



Environmental Health Strategies Inc. (EHS)

provides scientific, technical and economic advice to government and private sector clients to assist decision-making in the area of protection of human health and the environment.

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Canada's new regulatory initiative for air emissions, including greenhouse gases

Earlier this year, I had an opportunity to attend a talk by Sir Nicholas Stern, publicizing the report, Review on the Economics of Climate Change. This is a major report on groundbreaking work on economics of climate change, headed by Sir Nicholas, that was issued last year by the UK Government, (http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/sternreview_index.cfm). I was very impressed by both, the report that I looked at briefly prior to the talk and by Sir Nicholas Stern himself. He started off and ended with the following three points:

- Concerning the science of climate change - to deny the body of scientific opinion that global warming (GW) is real is absurd;
- Concerning the response global warming - a response that we should wait to deal with the possible consequences of GW until we are more certain of our facts is reckless; and
- Concerning a possible the position on GW, that this is going to affect future generations so we don't need to be concerned with this problem, is unethical.

All of which brings me to the Canada's new initiative to regulate air emissions. Canada's Conservative government, or Canada's New Government, as it likes to refer to itself, announced a major new initiative to regulate air emissions of criteria air pollutants (CACs) and greenhouse gases (GHGs), Regulatory Framework for Air Emissions (2007), <http://www.ecoaction.gc.ca/news-nouvelles/20070426-1-eng.cfm>. This 48 page document makes for very interesting reading and, on balance, I like its comprehensive, action-oriented, 'can do' approach. Obviously, the "devil is in the detail" and it remains to be seen how the government handles this very ambitious undertaking.

While I salute the government's courage to step up to the plate, it's interesting to read that the report suggests that the cost of implementation will not exceed 0.5% of GDP between now and 2020 to deal with these important issues. This is less than the estimate in Sir Nicholas Stern's report where he states that the cost of reducing global GHG emissions by 50-60% will be of the order of 1% of GDP per year. Canada has the highest per capita consumption of energy and emissions of GHGs in the world so one would expect our costs to be higher than the average to reduce our GHG emissions. It's important to appreciate what these number really mean. Canada's GDP in 2006 was about \$1.4 trillion. A 0.5% of GDP in current 2007 dollars would represent about \$7 billion. 1% of GDP would represent \$14 billion. Remember that's every year!

Continue on page 2

Canada's new regulatory initiative for air emissions, including greenhouse gases

Continued from page 2

The Framework covers 4 distinct areas:

- Industrial Air Emissions;
- Transportation Sources;
- Consumer and Commercial Products;
- Indoor Air Quality.

The government acknowledges that it has never regulated emissions of GHGs or air pollutants across industries before. As a result, it proposes that it will set environmental regulatory standards and will give provinces, territories and native governments an opportunity to enact appropriate environmental regulations, in which case the federal government will not enact regulations affecting that particular jurisdiction:

The federal government will set stringent national standards and will work to reach equivalency agreements with those provinces that set provincial emissions standards that are at least as stringent as the federal standards. Equivalency agreements will allow provincial leadership, while ensuring a nationally-consistent level of health and environmental protection.

Some of the elements of the ambitious agenda that the federal government has announced include:

- For greenhouse gases, the framework sets a 2010 implementation date for emission-intensity reduction targets.
- The government is committed to reducing Canada's total emissions of GHGs, relative to 2006 levels, by 20% by 2020 and by 60% to 70% by 2050.
- For air pollutants, the framework sets fixed emission caps that will enter into force as soon as possible between 2012 and 2015.
- The regulations will mandate reductions in air emissions from the following industrial sectors:
 - electricity generation produced by combustion,
 - oil and gas (including upstream oil and gas, downstream petroleum, oil sands, and natural gas pipelines),
 - forest products (including pulp and paper and wood products),
 - smelting and refining (including aluminum, alumina, and base metal smelting),
 - iron and steel,
 - iron ore pelletizing,
 - potash,
 - cement,
 - lime, and
 - chemicals production, including fertilizers.

It is significant that emission trading is proposed as an option to reduce GHG emissions, including domestic and international emission trading options:

- Domestic trading;
- Access to domestic offsets;
- Access to Clean Development Mechanism at 10% of total target; and
- Possible linkages to a Canada-U.S. -U.S. regional or -state-level GHG emissions trading system.

This is a huge agenda and, as the paper says, over time it will affect every Canadian.

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