



# RENEWABLES 2003 National Summit

December 1, 2003 - Calgary

Clean Air Renewable Energy Coalition

Mark S. Rudolph, Clean Air Renewable Energy Coalition  
Coordinator and President, justenvironment  
<http://www.cleanairrenewableenergycoalition.com>

CLEAN AIR  
RENEWABLE ENERGY  
COALITION

# Clean Air Renewable Energy Coalition

## Key Points

- Started in December 2000
- Founded by Suncor Energy Inc. and Pembina Institute
- Brings together a 'Counter-Intuitive Group of Strange Bedfellows' not the 'Usual Suspects'
- 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

## Members:

AIM PowerGen Corporation

Axor

BC Hydro

BP Canada Energy Company

Benign Energy Canada Inc.

Canadian Hydro Developers

DuPont Canada

Enbridge

Enmax

Hydro Quebec

Federation of Canadian Municipalities

Friends of the Earth

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


RENEWABLE ENERGY  
COALITION

# Vision for a Low-Impact Renewable Energy Future for Canada

- Coalition surveyed past work and future political horizon
- Ascertained that Low-Impact Renewable Energy is still treated as a 'Niche' player
- Decided to develop a Big-Picture Vision to take to:
  - A New Prime Minister
  - A New Federal Cabinet
  - Current and New Provincial and Territorial Premiers and Cabinets
  - The media
  - The Public



<b>RENEWABLE ELECTRICITY POTENTIALS IN CANADA (TWh p.a.)</b>			
	<b>Current Generation</b>	<b>Potential Generation (Minimum)</b>	<b>Potential Generation (Maximum)</b>
<b>Onshore Wind</b>	1	12.3	86
<b>Solar PV</b>	0.001		0.012
<b>Small Hydro</b>	4	15	98
<b>Biomass</b>	1.9	49	154
<b>Landfill gas</b>	0.6	0.9	2.7
<b>Wave / Tidal</b>	0.1	45	56
<b>Geothermal</b>	0		1.1
<b>TOTAL</b>	<b>7.6</b>	<b>122</b>	<b>398</b>
<b>Canadian Traditional Generation Source TWh (2000)</b>			
<b>Large Hydro</b>	346		
<b>Thermal</b>	147		
<b>Nuclear</b>	68		
<b>TOTAL TRADITIONAL</b>	<b>556</b>		

- 
- Our estimate indicates that Canada's potential for low-impact renewable resources is 122 to 398 TWh p.a.
  - This is approximately 22 percent to 71 percent of Canada's power consumption in 2000
  - This indicates that renewable energy sources could be equivalent to today's production of nuclear and thermal power combined
  - This assessment takes renewables for a 'Niche' source to a diversified partner to be treated on a level playing field

# Recommendations for Canada

## Define a Comprehensive Renewable Energy Vision for Canada

Specifically, the Coalition believes a plan should identify:

- The need for a **comprehensive renewable energy resource assessment** that would deliver a cost-resource curve for each renewable energy technology and support the setting of realistic targets for increasing the penetration of technologies most viable for a given region
- The need for **R&D money for early-stage technologies**
- The need for **differentiated guaranteed prices** (feed-in tariffs) for technologies that have left the demonstration phase and have entered the market, but cannot compete with least-cost pre-commercial renewable energy
- The important role **renewable energy will play in a carbon-constrained economy**

# Set Long-Term Targets for Renewable Energy in Canada

**Specifically, the Coalition supports:**

- **A low-impact renewable national energy target accounting for a minimum of 7 per cent of Canada's electricity production in 2010 (approximately 30 per cent of new capacity between 2000 and 2010 – triple the existing federal government target), and,**
- **A minimum of 15 per cent of Canada's electricity production in 2020**





# Commit to a Package of Long-Term and Broad Market and Government Incentives

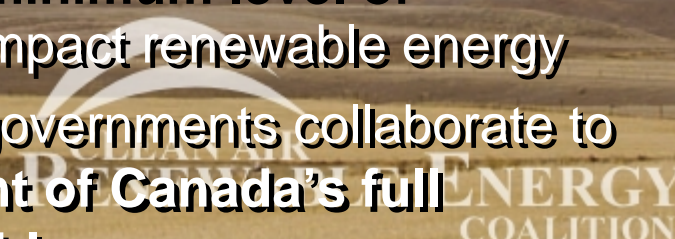
**Specifically, the Coalition recommends:**

- **The Federal Wind Power Production Incentive (WPPI) be increased to the equivalent level of incentive in the U.S. in order to provide a level playing field for investment (estimated at 2.7 cents / kWh)**
- **This type of incentive be extended to other renewable energy technology at a pre-commercial level**
- **Federal climate change-related money be used to expand the Market Incentive Program funding to \$30 million per year, extend it to 2012 and consult with the provinces and territories to develop a broader-based green energy rebate and education program for consumers**

# **Develop Partnerships Between the Federal Government and its Provincial and Territorial Counterparts to Provide Incentives or Measures to Increase Renewable Energy Investments in Canada**

**Specifically, the Coalition recommends:**

- **Federal, provincial and territorial governments commit to purchase a minimum of 30 per cent of their electricity needs from low-impact renewable energy by 2010, and increase that to 80 per cent by 2020**
- **Provincial and territorial governments mandate or provide support for a clearly identified minimum level of electricity production from low-impact renewable energy**
- **Federal, provincial and territorial governments collaborate to do a comprehensive assessment of Canada's full potential for low-impact renewable energy**



# Recognize the Potential for Renewable Energy in a Carbon-Constrained Economy

- The proposed rules for the domestic emissions trading and offsets system do not recognize the potential contribution of renewables to avoid greenhouse gas emissions from the energy sector. The Kyoto Mechanisms may encourage the flow of capital for development of renewable energy outside of Canada. Incentives are required to encourage action at home

# **Benefits Associated with Governmental Investment in Low-Impact Renewable Energy**

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

# Conclusion

- **Green Power / Low-Impact Renewable Energy is not a 'Niche' source**
- **The benefits to Canadian society are overwhelming**
- **The public is demanding cleaner, more sustainable power**
- **Making it happen requires a Vision**
- **Making it happen requires doing things a little differently**
- **"Some men see things as they are and say Why"?, I dream of things that never were and say, Why Not?"**