i>416 – 460 mln</i>



Total Job Estimates

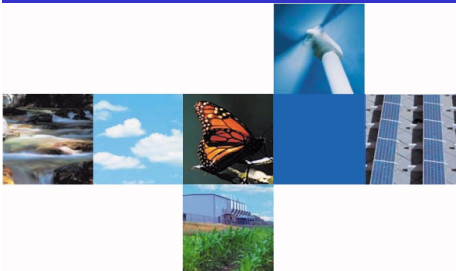


Can leverage the creation of 20,000 New Jobs by 2015



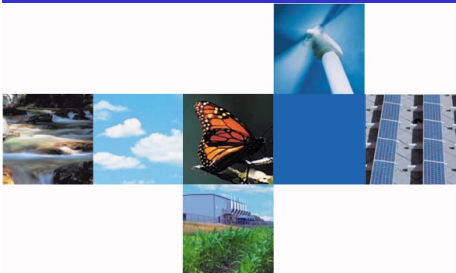
Benefits

- **Creating a Whole New Industry for Canada**
- **Competitiveness**
- **Investment in Innovative and Sustainable Renewable Energy Technologies**
- **Diversification of Canada's Energy Supply**
- **Support for the New Industrial Revolution**
- **Made-In-Canada Manufacturing Facilities**
- **Regional Economic Development**
- **New Capital Investment and Job Creation**
- **Clean Air**
- **Reduced GHG Emissions**



Conclusions

- **Green Power/Low-Impact Renewable Energy is "Moving out a Niche and into the Norm"**
- **Greater benefits to Canadian society, our economy and the environment**
- **The public is demanding cleaner, more sustainable power**
- **Good public policy is demanding greater security of supply**
- **We are Building an Industry to Serve the Economy of the Future**



Contact Information

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