

Kyoto and Beyond: The Citizen's Dilemma

Submission to "Comment" @ *The Globe and Mail*

by

William Leiss

December 2002

William Leiss is NSERC/SSHRC/Industry Research Chair in Risk Communication & Public Policy, Haskayne School of Business, University of Calgary; Professor, School of Policy Studies, Queen's University; and Executive-in-Residence, McLaughlin Centre for Risk Assessment, University of Ottawa. A series of earlier newspaper articles on Kyoto ratification will be found at: <http://www.leiss.ca>

Soon, at long last, Canada will complete the process of ratifying the Kyoto Protocol. One of the additional benefits of this action to Canadian citizens (at least, those among them who read newspapers) will be a decline in the number of "dueling climate science" articles. As the vote on Kyoto in Parliament has approached, new climate experts have been discovered by columnists on a daily basis. Others repeat the warnings of economic doom from corporate executives. Our major decision-making institutions – the two senior levels of government and the business community – are at each other's throats. Is this what is referred to as the "business as usual scenario" for Canada?

There is a charming naïveté in the gushing enthusiasm of some newspaper columnists for the alternative theories of climate change they offer up to the hapless citizen. Our climate is not really warming at all, we're told, there's no evidence of such a trend. Or, different measurements of temperature disagree, so we're not sure if it's warming or not. On the other hand, if the climate is warming, that's actually a good thing, because our population is aging, and warmer is better for them, and besides, our plants will be happier with more carbon in the atmosphere. But remember, if the climate is warming, it's certainly not our doing! Blame it on the sun's cycles, not on our greenhouse gas emissions.

How could it possibly be our carbon dioxide emissions, since CO₂ makes up such a small percentage of the earth's atmosphere? So, even if our emissions influence the greenhouse effect – which everybody seems to agree keeps our planet toasty warm – it couldn't be much of an influence, so something else must be going on. You probably didn't even know that there was a strong warming trend in the early Middle Ages, when grapes grew in England, and everybody was happy. Clearly this is all part of Mother Nature's doing, because She thinks it's more interesting for us to have a variable climate, rather than one that stays the same all the time.

Had enough? Well, maybe we should reduce our emissions anyway, even though we just can't trust anything the climate scientists say. Even the Alberta government, fierce opponent of Kyoto, thinks we should. But we're not going to do it just because a bunch of foreigners who had a meeting in a Japanese city said we have to! The truth is, the Kyoto Protocol wasn't really about the risk of global climate change. It was really a scheme to transfer wealth from good countries like Canada to bad countries like Russia. Not only that, it was a nasty plot to destroy the Canadian economy and to turn Alberta into a have-not province like British Columbia or New Brunswick.

And on and on. The good news for the citizen is that very soon we'll ratify the Kyoto Protocol and news coverage will turn to simpler matters, such as fixing Canada's Medicare system. There is some bad news, however: The Kyoto debate will be back. But before it

returns, there is a small window of opportunity in which we could, if we want, design a better structure for public discourse about climate risk.

The Kyoto debate will be back for the simple reason that what happened in 1997 was only the first small step towards solving the problem. The nations who assembled then in Kyoto had been persuaded by the consensus judgment of the world's climate scientists that there was a problem to fix – namely, “climate forcing” by human-caused greenhouse gas emissions. That consensus, summed up in the 1995 report of the Intergovernmental Panel on Climate Change (IPCC), and strengthened in the 2001 IPCC report, said that we should reduce human GHG emissions in order to “stabilize” concentrations of GHGs in the atmosphere.

All the world's nations must act to make the emissions line “go flat” and then start to decline, and even on the most optimistic scenario this is unlikely to happen before 2100 or so. The Kyoto reductions are too small to accomplish this, as everyone knows. (Some of the anti-Kyoto forces say we should reject the treaty just because of this, which is a bit like wanting to have your cake and eat it too.) My guess is that the world will need four or five Kyoto rounds to finish the job – if indeed the world is capable of doing so. But there is no doubt that Round II at least will occur, sometime in the next five to ten years, when those who have ratified Kyoto will be trying to get countries like China and India to agree to a first set of targets for controls on emissions growth.

