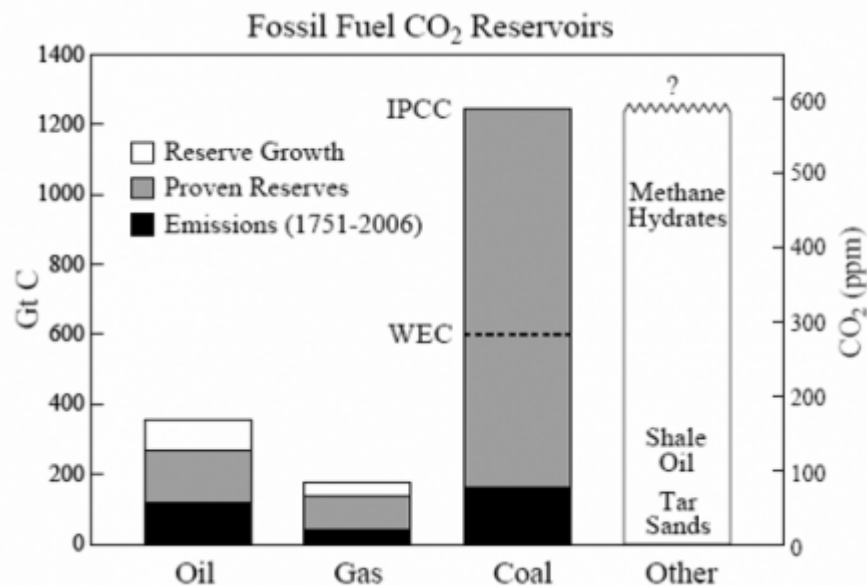


29 April 2010

Mr. Dewar,

As one of your constituents, I am writing to express my approval of the government's recently announced plan to phase out coal-fired electricity generation in Canada, while simultaneously expressing my strong view that this policy does not go far enough. In addition to producing massive amounts of climate-altering greenhouse gases, coal plants put out large quantities of air and water pollution. Coal mining also costs human lives and destroys habitat. In short, we can do better than coal as a source of power.

This becomes even clearer when you consider the relative sizes of different fossil fuel reserves. When burned, these will all produce predictable amounts of carbon dioxide (CO<sub>2</sub>). As such, the overall size of the reserve corresponds to the amount of dangerous climate change it could generate, with impacts on both human and natural systems:



As such, I encourage you to extend the logic of your existing policy further. Rather than simply forbidding the construction of new coal plants without carbon capture and storage

(CCS), the government should place a price on CO<sub>2</sub> emissions, encouraging the least costly reductions to be undertaken first. This should take one of the following forms:

- An economy-wide carbon tax, applied equally to all sources of emissions
- A national cap-and-trade system with 100% auctioning of permits and no dubious offsets (such as those based on destroying HFC-23, or planting trees that may not endure indefinitely)
- An economy-wide carbon tax or auctioned cap-and-trade system, with some or all revenues automatically recycled back to the population (cap-and-dividend).

All of these approaches will create incentives throughout the economy to reduce greenhouse gas emissions. Concerns about trade competitiveness should be addressed in two ways. First, by establishing agreements with existing and emerging carbon pricing schemes in other political jurisdictions, such as the European Union and the United States. Second, by implementing a carbon tariff, applied to imports from countries without effective carbon pricing schemes. If set at the same level as the domestic carbon price, such a tariff would be compatible with the rules of the World Trade Organization.

As the chart above shows, the only source of potential emissions that rivals coal in dangerousness is unconventional oil and gas. This includes things like the Athabasca oil sands, as well as coal bed methane and others. Leaving the carbon in these fuels safely underground is just as important as phasing out coal. We need to avoid being confused by the apparent economic gains associated with oil sands exploitation. While the jobs and revenues being created today are obvious, the total environmental and climatic costs are quite probably much greater. Also, exploiting the oil sands perpetuates an economy based around fossil fuels, which will inevitably become rarer and more costly with the passage of time. Finally, it is unethical for one group of people in our generation to enrich themselves by exploiting this resource, when the risks associated with the emissions are primarily borne by members of future generations around the world.

In an ideal world, it would be possible to extract the energy from these fuels while sequestering the greenhouse gas emissions and other pollution associated with them. In practice, CCS is both limited and risky. We do not know whether it will be possible to store large quantities of greenhouse gases over very long stretches of time (like the hundreds of thousands of years it takes for eroding rock to permanently remove CO<sub>2</sub> from the atmosphere). We also do not know whether doing so will be safe for human beings and natural systems. Also, the costs associated with doing so are unknown, especially given the massive sheer physical scale of trying to sequester an appreciable share of the world's emissions. Finally, CCS is fundamentally ill suited to mobile sources of emissions. Since 85% of emissions associated with fuels from the oil sands are produced when those fuels are burned in a dispersed way, CCS cannot do much to limit the total climate impact of oil sands exploitation.

Dealing with climate change is an extreme ethical necessity. We owe it to future generations to leave them a planet that is not fundamentally endangered by the accumulation of greenhouse gases in the atmosphere. In order to do right by them, we should be implementing policies that include a moratorium on new coal-fired facilities and new extraction of unconventional oil and gas, an economy-wide price on carbon, and complementary policies such as tighter building codes and efficiency regulations. The co-benefits associated with such an approach are numerous: ranging from decreased geopolitical vulnerability to reduced deaths from particulate matter in air pollution to the gaining of commercial advantage by becoming leaders in the development and deployment of renewable energy technologies.

With far-sighted policies and a continuous awareness of our ethical responsibilities towards future generations and the natural world, we can apply our knowledge and energy to the development of a carbon neutral global economy, powered by renewable sources of energy that can be used forever.

Sincerely,

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