

**THE INTEGRATION OF  
ENVIRONMENTAL CONSIDERATIONS  
INTO GOVERNMENT POLICY**

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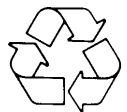
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## FOREWORD

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In phase 2, the Rawson Academy formed a team of four analysts, led by Francois Bregha, the Academy's Director of Policy Studies and including Jamie Benidickson and Ed Weick, independent consultants, and Tom Shillington, of J. Phillip Nicholson Policy and Management Consultants Inc.

Throughout its work, the team was overseen by an advisory committee chaired by Peter Jacobs, of the Universite de Montreal. John Herity, Director General, Policy, Federal Environmental Assessment and Review Office; Fred Roots, Science Advisor to the Department of the Environment; Louise Roy, an environmental consultant in Montreal; and Bob Weir, Chief, Environmental Impact Systems Division, Environment Canada: were the other members of the advisory committee. In addition, the study team received many helpful comments and criticisms from individuals across the country during the course of the project, in particular, Bob Gibson of the University of Waterloo and Ken Ogilvie of the Canadian Environmental Advisory Council.

The Academy held two workshops as part of this project: the first, the attendance of which was limited to senior government and industry executives, was held in April 1988; the second, with a broader participation from government, industry, academia and public interest groups, was held in February 1989.

To all those who assisted us during the course of the project, we extend our sincere appreciation.

## TABLE OF CONTENTS

Forward.....	iii
Acknowledgements.....	v
Executive Summary.....	ix
<b>1. INTRODUCTION.....</b>	<b>1</b>
<b>2. ISSUES.....</b>	<b>3</b>
What is Policy?.....	3
issues in Integrated Assessment.....	4
<b>3. APPROACH AND METHODOLOGY.....</b>	<b>7</b>
<b>4. THE SCOPE OF INTEGRATION.....</b>	<b>9</b>
Defining Significance.....	9
Tiering.....	10
Defining Relevance.....	10
<b>5. IMPLEMENTING INTEGRATED ASSESSMENT.....</b>	<b>13</b>
Barriers.....	13
Identifying Responsibility.....	14
Fostering Ministerial Accountability.....	15
The Role of Central Agencies.....	19
Public Involvement.....	20
<b>6. SCIENTIFIC AND METHODOLOGICAL ISSUES.....</b>	<b>25</b>
Adequacy and Availability of Data.....	25
Integration of Environmental Science into Policy Decisions.....	26
Monitoring and Accountability for Policy Assessment.....	27
<b>7. CONCLUSION.....</b>	<b>29</b>
<b>APPENDIX I: REVIEW OF THE CASE STUDIES     CONDUCTED IN PART I.....</b>	<b>30</b>
<b>APPENDIX II: REPORT ON THE FIRST WORKSHOP,     APRIL 1988.....</b>	<b>37</b>
<b>APPENDIX III: WORKSHOP AGENDA AND     LIST OF PARTICIPANTS, FEBRUARY 1989.....</b>	<b>41</b>
<b>BIBLIOGRAPHY.....</b>	<b>43</b>

## EXECUTIVE SUMMARY

The need to consider environmental factors explicitly in government policy has become increasingly **recognized** in recent years. In 1987, the World Commission on Environment and Development (“Brundtland Commission”) recommended that “environmental protection and sustainable development must be an integral part of the mandates of all agencies of government.” The National Task Force on Environment and Economy echoed this recommendation in its 1987 report by proposing the establishment of “formal mechanisms to hold Ministers and their departments accountable for promoting environmentally sound economic development.” With rare exceptions, however, federal government policies are not yet assessed for their environmental implications.

The integration of environmental considerations into the policy-making process raises difficult institutional, procedural and methodological issues, among them:

- **Scope:** At what policy level should environmental factors be considered?
- **Responsibility:** Who should be responsible for integrating environmental factors into policy?
- **Criteria:** What environmental criteria should be applied in the formulation and assessment of policy?
- **Process:** How should environmental considerations be incorporated into the overall process of governmental decision-making?
- **Monitoring and Accountability:** How should success be determined? What mechanisms are available to hold policy-makers accountable for the environmental implications of their policy choices?
- **Public Consultation:** What is the place of public consultation in policy assessment?
- **Science, Information and Assessment Methodologies:** How adequate are currently available information and analytical capabilities?

The two case studies undertaken as part of this project, one in energy, the other in agricultural policy, suggest that the following, mutually reinforcing barriers now constrain the integrated assessment of policy: a lack of clear objectives, insufficient political will, the narrow definition of issues, the existing organizational structure, absence of accountability, bureaucratic politics, lack of information and absence of incentives.

The integration of environmental issues at the policy level will require a comprehensive effort. Piecemeal initiatives, such as the requirement that environmental factors be considered as part of memoranda to Cabinet, are likely to prove ineffective unless they are reinforced by complementary measures. Examples of such measures are clear lines of accountability, the creation of a Parliamentary Commissioner for the Environment to audit the Government’s compliance with its own environmental assessment process, the setting of sustainable development objectives in relevant policy sectors, a larger commitment to environmental science, a public consultation process, the development of indicators to gauge success, and government staff training and support.

## 1. INTRODUCTION

Systematic attempts by government to mitigate the environmental impacts of human activity in Canada are only about two decades old. In this brief period, our understanding of the strategies required to control these impacts has undergone a fundamental change. The first strategy employed, and still the dominant one today, concentrates on the local effects of environmental degradation by imposing emission or discharge standards and by incorporating environmental factors into project design.

This strategy is essentially reactive and aims at ameliorating the effects of industrial activity without necessarily changing it. While it has been successful at mitigating specific instances of environmental degradation, such as urban air pollution, it has not prevented environmental deterioration in the form of acid rain, the spread of toxic chemicals, the degradation of agricultural soils, the destruction of wildlife habitat, the depletion of the ozone layer and climatic change. These are all examples of environmental problems which have worsened in the last two decades, notwithstanding the application of mitigative strategies.

The growing evidence that environmental problems are international in scope, and that they could both result from economic activity and limit economic development, has gradually led to the reassessment of traditional reactive approaches and the consideration of alternative strategies to arrest environmental degradation. The World Conservation Strategy, published in 1980 by the International Union for the Conservation of Nature and Natural Resources (IUCN), the United Nations Environment Programme (UNEP) and the World Wildlife Fund (WWF), was one of the first attempts to integrate conservation and economic concerns in the policy-making process. Establishing three environmental bottom lines (the maintenance of essential ecological processes, the preservation of genetic diversity and the sustainable utilization of species and ecosystems) to guide resource development decisions, the World Conservation Strategy has spawned the development of over 40 national and many regional strategies worldwide. The Canadian government endorsed the World Conservation Strategy in 1981.

Since the Strategy's publication, several reports have called for the integration of economic and environmental decisions. In 1985, the Royal Commission on the Economic Union and Development Prospects for Canada (the "Macdonald Commission") (1985509, Volume II) concluded that

*it will be essential in the decades ahead to integrate environmental decisions and economic decisions, for there is, in Commissioners' view, no ultimate conflict between economic development and the preservation*

*and enhancement of a healthy environment and a sustainable resource base.*

The need to integrate environmental protection with economic development at the policy level was reinforced with some urgency in the 1987 report of the World Commission on Environment and Development (the "Brundtland Commission"). In its report, the Commission argues that the ability to choose policy paths that are sustainable requires that the ecological dimensions of policy be considered at the same time as the economic, trade, energy, agricultural, industrial and other dimensions — on the same agendas and in the same national and international institutions (WCED 1987:313). This is the chief institutional challenge of the 1990s.

As part of its response to the Brundtland Commission, Canada established the National Task Force on Environment and Economy in October 1986 to "foster and promote environmentally sound economic development." The Task Force was composed of seven environment and resource ministers, senior industry executives and representatives of environmental organizations. Its 1987 report made several recommendations designed to promote environmentally sustainable economic development. Specifically, the Task Force called on the federal and provincial governments to ensure that:

- Cabinet and major government economic/development documents demonstrate they are economically and environmentally sound and sustainable;
- all government processes for screening, review and evaluation of economic development projects include both socio-economic and environmental criteria;
- every major report on economic development and every related Cabinet document demonstrate that the proposal or activity is economically and environmentally sound; and
- all government programs which give funding or loan guarantees to industry are conditional on meeting environmental standards.

These recommendations are designed to anticipate and prevent environmental problems by assessing the environmental implications of various policy and program options before economic development decisions are made. Canada's First Ministers endorsed the Task Force report at their economic conference in November 1987.

Any hesitations which the federal government might have harboured about the extent to which it should mandate the consideration of environmental factors in policy making were

effectively dispelled on April 10, 1989. That day the Federal Court of Canada ruled in the Rafferty-Alameda case that the federal Environmental Assessment Review Process (EARP) 1984 Guidelines order and bound the Government to assess all its activities, including policies and programs, for their environmental effects. The Court decision hastened the drafting of environmental assessment legislation to clarify the process to be applied in policy assessment.

The rationale for considering environmental factors explicitly in the policy-making process has become widely accepted since 1980. The issue is now a methodological one: how should environmental factors be integrated into the policy-making process? The answer is likely to vary by region, sector, level of government and policy issue. This report focuses largely on the procedural issues raised by the adaptation of environmental impact assessment techniques to the decision-making process.



## 2. ISSUES

The design of a process to integrate environmental factors into policy formulation must be efficient, effective and flexible. It cannot be so cumbersome, for example, that it reduces the number of policy decisions the Government can make. It must also lead to more environmentally sustainable forms of economic development. Finally, because the environmental impacts of particular policies as well as the causes of these impacts will vary in different policy sectors and sometimes even within the same department or agency, the process through which environmental factors are taken into account must be flexible. There can be no single recipe to the integration of environmental factors into policy.

### WHAT IS POLICY?

Any analysis for which the central focus is policy, including this one on how to integrate environmental factors into the policy process, must inevitably address the issue of "What is a policy?" After many attempts by scholars, the definition of policy remains remarkably elusive. The following definition confirms its all-encompassing nature (Jenkins 1978:15):

*A set of interrelated decisions taken by a political actor or a group of actors concerning the selections of goals and the means of achieving them within a specified situation where these decisions should, in principle, be within the power of these actors to achieve.*

### Types of Policies

Policy can be general or specific, stated or implicit, incremental or radical, independent or an element of other policies. Explicit policies can come in various forms: they can be green papers, white papers, ministerial speeches, press releases, statements in the legislature, laws, regulations, and so on. Often, policies simply result from the incremental accumulation of decisions made over time. Although each of these decisions individually may appear to be of little environmental consequence, together, they can have major impacts. The result of such cumulative impacts has sometimes been described as "destruction by insignificant increments." For example, where one fossil fuel power plant may have acceptable environmental impacts, several may lead to acid rain problems and fossil fuel consumption on a global scale leads to climatic change.

Policies are sometimes implicit in that they are nowhere clearly stated or explained. The water pricing policies of many Canadian municipalities, for example, which are arguably responsible for a great deal of waste, are rooted in the

assumption that water is a free good, rather than in any explicit analysis of the costs and benefits of various pricing structures.

Policies exist in hierarchies, with narrow policies "nested" within a series of progressively broader policies. Thus, specific policies (sometimes called programs in their operational form) are nested within more general policies (perhaps designated as principles or goals) and in turn provide the framework for narrower activities such as projects. Values provide the ultimate nest for all policies. In his classic essay, "The Historical Roots of Our Ecological Crisis", Lynn White Jr. (1967:1203) suggests that attitudes to the land deriving from an underlying religious perspective fundamentally influence the manner in which humanity approaches the environment: "we shall continue to have a worsening ecologic crisis until we reject the Christian axiom that nature has no reason for existence save to serve man." We shall return to the concept of "nesting" in Chapter Four.

If nesting makes it difficult to circumscribe a policy's precise scope, the fact that policies are formulated in many different ways complicates policy analysis. The formulation of the policies to which government attaches the highest priority is typically *sui generis* in that it often falls outside the conventional policy-making process. Recent examples of such exceptional policies at the federal level include the National Energy Program, the Meech Lake constitutional accord and the decision to enter into free trade negotiations with the United States. A government seldom pursues more than a few such major policies during the course of its mandate.

Below this top policy tier, two additional categories of policies can be distinguished'. The first involves routine decisions which are made according to a well-understood and predetermined process involving the analysis of options within the government's overall fiscal framework and broad policy objectives. These decisions account for most government policy making. A category of policy also exists in the grey zone between the exceptional and the routine. These are limited in number, have a high political profile and do not always follow the conventional policy-making process.

The design of a government process to integrate environmental factors into policy will clearly accommodate routine decisions more readily than exceptional ones. This is not to say that exceptional policies should be exempted from environmental analysis but rather that some of the approaches

<sup>1</sup>We are indebted to Bruce Doern, School of Public Administration at Carleton University, for this grouping.

discussed in this paper concerning the implementation of integrated assessments would not be appropriate. The very profile of these decisions, however, should encourage a high degree of political accountability for all their implications, including environmental ones.

