Kyoto Whoppers

by

William Leiss and Stephen Hill

Note: The Calgary Herald published a slightly abridged version of this essay on October 22, 2002 (page A21)

WILLIAM LEISS IS RESEARCH CHAIR IN RISK COMMUNICATION & PUBLIC POLICY, HASKAYNE SCHOOL OF BUSINESS, UNIVERSITY OF CALGARY, WHERE STEPHEN HILL IS A POSTDOCTORAL FELLOW

When public officials start getting fired for exercising freedom of speech, it's a sign that public policy debate has entered a dangerous zone. But those of us who have been involved in the Kyoto debate for some time weren't surprised at this development.

Throughout 2002 the public has been swamped by over-excited and misleading rhetoric on Kyoto ratification. In fact, the public has been fed a series of Kyoto Whoppers, so it's not surprising that cases of indigestion are cropping up here and there.

Still, it is discouraging when so distinguished an Albertan as Peter Lougheed pulls out one of the stalest of the Whoppers and tries to put in on the menu again. According to this one, the climate science consensus is so unreliable that we shouldn't be signing international treaties to reduce greenhouse gas emissions. Sorry, Mr. Lougheed, with all due respect, Sir, that's a Whopper. There is no reputable climate scientist who believes such a thing. Since we are told often that we must follow the lead of the US in these matters, let's do so: The largest and most active national academy in the world, the US National Academy of Sciences, told Mr. Bush in June 2001 that the climate science

supporting Kyoto was quite reliable. All of the leading, reputable Canadian climate scientists agree. End of story.

Then there's the current Federal government Whopper, about how we're entitled to claim "clean energy exports" against our Kyoto targets, even though we didn't negotiate those credits in the proper forum. What kind of example is this supposed to set for international agreements? Is it Canada's position that every country can make up its own rules about how it will comply with treaties? If the Canadian government was not astute enough to come away from the Kyoto negotiations with the appropriate targets for our country, as many believe, we hardly can blame the rest of the signatories for this problem. We have to lie in the bed we made. It's rather embarrassing to be seen in full view on the international stage trying to weasel out of our own commitments as a way of gaining leverage for more concessions.

But the biggest Whopper of all is the notion that the Kyoto Protocol is "not about climate change, it's just a transfer of wealth." This is of course a reference to the emissions trading provisions in the Protocol, under which countries – such as Canada – which need credits to meet their reductions targets could, if they wish, buy them from nations which have them to sell (such as Russia). Since large Canadian companies have been pressuring the Federal government, for at least a decade now, to introduce trading schemes – and other so-called "market instruments" – for environmental pollutants, this sudden aversion to trading carbon is puzzling and suspicious. It's also potentially damaging to the cause of good environmental management, since the reason business favors market instruments is that they can lead to the most efficient and cost-effective

solutions.

There's a lot at stake for Canadian industry, especially the oil and gas sector, in the Kyoto debate. But the general public cannot focus on the real issues raised by Kyoto, as we should be doing now, if opinion leaders insist that we keep chewing on the old Whoppers. So let's look at a hypothetical Canadian case of how emissions trading would work in the petroleum sector. Then we can return to the Kyoto issue, and we will be able to see clearly that the "transfer of wealth" objection is simply an irrelevant distraction.

Recently Canada introduced new federal regulations for sulphur content in gasoline. These were long overdue, since Canadian gasoline refiners have been allowed to maintain unacceptably high levels of sulphur for far too long. In recent years there has been a wide disparity in the levels of sulphur in the gasoline made at various Canadian refineries across the country. At times these levels have varied by a factor of 50: In other words, some products contained up to fifty times more sulphur than others did. It should be noted that all these refineries were in compliance with the standards set under the old regulations.

Now let's suppose that the new federal regulations established emissions trading – the so-called "cap and trade" regime – to meet lower sulphur content standards. (They don't, by the way.) The new standard would fall somewhere between what the lowest- and highest-sulphur refiners now produce. So the high-sulphur refiners have to reduce their sulphur content, perhaps in some cases by a large margin. Let's say the lowest producer is now at 100ppm (parts per million of sulphur in gasoline), the highest is at 1000ppm, the current average level for all refiners is 600ppm, and the new federal standard is set

at 500ppm. The reduction from an average of 600 to 500 is the net environmental benefit from the new standards, and the standard might be lowered again in future years.

With an emissions trading regime in place, the firm which is at the high end (owning the refinery with the 1000ppm) has a choice in deciding how to comply with the new standard. It can install new pollution control equipment, introduce new process control technologies, purchase lower-sulphur feedstock, or take some combination of all these steps, or others. Or it could decide to shut down this refinery and build a new one, in which case it may wind up with credits to sell. Or it can just continue running it and buy credits from the firm which is the lowest-sulphur producer. This is a pure business decision, based on a cost-effectiveness analysis of its various options. Let's say it decides that choosing the last option (trading for credits) is what makes the most sense.

