

Sustaining a Quality Environment for Canadians

by
R. Quentin Grafton
University of Ottawa

Presented at
**CSLS-Industry Canada Conference on Canada in the 21st. Century:
A Time for Vision**

Château Laurier Hotel, Ottawa,
September 17, 1999.

Challenges for the 21st. Century

- To translate the concept of sustainable development into a consistent set of policies for Canadians.
- To address the environmental challenges of the global commons (climate change, transnational pollution)
- To help prevent and mitigate severe declines in environmental quality in some of the world's poorest countries.

Policy Problems

Canadians face a number of public policy challenges to promoting sustainable development:

- Federal-Provincial conflicts and jurisdictional disputes. The federal government has constitutional obligation to promote “Peace, Order and Good Government” but the provinces have jurisdiction over civil & property rights and authority over provincial Crown land.

- Inconsistency in policy and a lack of adequate funding have prevented environmental ministries (provincial and federal) from becoming as effective as they could be.
- Too great a focus on regulations as a means to achieve environmental objectives.

Promoting Sustainable Development in Canada

1. Canadians lack basic information on the state of their environment & natural resources.

- Major focus of Federal Government should be to provide data bases of environmental quality, resource use and pollution.
- Environmental audits by province & territories should be performed at least once every 3 years.

2. Environmental regulations should primarily be a provincial responsibility:

- The Federal Government should provide goals and national standards and information and assistance in developing environmental inventories and achieving objectives.
- Provincial implementation increases flexibility and reduces costs of pollution control while national standards help avoid policies that result in “lowest common denominator”.

3. Change the emphasis in public policy from “regulations” to “incentives”:

- Encourage use of market-based instruments (pollution permits, charges) ;
- Public disclosure of polluters (individuals, businesses, communities & govts) should be a priority;
- Encourage private conservation through use of covenants;
- Provide legal funds to uphold common law rights.

Promoting Global Sustainable Development

Due to its geography and location, Canada is likely to be affected a great deal by:

- atmospheric changes (the higher latitudes are most affected by ozone depletion and by global warming);
- transboundary pollution (pollutants accumulate in the polar regions, eastern Canada is vulnerable to acid rain) and
- ecological disruptions (Canadians are more dependent on natural resources for their incomes than most other OECD countries, polar regions are less resilient than other ecological zones).

These factors, and the concern of Canadians for others and future generations, require that Canada be an active participant in international environmental treaties and agreements.

- The success of the Montreal Protocol (and subsequent revisions) emphasises the potential benefits of a multinational approach to global environmental problems.
- Future peace & prosperity of many countries is dependent on their citizens continued access to benefits provided by the environment. Canada should play a much more active role in supporting the UN Global Environmental Facility.

- Canada should provide a greater leadership role in supporting and promoting environmental assessment, green accounting and environmental monitoring. National environmental audits should be encouraged with the assistance of the UN.
- Through its participation in FTA, APEC, WTO, OECD and other organisations, Canada should help establish funds to document environmental quality and prevent practices that impose costs on other countries. Incentives to encourage desired objectives and penalties for non-compliance should be implemented.

Vision for the Future

1. Much has been achieved since Environment Canada was created in 1971. Despite failures, significant improvements have occurred in:

- the disposal of hazardous wastes,
- the water quality of the Great Lakes region and
- the reduction of some air pollutants.

These successes have arisen, in part, because of effective environmental policies.

2. Sustaining a quality environment in the 21st century will require:

- detailed **information** about the state of our environment;
- the right **incentives** for individuals and businesses to consider the costs they impose on others; and
- **international co-operation** (with incentives and penalties) to address the problems of the global commons.

Q. Grafton Thank you Jerry. It has a mind of its own. OK, the topic we're going to address right now is sustaining a quality environment for Canadians. What I'm going to try and do is focus somewhat on what Brian Coupland did in his very nice overview of the Canadian environmental situation today and into the future. Unfortunately Brian couldn't be with us today so I wish him all the best.

And so I'll go onto the second slide. What I've done is I've taken from Brian's book, paper and I've broken them down into 3 points. He actually has 2 points so I've split up one of them into, into, into 2. First of all he considers the challenges for the 21st century for Canada and sustainable development in Canada environment, the 3 points; to translate the concept of sustainable development into a consistent, and I'd like to underline consistent in boldface, set of policies for Canadians. Two, address the environmental challenges of the global commons, as climate change issues, transnational pollution and many other issues that, that we face as being part of the, of the earth. And then third to help prevent and mitigate severe declines in environmental quality in some of the world's poorest countries. Those have repercussions for us in Canada, as well as for those countries which are suffering from those environmental problems. Going to the next slide.

