

***THE NEW FEDERAL ENVIRONMENTAL IMPACT
ASSESSMENT PROCESS IN CANADA: A STEP
TOWARDS SUSTAINABLE DEVELOPMENT ?***

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SHORT TITLE

THE NEW FEDERAL ENVIRONMENTAL IMPACT ASSESSMENT PROCESS IN
CANADA

This thesis is dedicated to my parents and my brother for their
love and unconditional support across the ocean.

ABSTRACT

Sustainable development requires the integration of ecological and social concerns into economic activities. Recent trends in environmental impact assessment [EIA] suggest the eventual use of the EIA process to link socio-environmental attributes with economic decision-making thus allowing for the transition towards a sustainable future.

This thesis is an examination of the proposed Federal Environmental Impact Assessment Act of Canada and the extent to which its provisions seek to ensure a move towards sustainable development.

II

AVANT-PROPOS

Le développement durable requiert l'intégration des considérations socio-environnementales dans les activités économiques. Les évaluations environnementales et leurs récents développements pourraient être utilisés dans ce but et ce faisant favoriser une transition vers un futur où l'environnement, le social et l'économie seront intimement liés.

Cette thèse examine la nouvelle loi canadienne sur l'évaluation environnementale et la mesure dans laquelle ses dispositions visent à assurer la mise en oeuvre du développement durable.

III

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*"The next few decades are crucial. The time has come to break out of past patterns. Attempts to maintain social and ecological stability through old approaches to development and environmental protection will increase instability. Security must be sought through change"*¹

INTRODUCTION

In 1987, the Brundtland Commission brought the concept of sustainable development into the public arena² and highlighted the tensions between economic expansion and environmental protection.³ One of the most important challenges of the twilight years of this century and the early decades of the 21st century will be the implementation of this concept.⁴

Canada was the first country to endorse the ideas and proposals of the Brundtland Commission. Canada also has the distinction of being one of the first countries in the world to adopt comprehensive legislation requiring environmental impact assessments for various economic development projects. Recently, the federal government announced its intention to make further legislative changes in order to protect the environment more effectively. Some commentators on environmental issues have suggested that an essential element of a world-wide move toward

¹ World Commission on Environment and Development, *Our Common Future* (Oxford: Oxford University Press, 1987) at 22 [hereinafter *Brundtland Report*]. The World Commission was appointed by the General Assembly of the United Nations and chaired by Norwegian Prime Minister Gro Harlem Brundtland. The Commissioners' task was to formulate a "global agenda for change".

² J.O. Saunders, "The Path to Sustainable Development: A Role for Law" in J.O. Saunders, ed., *The Legal Challenge of Sustainable Development* (Calgary: University of Calgary, 1989) 1 at 1 [Saunders].

³ W.E. Rees, "A Role for Environmental Assessment in Achieving Sustainable Development" (1988) 8 *4 Environmental Impact Assessment Review* 273 at 273 [Rees].

⁴ P.S. Elder & W.A. Ross, "How to Ensure that Developments are Environmentally Sustainable" in J.O. Saunders, ed., *The Legal Challenge of Sustainable Development* (Calgary: University of Calgary, 1989) 124 at 125 [Elder & Ross].

sustainable development is the requirement to undertake of Environmental Impact Assessments [EIA]⁵ for any and all economic and social development initiatives.⁶

This work examines the viability and effectiveness of the Canadian federal government's attempts to utilise EIA as an important element in its environmental protection agenda. It proposes to identify the ideological biases and policy reasons that underlie the particular model of EIA chosen by Canada, and to assess the degree to which the new Federal EIA Act has been successful in achieving its legislative mandate. Particular attention will be paid to establishing whether, and if so how, the proposed changes will enhance Canada's ability to protect its environment as well as to ensure sustainable forms of development. Two of the more important elements of EIA legislation in this context are the state's ability to enforce the legislation and its stated willingness to engage in long term monitoring of environmental impacts. Indeed, without legislatively authorised enforcement and follow-up programs, EIA will not enhance the movement towards sustainable development.