### Policy and the Exercise of Power

Policy making often represents a testing of whose will prevails among vested interests. In his speech entitled "The Built and Natural Environments: Forging the Link," given at the 1988 Heritage Canada Conference in Charlottetown, the Honourable Tom McMillan, then Minister of the Environment, described the importance of political power in policy making in the following words:

*More and more decisions are being made by powerful governments wielding great authority in favour of strongly organized groups... Government in most Western democracies is now less a matter of leadership than a matter of brokerage politics. Politicians are reduced to distributing public spoils based more on who shouts the loudest than on who speaks the most sense.*

The environment is consistently under-represented in such a tug-of-war because it has no strong institutional advocate. Thus, agricultural policy is less concerned about conserving the long-term productivity of soils and more about the immediate needs and demands of farmers. Similarly, energy policy is designed more to protect or direct the energy industry than to address end-use needs efficiently at minimum environmental cost. In the trade-offs inherent in policy making, adverse impacts are too often borne by the environment rather than by one of the financial stakeholders.

### The Lessons of Project Assessment

The phrase "environmental assessment of policy", which has been used as shorthand to describe the inclusion of environmental considerations at the policy level, is a misnomer inasmuch as it suggests the creation of a separate environmental assessment process to be grafted onto existing policy-making processes. A project environmental impact assessment (EIA) is a discrete exercise which typically segregates the environmental assessment of a project from its financial planning and, sometimes, even major components of its engineering design. A project EIA is often conducted late in the project development process and is aimed at mitigating anticipated impacts rather than challenging the project rationale.

It is much more difficult to isolate environmental issues at the policy level. In fact, such isolation will be counterproductive if

the goal of considering environmental factors at the policy level is to anticipate and prevent environmental damage before it occurs. An effective integration of environmental factors in policy making implies the consideration of these factors at the policy *formulation stage*. It may also involve a review of these factors at the policy *assessment stage*.

Although the environmental assessment of policy would likely borrow many of the techniques of project assessment, the fact that cause-and-effect relationships at the policy level are often more complex than at the project level may limit the extent to which these techniques can be used. Historically, the Government has submitted only a small number of its policies to an assessment process remotely similar to a typical project EIA. The Government's reluctance to engage the public in a wide-open policy debate is unlikely to change. This reluctance suggests that policy formulation will become a more important vehicle for raising environmental concerns than policy assessment.

In both cases, of course, the goal will be to reflect these concerns in the selection and implementation of a policy. A project is either constructed or it is not. The implementation of a policy, on the other hand, is seldom so clear-cut. The political will behind a policy, the degree of bureaucratic or ministerial discretion, the human and financial resources available, and the choice of policy instruments to ensure compliance (e.g., the mix of penalties and incentives) influence how a policy will be implemented and, hence, how it may affect the environment. An in-depth review of how environmental considerations can most effectively be incorporated in policy making should analyze the relative effectiveness of various means in integrating environmental factors. We do not conduct such an analysis in this report.

Policy integration can occur both vertically from policies through to strategies, programs and projects, and horizontally by including environmental considerations in policy formulation. In this report, we use the word integration primarily in its horizontal sense.

## ISSUES IN INTEGRATED ASSESSMENT

The issues which are raised by the integration of environmental factors into government policy making can be summarized in a series of questions:

**Scope:** At what level should policy be assessed? As policy is usually developed incrementally, identifying the parameters of what is to be assessed (scoping) is a much more important consideration here than it is for a project EIA. Should "class" procedures be developed for different policy assessments?

**Criteria:** What environmental criteria should be applied to the formulation and assessment of policy?

- **Responsibility:** Who should be responsible for incorporating environmental factors into policy making? Initiating departments (self-assessment) or an independent agency, such as an environmental commissioner? If the former, what checks and balances would have to be instituted to ensure compliance?
- **Process:** When should environmental factors be incorporated in the policy-making process? Should the requirement for the environmental assessment of policy be legally entrenched?
- **Monitoring and Accountability:** What devices are available to hold decision makers accountable for the environmental implications of their policy choices? Who would monitor and audit the process? How should success be determined?
- **Public Consultation:** Since policy options are often developed in secrecy, what opportunity should be made for public involvement concerning environmental factors? What forms should public involvement take? Is one of the purposes of assessing policy for its environmental impacts to help build societal consensus, or is it only to identify environmental and social impacts?
- **Science, Information and Assessment Methodologies:** How adequate are current scientific data and evaluation techniques for integrating environmental factors into the policy-formulation process?

Even this thumbnail list of issues illustrates how challenging the integration of environmental factors into the policy process is likely to be. In this report, we do not answer all the listed questions. Rather, we focus largely on process issues and only secondarily address methodological questions. Because Canada has had very little experience with considering the environment at the policy level, the theoretical and practical aspects of such consideration are not well developed in the Canadian literature. More is available in the United States. However, a quick review of the U.S. experience with “programmatic environmental impact statements” (i.e., environmental assessments of programs) suggests that:

- policy conflicts are often ignored;
- analysis tends to be defined very narrowly;
- there is a tendency for many of these statements to be largely socio-economic and demographic descriptions with little analysis of causes and effects;
- some programmatic statements appear to be intended more to rationalize legislation than to analyze environmental impacts; and
- there seems to have been very little development in methodology over the last 15 years.

It is likely that the methodology to assess policy and program proposals for their environmental implications can be adapted in large part from the approach already applied at the project level. This methodology will involve:

1. the definition of the objectives the policy is to serve;
2. the identification of alternative instruments to achieve them;
3. the development of exclusion lists and the provision for automatic referrals and class assessments where warranted;
4. the screening of proposals against environmental criteria;
5. the preparation of initial environmental evaluations and full environmental impact statements where adverse environmental effects appear significant; and
6. perhaps the submission of the policy proposal to public review.

We **recognize** that a more forceful federal environmental policy could have constitutional implications. In recent years, several provinces have expressed their concern at the possibility that the federal government might use its three main environmental policy levers—the Canada Environmental Protection Act, the Fisheries Act and the Environmental Assessment and Review Process — more forcefully.

The federal government has proposed to resolve the issue of jurisdictional overlap in the area of project assessment in part by striking joint hearing panels with the provinces. This approach, as evidenced by Quebec’s reluctance to compromise its own environmental assessment of the second phase of the James Bay hydro-electric project, has not been entirely successful. The coordinated review of environmental factors where policy overlaps is likely to be even more difficult. The councils of federal and provincial ministers which have been created in various sectors, such as energy, forestry and agriculture, as well as environment, provide one obvious coordinating mechanism for the harmonization of potentially conflicting approaches to the environment. The analysis of such mechanisms, however, extends beyond the scope of this report.

### 3. APPROACH AND METHODOLOGY

This report represents the completion of the first phase of the Canadian Environmental Assessment Research Council (CEARC) study on the environmental assessment of policy. It is the product of two research projects undertaken by the Rawson Academy of Aquatic Science on CEARC's behalf between September 1987 and March 1989.

The purpose of the first project was to review the extent to which environmental factors have historically been incorporated into government policy. Five case studies were selected for review, ranging from conservation-oriented to development-oriented policies. Within this spectrum, one policy was selected that had a long evolutionary history and one that had developed quickly. Four of the policies examined were national in scope, one was local. The five case studies were: agricultural policy for the Prairie Provinces; the National Energy Program; the National Parks Policy and the National Marine Parks Policy; the Federal Aboriginal Comprehensive Claims Policy; and solid-waste management in Metropolitan Toronto (see Appendix I for a short description of these studies). The complete studies can be obtained directly from CEARC.

The project reviewed the factors which led to each policy, the criteria used to identify anticipated environmental impacts, the translation of each policy's objectives into legislation and regulations, and each policy's implementation, including any provisions made for monitoring its impacts and the accuracy of predictions.

As part of this first project, the Rawson Academy convened a small workshop of senior government executives at the assistant deputy minister level and higher to consider four main questions (see Appendix II for a report of the workshop's discussion):

1. Is the environmental assessment of policy necessary to the integration of environmental and economic factors in government decision making?
2. What are the main issues and barriers to its introduction?
3. How should these barriers be overcome?
4. What are the key unresolved areas for further analysis?

At the first project's conclusion, the Academy was able to demonstrate that environmental factors had historically played a small to insignificant role in policy development in the sectors chosen. Attitudinal, methodological, institutional and knowledge barriers constituted the main impediments to the

effective consideration of environmental factors at the policy level.

The second project analyzed the institutional and jurisdictional constraints to the environmental assessment of policy and identified approaches to overcome them. The Academy examined the issues listed in Chapter 2 in the context of two further case studies, one the Department of Energy, Mines and Resources' (EMR) Canadian Exploration and Development Incentives Program (CEDIP), the other a hypothetical review of pesticides policy. Although not offered as "representative", these case studies were chosen in part for their contrasting features:

#### Energy

actual  
new policy  
incremental  
internal to EMR  
financial incentives

#### Pesticides

hypothetical  
policy re-assessment  
major re-orientation  
interdepartmental  
regulation

The energy case study showed that environmental issues were not considered in CEDIP's formulation because EMR's narrow definition of environmental relevance excluded them from policy development. Although EMR recently introduced several measures to ensure that environmental factors are considered in energy policy, these measures have not yet affected the policy development process in a fundamental way. Unless several barriers to their implementation are removed, including insufficient dedicated resources and the absence of effective enforcement mechanisms, it is unlikely that the measures taken to date will achieve their stated objective of "ensuring that resource development and environmental protection proceed hand in hand" (EMR 1988:1).

The agricultural pesticides case study focused on the scoping, process and science issues which would be raised if the government were to strengthen its pesticides registration process in an effort to reduce the environmental impacts of pesticide use in agriculture. These issues included the importance of inter-generational equity in policy formulation, the adequacy of the existing regulatory assessment process in addressing major policy changes and the use of various analytical techniques to reach policy decisions on the basis of incomplete or uncertain scientific information.

The key issues raised in these case studies were reviewed in a workshop bringing together some two dozen policy makers and policy analysts from government, industry, academia and non-governmental organizations (see Appendix III).

## 4. THE SCOPE OF INTEGRATION

Decisions on what is, and is not, considered relevant are usually among the most important in environmental assessment. If, at the project level, such decisions are often complex and controversial, at the policy level, they are likely to be even more so.

The question of scope arises every time the words environment and policy are mentioned together because neither term has precise boundaries; any given policy can be seen as a sub-set of a broader, if sometimes implicit, policy. Similarly, any ecosystem is but one component of a broader one.

Disentangling cause-and-effect relationships will almost always be more difficult at the policy level than at the project level, particularly where policy is implicit and where the causal chain from policy to impact is indirect and/or long. A broad environmental impact, such as climatic change, can have several causes. Conversely, a broad government policy, encouraging the use of fossil fuels for example, can have several environmental effects.

The question of scope is fundamental because the way it is answered will influence not only what should be considered but also how, when and by whom. The process of scoping, therefore, is one of making systematic choices, choices which will tend to foreclose certain options as they channel policy formulation in a specific direction. These choices will commonly include decisions concerning the range of options to be analyzed, the merits of alternative instruments to implement the policy and the significance of associated environmental impacts.

The choice of appropriate scope largely determines what policy alternatives are relevant and the role environmental factors can play in designing policy. As a general rule, the more narrowly a policy objective is defined, the fewer alternative policy instruments will be available to meet it and the less scope there will be to consider relevant environmental factors in policy decisions. Hence, the choice of a policy objective already implies an environmental strategy. Canada's implicit energy security objectives, as deduced from spending commitments rather than government policy statements, for example, lead to growth- and supply-oriented approaches and a rising environmental cost. A focus on energy demand would yield sharply different policy objectives, such as increasing automobile efficiency, which would allow greater consideration of environmental factors in designing program to achieve them.

The process of scoping also raises ethical considerations because policies can affect both present and future generations. The weight which the interests of each

generation should be given in the policy-making process is reflected in how society values or *discounts* the future. Economists, business persons, politicians and environmentalists, to name but four groups with an obvious interest in the future, are likely to hold very different views as to what constitutes an appropriate discount rate. Whereas a neoclassical economist would choose the long-term interest rate as the socially optimal calculation for considering the future, an environmentalist might argue that this rate exaggerates present costs and undervalues future benefits, thereby biasing inter-temporal choices in favour of the present. For their part, businesspersons would demand a higher rate than the economist to reflect the risk of investment. The politicians' time-horizon might be the shortest of all -- the next election -- and their discount rate, therefore, the highest.

The choices society makes over how to weigh the future carry environmental implications because the choices determine the pace of resource development and assume a rate of technological change. Rooted as they are in deep-seated values, these choices are perhaps the most fundamental and the most difficult of all considerations underlying scoping.

### DEFINING SIGNIFICANCE

The realisation that "everything is connected to everything else" and that environmental matters must, therefore, be considered in most government policies does not provide sufficient guidance to establish and operate a more environmentally sensitive policy process. The large number of policy decisions government makes every year will require, at least at first, that priorities for the consideration of environmental issues be established so that scarce human and financial resources are allocated most effectively. At the government-wide level, priority-setting could perhaps form part of the mandate of the Cabinet Committee on the Environment (see "The Role of Central Agencies"). At the departmental level, scoping would most appropriately be done within existing strategic planning units, but would undoubtedly benefit from the input of Environment Canada and external stakeholders.

At all levels, the setting of priorities for the environmental assessment of policy will require improvements in the scientific understanding of ecological processes and in the technical quality of environmental information. In its Framework for Discussion on the Environment (Environment Canada 1990:8,9), the federal government proposed both to "increase significantly its commitment to environmental science and technology" and to supplement its state of the environment report with an annual environmental outlook and policy statement.

