

Toronto Energy Action News – Spring 2001.  
The ENERGY ACTION COUNCIL OF TORONTO newsletter.

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### Third Climate Change Report: CO<sub>2</sub> levels “unprecedented”

The latest report of the Intergovernmental Panel on Climate Change (IPCC) provides a very clear summary and update of the past five years of research on climate change. The report was prepared and reviewed by hundreds of scientists from around the world (to be precise 995 scientists worked directly on the report as authors, editors, and reviewers). The report can be downloaded free of charge from [www.ipcc.ch](http://www.ipcc.ch).

The report clearly states that: "emissions of greenhouse gases and aerosols due to human activities continue to alter the atmosphere in ways that are expected to affect the climate". As an illustration of the extent of the problem, consider the report's evaluation of carbon dioxide (CO<sub>2</sub>) trends:

"the atmospheric concentration of CO<sub>2</sub> has increased by 31% since 1750. The present CO<sub>2</sub> concentration has not been exceeded during the past 420,000 years and not likely during the past 20 million years. The current rate of increase is unprecedented during at least the past 20,000 years".

To help comprehend and visualise the time scale and seriousness of the problem consider that Canada has only existed as a nation since 1867, and that in 1812 the village known today as 'Toronto' had only 700 residents.

The IPCC report estimates that "human influences will continue to change atmospheric composition throughout the 21<sup>st</sup> century" and it predicts that "anthropocentric climate change will persist for many centuries". The details related to these sobering predictions, and the actual estimates of scientific confidence on both the observed and projected changes in extreme weather and climate events, are all well elaborated within the report and should be explored and widely discussed by all segments of society.

This brief article does not intend to summarise the IPCC report. The key point here is to emphasise the fact that as a global society we have embarked in a process whose negative impacts go well beyond the time horizons of our own personal life spans and even those of many contemporary nations (for example, the USSR lasted only between 1917 and 1991).

The fact is that practical solutions to climate change already exist (e.g. energy efficiency and renewable sources of energy generation are already technologically mature choices), however the political will to implement them is unfortunately still quite limited.

Today more than ever before we need to think globally and act locally to chart a new course towards sustainability. Here at ENERACT we are trying to implement *today* some of the essential first steps to achieve a more sustainable future.

*José Etcheverry*  
EnerACT Board of Directors.

## Report from the Solar Domestic Hot Water project

Enthusiasm for EnerACT's Solar Domestic Hot Water (SDHW) project continues to grow and EnerACT continues on its pioneering path with respect to the renewable energy sector in Toronto and the GTA. In January 2001 Stephen Hall departed the project and EnerACT to follow another opportunity. At that point, we had 3 of our 18 systems spoken for. Since then we have garnered another 9 participants in the project, bringing our total to 12 of a maximum 18 participants.

We expect to reach the maximum by the end of May. Installations will be complete by the end of June, 2001.

Our interaction with other members of the community is also growing. One of our newest partners is Autosshare (see ad on back page).

We are also in discussions with City of Toronto staff in order to include the SDHW project in the City's Employee Energy Efficiency (E<sup>3</sup>) program which aims to provide a range of services to

the City's 30,000 employees which incorporate the use of energy efficiency and conservation measures. Look out for the final project update in the Summer 2001 issue of *Toronto Energy Action News*.

*Ravi Mark Singh,*  
SDHW Project Manager.

## FOCUS

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### on WIND Power.

## Wind power in 2001

The year 2000 saw the installation of 3500 MW of wind power around the world – enough to power more than 800,000 North American homes – according to the American Wind Energy Association.



This represents an increase of 26 per cent over 1999 (a 10 per cent decrease over the 1999/1998 figures). AWEA estimates that this figure will dramatically increase in 2001, however, with an estimated 2000 MW of capacity added in the US alone.

*Excerpted from Renewable Energy World*

## **World's largest wind farm to be built in Oregon**

The Stateline Wind Generating Project will be online by the end of the year on the state border of Oregon and Washington, US.

One hundred per cent of its 300 MW output will be purchased by the utility which provides power in part for the city of Portland.

With over 450 turbines, the facility will provide power for over 70,000 homes in the city. Other projects in the US include a 200 MW plant in Southern California and a 260 MW development in Nevada.

*Excerpted from Renewable Energy World*

## **Wind power in Toronto**

**The Toronto Renewable Energy Co-operative (TREC) recently announced that, as part of their waterfront wind turbine project to build 3 wind turbines in partnership with Toronto Hydro, a second site is being pursued.**

The new site is located at the grounds of Exhibition Place. Exhibition Place Board of Governors have approved the site in principle and staff is currently working to determine the approvals process required for the site.

TREC is also busy finalizing various contracts pertaining to the Ashbridges Bay Sewage Treatment Plant site. Staff are negotiating a licence agreement with the Toronto Port Authority and the City.

A wind turbine supplier has been selected for the site - stay tuned for a public announcement naming the supplier and expected commissioning date on Breakfast Television followed by a Press Event on the waterfront. Another exciting development is the initiation of TREC's Wind Power Co-operative (WPC) member meetings. WPC has over 100 potential members who have put down \$500 toward the purchase of their first turbine unit.