Chapter I introduces and discusses the "Brundtlandian notions" of sustainable development. A detailed description of what is actually meant by the acronym "EIA" follows subsequently. The effectiveness of new EIA processes will be evaluated by comparing and contrasting it to the older, reactive, and backward looking approach to environmental protection. Finally, this chapter will establish the necessary link between EIA and the concept of sustainable development.

⁵ The term Environmental Impact Assessment [EIA] will be used throughout this study. However, it should be noted that many contributors to the relevant literature are increasingly speaking about Environmental Assessment [EA] in order to more clearly illustrate the expanding scope and new fields encompassed by this process.

⁶ Rees, *supra*, note 3 at 274; P.J. Jacobs & B. Sadler, ed., *Sustainable Development and Environmental Assessment: Perspectives on Planning for a Common Future a Background Paper Prepared for the Canadian Environmental Assessment Research Council* (Ottawa: CEARC, 1991) at 1 [Jacobs & Sadler].

Chapter II and III analyze the principal EIA process⁷ required by the new federal *Environmental Impact Assessment Act*. Chapter II describes of the procedural steps contained in the pre-assessment stage, while Chapter III presents the full assessment phase of the proposed federal EIA process. The critique of the prospective legislation is premised on the belief that only a strong and efficient EIA scheme can lead humankind towards its ultimate goal of achieving sustainable development.

Chapter IV contains an examination of the implementation mechanisms as well as a critique of the post-approval phase of EIA. With respect to implementation procedures, it will be concluded, contrary to some environmentalists' criticism, that the proposed federal EIA contains an efficient implementation mechanism. The second part of this chapter focuses on post-project actions. First, the Canadian legislative rationale for ongoing monitoring of environmental impacts is examined. Then, the post-approval provisions of the new Act are compared with those contained in the 1984 federal EIA process. It is concluded that the proposed legislation, although deficient in details, will, if rigorously and consistently applied, provide for ongoing monitoring of the environmental effects of a project, the auditing of the efficiency of the EIA process as well as increasing the scientific knowledge that will be transmitted to future environmental impacts assessments.

The conclusions will summarize what was presented in the four preceding chapters as well as tracing the future trends EIA should follow if sustainable development is to be more than only a promising idea.

⁷ Description of the main process is contained in sections 1 to 39 of the new Act.

CHAPTER I: THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

A. "BRUNDTLANDIAN" NOTIONS OF SUSTAINABLE DEVELOPMENT

The driving force behind sustainable development is the deepening and pervasive state of our contemporary environment/development problematique.⁸ Indeed, the environmental and socio-political woes that the world now faces are too familiar. Almost every day, the media inundate us with news of famine, increasing poverty, transnational shipments of waste, tropical deforestation, expanding desertification of arable land, the thinning of the ozone layer and global warming. Exploding levels of population, poverty, rampant consumerism or increasing growth, production, and material wealth are seen as both causes and effects of these problems. The landmark Report of the Brundtland Commission corroborates the validity of these news stories. Consequently, the Report stresses the urgent need for changing socio-economic and ecological goals and values in order to achieve lasting relationships between people and nature as well as among peoples.⁹

Similar ideas, such as development that permits the achievement of human needs and yet does not foreclose the ones of future generations, can be traced to the beginning of the conservation movement.¹⁰ Nevertheless, the term "sustainable development" was first coined in the 1970's and since then has evolved considerably. In the beginning, sustainable development was nothing more than the simple

⁸ Jacobs & Sadler, *supra*, note 6 at 4.

⁹ *Ibid.* at 1.

¹⁰ *Ibid.* at 10.

addition of environmental considerations into economic activities.¹¹ Different events in the 1980's, however, have brought a clearer articulation of the principle: sustainable development is aimed at not only "adding" but "integrating" biophysical criteria for sustainability with other human needs and values.¹² This broader perception of sustainable development is first to be found in the document *Living Resource Conservation for Sustainable Development* elaborated by the Conservation of Nature and Natural Resources (IUCN 1980).¹³ This World Conservation Strategy states, in particular, that sustainable development:

*...must take account of social and ecological factors, as well as economic ones; of the living and non-living resource base; and of the long-term as well as the short-term advantages and disadvantages of alternative actions.*¹⁴

Other conferences and documents, following the release of the IUCN document, fortified the message of sustainable development.¹⁵ However, it was the launch of the Report of the World Commission on Environment and Development that spread the concept of sustainable development throughout over

¹¹ S. Holtz, "Environmental Assessment and Sustainable Development: Exploring the Relationship", in Jacobs & Sadler, *supra*, note 6 at 93 [Holtz].