So it buys sulphur credits because it's the cheapest, most cost-effective option the firm has. In doing so it "transfers wealth" to the other firm which, because it produces very low-sulphur gasoline (100ppm), has sulphur credits to sell. Is this "immoral" or "dishonest" or somehow contrary to the whole intent of the new regulations, which is to reduce the total amount of sulphur in all Canadian gasoline? No, of course not. The environmental benefit to the public (a net reduction in sulphur) is guaranteed by the "cap." On average Canadian gasoline will have less sulphur than it used to have.

The whole point about using market instruments for securing environmental policy objectives is that – because they're "flexible mechanisms" – they're the most efficient ones. Not only that, they leave the decision-making entirely in the hands of the firms. No one tells them how to comply with the new regulations. They are entirely free to

choose whatever works best for each firm. If some firms want to transfer wealth between themselves by buying and selling sulphur credits, so what? The public doesn't care, and shouldn't care, about how firms meet their obligation to improve the environment. All they care about is that the firms do it.

Now let's return to Kyoto, which also includes a "cap and trade" flexible mechanism. A whole group of countries have agreed to various emissions targets. And, among this group of countries, there are some which now have higher emissions, well above their targets, and some which are below their allowed targets. Those in the latter category, like the firm at 100ppm above, have credits to sell. All countries in the former category – like the firms in the example above – have complete freedom in deciding how to meet their reductions targets. And some, perhaps including Canada, will decide to buy carbon credits to meet part of their targets because that happens to be the most cost-effective solution at the time.

Just like in the sulphur example, the environmental benefit from Kyoto implementation is secured by the "cap." For all countries which have targets under the Protocol, the total net reduction in greenhouse gas emissions is 5.2%. Like the sulphur example, this is all the public cares about. It's not relevant how countries meet their targets. What's essential is that the total net target be met.

To gain that environmental benefit there are some transfers of wealth from one country to another, just as there are between firms in the sulphur example. So what? No one forces countries to choose that option. They may choose it because it's cost-effective for them.

Under a regime of market instruments and flexible instruments, how a target is met – by

a firm or a nation – is irrelevant. Using the notion of a "transfer of wealth" to criticize the Kyoto Protocol is illogical. All it does is to distract the public from the real issues.

There are plenty of real and important issues, now that Canada is clearly headed towards ratification of the Kyoto Protocol. Our advice to those who are concerned about the impacts of Kyoto ratification, both for Canada and for Alberta, is this: Stop dishing out the Whoppers. Accept the fact that we will soon be in the Kyoto regime. And then start discussing the real issues with the public.

For example: What is the best way for Canadians to pay for the costs of reducing our carbon emissions? Are our carbon emissions really, as it seems to some Canadians, a problem only for industry to solve and to pay for all by themselves? In other words, should the petroleum sector itself be assigned a big fraction of the costs of Kyoto compliance? It may seem the right thing to do to some people, but it's not necessarily the wisest choice for us to make. Certainly there should be incentives for industry to reduce steadily the emissions intensity of its processes, and in fact Canadian industry is firmly committed to such an approach. But this cannot solve all of the problems associated with the costs of Kyoto.

What about we consumers? Who is it that happily purchases all those useful petroleum products anyway? It's us. So why shouldn't we pay the Kyoto costs, or at least a large fraction of them, directly? One of the worst things ever to happen on the "Kyoto file" was the Federal promise, made many years ago, that there would never be a "carbon tax" imposed on consumers to pay for Kyoto implementation. Not to put too fine a point on

it, this is ridiculous. Of course consumers should pay for the environmental benefits they receive.

Our energy prices are too low to encourage the kind of consumer behaviour we need to have in Canada. Increasing those prices with a carbon tax is an eminently sensible way for all of us to make different choices, more energy-efficient ones. Paying a lot of the Kyoto costs in this way allows those choices to stay where they belong, with the individual consumers. It's just like the sulphur case, where firms are free to choose whatever options they like to meet their new targets.

So it is with the consumer: If you want to buy a large and heavy vehicle to drive around in, you're perfectly free to do so. But with it comes a higher charge, in the price of the fuel you use, than if you were to chose a smaller vehicle. That's perfectly appropriate, because the large vehicle imposes a higher burden of environmental pollution on all the rest of us, and the owner should pay for it.

It's really quite simple, actually. We Canadians can find good solutions to these new challenges. But we would be better able to focus our minds on these challenges if the old Whoppers were thrown in the composting bin, where they belong.