So what are the policy problems? I, I hate, hesitate to talk about policy problems as an economist in a room of a lot of people who, who actually make policy, but I'll give you my perspective of it. I think Canada or Canadians face a number of public policy challenges with respect to sustainable development and the environment. I'm sort of putting them 2 together. Obviously the notions of sustainable development and environment are, are somewhat different. I think there are real problems in terms of our environmental policy in terms of federal and provincial jurisdictional conflicts. It, the federal government, has constitutional obligations for peace, order and good government and the provinces have considerable jurisdiction over civil property rights and the authority of course over provincial Crown land. And there have been conflicts and in fact there's multitude of regulations on the provincial and also on the federal level. This doesn't necessarily make for good policy. And that's certainly been a problem that Canada faces; not alone, there are other federated states which have these difficulties, but I say Canada probably has been unique in terms of its set of policies problems in terms of that. Go onto the, the next slide.

I review further the policy problems. Inconsistency in policy and a lack of adequate funding have prevented environmental ministries, and I mean that on the federal and provincial level, being as effective as they could be. I suppose we could all be more effective than we are, but I suppose what I'm saying and, and if you look at the funding for the environmental

ministries over the last 15 or 20 years you'll see there's actually been a decline in terms of a percentage of GDP that's being spent in terms of what's been going on in terms of environmental policy and policy making. There's also been shifts back and forth in terms of well, green is good for votes and then green is not so good for votes or something else. That's the nature I suppose of public decision making. And those sorts of shifts and changes and, that take place on the provincial and federal level I think have been unfortunate in terms of having a consistent set of policies and leading to goals that I think all of us would like to achieve. I think the third policy problem, and that's a very broad discussion issue that can't be addressed in 15 minutes, is that there's been too great a focus here in Canada, on the federal level and the provincial level, on regulations as a way to address environmental problems. Canada is not unique in having that set of difficulties. Many other countries have focused in on regulations and I'd like to suggest perhaps later on in my talk how we can perhaps move away from that approach to a different set of approaches which I think would be beneficial to all Canadians. So we can move onto the next slide.

And this is really the focus what Brian Copeland is talking about in his book. He's talking about 2, he's talking about what is the state of the environment in some sense in Canada and he's talking about how do we promote sustainable development. There must be at least 60 definitions or more of sustainable development and we can talk about them after my talk if you want to get into definitions. But what Brian and, and what I'm trying to address here is this idea of promoting sustainable development within Canada and this idea of promoting sustainable development outside of Canada. They're not necessarily unrelated. So how do we promote sustainable development in Canada? So I'm stepping out of my ivory tower and I'm talking about what can we do in terms of public policy. I think that this is the perfect venue to do that because of the audience we have here today. So let's have a look at it. So first, Canadians lack basic information on the state of the environment and natural resources. Despite the fact that Statistics Canada and Environment Canada in the last few years have done a very good job given the resources available to them in terms of getting a much better understanding of the state of our environment, there are huge gaps in our knowledge base, huge, huge gaps. And if we're going to deal with sustainable development, how to have sustainable development, how do we improve the quality of the environment, how can we do so unless we have measures, adequate measures to look at that over time? We don't, I'll tell you right now we don't have those measures on a consistent basis over time in the areas where we should have them. That needs to be rectified and rectified as soon as possible. That's where we're going to require resources, time and effort. So I personally think that the federal government, the major focus of the federal government in terms of environmental policy, should be in

terms of providing that basic information. Third, or second point in the, in the, in my first section, environmental audits. We have economic audits in all sorts of ways on a company basis we obviously have it in terms of public, public expenditures. We need to have it in terms of the environment. And we do have some sort of auditing, but what I'm talking about is auditing on a broad range in terms of various ways of looking at the environment, renewable and non-renewable resources, ways of measuring the environmental quality. Those sorts of things should be done on a regular basis. I'm not suggesting necessarily on an annual basis, but perhaps I think at least every 3 years. If we have that information we'll have a much better handle of where we're going, where we've come from, what can we do to improve the situation and is there a problem, what are the sorts of problems. At the moment I think we're flying blind. Go onto the next slide please.