¹² *Ibid.* at 94 & 96; Jacobs & Sadler, *supra*, note 6 at 10.

¹³ J.E. Gardner, "The Elephant and the Nine Blind Men: An Initial Review of Environmental Assessment and Related Processes in Support of Sustainable Development", in Jacobs & Sadler, *supra*, note 6 at 36 [Gardner].

¹⁴ IUCN, *World Conservation Strategy. Living Resource Conservation for Sustainable Development* (Gland, Switzerland: IUCN/UNEP/WWF, 1980).

¹⁵ These events are: the report of the North-South Commission (1981); the proclamation of the U.N. World Charter for Nature (1982); the World Industry Conference on Environmental Management (1984) and the Ottawa Conference on Conservation and Development: Implementing the World Conservation Strategy (1986), Jacobs & Sadler, *supra*, note 6 at 11, Holtz, *supra*, note 11 at 96.

the world and made politicians, private sectors, as well as environmental groups endorse it as a goal for present and future decisions.¹⁶

Briefly, the Report contains the following: firstly, it confirms the severity, at both the national and international levels, of the actual environment development situation which is worsening from day to day. It states that due to the interdependence of the environment and development only a broad integrated perspective can effectively deal both issues.¹⁷ Thirdly, this new and broad approach must also recognise that the basic needs of the poorest in the world must be given priority. Indeed, inequality between the industrial and developing countries must diminish and poverty eliminated.¹⁸ Consequently, the Commission calls for a rethinking of the development path taken by the more developed countries and it urges the less developed countries to avoid the economic development models followed by advanced capitalist societies in North America and Europe, as well as by Japan and other newly industrialised nations. As such, the new path of sustainable development required by the Brundtland Commission is:

"a process of change in which the exploitation of resources, the direction of investment, the orientation of technological development and institutional change are made consistent with future as well as present needs".¹⁹

¹⁶ P.S. Elder, "Sustainability" (1991) 36 *McGill L.J.* 831 at 832 [hereinafter *Sustainability*].

¹⁷ Jacobs & Sadler, *supra*, note 6 at 12.

¹⁸ As noted by Sadler, one of the main driving concerns of the Commission was to eliminate poverty and stop the widening of the gap of inequality between the industrial and developing countries; B Sadler, "Sustainable Development, Northern Realities and the Design and Implementation of Conservation Strategies" in E Smith, ed., *Sustainable Development Through Northern Conservation Strategies* (Banff, The Banff Centre School of Management University of Calgary Press, 1990) at XI

¹⁹ *Brundtland Report*, *supra*, note 1 at 9.

And sustainable development in the Brundtland Report has been described as "development that meets the needs to the present without compromising the ability of future generations to meet their own needs".²⁰

But, as some observers have noted, these definitions are very general and their translation into action may involve the making of social choices that have far reaching consequences.²¹ Consequently, industrialised countries fear that there is, embedded in the concept of sustainable development, a search for "economic justice" that would lead to the redistribution of the world's resources in favour of less developed countries. If this were to happen, it would of course necessitate a significant reduction in the income and consumption patterns of the more developed countries.²² On the other hand, the "have not" countries balk at the idea of having to curtail their expectations of the fruits of economic development long enjoyed by residents of the "have" nations. They wonder about why must they control their population growth,²³ or scale back their economic and social development plans, or use less environmentally harmful but much more costly processes, when they are at best only minimally responsible for the current environmental crisis.²⁴

²⁰ *Brundtland Report*, *supra*, note 1 at 8 & 43.

²¹ Rees observes that, given the nature of emerging ecological and social constraints, the diminution of the present inequalities in standards between and within the "have" and "have not" countries "will almost certainly require that the rich reduce both present consumption and future expectations", W. Rees, "Economics, Ecology, and the Role of Environmental Assessment in Achieving Sustainable Development", in Jacobs & Sadler, *supra*, note 6 at 128 [hereinafter *Achieving Sustainable Development*]. Boothroyd explicitly states that fair sustainable development, a subset of sustainable development, "requires the rich to reduce their consumption"; P. Boothroyd, "On Using Environmental Assessment to Promote Fair Sustainable Development" in Jacobs & Sadler, *supra*, note 6 at 143 [Boothroyd]

²² *Sustainability*, *supra*, note 16 at 837.