Such proposals are necessary for the effective environmental assessment of policy. They will also require significant resources. The experience of the U.S. Environmental Protection Agency (EPA) in conducting Regulatory Impact Assessments (RIAs) between 1981 and 1986, for example, was that the cost of each RIA averaged US\$675,000 (EPA 1987:S-4). The EPA, however, estimated that the benefits of such RIAs were substantially larger than their costs, sometimes by several orders of magnitude. Nevertheless, it will be important to distinguish between significant and less significant policies in incorporating environmental factors into the policy-making process.

One approach would be to identify environmental and economic thresholds based on the consequences of pursuing various policy options. Precedents exist for such thresholds in the assessment of regulations, though these contain distinct economic biases. The now defunct Socio-Economic Impact Assessment (SEIA) process considered only “major” regulations, those for which social costs were estimated to exceed \$10 million a year. The EPA undertakes an RIA only if a “major rule” is in question, such a rule being defined as (EPA 1987:2-4):

*any regulation that is likely to result in (1) an annual effect on the economy of \$100 million or more; (2) a major increase in costs or prices; or (3) significant adverse effects on competition, employment, investment, productivity, innovation, or the international competitive position of U.S. firms.*

The U.S. Council of Environmental Quality (undated) defines “significance” for use in the administration of the National Environmental Protection Act in terms of both context and intensity:

*Context means that the significance of an action must be analyzed in several contexts such as society as a whole, ... The affected region, the affected interest, and the locality.... Intensity refers to severity of impact.*

## TIERING

The Brundtland Commission recommended that environmental factors should be considered at every step of the policy development process in the same manner as economic factors are now. For such an integrated approach to be applied efficiently, there must be a hierarchy of assessments which would make unnecessary, or at least minimize, the need to return to first principles every time a policy had to be assessed for its environmental impacts. At the same time, it will be important to provide sufficient flexibility in the process to ensure that the initial “green light” does not determine the final outcome if later assessment phases reveal unanticipated environmental consequences. The identification of the factors

relevant to every level of the hierarchy will be particularly important in implementing a given assessment. It represents a significant methodological challenge.

The concept of “tiering” is used in the United States to determine the proper scope of programmatic environmental impact statements (PEIS). The Council on Environmental Quality (198534267) defines tiering in these words:

*Tiering of environmental impact statements refers to the process of addressing a broad, general program, policy or proposal in an initial Environmental Impact Statement (EIS), and analyzing a narrower site-specific proposal, related to the initial program, plan or policy in a subsequent EIS.*

The second EIS then need not repeat the discussion in the first and can focus on the specific issues up for decision.

Tiering can have wide-ranging implications for the scope of environmental factors to be considered at different levels of the policy hierarchy, the choice of environmental criteria to apply at each of these levels, and for the appropriate forms of public consultation during the process.

## DEFINING RELEVANCE

One of the challenges of integrating environmental factors into the policy process will be to determine the scope of environmental impacts appropriate to every tier of the policy hierarchy. Today, environmental factors are typically considered only at the lower tiers of government policy. EMR has identified as components of its environmental screening process the federal land-use policy, the federal water policy, the policy for the management of fish habitat and the discussion paper on the protection and management of the federal archaeological heritage. The primary objective of this screening was to ensure that energy policy decisions, once made, do not result in unacceptable environmental impacts. This approach does not challenge the rationale behind the policies themselves. Although it is considered binding, there is no effective mechanism to enforce it. It is inherently a remedial strategy in that environmental considerations are “added on” towards the end of the policy process.

A number of options are available for the inclusion of environmental factors at higher levels of the policy hierarchy. Essentially, they involve making environmental objectives themselves energy-policy objectives. An example would be a policy to implement the 20 per cent reduction in carbon dioxide emissions by 2005, which was called for at the conclusion of the 1988 Toronto Conference on the Changing Atmosphere. This example gives greater weight to environmental factors than the remedial approach currently used by seeking to anticipate and prevent environmental deterioration before it happens. It should, therefore, lead to lower environmental impacts.

It is important to emphasize that the integration of environmental factors early on in the policy process will not eliminate the need to consider the environment at the program or project design level. The screening process now applied by most departments, in other words, will still be necessary but it should be supplemented by the explicit consideration of environmental factors at earlier stages of policy development.

Under a tiered approach to the integrated assessment of policy, the definition of relevant environmental impacts would vary at different levels of the policy hierarchy. The case study on the Canadian Energy Development Incentives Program (CEDIP) illustrates how such a hierarchy might be constructed:

- **Tier 1: supply vs demand.** The issue here is the comparative marginal environmental and economic cost of increasing supply and reducing demand, for example, by increasing the efficiency of energy use. The relevant environmental considerations of such a comparison are very broad and would only be constrained by the relevance of other factors such as technology, timing and infrastructure.
- **Tier 2: supply vs supply.** Assuming a decision was made to increase energy supply, a choice of various supply options would exist, each with associated environmental impacts, for example, climatic change for fossil fuels; waste disposal for nuclear power. Besides environmental factors, the choice among these options would include consideration of end uses (very little substitution is available for liquid fuels in the transportation sector), availability and security of supply.
- **Tier 3: CEDIP vs another oil development program.** Once it has been determined that more oil is needed, a decision must be made on which supply option appears most economically and environmentally attractive. Relevant environmental considerations here would include the marginal impact of drilling more wells in Alberta as opposed to the development of heavy oil. Here, too, considerations other than the environment (the marginal

cost of various oil supply sources, the total federal incentive available, unemployment levels in the drilling industry, etc.) would constrain the range of policy alternatives.

- **Tier 4: individual drilling projects.** At the bottom tier of this hierarchy, is the integration of environmental factors at the site-specific level. This integration is already largely a routine matter as environmental regulations are added to standard engineering practices.

Tiering already occurs implicitly in policy formulation: each time policy makers make an assumption about the variables they will use in designing a program, they make a tiering decision. The tiered approach outlined above would allow explicit decisions about relevance; thus, the environmental impacts of consuming the hydrocarbons discovered as a result of CEDIP are relevant early in the policy-making process and to the first two tiers but not to the third. Conversely, the cumulative impact of a drilling program should probably be considered in the third tier, after the fundamental policy choices have been made, and not earlier.

Such categorisation should be seen more as a general conceptual approach than a precise analytical tool. In practice, it will be difficult to devise mutually exclusive categories of environmental considerations. Line managers will likely have to exert some discretion in applying the tiering concept.

Although the determination of what impact is relevant at what tier of the policy process is probably necessary for the efficient implementation of an integrated policy assessment, this determination is inherently rooted in value preferences. Stakeholders in many areas of public policy would be unlikely to agree today on the significance of the environmental impacts associated with policy, let alone the weight they should receive in the policy formulation process. They will bring very different perspectives to the tiering process. An integrated policy analysis would at least make value preferences more explicit. To that extent, it could also make policy makers more accountable for their decisions.

## 5. IMPLEMENTING INTEGRATED ASSESSMENT

Government institutions responsible for protecting the environment are typically separated from those responsible for managing natural resources and the economy. Superimposed onto an already-functioning administrative structure organized legally and bureaucratically largely along sectoral lines, these recently created environmental institutions have been given limited powers which have not challenged the rationale behind the existing division of responsibilities. Even when their powers have been increased, bureaucratic vested interests in other sectors have successfully resisted encroachment. The limits imposed by Agriculture Canada and Health and Welfare Canada on the Canadian Environmental Protection Act are a recent example of this continued compartmentalization of responsibilities. But, as the Brundtland report notes, "the real world of interlocked economic and ecological systems will not change; the policies and institutions concerned must" (WCED 1987:3 10).

The effective integration of environmental factors into the policy-making process of sectoral departments is likely to entail wide-ranging institutional reform. This chapter outlines some of these reforms under the headings of responsibility, departmental accountability, the role of central agencies and public involvement.

Before analyzing these issues, it is useful to list briefly the barriers which now exist to the integration of environmental considerations to the policy-making process. These barriers are inter-related and mutually reinforcing. A strategy to integrate environmental factors into the policy process will, therefore, have to address them systematically to succeed.

### BARRIERS

The realization that government needed new institutions to consider environmental issues is less than 20 years old in Canada. Since the creation of Environment Canada in 1971 and the establishment of the federal Environmental Assessment and Review Process (EARP) in 1974, scientific understanding of the nature and consequences of environmental impacts has evolved further. This understanding is leading to a shift in emphasis in environmental strategy from a remedial to an anticipatory and preventive approach. The conceptual evolution in the preferred environmental strategy has occurred fast enough that many of the values, structures and processes in government policy making are now out of step with the requirement to integrate environmental factors at every step of decision making and indeed represent barriers to this integration.

The most important of these barriers are:

- **Lack of clear objectives:** Policies are implemented to achieve preset objectives. Although the Government now pursues a large number of economic and environmental objectives, these do not provide sufficient direction to formulate and assess integrated policies. The ultimate goal of an integrated policy would be environmentally and socially sustainable economic development, a goal which the Government has endorsed. Until this goal is translated into more precise sectoral objectives, however, it will give little guidance to the policy maker about the balance to be struck when environmental and economic aims compete. Canada's system of "brokerage politics" (White 1967) offers no rewards to politicians and government officials who define precise objectives. On the contrary, the definition of such objectives risks offending those who disagree and also provides an onerous measure of accountability where the decision maker often does not fully control the formulation and implementation of a policy (Holtz 1989).
- **Insufficient political will:** Policy is about making choices. Where these choices involve a trade-off between short-term economic growth and long-term environmental protection, the fact that society has tended to value the present more than the future has biased decisions in favour of growth. Political will is also reflected in institutions. Until the restructuring of the federal Cabinet in January 1989, the junior status of the Minister of the Environment both reflected and signalled the low priority the Canadian government attached to environmental issues.
- **Narrow definition of issues:** Many policy makers do not consider the environmental implications of their decisions because they define their own actions too narrowly. Environmental factors were not considered in recent government commitments to subsidizing energy megaprojects, for example, because the link between increasing oil supply and the environmental implications of consuming that supply was not made. As late as March 1990, Environment Canada would ask in its Framework for Discussion on the Environment whether "energy projects [were] consistent with a commitment to greenhouse gas reductions" (Environment Canada 1990). The intellectual inertia which this question reveals is the result of a corporate culture emphasizing economic goals, particularly growth, as the main underpinning of public policy.



- **Organisational structure:** The Canadian government, like most other governments, has inhibited the integrated formulation of policy by segregating environmental considerations in a separate department. The environment is thus made a sector like any other (forestry, transportation, fisheries, etc.). At the departmental level, most economic development departments do not have a section that is explicitly charged with environmental protection issues. Where they do, as does EMR, the section is often located outside the department's policy mainstream. The few resources typically allocated to such sections only compound the effects of a department's organisational structure. The effective integration of environmental factors into government policy will require the application of new skills and perhaps the hiring of new staff in line departments. FEARO has estimated that an increase of 58 per cent over current expenditures across the Government would be needed to implement the EARP fully under the existing Order-in-Council and a further doubling of resources would have to be allocated to implement a mandatory process. These resources translate into \$344 million over 4 years and 1,859 person-years. Of these totals, less than \$25 million and no additional person-years are estimated to be required for integrating environmental factors into policy\*. Although the policy assessment costs appear to be a bargain compared to the forecast project assessment costs, budgetary restraint and the Government's limit on the size of the public service could loom as important constraints to the effective consideration of environmental matters in policy making.
- **Absence of accountability:** This barrier is directly related to organisational structure. Because policy is ostensibly made at the political level, departmental managers are not held accountable for the environmental implications of government policies. Ministers also shirk accountability for the environmental impacts of their decisions by focusing on their intended **sectoral** achievements rather than unintended environmental consequences. In "Fostering Ministerial Accountability", we discuss a range of measures to increase accountability.
- **Bureaucratic politics:** Policy making is not a dispassionate exercise; it frequently engenders conflict, particularly when the future of a program is at stake. In such circumstances, policy makers are often reluctant to provide potential critics with the information needed to make a real choice, especially when this information could

be used to mobilize support against their preferred course of action. Internal competition and the hoarding of information already constitute barriers to efficient policymaking. Inasmuch as the consideration of environmental issues may threaten existing power relationships within bureaucratic institutions, it may exacerbate the effect of these barriers.

**Lack of information:** The policy criteria which line departments use to screen projects for environmental impacts are not always translated into operational guidelines for line managers. The managers must rely on their intuitive assessment of a policy's impacts. More fundamentally, in many cases, environmental information on which to assess a policy's impacts does not exist or is imprecise (see "Adequacy and Availability of Data").

**Absence of incentives:** The policy maker seldom receives any rewards for avoiding environmental problems. The addition of environmental factors to the policy process is seen with considerable justification as being complex, time-consuming, subjective and a potential generator of conflicts. When political considerations dictate a quick response to an external demand, there is often little time to weigh all economic factors carefully, let alone start including environmental ones.

## IDENTIFYING RESPONSIBILITY

The proposition that all government departments and agencies should consider the environmental implications of their policies does not imply that environmental factors become paramount in policy making. Within the existing governmental structure designed to produce policy coherence, ministers would remain free to make their own trade-offs. But, they must also be held accountable.

