



Catching Up on Renewable Energy

On March 4 2008, Canada will join other countries in Washington, D.C., to discuss ways of rapidly scaling up the use of renewable energy. At the Washington International Renewable Energy Conference (WIREC) — the largest renewable energy conference ever held — each country will be asked to make major new policy commitments that will support new investment in renewable energy.

A Great Renewable Energy Opportunity for Canada

The Canadian Renewable Energy Alliance believes WIREC provides an excellent opportunity for Canada to make a new commitment to renewable energy for the following reasons:

- Canada is lagging behind the rest of the world on the use of renewable energy, yet it has more renewable energy resources than most other countries.
- The lack of a strong Canadian commitment to renewable energy is a huge lost opportunity. We are missing out on the fastest growing energy source of the 21st century and one of the best ways to tackle global warming.
- In 2006, the Canadian Renewable Energy Alliance recommended that Canada develop a national renewable energy strategy. We have since been joined in that call by the Canadian renewable energy industry, yet no action has been taken.
- Canada has a chance to catch up with the rest of the world by making concrete commitments at WIREC. Canada should commit to developing and implementing a national renewable energy strategy along with support programs for renewable power, heat and fuels.
- In addition to national programs, Canada should have a Canadian renewable energy act that would provide support to provincial governments like Ontario that implement innovative policies such as feed-in tariffs¹ for renewable power.

The Canadian Renewable Energy Alliance is calling on Canada to announce the following new or strengthened renewable energy policies at the WIREC conference:

1. **By 2009 establish national targets for renewable energy and develop a national renewable energy strategy. Canada should have a renewable energy act** that has the goal of making low-impact renewable energy sources the primary focus of Canada's long-term energy supply strategy and that supports provinces that adopt feed-in tariffs and other innovative policies.

¹ A feed-in tariff provides premium prices and priority access for renewable power sources.

2. **Scale up the current EcoEnergy for Renewable Power incentive program** by three fold over the next five years. Include specific set-asides for different regions of the country and a level of incentive that matches the development status of each technology. Target: 12,000 megawatts (MW) installed capacity by 2012; 35,000 MW by 2020.
3. **Introduce a national tax credit for residential and small business solar water heaters** as a supplement to the EcoEnergy for Renewable Heat program. Target: one million residential and small business solar systems in 10 years.
4. **Support renewable energy deployment in the North.** Target: 85 MW of wind capacity installed by 2018.
5. **Support community power generation.** Provide seed monies to provincial community power funds to cover soft costs for project development and capacity building as well as low-interest loans to enable ownership of projects by community power proponents.
6. **Support sustainable, renewable biomass heating fuels.** Target: 1.25 million homes and businesses using renewable heating fuels by 2018.
7. **Develop sustainability criteria for renewable agricultural and biofuels.** Establish criteria that ensure the sustainable use of biomass resources for the production of ethanol and biodiesel from forest and agricultural materials. All existing and future financial support for renewable fuels should be limited to fuels that meet these established criteria.
8. **Establish a high-level national task force on renewable power grid integration, power storage and transmission.** Such a task force is needed to recommend policy, technology development and regulatory changes that will maximize the deployment of renewable power potential in Canada.
9. **Participate actively in and provide funding for international partnerships** like the Renewable Energy and Energy Efficiency Partnership to expand international cooperation on renewable energy and to help developing countries adopt clean energy alternatives at the community level.

The combination of renewable energy with significant improvements in energy efficiency is the leading option to address global warming. A transition to renewable energy will also bring improvements in air and water quality, energy security, access to energy, and economic development.

In 2004, countries from around the world, including Canada, came together in Bonn, Germany, to discuss ways of supporting greater use of renewable energy. Governments left Bonn with a vision of renewable energy as a widely available solution to global warming, air and water pollution, energy security, access to energy for the poor, and economic development.

Many countries have acted quickly to support the rapid deployment of renewable energy. Spain, Germany, Italy, France, many U.S. states and even India and China have adopted policies and regulations that increase investment in low-impact renewable energy. They see beyond the fossil fuel era and want to ensure they have a mature, safe and competitive renewable energy industry in place for the inevitable transition to renewable energy.

Canada Is Lagging Behind on Renewable Energy

Unfortunately Canada continues to lag far behind other countries. While Canada provides some federal and provincial support for wind power development, and provinces like Ontario have innovative renewable energy support programs, these efforts are small and intermittent compared with other countries. Our efforts do not come close to realizing Canada's huge renewable energy potential.