²³ *Ibid* at 837.

²⁴ Apart from its lack of practical meaning, sustainable development raises another problem. The Brundtland Commission has equated sustainable development with "a more rapid economic growth" in both industrialized and developing countries. As such, a growth rate of 4% is advanced in the Report. But for some who view the present level of development being the root of today's

Notwithstanding the lack of specificity in defining and effecting the notion of sustainable development, the Brundtland Report does provide some hints as to the changes in perspective, ideology and action on the part of the world community that the Commissioners believe are necessary in order to protect the environment. The Report suggests that, in order to achieve sustainable development, there must be action and co-operation at both the national and international levels with respect to the issues of population control, plant and animal husbandry, energy use and conservation and industrial policy to name a few.²⁵

Further, the type, level, and manner of national and international action that the Report calls for is quite different from what is now common. It involves decision-making that treats ecological and economic matters on an equal footing.²⁶ It is important to recognise that this merging of environmental and economic considerations in decision-making is the second most important principle of the Brundtland Report.²⁷ In formulating this second principle, the Commission had to reconcile economic and ecological concerns, previously thought to be in conflict.²⁸ The Report recognises that:

"Development cannot subsist upon a deteriorating environmental resource base; the environment cannot be protected where growth leaves out of account the costs of environmental destruction".²⁹

environmental and socio-political problems, the very possibility of sustainable development is questioned; see *Brundtland Report*, *supra*, note 1 at 50-51; Saunders, *supra*, note 2 at 9, Rees, *supra*, note 3 at 274.

²⁵ *Brundtland Report*, *supra*, note 1 at 308.

²⁶ *Ibid.* at 62.

²⁷ L. Starke, *Signs of Hope: Working Towards Our Common Future* (Oxford: Oxford University Press, 1990) at 9 [Starke].

²⁸ *Brundtland Report*, *supra*, note 1 at 62.

²⁹ *Ibid.* at 37.

The Commission notes that sectoral fragmentation of responsibility is the cause of many of the environmental/development problems.³⁰ It comments upon the all too familiar tendency of sectoral organizations to pursue sectoral objectives and to treat undesirable impacts on other sectors as side effects unless the effects are so severe that they are compelled to deal with them. According to the Commission, the way to counteract the problem of division of responsibility is by ensuring that ecological dimensions of policy be considered at the same time as the economic, trade, energy, agricultural, industrial and other dimensions.³¹

However, the changes needed in our actual development models as well as the tools as presented by the Commissioners remain of a very general nature. And as to date, beyond the impression that sustainable development is any form of development that does not deteriorate the environmental, social, economical or political systems upon which it exists,³² there is still no common and universally accepted definition of the concept of sustainable development.³³ Consequently,

³⁰ Rees notes that the organization of government which breaks the biosphere into separate elements (fisheries, forestry, land and water, energy) reflects the outlook our society has on nature. The still prevailing scientific understanding of the world view of western political economy finds its roots in the 19th-century scientific rationality and technological efficiency. The environment is seen as isolated, individual resources base that can be tapped in order to fulfil our material needs and wants, *Achieving Sustainable Development*, *supra*, note 21 at 124. However, it should be noted that due to the failure of our actual framework to solve the existing ecological crisis, new thinkings are aimed at restructuring the western approaches to the world. For example, the Gaian Earth perspective, Jacobs & Sadler, *supra*, note 6 at 6 & 7.

³¹ *Ibid* at 313.