Each turbine in this program will produce up to 750kW of power – enough to power up to 300 Toronto homes. Each turbine will displace as much as 1.4 tonnes of Carbon Dioxide emissions annually.

To find out more about the project or to become a member of the Wind Power Co-op, please call the TREC office (416) 977-5093 or visit our website at [www.trec.on.ca](http://www.trec.on.ca)

*Deb Doncaster,*  
TREC Project Manager

## **A Message from the EnerACT Chair**

Welcome to a new year at EnerACT. On February 21 the Annual General Meeting was held at the St. Lawrence Centre just prior to a public forum entitled "End of Cheap Fuel: Opportunities for Green Energy".

The forum was cosponsored by the Coalition for a Green Economy, St. Lawrence Centre Forum and EnerACT. The event was very popular with the auditorium filled to capacity.

The Annual General Meeting also had good attendance at over 20 persons. The AGM primarily dealt with Board of Director elections and presentation of the financial statement. For details on changes within the Board, see "Transitions" on the next page.

The solar domestic hot water installation program in partnership with Natural Resources Canada is proceeding well. We are in Phase 2, which involves installing another 18 systems, in addition to the original 9. All systems will be completed by the end of the summer. Discussions are being held with the City of Toronto's Energy Efficiency Office to launch a larger project in the future.

We are gearing up to take bookings for our solar trailer, which has quite a history of powering folk festivals and other environmental events. On the other hand we have given ownership of our solar wagons to organizations that have larger exposure to the public, particularly youth, on a regular basis.

An important matter to address, in the next year or so, will be the planned provincial restructuring of the electricity sector. The challenge will be to use the restructuring as a mechanism to ensure more sources of green electricity supply – wind, solar, small hydro and biomass, including digesting organic waste to “natural” gas. EnerACT can play a role to clarify options to the public and to lobby for removal of regulatory barriers.

I look forward to the upcoming year where we will continue to see EnerACT play a pivotal role in the renewable energy sector in Toronto and Ontario.

*Mario Kani*

## The Canadian Energy Fair

EnerACT members are invited to the first annual Canadian Energy Fair – Green Choices Saturday July 7th and Sunday July 8th, 2001. A special “Business of Renewables” session will be held on Friday, July 6th.

The purpose of the Green Choices fair is to demonstrate applications on renewable energy, energy efficiency programs and sustainable living. The Centre’s partner for the fair is Natural Life Festivals, as one of a series of Natural Life events presented across Canada this year. Natural Life events feature unique marketplaces of information, natural products and crafts.

Given Canadian use of energy per capita is amongst the highest in the world, with increasingly negative impacts on the climate and air quality, the urgency of our efforts is apparent. The Kortright Centre’s 800 acre park has the largest display of working renewable energy demonstrations and educational programs in Canada, proving a properly designed energy efficient home will use 50-70 percent less energy than a conventional home and a solar hot water system can provide 50 percent of household hot water needs. It is well placed to offer at the fair practical green energy workshops, hands-on demonstrations and special events for children.

Workshops will be run over the two-day event, about an hour per workshop. Presenters come from a varied backgrounds including homeowners, builders, educators, architects, engineers and green power producers and retailers. Topics include *Living in an Age of Choice –Electricity Restructuring in Ontario, Domestic Use of Solar Energy, Wind Power and Bio-fuels, Electric Vehicles and Fuel Cells, Energy Cooperative Options, Building and Using a Solar Cooker and Water Heater* and others.

Kortright Centre is located at 9550 Pine Valley Drive, Near Kleinburg, Ontario, two km west of Hwy 400, south of Major MacKenzie Drive.

Admission is: Adults \$6.00/ Children \$4.00/ Seniors \$4.00/ kids under 5 are free with their families and parking is \$2.00 per car.

*Rob McMonagle*

### **ATTENTION Memberships are due!**

All memberships expired on December 31st 2000

If you have not yet done so, please fill out the membership form on the back of this newsletter and send it in to us with your renewal cheques.

For more info, please contact the EnerACT office: (416)488-3966.

Know someone who might be interested becoming an EnerACT member? Please refer them to our website or pass this newsletter on to them after you're done!

... EnerACT transitions ...

More changes to the EnerACT leadership.

After a brief stint as Executive Director and Project Manager (DHW) at EnerACT, Stephen Hall has left to pursue opportunities in California, USA. In January 2001, Ravi Mark Singh tendered his resignation from the Board in order to assume the duties of Project Manager for the Solar DHW project.

At the Annual General Meeting, Mario Kani returned as EnerACT Chairperson, Rob McMonagle as Treasurer. EnerACT is also pleased to welcome Bob Tmej as Secretary. Bob has been a long-time member of EnerACT and has served on the Board in previous years. Roger Algie, Greg Allen, José Etcheverry, Bridget Haworth, Jim Hinton and Peter Shepherd have also returned for another year on the Board. The Board of Directors looks forward to working with *you* over the upcoming year!

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**WWW.ENERACT.ORG**

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