Once the principle that all policy makers should consider the environmental implications of their actions is accepted, two questions arise: Who should be responsible for integrating environmental factors into the policy process? Should this responsibility be binding?

### Who Should be Responsible?

As a general rule, environmental factors will be integrated into policy more effectively the earlier they are considered in the objective-setting process. Early consideration of these issues makes it more likely that environmental damage can be anticipated and prevented instead of remedied after the fact. In other words, the techniques which have been developed for environmental assessment are most effective when they are used as a planning rather than as an evaluation tool. The

<sup>2</sup> See Annex IV of Environment Canada's draft memorandum to Cabinet on "Reforming Federal Environmental Assessment", November 9, 1989.

early consideration Of environmental **issues not Only supports** the principle of environmentally sustainable economic development, as described by the Brundtland Commission, it encourages policy makers to be held accountable for the environmental implications of their initiatives.

This approach, commonly called self-assessment, **places** policy makers in an apparent conflict of interest: Can they be truly objective in determining whether and how their own policies should be assessed for their environmental effects when such assessment implies a loss of control over the policy-making process? Furthermore, will policy makers not seek the line of least resistance by attempting to avoid public consultation? These questions have led critics of self-assessment to argue that the Minister of the Environment should decide what level of environmental assessment is required and whether public hearings should be held.

The choice between self-assessment and external review need not be an absolute one. Self-assessment can occur both at the line managerial or the departmental level. If the process is to remain credible, an approach based on self-assessment can and, indeed, must also include external reviews for those policies deemed to be environmentally most significant. At issue here, as at the project level, is the determination of when external review becomes necessary or appropriate.

This determination may depend in part on the policy tier being assessed. For example, the setting of broad policy goals implying value judgements is likely to be less legitimate, and more likely to be challenged, in the absence of consultation with the appropriate stakeholders. External review may be desirable in the high policy tiers. Conversely, the integration of environmental factors at a lower tier of the policy process entails the consideration of more technical issues, perhaps involving different stakeholders and requiring different assessment mechanisms.

In an imperfect world, such integration cannot always be expected to occur automatically. In the case of CEDIP, environmental factors were never even thought to be relevant to the development of the program and were ignored.

It will be important that line managers receive appropriate **support in recognizing** environmental issues and in discharging their responsibilities. Such support could include training, the establishment of a consultative mechanism with Environment Canada or the creation of interdepartmental working groups on environmental issues. In addition, it will be essential that the self-assessment process be regularly audited to ensure that it is not being abused.

Departmental self-assessment (i.e., by the line manager and a central coordinating unit such as **EMR's Office** of Environmental Affairs) is likely to be the dominant form under which environmental factors are integrated into the

policy-making process at the federal level. It should not be implemented without a system of checks and balances designed to prevent avoidance and promote accountability. Without such a system, public confidence in the results of the assessment will be undermined.

### Should Responsibility be Binding?

It has been argued that a statutory obligation to consider environmental information should constitute a necessary counterpart to the existing requirements for Cabinet secrecy if the public is to be convinced that the environmental assessment of proposed programs and policies is being done adequately and consistently. The Honourable Lucien Bouchard, a former Minister of the Environment, used this rationale in part in November 1989 when he argued that the environmental assessment of policy should be legally mandated.

There is another side to this argument. There is currently no blanket legal requirement at the federal level to consider any given factor in policy making, be it economic, financial or social. These factors are considered as a matter of practice and common sense. So why should environmental factors be treated any differently? While making such an exception would clearly have symbolic value, mandating the consideration of environmental factors might make it more difficult to engage in policy trade-offs. It might also make the policy-making process more rigid by threatening the informality which **characterizes** much policy-making today. It has been suggested that the prospect of litigation would exert a "chilling" effect on policy making which would engender delays and attempts to shirk accountability.

None of these concerns, of course, argues against an administrative requirement that environmental factors be considered in policy making. Just as the impact of policy proposals on federal-provincial relations must now be assessed as a matter of routine in submissions to Cabinet, so too could their impact on the environment. As a further spur, government departments could be asked to develop action plans to achieve sustainable development objectives against which their performance would be audited (see "External Mechanisms" on a Parliamentary Commissioner for the Environment). Thus, while the responsibility for including environmental factors into the policy-making process must be binding in order to be effective, it is unclear whether it should be legally mandated.

### FOSTERING MINISTERIAL ACCOUNTABILITY

If **various** institutions of government are responsible *for* integrating environmental considerations into their policy-making processes, the question arises who they are

accountable to for the way in which they perform their responsibilities and for the results.

In general, accountability is provided through processes of reporting, review, monitoring or supervision whereby a designated authority assesses performance on the basis of appropriate standards or benchmarks. Typically, sanctions or rewards then ensue to encourage the desired result(s). A framework of accountability designed to ensure that progress is made in the direction of integrating environmental considerations into the policy-making processes of government would include the standard or benchmark for assessment, the reporting and review process, the designated supervisory authority, and effective incentives.

The actual process of review for accountability may take a number of forms, including regular annual reporting requirements and ad hoc investigations carried out by one or more of several possible supervisory bodies. The authority designated for ensuring accountability might be internal or external to government, and it might be more or less expert or political in nature, depending on a number of factors. The sanctions and rewards resulting from accountability for environmental decision making can also vary. Depending upon the type of decision-making institution in question, they could include financial incentives, favourable or adverse publicity, or even electoral benefits or penalties.

The design of an approach to foster accountability for the environmental implications of policy will have to consider the accountability mechanisms to which government managers must already submit in other policy fields. They already observe a wide array of internal rules concerning hiring, job classification, bilingualism, spending, security, etc., as well as less formal but still binding practices concerning hierarchical relationships, intra- and interdepartmental consultation, and so on. The cumulative weight of these rules and guidelines is high, depriving managers of responsibility while it multiplies their accountability. The addition of mechanisms to integrate environmental factors in the policy-making process must not be so onerous that it hampers the ability of managers to do their jobs.

There are three limitations to increasing the federal government's accountability for the environmental consequences of its policies.

The first is constitutional. The division of powers between the federal and provincial governments concerning environmental matters is not clearly specified in the constitution. This division has led to the creation of federal-provincial bodies, such as the Canadian Council of Ministers of the Environment, to co-ordinate the establishment of national environmental policy objectives. When responsibility is similarly shared, it is not always clear to the Canadian public which level of government is accountable for any given policy success or failure. The federal government's delegation of administrative

responsibilities in certain cases, such as under the Fisheries Act, or proposed acceptance of provincial procedures in others, including environmental assessment, blurs accountability even more.

Second, the Canadian environment is subject to impacts from external sources over which Canadian governments have no direct control. It is sometimes difficult to attach responsibility or blame for deterioration in the environment to domestic actions, or to credit domestic efforts with improvement.

Finally, limitations in our understanding of the nature of ecological change complicate the task of determining whether particular policies are harming or contributing positively to the state of the environment. Increasingly, certain impacts are cumulative and long term, result from multiple causes, extend beyond the electoral mandates of government, and thus diminish the basis on which political decision makers can be held accountable for their policy choices.

## Internal Mechanisms

### *Memoranda to Cabinet*

Cabinet submissions require a standardized format for the presentation of information, to which environmental factors could be added. EMR has already undertaken to provide "where appropriate, an assessment of both the environmental consequences of the proposal and the potential economic benefits." To ensure consistency in the quality of environmental analysis, Environment Canada could be empowered to provide guidelines for the preparation of the relevant sections.

Memoranda to Cabinet are routinely subjected to interdepartmental consultations, a procedure which helps to ensure both the acceptability of the proposal and the quality of the underlying analysis. They are placed on the Cabinet agenda only after the Privy Council Office (PCO) determines that they have been completed satisfactorily. The institutionalization of this process for environmental issues could be used to ensure regular consideration of environmental matters.

Several of the participants at the first workshop warned, however, that the preparation of an environmental section in Cabinet memoranda could easily become a "mechanistic" exercise that would "debase the currency" unless it was reinforced by complementary measures.

### *Program Evaluation*

All government programs must now be evaluated on a regular basis. This requirement provides an internal checkpoint which

can be used to promote awareness within government of the importance of environmental factors. EMR has already committed itself to include environmental and related socioeconomic criteria in carrying out evaluations of its programs.

### *Internal Audits*

This option is attractive insofar as it resembles the monitoring system operating in the private sector and offers the possibility of directly linking sanctions and rewards in the form of promotion or financial benefits to the performance of individual managers. Standards would be determined in advance through some form of annual planning/budget/priorities exercise and expectations would thereby be clearly known.

An internal audit process has much to recommend as a means for ensuring that operational objectives are rigorously pursued. Has the departmental recycling program achieved its goals? Did the agency reach its target for improved fuel mileage on personnel travel? Have building and workplace environmental standards been met for new construction and renovations? An internal audit process, however, has inherent limitations when it is applied at the policy level. Inasmuch as the purpose of government policy is to influence the behaviour of individuals or organizations outside its direct control, policy makers can be audited only for the steps they have taken internally to implement policies, not for the success of their policies.

### *Operational Performance Plans*

Every year, departments are required to prepare operational performance plans in which they identify their goals for the upcoming fiscal year and the policies and programs they intend to implement in meeting these goals. As these plans are assembled hierarchically, from the smallest line unit to the department as a whole, they provide a mechanism to measure performance at every level within the Government. An effective integration of environmental considerations in the policy process will have to embed these into the Government's overall planning cycle.

### *Performance Appraisal*

The performance of every government employee is appraised at least once a year, usually against predetermined goals set out in a workplan. The inclusion of an environmental dimension to these goals, where warranted, would help promote accountability for environmental protection throughout departments. At senior levels (senior management and

above), pay raises are directly tied to performance appraisals, providing an economic incentive to the achievement of agreed goals. Many departments and the Public Service Commission run other incentive programs to reward productivity increases or waste reduction. Such programs could be expanded to include environmental issues.

At least one large multinational corporation, Du Pont, has already announced that the compensation of its executives would be directly linked to their environmental performance as well as to more traditional indicators (Bruntland Bulletin 1989:SF5).

### *Assessment of Regulations*

Federal initiatives regarding the assessment of statutory regulations may provide a useful model for the integration of environmental issues in the policy process. Between 1978 and 1980, the Office of the Coordinator, Regulatory Reform, administered the Socio-Economic Impact Assessment (SEIA) process. Few SEIAs were actually carried out during that period, in part because the process may have been too demanding.

Both the Office and the process were replaced in 1986 by the Regulatory Affairs Branch (RAB) of the Office of Privatization and Regulatory Affairs (OPEA) and by the Regulatory Impact Assessment (RIA) process. RAB has published since 1986 an annual Federal Regulatory Plan whose purpose is:

*to find out from Canadians what their views are on new regulations, proposed amendments to existing regulations, and reforms of the regulatory system, and to make sure that ministers are informed of those views before decisions are taken.*

The Plan contains brief descriptions of the regulatory changes expected to be proposed over the year ahead and provides the name, address and telephone number of a contact person for each. The Plan gives public notice of possible upcoming regulations and could provide an avenue for the public to make representations about their environmental implications.

The Plan also includes "The Citizens' Code of Regulatory Fairness" (OPRA 1986) which states, among other things, that:

1. *The Government will encourage and facilitate a full opportunity for consultation and participation by Canadians in the federal regulatory process.*
2. *The Government will provide Canadians with adequate early notice of possible regulatory initiatives.*

## External Mechanisms

Although necessary, internal mechanisms, such as the ones in the previous section, are unlikely to be sufficient in and of themselves to promote sectoral accountability for environmental factors. There are two reasons why mechanisms external to government are likely to be needed to encourage accountability. The first is that internal mechanisms have inherent limitations. The reforms needed to integrate environmental factors in policy making will upset traditional bureaucratic relationships and will be resisted unless they are reinforced through other means.

The second is that, until now, most of the pressure to place a greater weight on environmental matters in policy making has come from environmental groups and the public. The senior government officials in the first workshop noted that institutions which owe their existence to the status quo cannot be expected to challenge it vigorously. They agreed that there would have to be outside pressure to effect change and heighten concern about the environment throughout government.

## Parliamentary Commissioner

An independent Commissioner for the Environment reporting to Parliament has frequently been mentioned as a promising approach to reinforcing accountability. There are now several agencies which monitor government activity in light of a particular interest -- linguistic, financial, human rights, and so on. A Commissioner for the Environment would be constituted according to these precedents. The office would be responsible for monitoring the performance of government agencies and departments according to designated standards of environmental protection or resource conservation.

New Zealand, with the help of Canadian officials, has created the office of Parliamentary Commissioner for the Environment to meet such responsibilities. Under the provisions of the 1986 New Zealand Environment Act, the Commissioner has the powers to:

- *review the performance of the system of agencies and processes established by the New Zealand government to manage the environment;*
- *investigate the effectiveness of planning and management undertaken by public authorities;*
- *investigate any matter which has or may adversely affect the environment;*
- *review and report on environmentally significant legislation before the House of Representatives;*

- *undertake inquiries at the request of the House of Representatives;*
- *require individuals or agencies to supply information (the Commissioner has already **used** this power to ask for copies of Cabinet papers); and*
- *appear before regulatory hearings.*

It has been suggested that a Parliamentary Commissioner for the Environment could also be charged with representing the interests of future generations to whom the current generation is morally accountable for protecting environmental quality.

