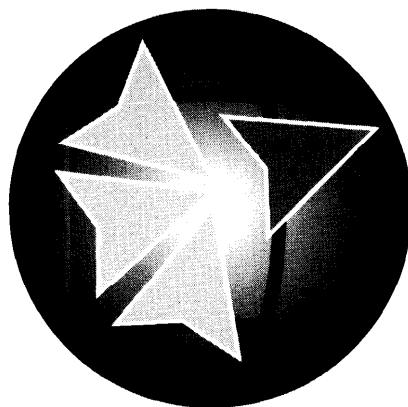


**ENVIRONMENTAL ASSESSMENT
IN CANADA**

**ACHIEVEMENTS,
CHALLENGES AND
DIRECTIONS**



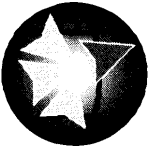
A Report in Support of the
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INTRODUCTION

Has environmental assessment achieved its goal of helping us reach better decisions? This is the fundamental question that all of us as environmental assessment practitioners must begin to address seriously and systematically. "

*Michel Dorais, President,
Canadian Environmental
Assessment Agency*

Is environmental assessment useful and relevant? Is environmental assessment helping to achieve sustainable development in Canada? Is pollution reduced or prevented as a result of environmental assessment? Is biodiversity protected? Are ecosystems essential to the prosperity of present and future generations of Canadians better protected? Is environmental assessment helping decision-makers make informed choices by providing sound information about likely environmental effects of projects and policies?

This report attempts to address these questions for Canada. The report summarizes Canada's efforts to achieve relevant and useful environmental assessment processes that contribute to sustainable development. The report also summarizes achievements, challenges and future directions for environmental assessment in Canada.

This report is offered as part of Canada's contribution to the International Study of the Effectiveness of Environmental Assessment, an initiative sponsored by the Canadian Environmental Assessment Agency, and the International Association of Impact Assessment and its member countries and organizations.



ACHIEVEMENTS

Environmental assessment in Canada has come far in recent years. Application is more rigorous, where it once was sporadic. Environmental assessment processes are more open and accessible to the public. Recognition among proponents that environmental assessment can result in better projects is growing. Decision makers treat the process and results of environmental assessment more seriously.

Improving the Processes

Environmental assessment processes are better established, increasingly sophisticated, and more responsive to needs of proponents and the public. Achievements include:

Entrenching Legal Requirements for Environmental Assessment

All provinces and the federal government now have legislated requirements for environmental assessment of projects. Legislative entrenchment has enhanced the stature of environmental assessment processes, and led to greater seriousness of purpose on the part of government leaders, public servants, and proponents in carrying out their duties.

Integrating Environmental Considerations Into Proposed Policies, Programs, and Plans

Assessment of environmental effects of proposed policies submitted for consideration by the federal Cabinet is required as a matter of policy. The use of environmental assessments of policies, programs and plans (i.e., strategic environmental assessment) is increasing in frequency at all levels of government. A new federal law establishes a Commissioner of Environment and Sustainable Development and requires federal departments to prepare sustainable development strategies.

OECD Environmental Performance Reviews: Canada, 1995

Notable achievements have been made in integrating environmental considerations into economic and sectoral policies. Examples include the legislated environmental assessment process, [and] the environmental analysis of policy proposals and legislation.”



Harmonizing Requirements between Federal and Provincial Governments

Environmental assessment regimes of federal and provincial governments are being harmonized to improve efficiency in the review of project proposals involving both levels of government. The federal government has ratified harmonization agreements with Alberta and Manitoba, has signed an agreement in principle with British Columbia, and is negotiating with other provinces. These agreements recognize that both the federal and provincial levels of government have interests and obligations with respect to environmental assessment of projects, and that cooperative approaches are the best way to ensure effective and efficient processes.

Canada-British Columbia Harmonization Agreement

The Agreement guarantees the federal government and affected aboriginal peoples the right to participate on provincial environmental assessment review committees and delegates the conduct of federal screenings and comprehensive studies to the provincial government, where both processes apply.

Alpac Pulp Mill

"The final [pulp and paper/ mill process is probably better than the original one as a result of the [environmental assessment/ reviews and the delays. It is interesting how the entire industry has now accepted as normal what we pioneered We were the leaders - we shifted the entire industry. "

Alberta-Pacific Pulp Mill representative

Integrating Environmental Considerations Into Project Planning and Design

Proponents are using information generated from environmental assessments to influence the planning and design of their projects, as well as to mitigate anticipated adverse environmental effects.



Developing Effective Approaches to Transboundary Assessments

The Canadian Environmental Assessment Act includes provisions that allow the federal Minister of Environment to establish a public review where a project is likely to result in significant environmental effects across international and provincial/territorial boundaries where there is no other federal involvement in the project. As well, the federal and most provincial governments have agreed on approaches to implement the **Convention on Environmental Assessment in a Transboundary Context** (Espoo Convention) that Canada has signed.