³² *Achieving Sustainable Development*, *supra*, note 21 at 128. As noted by Jacobs and Sadler, "the key goals [of sustainable development] might be specified as:
-meeting basic human needs for material welfare;
-maintaining the ecological integrity of natural systems, and
-providing for equity, social justice, and choice of lifestyle (Jacobs & Sadler, *supra*, note 6 at 13)
See also Gardner's paper which elaborates the principles or components of sustainable development, *supra*, note 13 at 35

³³ B D Clark, "The Relationship of Sustainable Development and Environmental Assessment, Planning, and Management", in Jacobs & Sadler, *supra*, note 6 at 115 [Clark]; see also D.M. Liverman and others, "Global Sustainability: Toward Measurement" (1988) 12.2 *Environmental Management* 133 at 133 [hereinafter *Global Sustainability*] This article examines attempts to measure

the principle and the practical measures it implies are open to many interpretations.³⁴

B. THE LEGAL IMPLICATIONS OF SUSTAINABLE DEVELOPMENT

It is, nevertheless, certain that the integration of economics and ecology as envisioned by the Commission involves far reaching changes to traditional governmental decision-making processes. This in turn involves drastic modifications to "customs", "rules" and "laws" of nations and among nations. The Brundtland Report recognises the need for this reformulation of "*Human laws to keep human activities in harmony with the unchanging and universal laws of nature*".³⁵

Unfortunately, as the Commission also acknowledges, "*national and international law has traditionally lagged behind events*".³⁶ Traditional legal responses can, for the most part, be classified as "*reactive*". "Law" has been used to deal with the adverse environmental effects of human activity. If, instead, it is possible to formulate legal methodologies that are based on a forward thinking approach, then "enviro-economic" tensions maybe avoided.³⁷ By so doing, law and

sustainability and further discusses some of the proposed indicators of sustainability, such as carrying capacity, population growth, Gross National Product (GNP).

³⁴ Clark, *supra*, note 33 at 115; Saunders, *supra*, note 2 at 1.

³⁵ *Brundtland Report*, *supra*, note 1 at 330.

³⁶ *Ibid.* at 330.

³⁷ *Ibid.* at 39; Canadian Bar Association, *Report of the Canadian Bar Association Committee on Sustainable Development in Canada: Options for Law Reform* (Ottawa: Canadian Bar Association, 1990) at 5 [hereinafter *Canadian Bar Report*]. As noted earlier, the fragmentation of organization confines environmental ministers/agencies to fight environmental impairments. The departments/agencies causing these effects have no responsibility for them. Consequently, environmental departments "reforest, restore natural habitats, rehabilitate wild lands . . .", *Brundtland Report*, *supra*, note 1 at 39.

the legal system may be used to "shape new ventures" instead of "(preserving) older rules" that are destructive to the environment.³⁸

Since the early 1970's, several countries have incorporated the use of Environmental Impact Assessments into their environmental protection programs.³⁹ By attempting to integrate ecological and social considerations into development planning and activities,⁴⁰ the EIA process has been viewed as a response, although incomplete, to implement sustained forms of development and was consequently advocated by the Brundtland Report.⁴¹ The Commissioners, however, concluded that the early EIA mechanisms were largely ineffective, and they called for a much broader approach that "*should be applied not only to products and projects, but also to policies and programmes, especially major macro-economic, finance, and sectoral policies that induce significant impacts on the environment*".⁴²

C. THE EIA APPROACH TO ENVIRONMENTAL PROTECTION

1. A Brief Summary of the Evolution of Environmental Protection Legislation

The first environmental laws enacted in western countries in the 1970's provided several different policy responses to environmental degradation. First, legislation and regulations were implemented that controlled the emission or

³⁸ N.A. Robinson, "A Legal Perspective on Sustainable Development" in J.O. Saunders, ed., *The Legal Challenge of Sustainable Development* (Calgary: University of Calgary, 1989) 15 at 15 [Robinson].

³⁹ P. Wathern, "An Introductory Guide to EIA" in Peter Wathern, ed., *Environmental Impact Assessment: Theory and Practice* (London: Unwin Hyman, 1988) at 3 [Wathern]; Holtz, *supra*, note 11 at 93; Jacobs & Sadler, *supra*, note 6 at 18.

⁴⁰ Jacobs & Sadler, *supra*, note 6 at 3.

⁴¹ *Ibid.* at 8.