The New Zealand Office of the Commissioner for the Environment may have been operating for only a few years but its experience is clearly relevant to the Canadian situation. In May 1989, the Federal Environmental Assessment Review Office (FEARO) estimated that the creation of an office of a Parliamentary Commissioner would cost \$3 million annually and require a staff of 15 person-years. This cost and "the potential... for embarrassment to particular ministers and the government" were deemed too great to recommend in favour of this initiative.

## Parliamentary Committees

Parliamentary committees are attractive vehicles for promoting accountability within our system of government because elected representatives are directly involved. Parliamentary committees, however, have inherent limitations. Typically, they include a majority of members who belong to the governing party. Accordingly, partisanship often dominates their deliberations. In addition, the members rarely have specialised expertise. It is certainly possible for that expertise to be developed over a period of years of service, but discontinuities are inevitable as members are re-assigned to other committees, resign or are not re-elected. The lack of resources available to parliamentarians represents another handicap in discharging their committee functions.

## Public Monitoring

Such monitoring of government policy making on environmental grounds may be carried out in several possible ways. A simple way would be to require that departments include in both their annual report and Part III of their Main Estimates to Parliament an analysis of what they had already done and what they intend to do to incorporate environmental matters into the formulation of their objectives, policies and programs. However, the departments' natural tendency to dwell on their accomplishments and minimize their failures,

combined with the limited resources available to parliamentarians to probe departmental assertions, are likely to limit the effectiveness of this approach.

A complementary measure would be the creation of a Citizens' Environmental Council to report periodically and publicly on the performance of various departments in integrating environmental considerations into their policies. Both Pollution Probe and the Canadian Nature Federation have already prepared "environmental report cards" on government activities, an exercise that contributes to accountability by measuring performance against a set of public standards and publicly reporting the results. Similar work might be carried out in a more comprehensive manner, possibly by a citizens' environmental coalition which would undertake to review government policy on environmental grounds. The authority or "legitimacy" of such a body, its stability, financing and "representativeness", however, could be problematic.

One of the great challenges that public monitoring faces is the lack of scientifically sound, consistent and widely understood indicators to gauge whether the environment is improving or deteriorating and to allow the public to judge a minister's environmental performance. A standard to gauge success is, therefore, a priority to improve accountability. Unfortunately, methodological difficulties are likely to blunt the effectiveness of this mechanism (see Chapter 6).

At present, each federal department is responsible for reporting quarterly to FEARO on all its screening provisions and for keeping a file on those screenings documenting the logic behind a reached decision. These reports, which are publicly available, now apply to projects. They could also include policies in order to provide an effective overview of an agency's compliance with the requirement that it consider environmental factors in its policy-making process.

Although, in theory, the Canadian public will always be able to vote a government out if it is unhappy with its environmental performance, the ultimate sanction of electoral rebuke is unlikely to prove very effective in practice. The Canadian parliamentary system discourages single-issue elections and few governments in Canada have been defeated at the polls on the basis of their record on one issue alone.

Public monitoring of the Government's record in integrating environmental factors in policy can only succeed if easily understood environmental quality indicators are available and there is sufficient public access to government information to determine whether proper procedures have been applied.

### *Other Mechanisms*

Litigation, a tool widely used in the United States, would involve a systematic program to ensure existing procedural

requirements for environmental assessments and project approvals were fully met. Over the years, there have been several proposals to legislate a federal or provincial Environmental Bill of Rights. Such a measure could encourage accountability if it increased legal recourse for individuals to protect their environmental rights.

International treaties and conventions on environmental matters already provide another external mechanism that in some instances sets performance standards. The ability of various UN agencies to inquire into the policies of member nations or to offer a forum for Canadians who are concerned about their government's activities, such as the intervention of the James Bay Cree in UN agency deliberations, constitutes an unofficial but potentially influential mechanism to improve performance.

International comparisons of energy efficiency or some other relevant performance standard also encourage accountability. The Organisation for Economic Cooperation and Development (OECD) and the International Energy Agency (IEA), for example, periodically review the performance of member states in selected policy areas. Such reviews can influence domestic policy development when a country's objectives and performance diverge too sharply from that of the organisation's other member states.

## **THE ROLE OF CENTRAL AGENCIES**

Central agencies, such as the Privy Council Office, Treasury Board and the Department of Finance play an important role in the Canadian government by developing and imposing a policy framework within which line departments are expected to perform. If environmental factors are to be integrated in policy making throughout the Government, a new or existing central agency is likely to be needed to co-ordinate this effort. This agency would not only set the criteria line departments would be expected to meet, it would play an important symbolic role by demonstrating the Government's political commitment to the issue.

Such an agency might report to the Minister of the Environment, but should not be merged into Environment Canada. Environment Canada will obviously retain its operational responsibilities for national parks, wildlife, atmospheric issues, and other such issues even after other departments start becoming more accountable for the environmental implications of their policies. It should also retain government-wide or "horizontal" responsibilities for the environment. Environment Canada may well have to strengthen this role by establishing standards against which line departments could evaluate their performance. Too strong a mandate, however, could in itself become a barrier to more dispersed accountability for environmental issues if line departments are thereby to let Environment Canada carry the blame for the environmental shortcomings of their programs.

Given the value judgements inherent in integrating environmental factors into policy formulation, perhaps the most important role an existing or new central agency on government-wide environmental issues could play would be in communicating the “correct” balance to be struck between environmental and other considerations. The Memoranda of Understanding (MOUs), which Treasury Board is negotiating with government departments under the Increased Ministerial Authority and Accountability (IMAA) policy, could provide a model for institutionalizing the relationship between a central agency on the environment and line departments.

IMAA, the objectives of which are to give ministers and senior managers the increased authority and flexibility to deal with changing circumstances and to enhance the accountability of ministers and senior managers for the achievement of results, is being implemented through MOU negotiations between individual agencies and Treasury Board. These MOUs outline an accountability framework, including specific targets and annual management reports against which performance is to be monitored and evaluated over three-year cycles.

As a secondary role, the central environment agency might support the recently established Cabinet Committee on the Environment. The Committee, chaired by the Minister of the Environment, is symbolically important and could provide a useful strategic mechanism to foster government-wide accountability for environmental issues. The Committee, which includes the ministers of agriculture, forestry, energy and fisheries, has no budgetary responsibilities. Beyond its obvious coordinating and policy-making functions, the Committee could:

- sponsor the formulation of operational definitions of the term “sustainable development”;
- identify the priority areas for integrating environmental considerations into policy;
- develop frameworks to integrate environmental and economic issues more closely for the four sectors on the Committee;
- review and make recommendations about economic incentives which are environmentally harmful; and
- review the need for new institutional mechanisms to achieve the Government’s environmental objectives.

Taking the central agency model to its logical conclusion, it has been suggested that the Minister of the Environment should emulate the role played by the Minister of Finance. Just as the Minister of Finance sets down every year a fiscal framework within which all government departments must operate, so the Minister of the Environment could establish a periodic environmental policy framework specifying environmental objectives against which departments would formulate policy.

## PUBLIC INVOLVEMENT

A key prerequisite for successful policy assessments is the presence of strong, divergent, perspectives. In the United States, “the impact statement system depends on outsiders, public and private, having sufficient resources to challenge the intertwined technical and value premises of the organizations preparing the impact analysis” (Taylor 1984). Where there are few contending interests, or where adequate resources are lacking, policy assessment will not succeed. Challenge does not necessarily imply formal, adversarial public hearings as is the case in the United States. Such a process cannot easily be transplanted into the Canadian parliamentary system of government. It does mean that sufficient measures will be taken to oversee departmental and agency compliance once the objective of integrating environmental factors into policy-making has been accepted.

One of the most effective measures which could be taken to ensure that government departments consider and act on environmental issues would be to facilitate public involvement in policy-making. The term “public involvement” is very elastic and encompasses a wide spectrum of activities, each with different goals and degrees of commitment, ranging from public information to consultation to direct participation in decision-making. There is no single “best” public participation forum. Nor can an effective public participation program rely on only one or two events. Public participation in policy-making must take a “life-cycle approach”, one which covers all stages from policy development to project implementation.

The public involvement in the policy-making processes described in the two case studies was minimal or nonexistent. Although officials responsible for the pesticide review process agreed that environmental considerations must be taken into account, they perceived these matters to be essentially scientific in nature and a problem falling more or less exclusively within the domain of expert judgement. Members of the public — because they are not qualified — were assumed to have little or no capacity to make a relevant contribution to the deliberations. In the case of CEDIP, EMR’s definition of the decision to be made as nothing more than an efficiently designed incentives program foreclosed any need the Department might have perceived to solicit public views on environmental impacts.

The case studies are more helpful in illuminating the process of excluding public involvement than of integrating public contributions into the policy-making process. Thus, it is appropriate to restate the rationale for public involvement in policy-making:

- members of the public may have knowledge of environmental conditions and impacts that is superior to the information otherwise available to decision makers;

- public participation can introduce perspectives not otherwise available to decision makers, which will be particularly relevant where risk assessments and cost-benefit analyses form part of the decision-making process;
- public acceptability of policy decisions is in part related to the quality of the process leading to those decisions; thus, public confidence may be enhanced through public involvement in decision-making; and
- public participation in the policy-making process promotes the values and ideals of democratic citizenship and contributes to greater understanding of policy problems by the participants.

Public involvement in environmental assessment has traditionally faced several barriers including inadequate notice of intended government initiatives, government reluctance to consult with the affected publics, inaccessible information and inconsistent adherence to procedures. One of the most difficult barriers to overcome has been the lack of adequate financial resources. To help remedy this problem, FEARO has recommended a program of participant funding as part of a reformed EARP.

A fundamental issue raised by the integration of environmental factors at the policy level is the extent to which the consultation of third parties may be essential to its success. Policy choices are inherently subjective and require value judgements that, in a democratic society, should be negotiated rather than imposed. Susan Holtz, a member of the National Round Table on Environment and Economy, argues that "when we're talking about building environmental values and criteria into economic decisions and policy-making, we are necessarily talking about a constant process of negotiating these values and criteria" (Holtz undated).

Public involvement will be particularly important at the policy scoping level. In the United States, scoping meetings are commonly held with third parties to reach agreement on the issues which an environmental assessment hearing should consider. The views of third parties are not solicited as routinely at Canadian scoping hearings. Things are changing. Recently, the Ontario Environmental Assessment Board used a form of scoping at the beginning of its timber-management class environmental assessment hearings.

The Energy Options consultative process, the Task Force on Northern Conservation and the National Task Force on Environment and Economy are all recent examples of how the main issues in three different policy fields can be scoped in a public consultation process. It is worth noting that the processes were all led by multi-stakeholder advisory committees, they all produced unanimous reports and they all recommended that a far greater importance be accorded to environmental goals in the formulation of government policy.

Their apparent success seems to provide a recipe for public involvement in scoping factors to be considered in integrating environmental matters into policy.

## Identifying the Public

EMR already consults with companies producing, distributing and selling energy regularly and closely about its policy proposals. The interests of these stakeholders tend to be specific and are fairly easy to identify. Environmental interests, on the other hand, are, by their very nature, often diffuse and difficult to define. EMR's draft environmental screening-procedures manual understandably begs the question of "Who is an environmental stakeholder?" when it states that "where it is determined that there may be a potential for adverse impact from proposals, responsible officers should ensure that there is an opportunity for consultation and dialogue with the affected parties"(EMR 19885).

The Government has few incentives to consult with the public on environmental issues where the Government is not necessarily willing to accommodate public expectations. It has been suggested that elected politicians may resist involving the public where they perceive such involvement as infringing upon their power (Holtz undated). A test of the Government's commitment to integrating environmental factors into policy making will be its willingness to engage in public consultation anyway and, where necessary, to fund its critics.

There are clear limitations to the involvement of individuals in government policy-making. One legal scholar (Tuohy 1988) has recently argued:

*They have few information resources and no resources of organized political support. They will soon find themselves "outgunned" by the organized interests who will, willy-nilly, participate in policy-making; and hence they will have little impact upon the intelligence or the fairness of decisions and little experience of genuine participation. Policy arenas are, by and large, not amorphous. They are structured -- populated by organized interests. Institutional reforms which ignore this structure of organized interests, which proceed as if arenas were amorphous, will not have their intended effects...*

It will not be an easy matter to identify and involve representatives of the public. Few public interest groups, including environmental groups, have become stable participants in decision-making (O'Riordan 1976:61):

*Many environmental actions groups... do not enjoy the same internal cohesion as the well established lobbies because their members are seldom bound by*



*lasting ties and their leaders may be inexperienced in the art of political bargaining.*

## Forms of Involvement

If the issue of “Who is an environmental stakeholder?” in policy formulation or assessment is a difficult one, so are the issues of when and how public consultation should take place. There is substantial experience in public involvement in project-level environmental impact assessments (EIAs). How much of this experience can be transferred to policy assessment exercises?

There are at least five factors to consider in answering this question: objectives, audiences, consultation techniques, legal status and indicators of success.

### Objectives

The rationale for public involvement is likely to differ between a policy assessment and a project EIA. The latter typically seeks to engage interests and individuals with a direct concern in the issue at hand. Often, public involvement plays a critical role in determining whether the project proceeds and, if so, under what conditions. In a policy assessment, the objective for public involvement is less likely to focus on a specific “yes or no.” The objective may be more to establish a common understanding of issues, options and constraints. The Government may seek societal agreement on a broad policy direction or a consensus for action rather than support for the specific conditions under which a policy might be implemented.