The Tulsequah Chief Mine

The Tulsequah Chief Mine is located in northern British Columbia, 30 km from the Canada-US. border. The project committee for the environmental assessment of a proposal to reopen the mine included representatives from Canadian governments, aboriginal peoples, and U.S. federal and Alaska state agencies. Although project details are not final, the value of an open planning process that examines the impacts of the project as a whole irrespective of political boundaries was clearly demonstrated.

The Federal Public Registry

Developed to facilitate public participation in the environmental assessment process, the **Public Registry** holds all records produced, collected or submitted for the environmental assessment of projects involving the federal government. The **Public Registry** is accessible through the **Federal Environmental Assessment Index** at the Internet site of the **Canadian Environment & Assessment Agency** (<http://www.ceaa.gc.ca>).

The Agency received a prize for outstanding achievement under the 1995 Federal Awards Program for the Agency's innovative approach to management of information and technology.

Facilitating Better Informed and Broader Public Participation

Requirements for public participation are broadening the range of expertise and information available to environmental assessments. At the same time, public participation requirements are providing communities affected by proposed projects with better opportunities to ensure that their concerns are heard by decision-makers. These opportunities for information exchange are critical to understanding the environmental effects of projects and related public concerns. Electronic, Internet-accessible systems, such as the federal Public Registry, are improving public access to environmental assessment information.



Using Innovative Approaches to Dispute Resolution

New approaches to dispute resolution, such as mediation, are now available in environmental assessment. Such approaches may be successful – for all stakeholders – in resolving thorny disputes about controversial projects.

Providing Better Information to Decision-makers

In Canada, there is a growing recognition that environmental assessment must provide decision-makers (e.g., cabinet ministers, senior officials, regulatory authorities) with timely, relevant, and credible information and show that environmental assessment can actually improve decisions. Environmental assessments must be presented in ways that meet the information needs of decision makers. Evidence of broader acceptance of strategic environmental assessment, as well as project environmental assessment, among decision makers is a good signal that environmental assessment is gaining credibility.

Mediation – Bureau d'audiences publiques sur l'environnement (BAPE)

The Quebec Minister of Environment has authority to request BAPE to conduct an environmental assessment of a project by way of mediation and inquiry. In such a case the BAPE commissioner meets with the parties to seek a joint solution. Where agreement cannot be reached, or the Minister believes that the agreement does not protect the environment and the public interest, the project is referred for public hearings by a BAPE review board

Since 1978, mediation has been employed 28 times, with a success rate of 75 per cent. Mediation has reduced the need for hearings, saving time and costs, and has allowed communities to participate in devising solutions.

Grimsby Landfill

Innovative approaches were employed in the environmental assessment of a new solid waste landfill site near Grimsby in southern Ontario. The proponent and local citizens first agreed to a process, then worked through a technical review, mediation and arbitration. The process, which included "final offer selection" in the arbitration, avoided a long and expensive hearing process.



Improving Environmental Assessment Methodologies

Improvements in environmental assessment methodologies are resulting in better and more accurate predictions of environmental effects:

Better Scoping of Projects and Assessments

Proper scoping of projects and assessments is crucial to effective and efficient environmental assessment. Scoping approaches are being used to focus environmental assessments and reduce the often voluminous documentation that has often been demanded or prepared and to narrow the issues that proponents must address in their environmental impact statements.

Northumberland Strait Crossing Project (Fixed Link)

This project is a 14 km bridge between Prince Edward Island and New Brunswick. The federal government required the developer to prepare a comprehensive environmental management plan to use as the basis for the contract providing federal funding for the project.

Ontario Class EA Process

Environmental assessment is streamlined in Ontario through the use of a class process for projects having similar characteristics. This allows proponents to conduct planning for certain projects more easily, efficiently and cost-effectively as it involves the direct participation of regulatory agencies rather than formal government review.

Assessing Cumulative Environmental Effects

The assessment of cumulative environmental effects is now required by law in several Canadian jurisdictions, and the Canadian Environmental Assessment Agency, among others, has prepared guidance material for such assessments. However, determining how the environmental effects from a proposed project interact with effects from other existing or proposed projects in a given watershed or airshed remains a difficult challenge requiring further research.



Developing Environmental Management Plans

In Canada, environmental assessment is being used as a basis for environmental management plans related to the ongoing operations of a project. These plans keep decision-makers current with progress in meeting the environmental challenges of a project and provide an approach to ensure that mitigation measures, monitoring and follow-up programs are carried out.