⁴² *Brundtland Report*, *supra*, note 1 at 222.

dumping of particular pollutants or environmental stressors by specifying economically "*optimal*" discharge levels.⁴³ This earliest legal approach also required the use of so-called "*new technologies*" in the fight to protect the environment and called for the use of devices such as "scrubbers" to reduce the emission of sulphur dioxide and other noxious fumes. Unfortunately, these legislative and administrative devices to protect the environment were all "*reactive*" in that their schemes were only invoked after the environment had already been severely damaged.⁴⁴ It soon became clear that such an "*after the fact approach*" was grossly inadequate to deal with the massive degradation of the environment that was becoming increasingly difficult, if not impossible to ignore.⁴⁵

This led to a second approach aimed at preventing and minimizing environmental damage. Instead of being largely "*reactive*" in regard to the environment, some states adopted a "*proactive*" approach. In contrast to the earlier statutes that provided for after the fact efforts as controlling the quantity of pollution or licensing dumping, the second generation of environmental legislation required the conduct of environmental impact assessments before a potentially environmentally injurious activity was to take place. This up-front approach to environmental protection was an attempt to avoid and/or to mitigate potential

⁴³ D.P. Emond, "Greening of Environmental Law" (1991) 36 *McGill L. J.* 743 at 746 & 748 [hereinafter *Greening*].

⁴⁴ *Ibid.* at 748 & 753.

⁴⁵ Firstly, at best, this approach to environmental protection can only remedy or restore the quality of the environment. Secondly, it could be considered as a licence to pollute, because licensing authorities deliver permits to new pollution sources at a level said acceptable by them. Thirdly, licences to emit pollution are considered in isolation and on an ad-hoc-basis, so that cumulative impacts, alternatives and need to the project are set aside or only superficially taken into account. Furthermore, due diligence may absolve the polluter; M I Jeffery, *Environmental Approvals in Canada* (Markham, Ontario: Butterworths, 1989) at 1.1 [hereinafter *Environmental Approvals*]

environmental problems by engaging in an evaluation of the potential environmental consequences of a future activity.⁴⁶

Public pressure was the main reason for mandating EIA studies of major development projects beginning in the mid 1960's in some industrialized countries.⁴⁷ Public concern was heightened by two important facts. People in the more developed countries began to notice the cumulative effects of advanced environmental deterioration resulting from intensive, unbridled human activity over the last century.⁴⁸ Secondly, it became increasingly obvious that pollution problems were far more complex than it was earlier thought.⁴⁹ In order to protect the environment in a truly effective manner, it was felt to be essential that consideration be given to comprehensive and proactive actions rather than merely attempting to "react" to the effects of human activity. As a result, a change in focus was needed that involved the "anticipation" of potential environmental effects.

In particular, the public sought and obtained the examination of potential environmental effects of large scale development projects while these types of projects were still in their planning phases.⁵⁰ This was to permit a better understanding as well as matching of both "economic" and "social costs" of such

⁴⁶ *Environmental Approvals*, *supra*, note 45 at 1.2.

⁴⁷ As noted by Beanlands, "the EIA procedures were implemented in order to deal with environmental issues in the public forum", G.E. Beanlands, "Ecology and Impact Assessment in Canada" in V.W. MacLaren & J.B.R. Whitney, eds., *New Directions in Environmental Impact Assessment in Canada* (Toronto: Methuen, 1985) at 1 [Beanlands].

⁴⁸ S.K. McCallum, "Environmental Impact Assessment: A Comparative Analysis on the Federal Response in Canada and the United States" (1975) 13 *Alta L. Rev.* 377 at 377 [McCallum].

⁴⁹ *Greening*, *supra*, note 43 at 754

⁵⁰ McCallum, *supra*, note 48 at 377. The relative economic prosperity of the late 60's and the early 70's encouraged governments to carry out mega-developments projects, such as James Bay I in Quebec or large-scale oil installations in the UK; M. Clark & J. Herington, eds., *The Role of Environmental Impact Assessment in the Planning Process* (London: Mansell, 1988) [Clark & Herington] at 7.

activities.⁵¹ Up to this time, the considerable "social costs" involved, such as terrestrial and aquatic impairments, health effects or air pollution were not borne by the proponents and other direct beneficiaries of such grandiose development projects, but rather by "innocent victims" and/or by society as a whole.⁵² As a result of the previous practice of limiting the analysis to only the economic benefits and costs, even a project entailing great "social costs" was allowed to proceed to the detriment of the environment.⁵³