Two. So this is again in the section of promoting sustainable development in Canada. Second point, environmental regulations should primarily be a provincial responsibility. Well, I would suggest to you that the conflicts that we've had in the past perhaps may be best resolved by assigning the responsibility, more or less exclusively to, to one jurisdiction. I suggest, although there may be an argument about this, that it may be best done by the provinces themselves. That doesn't mean that the federal government, Environment Canada and the related ministries, don't have a role to play, they most certainly do, but the actual undertaking of the policy, the micro-policies should be done I think on the provincial level. What should the federal government be doing? Well I think it should be trying to set national goals, national standards. If we talk about that in health care we can talk about that in terms of the environment. And the federal government should be involved in that actively, coordinating across the provinces. And I think there are resources required for certain provinces in terms of helping to come up with inventories of what's going on in the environment. The federal government can be very I think helpful in achieving those sorts of goals. And then the second point within that second section, I would suggest that the advantages that come from provincial implementation is flexibility. I mean I don't think necessarily what you're doing in British Columbia should necessarily be the same as what you're doing in Newfoundland. And that allows for some flexibility within the broad idea that we have national objectives or goals. That we don't necessarily head to them at the same, at the same rate. So we go to the third point with the idea of promoting sustainable development in Canada. The next overhead please.

And so this is a, a very broad topic. It's been a subject of my research and a lot of other people's research in terms of environmental economics. Change the emphasis in public policy from regulations to incentives. These are very broad rubrics of trying to put it all together. What do I

mean by that in terms of specifics? I think the first thing is to encourage the use of market based instruments, the use of pollution permits. Canada in fact has started to use macro-based instruments already. I think much greater use of that is required. Use of charges, that can also be considered to be a market based instrument as well. That is in comparison or contrast to a regulatory approach where you say thou shall not pollute X and that's a uniform standard that's applied across an industry or group, group of firms. I think what we're talking about here is trying to bring in flexibility in terms of the public policy with a federal/provincial basis, flexibility in actually how the policy is implemented.

Second point, public disclosure of polluters. There may be some cynicism in the audience about how effective this may be, but in fact it has been very effective in a number of cases and I can quote those cases to you if you wish in terms of some developing countries, poor countries in the world where there really aren't the resources to go ahead and regulate and audit in a sense that we would think of in Canada. So what some non-government organizations have done is they said, well let's take a particular industry, let's say pulp and paper in India or Indonesia, let's go through the list of polluters and let's come up with a grade 1 to 5, 5 is good, 1 is bad. And we attach these grades to the companies. And lo and behold! When these things are done companies start changing their policies because it's public disclosure. These are companies, public companies; sometimes they're private companies. Nevertheless it does seem to have an impact in terms of their behaviour. Those sorts of things I think would be useful. It's all part of this information database that I'm talking about that we need to develop within Canada. Two, encourage private conservation. That of course already is taking place in Ontario and other provinces, but I think it's something that would be I think be very useful to encourage in terms of private conservation. And then finally, legal funds to uphold common law rights. I'm not sure exactly how that would happen, but this is the idea of protecting property rights. The idea that nuisance, the idea that someone is polluting and effecting my property rights and that they need to be taken to court so that my common law rights are protected. There's certainly a tradition in Canada going back in history at least a century which can be very useful I think in terms of dealing with some pollution problems. And so that's the Canadian aspect of promoting sustainable development. The second aspect of what Brian, Brian Copeland was talking about was promoting sustainable development on a global basis and that's the next overhead.

I'd like to suggest to you that in Canada we really need to place a great deal of emphasis on promoting global sustainable development. It's not just in the interest of others; it's in our interest as well. So I'll list 3 reasons, I could perhaps list more, why we need to be concerned about the global commons and what's going on in other countries. First is

atmospheric changes. The higher latitudes are going to be most effected by ozone depletion. That's a fact. Now fortunately we've had improvements in terms of our levels of CFC production have come virtually to zero over the last few years. That's presumably going to lead to an improvement in terms of the stratospheric ozone layer, which will have positive aspects for us here in Canada. Also in terms of global warming, if global warming does take place, and there's certainly evidence to suggest that it is, then it's going to take place at a greater, faster rate in the higher latitudes than it will in the equatorial regions. Canada of course is in the higher latitudes so that's certainly a concern for us. Next, trans-boundary pollution. Well we know about that in terms of acid rain as do the Americans with sulfur oxide emissions, but also in terms of pollution accumulating in the polar regions. You're probably aware in the media about PCB buildup in polar bears that could lead to the sterility of male polar bears, the end of the species in the wild. Those sorts of issues related to the atmospheric circulation in terms of pollution getting built up in the polar regions. Obviously we are a polar nation so that's an issue for us particularly. And then a third point, ecological disruptions. In the polar regions the ecological zones are much less resilient than other ecological zones. Yes, I've, I've got about 5 minutes. And so where does this take us? Well, I think it takes us to the next overhead.