Using Multi-stakeholder Committees

Environmental assessments often involve more than one jurisdiction and many interested stakeholders. Recent Canadian environmental assessments have recommended multi-stakeholder advisory committees to coordinate more effectively ways of dealing with environmental challenges posed by projects.

Northern Rivers Basin Study

The Northern Rivers Basin Study - an output of the Alpac environmental assessment - is providing baseline information on water quality and fish ecology, and a better understanding of cumulative environmental effects of development projects in this watershed.

Vancouver Airport Expansion

With the Vancouver Airport runway expansion, a multi-stakeholder committee was established to oversee implementation of the environmental management plan and provide an ongoing link between local communities and airport management;

Follow-Up and Monitoring

The preparation of baseline studies against which environmental effects of projects can be monitored is increasingly common. Better follow-up and monitoring has also been recognized as essential to improving the effectiveness of environmental assessment, by determining the accuracy of predicted impacts. The **Canadian Environmental Assessment Act** contains specific provisions for carrying out follow-up and monitoring.



CHALLENGES

Important changes in Canadian society and institutions are posing new challenges that will influence the effectiveness of, and directions for, environmental assessment in the coming years. Some of these challenges include:

Increasing Complexity

Environmental assessment processes are becoming more complex with growing legal requirements imposed by more jurisdictions, the growing need to involve the public in environmental assessment, and the expansion of environmental assessment into policy and program development and planning. Managing this complexity represents a significant challenge for governments and proponents.

Financial Constraints in Government

Federal and provincial governments are being required to recover costs where possible and increase efficiencies in the administration of environmental assessment. Dwindling budgets have consequences for all aspects of environmental assessment, including the services that governments deliver and the allocation of responsibilities among governments, proponents, communities and non-government organizations.

Greater Emphasis on Non-Regulatory Measures

As governments downsize and privatise programs and services, the very role of governments in the conduct of environmental assessment is being called into question. Alternative approaches to environmental assessment carried out according to national or international standards may augment or eventually replace conventional regulatory approaches.



Governments in Canada face the challenge of cooperating to improve the effectiveness and efficiency of environmental assessment by:

- completing harmonization agreements between the federal government and remaining provinces
- developing Aboriginal environmental assessment processes under land claims and self-government negotiations in ways that ensure harmonization with federal and provincial environmental assessment processes; and
- ratifying and completing the implementation of the Espoo Convention.

The integration of environmental considerations into proposed policies, programs and plans through strategic environmental assessment and other means is still at an early stage, but offers the prospect of improved decision-making in accordance with sustainable development principles. Neither the public, nor proponents are fully satisfied with public review phases of environmental assessment; a continuing challenge is to provide new ways of engaging the public that also meet the concerns of proponents for expeditious processes. Further challenges are to ensure that predictions in environmental assessment about environmental effects are monitored and verified, and that the knowledge gained through environmental assessments is retained and made available to assist in assessments of future projects.



FUTURE DIRECTIONS

What directions should Canadian governments, proponents and stakeholders take to build on past successes and meet these challenges? The following broad directions appear fundamental:

Carry Out an Action Plan for Research and Development

As the environmental assessment legislative agenda in Canada nears completion, priorities can now shift towards addressing some long-standing research and development issues such as:

- scoping and project-discipline requirements (e.g., setting of time frames)
- establishing and evaluating carefully designed follow-up and monitoring programs; and
- developing environmental performance indicators.

More recent challenges must also need to be addressed in a research and development action plan:

- developing methodologies for the assessment of cumulative effects;
- refining approaches for determining sustainability and assessing the capacity of ecosystems and resources;
- developing methodologies for including consideration of socio-economic factors in environmental assessment; and
- exploring other approaches to engage the public more effectively.

Innovate

Innovative approaches are required to make environmental assessment more effective and efficient as well as to address the “big-picture” challenges facing Canadian society and institutions. Such approaches could include:

- encouraging alternatives to command-and-control regulatory approaches to environmental assessment;
- developing pilot projects that use standards for environmental assessment procedures developed by the Canadian Standards Association or the International Standards Organization
- accrediting environmental assessment professionals through professional organizations; and
- recovering costs for government information and services by building on user-pay and polluter-pay principles.



Integrate Environmental Assessment Processes into Decision Making

The results of environmental assessments must become more accessible to decision makers, so that information provided is understood and actually used in decision making. This can be advanced by:

- providing opportunities for decision makers (e.g., senior managers, Cabinet Ministers, regulatory authorities) to understand the benefits and limitations of environmental assessment, and for decision makers to communicate their information requirements to environmental assessment practitioners;
- developing curricula designed to teach non-environmental specialists the fundamentals of environmental assessment;
- emphasizing the importance and encouraging the use of strategic environmental assessment among decision makers and their policy advisors; and
- emphasizing accountability and commitment within the environmental assessment process for program managers and decision-makers.