And Canada will be at the table again. That's why I wish to make the following plea: We must start now to find a way to conduct our public debate more sensibly and productively before the next round starts.

First, we must start with a process that brings to the citizen a clear and credible account of the climate science consensus. Certainly there will be by that time more evidence on which to base the consensus judgment (my guess is that it will further support the existing IPCC work, but it's possible it won't). However, the so-called "skeptic" viewpoints also will be still around. None of us who aren't climate scientists can possibly decide for ourselves who is right when "dueling science" is presented. So we need a credible process to sort things out. Fortunately, a robust and highly credible process already exists, and some governments have used it even in the current round of debate.

The process is this: Governments refer questions about how to interpret the science consensus to their national academies. This is done all the time, for many different types of issues for which there is a body of scientific evidence. No country uses this process more actively than the United States: There the National Academy of Sciences (NAS) issues one report of this nature almost every working day of the year. The world's oldest national academy, The Royal Society (UK), is also very active. And our own Royal Society of Canada has also performed this service numerous times.

In Spring 2001 President George W. Bush asked his NAS to tell him whether the IPCC reports fairly represent the prevailing consensus of scientists on the issue of climate forcing.

He also asked whether the IPCC's "summary for policy makers" could be trusted. (<http://books.nap.edu/books/0309075742/html/index.html>). Their answer to both questions was: Yes. The Royal Society provided a similar answer to its government and the British public. (http://www.royalsoc.ac.uk/policy/climate_report.pdf). Unfortunately for the Canadian citizen, the Government of Canada did not request a similar report from its own Royal Society of Canada.

On matters of climate or any other type of risk, both governments and industry need to be able to rely on "consensus science" in order to make robust risk management decisions. "Consensus science" (which industry calls "sound science") is, simply, the current "weight of evidence" on an issue as reflected in the total of peer-reviewed, published research. This does not mean that there are no disagreements within the collection of reputable scientists. On the contrary, there are some disagreements in every area of research. Thus it isn't surprising that it's true of the science of climate change as well.

But industry, governments and the citizen need to rely upon some authoritative judgment about the science consensus when they come to making policy decisions. Referral of such issues to expert panels convened by national academies is a well-developed and well-trusted process for finding out what the current science consensus is. This process has a long track record, based on published reports of proven credibility.

As citizens we all rely upon the consensus of professional, expert opinion in our lives. We all need to learn how to decide whose judgment to trust, when we visit our doctor, engage a

contractor, or hire a baby-sitter. So it is with public policy decisions, when those decisions turn on what to believe about what our scientists are telling us. It is no exaggeration to say that our lives and those of our children depend on learning who to trust when it comes to the contest of opinion. Certainly we cannot rely on averaging out the opinions that appear in newspaper coverage or on Internet websites for such matters.

So what should we in Canada do now, to be ready for the next round of intense debate on climate change risk? Let's ask our governments to follow the following process: (1) On a three-year cycle, starting now, commission a series of reports on the current climate science consensus (including the range of expert opinion) from our national academies. (2) On the same cycle, commission a series of economic scenario reports from our national academies on the impacts of various emissions reduction targets on our country and its regions. (3) Do likewise with a series of reports on risk/cost/benefit trade-offs, where the two previous sets of reports are put together in a policy-relevant framework.

But don't stop there. These are highly technical issues, hard for most of us to understand. Governments should use trusted institutions, such as a network of university researchers, to operate a web-based public information resource. This facility would "translate" the scientific complexities into understandable terms, without distortion, for the citizen, and also operate a variety of mechanisms for answering questions and conducting debates. These resources should include high-quality animated graphics, for ease of understanding of the very difficult concepts scientists have to use to describe and model something as complex as the global climate.

If we had such a basis for informed and intensive debate, we might also hope to have, next time around, less extreme rhetoric and scare-mongering. Climate change risk involves some extremely tricky issues. And they are not going to go away. On the contrary, with each successive round the questions will become more complicated and the stakes – in terms of both risks and costs – will be higher. One way or another, our lives and prosperity, and that of our descendants, may depend on getting it right. We owe it to them and to ourselves to devise a more effective way of deciding what is the right thing to do.