And the factors and the concern that Canadians have for others in future generations I think requires that Canada be an active participant in international environmental treaties and agreements. I want Canada to remain active so and perhaps be more active in ways that it hasn't been in the past. The point I make here, and people often make it, there's been a real success in terms of some environmental treaties. The one that comes to mind is the Montreal Protocol and the conventions that followed that in terms of CFC's. Fewer CFCs get emitted, it takes 15 years or so to get into the, the upper atmosphere. The chlorine atoms then break down the, the O₃ molecules, the ozone, which has an impact on UV ultraviolet radiation to the earth. Well what Montreal Protocol did and the subsequent conventions was to bring about almost a total moratorium on terms of production. And that's been highly effective and it's been done through an international agreement. Now it's going to be much, much, much more difficult to deal with climate change issues, so called global warming, because of the expense involved in trying to deal with reductions in the CO₂ emissions and there are other factors as well, which we could perhaps discuss afterwards. But I would like to also go on that apart from these global issues in terms of the importance of the treaties, I think that there are other things that can be done. The United Nations has a global environmental facility, the account I think rests with the World Bank. That account I think is totally inadequate. And what it should be doing and is trying to do is trying to address issues in terms of the

environment in the poor countries of the earth. And I think we should make a much greater focus in on the global environmental facility in terms of improving the global environment. Go onto the next slide.

Now Statistics Canada has actually been one of the world's leaders in terms of green accounting. I would like to suggest that we could use that expertise elsewhere and we could talk about national environment audits. Those sorts of things I think should be encouraged under the auspices of the United Nations. Canada could benefit in terms of selling its services, but certainly the world could benefit in terms of dealing and addressing some of those environmental issues. The final point in that overhead, through our participation FTA and now NAFTA, APEC, WTO, OECD and other multi-lateral organizations I think Canada should help document environmental quality and prevent practices that impose costs on other countries. I think one of the points that should be made here is that there needs to be incentives to ensure desired objectives and hopefully there can be some penalties for non-compliance as well. So where does this take us? Well it takes me to just a few minutes left.

A vision for the future, that's what this conference is supposed to be about, the 21st century which is just around the corner. What are, what are my visions and what are Brian Copeland's visions in terms of the visions of the future? Well, I think a lot has been achieved. There's been some considerable success since 1971 when Environment Canada was first established. You can point to the disposal of hazardous waste, water quality in the Great Lakes region has improved dramatically, reduction of some air pollutants in terms of total particulate matter. And that's been a considerable improvement in the last almost 3 decades. Now why have these successes risen? Well they haven't risen by some invisible hand. They've arisen because of policy, effective policy. So there may be changes in the economy which may lead to improvements in the environmental quality, but the things I'm talking about here I think have been fundamentally brought about by policy changes. And that's what I think we're talking about here in terms of the 21st century. What are the policy changes we can enact today that will lead to a better quality of environment and better well being for all of us? And so I go onto the next slide.

And so I put it into 3 points. I've put them in boldface, the three I's. So you're left with something after all the 15 minutes of fast talk. So what are they? Well, detailed Information about the state of the environment. I can't stress that enough. We don't have enough information. We need to get it. You don't know where you're heading unless you know where you are and that's the problem we face here in Canada and in other countries. We need the right Incentives. It's not just the strong arm of government telling us what we should or should not be doing. I think we need to back

off in some ways and provide the right incentives, encourage the property rights, the common law rights that have protected us in the past. Rights, I should point out, that have been overridden by some provincial governments in the past, against the interest of the overall welfare of Canadians. And then the third aspect of course is International cooperation. It needs to be done. We're not going to do it alone in terms of bringing about an improvement in the global commons as well as addressing the environmental quality issues in some of the world's poorest countries. Thank you.

APPLAUSE