Although this proactive approach to heal the environment was a vast improvement over the initial "react-and-cure" schemes, there is a consensus that the Earth's state continues to deteriorate.⁵⁴ This is, perhaps, because both the react-and-cure and the preventive environmental legislative schemes are largely adversarial in nature as they tend to pit the entrepreneurs, who want to participate in economic activities, against public social interest groups striving for a clean environment.⁵⁵

⁵¹ Economic systems are inherently and inextricably linked to the biosphere. Every economy tapped the planetary resources for achieving economic development and further prosperity. All the products of economic activities at the resource supply level (mining), at the production level (waste product of manufacturing, such as emissions) and at the final consumption level are ultimately discharged back into nature as waste. However, the interdependence of the economic system and the biosphere is not reflected in present market economy of most industrial and less developed countries. There is, in particular, no mechanism for assigning the environmental costs generated by production to developers. Consequently, health effects, air and water pollution are production costs that will not be borne by the producer, but will be transmitted to the society (social costs), A.R. Lucas & S.K. McCallum, "Looking at Environmental Impact Assessment" in P.S. Elder, ed., *Environmental Management and Public Participation* (Toronto: Canadian Law Association, 1975) at 307 [hereinafter Lucas & McCallum]. J. Brunnée, *Acid Rain and Ozone Layer Depletion: International Law and Regulation* (Dobbs Ferry: Transnational Publishers, 1988) at 53, *Achieving Sustainable Development*, *supra*, note 21 at 125.

⁵² Governments of western countries did not provide protection to the public by making the economic sector bear resulting social costs. On the contrary, they were working in the same sense by favouring growth, arranging grant-in-aid, special tax relief. Furthermore, governments themselves undertook major development projects having considerable environmental repercussions. D.P. Emond, ed., *Environmental Assessment Law in Canada* (Toronto: Emond-Montgomery, 1978) at 5-6.

⁵³ Wathern, *supra*, note 39 at 21.

⁵⁴ *Greening*, *supra*, note 43 at 759.

⁵⁵ *Greening*, *supra*, note 43 at 768.

Consequently, these legal approaches to environmental protection do very little to accommodate the diverse interests at stake. For example, the public has been for the most part excluded from participating in the react-and-cure approach. Further, public participation by way of private litigation has not proved satisfactory. Indeed, besides procedural barriers, such as restrictive standing and class actions, civil suits are also costly and lengthy. Moreover, a successful plaintiff will not prevent the environmental harm though he/she may recover *post facto* damages.⁵⁶ With regard to assessment processes, hearings have tended to encourage the parties to focus on their claims and alleged rights, rather than promoting a search for a solution.⁵⁷

There is no doubt that new legal approaches are urgently needed for protection of the environment. For example, in place of the "*rights based adversarial models*" which resulted from previous legislative efforts, the use of "*alternative dispute resolution*" [ADR] to environmental problem solving shows great promise. Environmental protection legislation that mandates the use of alternative dispute resolution methodologies would require governments to take a far more innovative and pro-active role, and also would provide for the incorporation of negotiation and mediation techniques in resolving environmental conflicts.⁵⁸ While Emond may have been overly optimistic in predicting that the use of ADR will provide a solution to the environmental crisis,⁵⁹ there can be little doubt that this approach will prove far more effective than the options that are presently available.

⁵⁶ *Ibid.* at 752-53 & 769.

⁵⁷ B. Sadler & A. Armour, *The Place of Negotiation in Environmental Assessment: A Background Paper Prepared for the Canadian Environmental Assessment Research Council* (Ottawa: CEARC, 1988) at 50 [Sadler & Armour].

⁵⁸ *Greening, supra*, note 43 at 768. Chapter III will described the mediation-track existing in the proposed federal Environmental Impact Assessment Act of Canada.

⁵⁹ *Ibid.* at 762.