For example:

- Canada ranks eighth behind the United States, Spain, Germany, Italy, the United Kingdom and even India and China in terms of our investment attractiveness for renewable energy according to the Ernst & Young Renewable Energy Investment Attractiveness Index.²
- Canada does not appear on any of the country investment charts of the Global Status Reports on Renewable Energy³ published annually by the Renewable Energy Policy Network for the 21st Century (REN21).
- Through a 10-year process starting in 1997, all 25 countries of the European Union have agreed on a target of 20% new renewable power, heat and fuel energy by 2020, and each country is developing its action plan to achieve this. Canada has no targets and has no plans to develop a national strategy.
- The federal EcoEnergy for Renewable Power will reach its target of 4,000 MW by 2009. There are currently no plans to extend it or to expand it to support solar electricity, which is the fastest growing renewable power market in the world. Meanwhile the Canadian renewable energy industry says that 35,000 MW of new renewable power (supplying 15% of Canada's needs) could be in place by 2020. REN21 says that 85% of Canada's power could be supplied from renewable sources by 2050.
- Several countries are starting to use power storage and innovative new "smart grid" technology to increase the proportion of power demand met by renewable sources. No Canadian jurisdictions are currently planning to use these innovations.
- In 2006, Ontario made history by introducing North America's first "feed-in tariff," which provides premium prices for renewable power sources less than 10 MW. This extremely effective approach is used in all major countries that have seen rapid growth of renewable energy. Yet in Ontario it is limited to small power systems, and the province could lose its advantage if it further limits renewable power under its Integrated Power System Plan. Several U.S. states are moving quickly to adopt a feed-in tariff regime. British Columbia is considering using a feed-in tariff approach, but no other province has shown interest.

² http://www.ey.com/Global/content.nsf/International/Oil_Gas_Renewable_Energy_Attractiveness_Indices

³ <http://www.ren21.net/globalstatusreport/default.asp>

- Canada has several programs to support the production of biofuels like ethanol and biodiesel and it has targets for blended fuels. Yet these programs do not differentiate between sustainable sources and sources that could have serious environmental, food security and social impacts. Other countries are developing criteria to ensure that biofuel production has minimum impact.
- Several of our G8 partners have major assistance programs that help developing country communities adopt clean and local renewable energy technologies. Canada's aid programs include no help of this kind.

We have a lot to lose if we do not act now to catch up on renewable energy.

REN21 recently showed that in the world's 20 largest economies, renewable resources could meet 50–90% of their power demands, 50–70% of their heat demands and 15–30% of their fuel demands by 2050.⁴ Canada's potential was shown to be 85%, 65% and 30%, respectively, showing just how much potential we have.

According to the European Union Commission on Monitoring and Modelling Initiative on Targets for Renewable Energy (MITRE), net employment growth in the European Union is projected to increase to between 950,000 and 1,660,000 by 2010 if its target of 20% of energy demand with renewable energy is met.⁵ A report from the Renewable and Appropriate Energy Laboratory in Berkeley found that renewable energy creates more jobs per megawatt of power installed, per unit of energy produced, and per dollar of investment, than the fossil fuel energy-based sector.⁶

The Canadian Renewable Energy Alliance (CanREA) is an alliance of Canadian civil society organizations from the non-profit or voluntary sector that hold a common interest in promoting a global transition to energy conservation and efficiency and low-impact renewable energy. For membership and more information see <http://www.canrea.ca>.

⁴ *Renewable Energy Potentials — Opportunities for the Rapid Deployment of Renewable Energy in Large Energy Economies*. Intermediate Report to the 3rd Ministerial Meeting of the Gleneagles Dialogue on Climate Change, Clean Energy and Sustainable Development, Berlin, 9 to 11 September 2007. http://www.ren21.net/pdf/REN21_RE_Potentials_Interim_Report.pdf

⁵ *Meeting the Targets and Putting Renewables to Work*. European Union Commission on Monitoring and Modelling Initiative on Targets for Renewable Energy (MITRE). <http://mitre.energyprojects.net/>

⁶ *Putting Renewables to Work: How Many Jobs Can the Clean Energy Industry Generate?* Report of the Renewable and Appropriate Energy Laboratories. April 2004. <http://rael.berkeley.edu/files/2004/Kammen-Renewable-Jobs-2004.pdf>