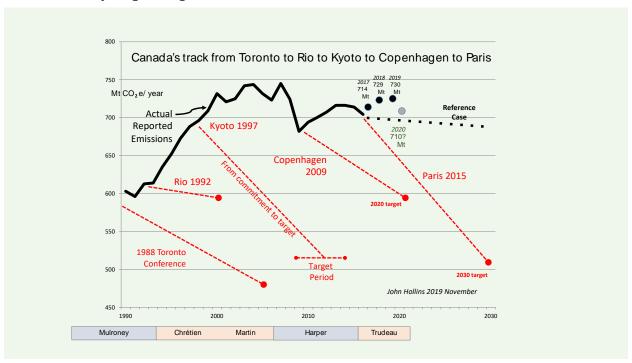
Canada's Carbon Malade, Diagnosis, and Prescription

A brief synthesis and opinion by John Hollins, one of the authors of CACOR's pending Pathways report, drawing on the writing and thinking of Robert Hoffman, Catherine Smith, and Ted Manning

Malade

On April 22, 2021, the Government of Canada announced a new Canadian goal: to exceed a 40 per cent reduction from the 2005 emission level by 2030, thereby upping the ante from its 30 per cent reduction target, the commitment Canada made in the 2015 Paris Agreement. This is *malade*.

CACOR's Pathways study demonstrates clearly that Canada is not close to being on track to meet even the 30% reduction target, never mind 40%. This most recent Canadian political rhetoric is from the same small, smooth mold as earlier policy announcements about the climate crisis. The sweet talk has not worked. For three decades, targets have been missed by large margins.



This is Canada's carbon *malade*. What has been talked about so smoothly has not yet been delivered.

Diagnosis

Climate change is upon us and real. The litany of accelerating consequences already is evident in the media and addressed in the academic press. Evident impacts include heat waves, wildfires, floods, storm surges, and melting ice. The evidence is beyond question.

But the Government of Canada still frames the climate crisis principally as a market failure that can be resolved by economic measures. This is a blinkered approach.

The industrial revolution began in 1776 with the invention by James Watt of the first thermodynamically and economically efficient steam engine. It took fifty years for the first coal-fired passenger train to run between Stockton and Darlington in England. In the following six decades, adoption of this technology, and many others, surged. By 1885, the last spike in the transcontinental track of the Canadian Pacific Railway was driven at Craigellachie, British Columbia.

Science and continuously evolving technologies have driven the use of fossil fuels and the inevitable heating of the globe. A successful approach to dealing with the long-term issue of global heating will by necessity have to encompass the physically and technically feasible dimensions, not just short-term economic factors.

The policies of the Government of Canada have been built on the quicksand of economics and political considerations. They need to be built on technologically informed analysis that looks out decades, that is accessible to stakeholders, and where results are monitored regularly so that adjustments may be made.

The Law of Requisite Variety states that the regulation that a regulator can achieve is only as good as the model of the reality that it contains. It is abundantly clear that the models of reality upon which Canada's policies are based are not up to the job. Continuing to increase production of oil from sand and methane by fracking, for example, is clearly at odds with any prospect of meeting any and all current aspirations. To navigate by such an illusion leads to catastrophe.

It is time to recognize that the climate change crisis is but a symptom of a complex of interrelated problems that threaten life on Earth, the root of which is humankind's failure to comprehend that economic growth as indicated by year-over-year increases in Gross Domestic Product cannot be sustained on a planet with a finite endowment of material resources. There **are** limits to growth (Club of Rome 1972).

Prescription

Governments must close the gap between rhetoric and reality.
Fatih Birol, Executive Director, International Energy Agency, June 2021



CACOR's Pathways study demonstrates an approach that provides a technologically informed way of enabling governments and stakeholders to think about the whole picture, a way to connect rhetoric and reality, a way to set targets that would actually be hit.

The path will not be easy. It will require understanding, commitment, support, and persistence for many electoral terms.

11352, 2021 August 6