### Audiences

The “publics” may well differ at the policy and project levels. A project EIA deals most often with focused issues and scope. The impacts, although not certain, are at least more easily predicted or identified. Consequently, public participation tends to focus on specific communities and interests. A policy assessment must deal with a far higher degree of uncertainty. Impacts are less easily predicted, particularly those at the local level which might naturally be expected to engage the interests of individuals and communities the most. Some have even suggested that the lack of evident, immediate and direct impacts could constitute a major barrier to public participation in a policy assessment. Whether or not this proves to be the case, the diffuse nature of policy impacts underscores the need to pay particular attention to consultation techniques aimed at involving different publics. It should be noted as well that a policy assessment will need to involve a far greater range of interests than a project EIA.

## Consultation Techniques

The differences between policy assessment and project EIA suggest that public involvement techniques used in each are likely to differ as well. Specific techniques will likely depend on the overall objectives being pursued. An effort to build consensus on a broadly defined policy area will require a different approach than one to consider a narrower area.

A policy assessment may require a more sustained effort than a project EIA to involve the full range of publics with an interest in the issue. This effort will be particularly important if public involvement is to extend beyond established stakeholders or if there are no apparent stakeholders. In other words, a richer combination of public involvement techniques and consultation forums may be required to encourage and facilitate public participation in a policy assessment exercise. A key issue here, as at the project level, will be the extent to which governments should actively support the involvement of selected groups through funding.

Another issue related to consultation techniques is the extent to which policy assessments can benefit from quasi-permanent consultative bodies representing a cross-section of stakeholder concerns. Such organizations can be important for resolving disputes, anticipating concerns, sharing information in a non-adversarial way, developing mutual trust and building consensus. The experience of the new Round Tables on Environment and Economy may provide a means of evaluating such consultation techniques.

### Legal Status

A further factor to consider is whether public involvement in a policy assessment should be a legal requirement or entitlement, or whether participation should be largely at the discretion of the policy makers. In some circumstances, statutory provision has been made for public involvement in the decision-making processes. In others, the common law governing entitlement to a “hearing” and the doctrine of fairness in administrative law require that persons whose interests may be affected by a decision be given an opportunity to present their views to the decision maker. These requirements, however, have generally not been held to apply to legislative or policy-oriented decisions.

### Indicators of Success

In a project EIA, a well-defined geographical scope, discrete objectives and a higher degree of certainty about impacts allow the development of indicators to measure the success of a public consultation exercise. Similar indicators in a policy assessment will be more difficult to develop given the large number of interests involved, the often broader geographical

scope and the uncertainty about impacts. At both the project and policy levels, however, a successful public involvement program is likely to be one which:

- informs all the interested public who need to participate;
- provides the forums which the public themselves said they wanted; and
- informs all of the final decision and the reasons for it.

## 6. SCIENTIFIC AND METHODOLOGICAL ISSUES

In order to incorporate environmental factors into the policy-making and assessment process effectively, the need for such an incorporation must be recognized and understood. The case study on CEDIP indicates how an implicit and informal process of scoping in the context of EMR's departmental culture narrowed the range of factors relevant to the decision to exclude environmental impacts from consideration.

But once the need to consider environmental impacts has been accepted, the inherent limitations in the methodological techniques of the environmental sciences may not allow a full understanding of the potential nature and magnitude of a policy's environmental consequences. These limitations vary to a significant degree upon the scope or definition given to the environment. For local impacts, cause-and-effect relationships can often be assessed through the application of deterministic science. This will be most likely where a small number of variables are involved.

Where the anticipated environmental impacts to be examined are more remote in space and time, cumulative in nature or the results of complex interactions, a different scientific approach will be required, involving probabilistic modelling and statistical associations to establish the connections among multiple stressors. At this level, it may not be possible to link cause and effect with confidence. A recent article in Harrowsmith (Reguly 1988) states with regard to the pesticide issue that:

*the relevant scientific discipline — a combination of toxicology and epidemiology — is at an early stage and may never develop to the point at which the accusing finger can single out the culprit and find him or her definitely guilty.*

### THE ADEQUACY AND AVAILABILITY OF DATA

The successful anticipation of future problems is based on the ability to forecast the possible consequences of a given action. This ability, in turn, depends on our knowledge of environmental processes. Such knowledge is still often remarkably superficial and stands in sharp contrast to the effort expended at recording and modelling all facets of economic activity. Deriving from an era in which economic growth was the prime policy concern, data on the national product, income and capital stock is about the production, distribution and consumption of goods and services and the economic transactions which accompany these processes.

It is now becoming apparent that our accounts are, at best, only a partial set of the overall accounts that are needed to accommodate all the crucial processes of production

including, for example, the production of atmospheric pollutants, and consumption, such as the health effects of eating chemicals in food. As a matter of priority, therefore, governments should invest in more research to develop a more comprehensive system of national accounts. In addition, forecasting techniques, the identification of early warning indicators for environmental planning and risk assessment methodologies, including cost/benefit analysis, need to be improved.

Extending social accounting systems to include environmental values would, as a first step, require innovative definitional and conceptual work. For example, it is by no means clear what many common property resources "produce". Until this issue has been resolved, analysts will be compelled to resort to measurements which assume that their productivity should be valued at zero or that it should be valued absolutely or that it should be reflected in the value of such things as surrounding real estate or that it is worth what groups of individuals would be willing to pay to keep it pristine, etc. Although such approaches all have their uses, they reflect an inconsistency and fragmentation of opinion on how to deal with phenomena that are not easily linked to the market.

The case studies, notably the one dealing with pesticides policy, suggest that data and information problems may be a limiting factor in policy assessment. The lack of data, or questions about their reliability where they are available, may undermine the ability of qualified scientists to analyze relevant impacts. Certain necessary data may not have been collected at all or, if collected, may not be available for use in the policy formulation and assessment process for a variety of reasons. Alternatively, available data may be inconsistent and of limited value. This position is reinforced in the State of the Environment Report (Environment Canada 1986:3): "Few efforts have been made to provide a comprehensive assessment of the state of the Canadian environment. Existing reports are regional and topical rather than national and comprehensive."

The lack of data has been attributed to several factors, but of those within the control of the federal government, a decline in research funding is among the most commonly cited. An example of such attrition is the Water Resources Research Support Program whose funding declined, in constant 1986 dollars, from a high of \$5 million in 1971 to \$250,000 in 1986, when the program was discontinued. The reduction in the funding of this and other programs widens the gap between the need for policy-relevant answers and the scientific ability to deliver them. If the human resource base able to provide a scientific perspective on the environmental aspects of policy is not soon increased, Canada's ability to implement effectively the environmental assessment of policy will be severely constrained.

When policy needs and the scientific response capability diverge, the achievement of objectives can become compromised. A case in point concerns the 1972 amendments to the U.S. Federal Insecticide, Fungicide and Rodenticide Act which required the Environmental Protection Agency to review the registration of all 35,000 compounds then in use within four years. This deadline was extended by one year in 1975 and eliminated entirely in 1978. It is now acknowledged that it will be many years before the list of pending reviews is exhausted (NRC 1980:46).

The availability and utility of data will vary dramatically according to the particular environmental impact under investigation. The following list of the current limitations to environmental reporting in Canada illustrates the challenges posed by data adequacy and availability in integrating environmental considerations at the policy level (Stakeholder Group 1987:10-12):

- no comprehensive network of information sources;
- no comprehensive framework describing the scope or extent of interactions between human actions and the environment;
- little knowledge of and often no means of obtaining data collected by industry, hospitals, universities and research institutions for their own specific purposes;
- data often designated confidential without apparent reason;
- gaps, inconsistencies and fragmentation in government data collection efforts;
- insufficient data to permit understanding of linkages between economic activity and resource activity or to permit effective risk analysis or epidemiological studies;
- no independent institution or agency capable of assembling environmental data and assisting in interpretation;
- inadequate ongoing national monitoring program to determine levels of toxic substances in human, fish and wildlife populations; and
- significant regional variations in the availability of data.

## THE INTEGRATION OF ENVIRONMENTAL SCIENCE INTO POLICY DECISIONS

Rapid technological change is a major source of uncertainty for decision makers. The pace of technological change is now such that it far outstrips the pace of change in ecosystems. As a result, technology is introduced, and often modified, long

before its environmental implications are fully understood. We may have to be more conservative in the future about the way new technology is introduced. It can no longer be assumed, for example, that a new chemical is benign just because it cannot be conclusively so demonstrated at the time of its introduction. Scientific and legal traditions have taught us to demand exacting standards of proof in assessments before making decisions. These traditions, which have generally served well in the social field, break down when the environment has to bear the onus of proof. In the words of the Macdonald Commission (RCEUD 1985:526):

*Institutional arrangements that are designed to deal with clear-cut disputes or problems are often unsuited to the resolution of environmental issues. More and more, environmental decisions depend on the application of ambiguous or provisional scientific and technical evidence to the very long-term questions that involve, or potentially affect, the interests of many parties, not all of whom are even identifiable.*

Another cause of uncertainty is that developmental benefits are, if sometimes difficult to calculate precisely, at least quantifiable. Environmental risks, on the other hand, generally remain unquantifiable, admittedly because we have devoted little effort to developing the necessary methodology. This creates a decision-making dilemma. Do we act now (often at great cost) before all the information is in and risk making the wrong decision? Or do we accumulate more evidence before acting, thereby running the risk of facing irreversible damage or even higher costs?

It is perhaps not surprising, given its intractable nature, that this dilemma has not always been resolved consistently. The United States, for example, has strenuously opposed stiffer acid rain controls on the grounds that enough scientific uncertainty remains to risk the wrong decision. In another case of similar scientific controversy, the depletion of the ozone layer by chlorofluocarbons (CFCs), the United States and other nations agreed to ban the production of CFCs even though economic alternatives were not available. In this instance, environmental and life-preservation values obviously overwhelmed scientific and economic concerns.

The data adequacy and availability issues are important in relation to the vital question of who must satisfy whom about the safety, or absence of safety, of the policy, process, project or product under review. The Chairman of the Pesticides Management Advisory Board was recently quoted as follows (Reguly 1988:99):

*Just as environmentalists cannot prove harm with any degree of certainty, so a defendant is not able to prove safety. It works both ways. Science today cannot tell whether this stuff is safe or that stuff is harmful. The only thing it can do is test animals and give an opinion on the acceptable risk.*

Judgement will be an inescapable component in any environmental assessment of policy. Who should bear the burden of proof becomes an important consideration when data are incomplete and expensive to acquire, and cause-and-effect relationships may be unclear. In this regard, a recent California law to regulate toxic substances deserves mention because it shifts this burden from government to industry. The initiative, remarkable for its brevity, simply states that business must warn the public if it knowingly exposes them to a substance that poses a significant risk of cancer or birth defects. The law also provides for citizen suits to force compliance (Roberts 1989).

It stands in remarkable contrast to the Government's recent Environmental Choice Program under which Environment Canada, assisted by outside experts, retains the initial onus for demonstrating that a product is environmentally sound leaving a technical committee of the Canadian Standards Association to be responsible for more detailed work. According to the chairperson of the experts' committee assisting Environment Canada, the task has proved "enormously complex" and the labelling program is proceeding more slowly than originally anticipated.

## **MONITORING AND ACCOUNTABILITY FOR POLICY ASSESSMENT**

Underlying much of the discussion about the environmental assessment of policy and of the impact of human activity on the environment generally is the assumption that a standard index for overall measurement of environmental quality, or sustainability, may be developed. Such a standard or benchmark, once developed and maintained on an ongoing basis, would become a tool for determining whether progress or deterioration was taking place. The State of the Environment Report expresses considerable doubt about the possibility that a single benchmark can be devised. Limited benchmarks, involving specific ecosystems, however, are possible and are being developed.

Even if it were possible to determine with the aid of some generally acceptable standard that environmental progress or deterioration was taking place, it would still likely be very difficult to associate the trend with particular government policies. Moreover, given the fact that actions within one jurisdiction affect environmental conditions in others, both inter-provincially and internationally, it may be impossible in some cases to associate direct cause and effect with the overall policies of the domestic government.

## 7. CONCLUSION

The systematic consideration of environmental issues in federal government policy would be a radical step. Paradoxically, it can be accommodated within the existing policy development process. Because of its upsetting nature, however, it will not succeed unless it is reinforced by a broad array of mutually supportive measures. There is no simple recipe to ensure that government effectively integrates environmental matters into its policy-making processes.

Several initiatives to achieve this goal, however, appear promising. In our view, the six most important are outlined below.

### Accountability

Environmental matters will be successfully integrated into government policy only when policy makers accept being held accountable for the environmental implications of their decisions. The Government already has available a variety of internal mechanisms to create greater environmental awareness and to promote accountability within departments and agencies. These include the annual planning cycle, program audits and evaluations, performance appraisals, memoranda to Cabinet, the development of new regulations, and the design of incentives to encourage and reward policy makers for minimizing the environmental consequences of their policy choices.

Although necessary, such mechanisms in themselves are unlikely to overcome the many barriers to greater **sectoral** accountability (see Chapter 5). An external source of pressure will be needed to surmount institutional resistance to change. A Parliamentary Commissioner for the Environment, with a mandate modelled on that of the Auditor General, could provide an effective source of such pressure by reporting regularly and publicly on the actions and processes federal government departments were implementing to consider environmental issues.

