Strategies for the Environment

Summer 2009

Newsletter

Are You Ready for the New Energy / Low Carbon Economy?

Greenhouse Gas Cap and Trade System for Ontario

Climate change has been accepted by most, including scientists and politicians alike, as an inevitable occurrence. Some regions are already feeling the increase in extreme weather events, more frequent and severe storms, Island states developing evacuation plans, heatwaves causing deaths. In Ontario, the risk of increased severity of storms have impacted infrastructure, water treatment and distribution and energy generation and distribution, and will be increasingly frequent and costly. What will the results be? This is still being debated. The changes that will occur will depend on how many feedback loops will be engaged, when and how quickly. The Earth is a series of complex ecosystems that are very hard to model and predict. Every year, the models get more complex and more accurate, requiring giant super computers to calculate them.

We can all make a difference to help slow down the changes, and even stop further changes. However, adaptation will also have to be part of our plans, because its too late to turn back all of the impacts that we will experience.

In December, 2008, the Ontario Ministry of the Environment released a discussion paper outlining the starting points of a Carbon Cap and Trade System. The goal is to have the cap and trade system in place for 2010.

MOE's GOALS

The MOE aims to achieve the following goals:

- Reduce Ontario's greenhouse gas emissions to six percent below 1990 levels by 2014 – a reduction of 61 megatonnes relative to business-as-usual
- By 2020 Ontario will reduce greenhouse gas emissions to 15 percent below 1990 levels – a reduction of 99 megatonnes relative to business-as-usual
- By 2050 we will reduce greenhouse gas emissions to 80 percent below 1990 levels

The New Energy Act for Ontario

There are many changes being implemented as a result of the new Energy Act. The new Act is intended to promote new renewable energy sources as well as promote energy efficiency.

The Act also amends statutes such as the Environmental Bill of Rights, Environmental Protection Act and the Building Code.

Details can be found on the MOE website: http://www.mei.gov.on.ca:80/english/energy/gea/

The cap and trade system is planning to cover the following sectors in 2010:

- Fossil fuel-fired electricity generators
- Industries, including all stationary combustion sources and process emissions in the following sectors:
  - Base metal (nickel/copper) smelting and refining
  - Cement
  - Chemical
  - Iron and steel
  - Lime
  - Petroleum refining
  - Pulp and paper

The Cap and Trade system will including reporting of six greenhouse gas categories in the form of Global Warming Potential or Carbon Dioxide equivalents (CO_2e).

The six categories:

- Carbon Dioxide
- Methane
- Nitrous Oxide
- Hydrofluorocarbons ($CHCLF_2$)
- CCL_2F_2
- Perfluorocarbons
- Sulfur Hexafluoride

The good news is that companies will get credit for early action. So if you have already started taking initiatives, organizations will be recognized and rewarded for the reductions undertaken.

Reductions will have to meet the criteria and ensure that the reductions are voluntary, additional, real, verifiable, permanent and enforceable.

If you are not one of the above mentioned industry sectors, why should you care? Because the Green Economy or the low-carbon economy could benefit your company. Off-sets are being considered as part of the Cap and Trade system. If your organization has not been given a cap, you can trade (sell) the credits generated through your greenhouse gas reduction activities. With the goal of the overall reduction of the carbon output to the atmosphere within the province.

On May 27, 2009 an amendment to the Environmental Protection Act was put through first reading. The amendment defined the six categories of substances that are defined as "green house gas."

The amendment additionally allows for regulations to be made in order to establish "programs and other measures for the use of economic and financial instruments and market-based approaches, including without being limited to emissions trading, for the purposes of maintaining or improving existing environmental standards, protecting the environment and achieving environmental quality goals in a cost effective manner." The financial instruments can include auction, sale or other means governing the distribution. Based on the speed the US is under taking its GMG legislation, hopefully Ontario's will be pushed quickly forward as well. This is another step toward developing a carbon trading scheme and encouraging the reduction of greenhouse gases.

Link to "Discussion Paper: A Grrenhouse Gas Cap-and-Trade System for Ontario": http://www.ene.gov.on.ca/envision/env_reg/er/documents/2009/010-5484.pdf

Did You Know?

That the federal and provincial governments, along with local utilities are trying to encourage industry to reduce their impacts on the environment. Most initiatives cost money to implement, whether its new equipment costs or retrogrades or even just time and training. Even though the initiatives will save organization money, in addition to minimizing the environmental impact, the layout of capital can be prohibitive to many companies.

There are now a lot of grants available to help and organization get over those hurdles. There is a lot of money available, and not that many companies are taking advantage of it. The money available can be quite substantive.

Check out these links for more information:

Ontario's Energy Efficiency Resource and Funding Guide: http://www.mei.gov.on.ca:80/english/pdf/conservation/energy_efficiency_funding.pdf

Natural Resources Canada – Dollars to Sense Energy Management Workshops: http://oee.nrcan-rncan.gc.ca/industrial/training-awareness/index.cfm?attr=0

Canadian Industry Program for Energy Conservation (CIPEC): http://oee.nrcan-rncan.gc.ca/industrial/cipec.cfm?attr=24

Some simple initiatives to help reduce GHG's:

1. Turn lights, computers, and other equipments off when not in use.
2. Add sensors to conference rooms, pantries/kitchens, washrooms and other rooms not regularly used.
3. Change light bulbs over to compact fluorescents. (You can get grants to changes ballasts over for warehouses and manufacturing forms.)
4. Increase temperature in summer by a couple of degrees to reduce air conditioning use.
5. Lower temperature in winter to reduce natural gas use.
6. Allow for telecommuting to reduce office space and commuting energy use. (In many jurisdictions, the transportation sector is the largest sector of GHG emissions according to the Western Climate Initiative.)