### Setting Objectives

The consideration of environmental issues in policy-making is a means to an end: more environmentally sustainable forms of economic development. This end, however, is too broad to provide practical guidance to the policy maker. It needs to be defined in operational terms which departments can use in designing their programs and policies. Each government

department, where appropriate, should be asked to define its own sustainable development objectives and prepare an action plan against which they could be audited by the Parliamentary Commissioner.

### Knowledge and Assessment Methodologies

At its most fundamental, the purpose of policy is to make the future different from the past. The successful anticipation of future problems is based on the ability to forecast the possible consequences of a given action. Where the anticipated environmental impacts to be examined are more remote in space and time, cumulative in nature or the results of complex interactions, it may not be possible to link cause and effect with confidence.

In A Framework for Discussion on the Environment, the federal government notes that "good science is essential for good environmental policy and sound regulation" (Environment Canada 1990) and proposes to increase significantly its commitment to environmental science. Such a commitment is clearly required to overcome the limits imposed on policy assessment by inconsistent or unavailable environmental information. In addition, the techniques on which policy makers rely to translate scientific data into socially valid conclusions, such as cost/benefit analysis, risk analysis, cumulative effects assessment and others, will need to be broadened in order to take greater account of the environment. New techniques, such as natural resource accounting or backcasting, through which policy is developed in light of a desired scenario, will also have to be applied.

### Public Consultation

By its very nature, policy-making involves trade-offs. When the scope of policy-making is broadened to include environmental considerations, these trade-offs become more complex because the value judgements underlying them are themselves made more explicit. These judgements should not be made by government alone where the policy issues at stake are controversial or imply significant environmental impacts. Recent multi-stakeholder consultation exercises in northern conservation, energy policy, the regulation of toxic chemicals, forestry management and environment/economy integration provide successful models for consulting with the public on major policies. These should be replicated as part of an effort to involve all stakeholders in promoting sustainable development.

## Measuring Success

One of the greatest challenges in integrating environmental factors into policy-making is to measure the resultant improvements in environmental quality, or more difficult still, the deterioration which has successfully been avoided. New techniques will have to be devised to provide both the public and the policy maker with indicators of success. In this connection, the Government is proposing to incorporate environmental considerations into Canada's system of national economic accounts. A system of sustainable development indicators, periodically measuring change in selected key variables, would provide a useful addition to such a system of accounts. Consistent state-of-the-environment reports are a third means for measuring progress.

Two important observations need to be made about these techniques. The first is that their purpose is not merely to provide information about the environment and natural resources useful to policy makers but also to reinforce political accountability. Just as the Government is called to account when key economic indicators deteriorate, so to should environmental information be sufficiently accessible and reliable to provide a fair measure of a government's environmental performance.

The second observation is that the measurement of success will only be credible and, therefore politically legitimate, if it is conducted by an authoritative agency demonstrably free from political influence. This test has been met in the case of natural resource accounting because Statistics Canada has achieved the necessary degree of independence. The

preparation of state-of-the-environment reports, which is presently coordinated by Environment Canada on behalf of the Government as a whole, should be transferred to a private institution operating at arms length from government.

## Internal Administrative Issues

The routine consideration of environmental issues in policy will require a profound change in attitudes in most **sectoral** departments of government. It will also require that departmental policy analysts broaden their skills so they can effectively consider environmental factors. This broadening will have implications for staff development, recruitment, performance evaluation and interdepartmental consultations, among other factors.

Placing a greater priority on environmental issues also implies changes in the government machinery. Because the environment cuts across government policy, a mechanism to co-ordinate environmental policy and signify the proper balance to be struck between it and other considerations will be needed.

Rising public concern over the deteriorating condition of the environment suggests that there is already considerable public support for these initiatives. The Brundtland Commission, the National Task Force on Environment and Economy and the **Macdonald** Commission have all recommended that environmental considerations be factored into the policy-making process. It is now up to elected politicians to initiate the necessary institutional and procedural changes to make it happen.

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## APPENDIX I: REVIEW OF THE CASE STUDIES CONDUCTED IN PART I

Two interrelated themes emerge from the case studies. The first is that the conceptual approaches most often used to define issues are too narrow. If Canadians are now muddling through environmental problems, it is not so much because of confusion about the causes of these problems as a persistent tendency to think in highly **compartmentalized** ways. The policy maker's instinct is to draw neat boundaries around a problem, to work only within the confines of these boundaries and not to acknowledge important effect ("externalities") extending beyond. Thus, until recently, the "good" agricultural policy maker would promote agriculture even though his efforts resulted in overproduction, an unsustainable farm population, a decline in wetlands, and the presence of pesticide residues in food and water. In a similar vein, municipal governments look for new places where to dump solid wastes until they run out of them, rather than undertake a waste-reduction strategy.

In this context, what "muddling through" really means is an administrative system functioning as it was designed to, with everyone responsibly doing his job and protecting his interests, but with no one responsible for gauging whether the sum of all these individual interests adds up to the societal interest. The "invisible hand" does not accomplish its purpose when decision-making is compartmentalized.

A second theme running through the case studies is that limits to growth can no longer be ignored. In the past, policy

makers have not had to worry about limits to growth because the limits could be pushed back ("the frontier ethic") or appeared distant enough to be irrelevant. Intergenerational equity was not a concern when natural resources were plentiful and human impacts low. It is now clear that resources previously regarded as boundless, such as clean air, pure water, tropical forests and the oceans, are finite. In a world increasingly stressed by human impacts, the failure to address rising environmental degradation will reduce the options available to future generations. Yet, addressing these problems will challenge the very basis of conventional economic policy.

Each of the case studies, in its own way, suggests that historic watersheds are being approached in the sectors that were reviewed. There are no more receptive backyards in which to dump garbage; energy security can no longer be achieved merely by drilling new oil wells; increased agricultural production can no longer be achieved without environmental consequences; representative ecosystems cannot be protected exclusively on lands industrial development has passed by.

Table 1 compares the case studies in summary form. The complete studies are available separately from CEARC. Only the key conclusions from each are given here.



POLICY ISSUE	PRAIRIES AGRICULTURE	NATIONAL ENERGY PROGRAM
Nature and development of the policy. (1)	Actually different policies with different origins and purposes. Multi-faceted, "amorphous", evolutionary. Mostly legislated.	Clearly defined in policy statement but with "hidden agenda" and no public input. Produced legislation.
Were environmental risks knowable, known, taken into account, ignored? (2, 3, 6)	To a large extent not knowable when policy developed. Not totally neglected but not high priority.	Knowable and known. Not totally ignored but treated as someone else's problem.
Actual environmental consequences: serious, minor, none, still uncertain. (4)	Major, some seriously detrimental.	Physical/biological: minor. Social: major, but not necessarily all adverse.
Have policy modifications been made due to environmental consequences? major, minor, none (5)	Not significantly.	Mitigative <i>actions</i> were undertaken.
What <i>should</i> have been built into policy from an environmental standpoint? (7)	Not really a relevant question in relation to circumstances of the fairly distant past.	The question in this case really relates to the soundness of the policy as a whole from an environmental standpoint.
Institutional arrangements: positive, negative, neutral (8)	Negative, due to fragmented jurisdiction.	The NEP brought about some positive institutional changes.
General conclusions/comments (includes 9)	Positive change requires a better understanding: (a) reals costs (b) agriculture in socio-political context.	Clearly illuminates the key issue of how to evaluate a major policy in environmental terms.

TABLE 1. A Summary of Case Studies

NATIONAL PARKS	LAND CLAIMS	METRO SOLID WASTE
Evolutionary; objectives fairly well defined; embodied in legislation.	A series of policy statements intended to resolve the aboriginal land rights issue. No legislation.	Evolutionary, diffuse, unclear. Considerable public input. Greatly affected by environmental protection legislation.
Risks minor, but could have been better anticipated.	Knowable but generally ignored. Not regarded as a central consideration.	Environmental considerations very largely governed the evolution of the policy.
Minor.	Substantial; mixture of positive and negative.	Serious consequences of <i>non-policy</i> ; consequences of policy remain to be seen.
Mitigative actions being undertaken continually.	Modified, but probably not as a direct response to environmental consequences.	Major.
Nothing identified.	Recognition of the goal of aboriginal self-sufficiency based on wise resource use.	The question in this case is: what should have been built into the <i>environmental</i> policy from the standpoint of other objectives?
Better means needed to take national park goals into account in the development of other policies.	Neutral to somewhat negative.	Uncertain (debatable) but clearly negative in some respects.
E.I.A. of <i>other policies</i> and programs would be advantageous from a national parks standpoint.	Demonstrates the need for understanding of social, economic, political, environmental interconnections as a basis for EIA.	Raises the issue of how to <i>balance</i> environmental protection against other needs.

## Agriculture Policy for the Prairie Provinces

Prairie agriculture is characterized by high fixed costs, low profitability and unpredictable markets and crop conditions. As an industry, prairie agriculture raises several environmental issues. One is conservation, the preservation of the soil's productivity for future generations. Another is environmental damage, the effect which agricultural practices have had on other resources, such as wildlife and water. A third is the damage which other economic sectors inflict on agriculture. A fourth issue, essentially social but having environmental overtones, concerns how agriculture will have to be restructured in the coming decades in response to changing economic conditions.

The case study on prairie agriculture spans a long period, roughly from 1900 to the present, over which perceptions of the environment changed greatly. For much of the period, the environment was perceived essentially as hostile nature to be tamed to serve human goals. When, in the Dust Bowl of the 1930s, the environment could no longer support an agricultural system that had become overextended, farming practices and land uses were re-oriented. The approach of the time was essentially technocratic, based on the belief that the environment could be engineered scientifically better to serve humanity.

The agricultural case study reveals that there are close connections between environmental and social factors. Many of the problems of prairie agriculture stem from the fact that, in response to both market forces and government policy, too many people have been encouraged into an extensive and intensive overuse of the land. To be efficient in both an environmental and economic sense, the prairie agricultural sector would need to shrink. Yet, the concept of reducing the number of farms, farmers and farm size has enormous social ramifications.

A consideration of the impact of agricultural policy is hampered by large data gaps. More information is needed on the full costs of agriculture, particularly costs which arise out of soil loss, the dispersal of chemicals, the draining of wetlands, the costs of dredging resulting from agricultural practices, etc. Costs to agriculture from the activities of other economic sectors must also be given more attention, especially the major costs arising out of future climate change.

Agricultural policies are very sensitive politically, a fact which makes policy formulation more difficult. The process of developing more environmentally benign agricultural policies is hampered by multiple jurisdictions and the existence of powerful vested interests.

The application of EIA to agricultural policy is a much larger question than one of methodological technique. This application requires an understanding of the institutional

factors surrounding such policies, as well as a rigorous definition of the objectives which the policies are meant to pursue. These institutional factors are complex because prairie agriculture has become a way of life for a large population.

## The National Energy Program

The National Energy Program (NEP) must be seen in the context of how industrialized countries have traditionally managed their energy resources. Taken as a block, these countries have consumed more energy than they have produced (Canada is one of the few exceptions), and have consumed much of it wastefully. The high rates of energy consumption in the industrialized world are responsible for a sharp deterioration of the world environment and will arguably perpetuate global economic imbalances.

The traditional preoccupation of energy policy makers has been to increase energy supplies to meet a demand thought to grow independent of policy. This approach has implicitly traded off preserving environmental quality in favour of increasing energy supplies: no other economic sector has as great an impact on the environment as energy production, distribution and use. In the words of the Brundtland Commission, "choosing an energy strategy inevitably means choosing an environmental strategy."

The NEP represented the culmination of the policies the Canadian government had been pursuing since the early 1970s. Developed in secrecy during a time of crisis, the NEP defined the critical energy issues in 1980 as oil availability and price. Although several solutions were advanced to meet these issues, the one which commanded the most resources was the exploration for new sources of oil in Canada's frontier regions. Billions of exploration dollars were transferred from the western provinces to the Arctic and the East Coast offshore in an attempt to make Canada oil self-sufficient.

The NEP acknowledged that some environmental costs were inevitable in hastening the pace of frontier exploration and development. Accordingly, it strengthened the regulatory regime to control these costs. This approach, however, was not rooted in any systematic consideration of environmental risk and it provided for assessment and monitoring only on a case-by-case basis.

Less environmentally risky alternatives to meeting the Government's energy security objective were available at the time and their existence recognized (i.e., the creation of a strategic petroleum reserve, greater emphasis on the promotion of energy efficiency). Some of these, such as allowing the domestic price to rise to international levels were deemed to be politically and economically unacceptable. Ultimately, the NEP's unstated objective (a redistribution of political and economic power in favour of the federal

government) dictated a choice of policy instruments which precluded the full consideration of environmentally more benign strategies.

## National Parks Policy

The establishment of a park inherently forces a trade-off between environmental and economic values, between protecting the land and developing it. The fact that new parks are established only with considerable difficulty shows this trade-off has historically been weighted towards development factors. At the federal level, Environment Canada has set the prime purpose of national parks as the preservation of natural landscapes for the enjoyment of present and future generations. The provinces take a much more varied approach which recognizes not only conservation but also industrial and recreational use. The case study described the Canada Heritage Lands concept which would, in a single area, provide for the conservation of core lands while, at the same time, allowing other uses in areas with less essential habitat.

The balance implied by multiple use cannot always be struck. In certain areas, such as Lancaster Sound and South Moresby, preservation and development appear as mutually exclusive objectives. In these instances, the outcome of such conflict is most often determined by the relative effectiveness of the various stakeholders in the issue. National parks policy, although backed by Canada's most powerful conservation legislation, accordingly often has to bend to other policies and programs, many of which have a weaker legislative base. Parks policy shows that not all policies are "created equal". A policy EIA must take into account the importance and momentum of a policy relative to its competitors.

In a different vein, the legal requirement to preserve national parks in their natural state can lead to unintended consequences. For example, without the establishment of buffer strips, protection requirements within parks may direct development and associated impacts onto adjacent lands. The complete protection of a park's environment can also lead to the creation of artificial ecosystems such as forests without the natural renewal resulting from fires.

More than most other policies, parks policies are characterized by a heavy commitment to public consultation, both during policy formulation and during implementation. This practice tends to bring the resolution of conflict, including the trade-off between environmental and economic values, to the forefront of the process where it can be addressed openly.

## Federal Land Claims Policy

The federal aboriginal claims policy can trace its roots back two centuries to the Royal Proclamation of 1763. Yet, despite

the negotiation of several treaties with various Indian communities since then, almost half of Canada is still not covered by treaties and is still subject to aboriginal claims. These "comprehensive" claims exist principally in the two Territories, British Columbia, Quebec and Labrador.

The modern land claims policy dates back to the mid-1970s. Its environmental implications are less direct than those of the other policies that have been reviewed by this study as they depend largely on the institutional approaches developed to share environmental management functions between government and aboriginal organizations. At its inception, the policy paid no attention to its potential environmental impacts. Perhaps more surprisingly, the policy paid scant attention to the long-term social and economic needs of the aboriginal peoples affected by the policy and the extent to which these needs could be met by the wise use of nearby resources.

The policy's main objective has been legal in nature: the complete, final, elimination of the common law land rights of aboriginal occupants in exchange for precise amounts of land, cash, hunting rights and certain advisory powers in resource management. The adversarial assumptions behind this objective, and its intolerance towards ambiguity of result, have made modification of the policy difficult.

Although aboriginal groups have many motives for settling their claims, their aim to exert greater control over the renewable resources upon which they depend is one of the main driving forces behind negotiations. Unfortunately, where claims have altered institutional responsibilities for the administration and conservation of natural resources, the net effect has often been merely to add new layers of advisory functions. It is far from clear whether such bureaucratic proliferation will be either efficient or cumbersome.

Despite the promising efforts of the 1985 Task Force to Review Comprehensive Claims Policy, the current policy does not explicitly commit itself to the goal of maximum aboriginal self-sufficiency through the sustained use of land resources.

## Solid-waste Management in Metropolitan Toronto

While the problem of solid-waste disposal in the Metropolitan Toronto area is strictly speaking a local one, it is also a manifestation of a problem of national scale. Most Canadians now live in urban centres, many of which face waste disposal problems that do not differ much from those of Toronto.

Waste management was not identified as a significant environmental issue in the Toronto area until the problem was far advanced. This situation is typical of cumulative environmental effects where each increment appears very small in relation to the problem as a whole or the

environment's absorptive capacity. The main reasons for neglecting the issue in this case were the rapidity in the growth in waste volume and in the proportion of non-biodegradable content and the fragmentation of responsibility, with local municipalities, the Metro government and provincial authorities all having different and changing roles.

The history of waste management in the Toronto area is one of compartmentalizing problems (e.g., protecting the environment, disposing of wastes) and responding to rather than anticipating them through similarly compartmentalized areas of responsibility. Had there been a single focus for all

authorities, it is likely that the problems would have been identified earlier, defined more clearly and addressed more effectively.

The problem of waste management cannot be solved by looking for means of disposal, any more than community health can be achieved by merely treating the sick. The issue involves underlying social attitudes, major economic and environmental questions and a variety of government agencies. Of these, social attitudes – the desire to externalize lifestyle costs as expressed in the “not-in-my-backyard (NIMBY) syndrome” – have proven to be the most difficult to change.

## APPENDIX II: REPORT ON THE FIRST WORKSHOP, APRIL 1988

The Canadian Environmental Assessment Research Council (CEARC) commissioned the Rawson Academy of Aquatic Science in September 1987 to initiate a pilot project to review the impacts of government policies on the environment. As part of the project, the Rawson Academy convened a workshop on April 5, 1988 to consider four main questions:

1. Is the environmental assessment of policy necessary to the integration of environmental and economic factors in government decision-making?
2. What are the main issues and barriers to the introduction of policy assessment?
3. How should these barriers be overcome?
4. What are the key unresolved areas for further analysis?

The workshop participants are listed at the end of this appendix.

### Is the Environmental Assessment of Policy Necessary?

The workshop participants agreed with the proposition that government policies should be assessed for both their environmental and economic impacts. It was noted that, over time, environmental factors will inevitably come to play a larger role in public policy. The remarkably rapid change in public attitudes towards the environment over the last two decades was cited to support this view. An increasing number of policy makers are becoming aware of the need to pay greater heed to environmental factors and accept that environmental degradation may reduce economic opportunities. Many others, however, remain to be convinced. It is important that the compelling evidence on the interrelationship between environmental and economic policy be brought to the attention of all policy makers in light of the fact that government will clearly have to play a large role in the promotion of economic policies that are environmentally sustainable. It was noted, however, that government conducts fundamental policy reviews infrequently and that environmental and economic decision making will largely have to be integrated incrementally into the existing policies.

### Issues and Barriers

One of the workshop participants commented that environmental policy is a "juvenile" policy by comparison to other policy fields such as education and health. Institutions

to address environmental issues are not as well developed and the necessary consensus for social action is not yet equally advanced. Yet, because of the speed at which the environment is being degraded, policy changes will have to be made much more rapidly than was necessary in the case of either health or education.

A discussant felt that the debate over the environmental assessment of policy is handicapped by the absence of a widely agreed definition of the term "sustainable development". He suggested that Environment Canada should help to define the term and identify in which areas the environmental assessment of policy is most urgent. While not disagreeing with this suggestion, another participant argued that a precise definition of sustainable development is not essential to the timely pursuit of sustainable policies.

Notwithstanding the vagueness of the concept, all agreed that the main barrier to the implementation of sustainable policies is not definitional but rather political in that the consequences of its application, according to one participant, could be very upsetting. Current government agricultural policies, which allow and, sometimes encourage, farmers to mine the soil, were cited as an example of how far some policies are from the sustainable development ideal. It was argued that, in this instance, it was unrealistic to expect substantial change in policy orientation until the main beneficiaries of the current policies, the farmers themselves, understood the need for change. Agriculture was thus mentioned as one area where government must show leadership in communicating the need for sustainable development.

It was noted that perhaps the greatest barrier to the introduction of environmentally sustainable policies was institutional. Institutions which owe their existence to the status quo will seldom challenge it vigorously. Outside pressure will thus be needed to effect change and heighten concern about the environment throughout government. A great deal of the workshop's discussion focused on this issue.

Finally, three potential barriers to change were noted:

- the federal and provincial governments share jurisdiction over the economy and the environment; neither level of government is free to move completely independently of the other;
- although public concern about the environment is high, it is unclear how much consumers and tax payers are willing to pay for a healthier environment; there is evidence to suggest, however, that they will pay more in many cases; and

- for electoral reasons, governments have tended to place greater weight on short-term quantifiable objectives, such as the creation of jobs, than on the realisation of environmental goals which, by their very nature, are often vaguer and longer term. The 1985 election of the Liberal government of Ontario, however, may indicate that environmental issues are catching up to economic issues on the political agenda.

## Overcoming Barriers

This was the focus for most of the discussion. It was recognised at the outset that a system of incentives that encouraged voluntary improvement by the private and public sectors was more likely to succeed in the promotion of sustainable development than a regulatory approach. The workshop participants, however, devoted most of the discussion to two other strategies: institutional reform and communications.

## Institutional Reform

The National Task Force on Environment and Economy has recommended that all Cabinet submissions include a section on environmental impacts. This recommendation was the subject of some debate during the workshop. One participant argued that such a step would help decision makers to focus on environmental concerns. Other participants disagreed claiming that the preparation of an environmental section in Cabinet memoranda could easily become a “mechanistic” exercise that would “debase the currency”.

Another of the Task Force’s recommendations was that the Minister of the Environment be appointed to the Priorities and Planning Committee of Cabinet. Here, too, there was scepticism expressed about the value of such a step as it was felt it would be largely symbolic unless accompanied by more substantial reform. Although a strategy for institutional reform was not discussed as such, workshop participants agreed that changing the way we think about the environment was fundamental to the successful integration of environmental factors into decision-making.

This integration would have to be the responsibility of all departments and not just that of the Department of the Environment. One speaker argued that all ministers should consider themselves as environment ministers and that they would find political advantage to do so given the high public interest in the issue. It was noted that a few departments, such as Energy, Mines and Resources (EMR), had recently created or were strengthening their environmental units. They still constituted only a small minority of federal agencies to have done so. Through the Energy Options process, EMR has also invested considerable effort into examining the application of sustainable development concepts to energy policy.

Participants paid close attention to two initiatives — one in Great Britain, the other in New Zealand — designed to sustain those governments’ efforts in environmental protection. The British initiative has involved the creation of a standing royal commission on the environment reporting annually to Parliament. This commission is composed of representatives of various environmental stakeholders to give it greater legitimacy. In addition to a general report, it chooses an issue each year for detailed analysis. It was noted that the British Department of the Environment has occasionally used the Commission to bring greater public attention to certain issues.

New Zealand has chosen to appoint an environmental commissioner to audit the government’s environmental record and to report to Parliament on the adequacy of New Zealand’s environmental laws and on their application. Although the appointment of an environmental commissioner reporting to Parliament would be consistent with the approach Canada has followed recently in other areas of public policy, such as official languages, access to information and government ethics, several participants were sceptical of the Government’s readiness to accept yet another “watchdog”. It was noted, however, that an independent agency was more likely to succeed in reinforcing the Government’s efforts to promote sustainable development than existing public institutions.

## Communications

The workshop participants agreed that public concern over the environment is very high but they were unsure of how well Canadians understand the complexity of environmental issues. The importance of communicating to the public the long-term nature of Canada’s environmental problems and the absence of “quick fix” solutions was underlined. It was suggested that the Minister of the Environment might usefully deliver an annual address on the “state of the Canadian environment” as part of an overall government communications effort to inform Canadians of the environmental achievements and the nature of remaining threats.

This communications effort would also have to be directed inward to the Government itself as most departments still do not fully appreciate the economic dimension of the environmental problems facing the country. In this context, it was asked how the development of sustainable policies could be made into a positive exercise. How could early success be communicated? How could positive steps be reinforced? The same speaker underlined the importance of celebrating environmental achievements more loudly since “nothing breeds success like success.”

## Further Research

Over the course of the workshop, several areas were suggested as possible topics for further research:

- defining the various dimensions of the concept “sustainable development”;
- identifying priority areas for the application of the environmental assessment of policy; energy, and in particular, transportation fuels, was suggested as one area where sustainable development strategies were required;
- developing incentives to encourage industry to incorporate environmental factors into their economic decisions; and
- investigating the appropriateness of creating a government environmental watchdog, either an “auditor-general for the environment” or a standing royal commission on the environment.

## CONCLUSION

The difficulty of quantifying the urgency of implementing environmentally sustainable policies was noted by several speakers. In the view of one participant, the Government has a clear choice: it can neglect the issue and effectively turn it into no more than a “cottage industry” or it can take advantage of the supportive public mood to break new ground. It was noted that public and industry expectations were high in the wake of the National Task Force on Environment and Economy report and that the Government needed to demonstrate its commitment to the Task Force’s recommendations if industry was to continue participating in the process.

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### **Dalton Camp**

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### **Mr. Roy Aitken**

Executive Vice-President  
INCO Ltd.  
and

### **Ms. Grace Patterson**

Vice-Chairperson  
Ontario Environmental Assessment Board,  
were invited but were unable to attend.



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## APPENDIX III: WORKSHOP AGENDA AND LIST OF PARTICIPANTS, FEBRUARY 1989

### Project on the Integrated Assessment of Policy

The Park Lane Hotel  
111 Cooper Street  
OTTAWA

February 10, 1989

### WORKSHOP AGENDA

- 9:30** Chairman's Opening Remarks (objectives of study, introduction of participants)
- 9:45** Presentation of issues raised in the case studies
- 10:00** Identification of barriers to the integrated assessment of policy

**11:00** Discussion of issues:

What is the proper scope of issues to be included in integrated policy assessment?

**12:00** Lunch

**12:30** Discussion continued:

Who should carry out integrated policy assessments?  
When should such assessments be done?

How should departmental accountability for the environmental implication of their actions be fostered?  
What should be the role of central agencies in integrated policy assessment?

How important is the consultation of third parties to integrated policy assessment?  
How will success be determined?

**3:15** Closing comments by working group and participants

**3:30** Workshop ends

## LIST OF WORKSHOP PARTICIPANTS

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**Stephen Hazell**

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**Louise Kingsley**

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**John Merritt**

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