2. Definition of Environmental Impact Assessment

A review of the relevant literature indicates many uses and meanings of the term "Environmental Impact Assessment".⁶⁰ This is certainly due in part to the progressive changes and expansion in the scope and role of EIA which has occurred since the process was first enacted.⁶¹ However, there is consensus in the EIA literature on several elementary tenets contained in the EIA method.⁶² Firstly, many EIA contributors recognize the need for environmental assessment to apply not only to specific projects but also to governmental policies, programs and plans that may affect the environment.⁶³ Secondly, they also consider it important to adopt a broad definition of "environment" that goes beyond the commonly understood bio-physical framework so as to include predictions with respect to social, cultural, health, economic and aesthetic impacts in the EIA process.⁶⁴ Notwithstanding the values and merits of many other attempts to define environmental impact assessment, the following EIA definition will be used in this thesis as first proposed by the Canadian Environmental Assessment Research Council (hereinafter CEARC):

⁶⁰ PADC Environmental Impact Assessment and Planning Unit, ed., *Environmental Impact Assessment* (Boston: Martinus Nijhoff, 1983) [hereinafter PADC], Y.J. Ahmad & G.K. Sammy, *Guidelines to Environmental Impacts Assessment in Developing Countries* (London: Hodder & Stoughton, 1985) at 1 [Ahmad & Sammy].

⁶¹ Jacobs & Sadler, *supra*, note 6 at 19.

⁶² Ahmad & Sammy, *supra*, note 60 at 1.

⁶³ EIA is "a process that contributes to the identification of 1) the biophysical and 2) the social dimensions of sustainable development at all levels of decision-making" in Jacobs & Sadler, *supra*, note 6 at 1.

⁶⁴ For a description of the broadening of "environment", see Holtz, *supra*, note 11 at 95-96.

*Environmental impact assessment (should be) a process which attempts to identify and predict the impacts of legislative proposals, policies, programs, projects and operational procedures on the biogeophysical environment and on human health and well-being. It (should) also interpret and communicate information about those impacts and investigate and propose means for their management.*⁶⁵

This definition has the merit of clearly illustrating the possible scope of an environmental assessment process. As noted earlier, not only does the EIA method apply to specific projects, but also to policies, programs and legislative proposals. Further, this definition also demonstrates that, contrary to its label, EIA may also evaluate potential health as well as social effects. Secondly, in CEARC's definition, EIA functions, at a minimum, as an "information gathering tool" in that it provides governmental decision makers, as well as other interested parties, with information about the likely environmental consequences of a planned activity.⁶⁶ EIA does so by identifying, predicting, and evaluating potential adverse environmental impacts of proposed public and private actions.⁶⁷ Finally, this definition suggests that, beyond the mere gathering and evaluation of information, EIA calls for positive action, that will prevent, or at least minimize, adverse environmental changes.

⁶⁵ Canadian Environmental Assessment Research Council, *Evaluating Environmental Impact Assessment: An Action Prospectus* (Ottawa: Minister of Supply & Services Canada, 1988) at 1.

⁶⁶ As noted by Lucas, "the basic purpose of most Canadian environmental systems is generation of information for planning purposes"; A.R. Lucas, "The Canadian Experience" in S.D. Clark ed., *Environmental Assessment in Australia and Canada* (Vancouver: Westwater Research Centre, 1981) at 145 [hereinafter Lucas in Clark], Emond, *supra*, note 52 at 5, Wathern, *supra*, note 39 at 6; Emond, *supra*, note 52 at 7; A. Armour, "Understanding Environmental Assessment" (1977) 17:1 *Plan Canada* 8 at 10 [Armour].

⁶⁷ Rees, *supra*, note 3 at 281. As such EIA has three different components. First, the appropriate environmental data of the site where the project will take place are identified and possibly collected. At a second level, effects on the environment caused by the proposed activity are determined and compared with the situation that would exist without the proposal. Finally, the actual changes are recorded and analyzed; Wathern, *supra*, note 39 at 17.

CEARC's definition, however, as every other, has some limitations: one is that it fails to specifically include the appraisal of socio-economic impacts.⁶⁸ Also it is not clear whether this definition encompasses non-governmental actions. Thirdly, it does not specifically mention that environmental impact assessment has become "a multi-faceted approach to development planning and control".⁶⁹ In particular, EIA's present practice encompasses not only the identification of environmental and social impacts, but also risk analysis, impact management and auditing. Further, in the process, consultative methods have now been used to solve a dispute between interested parties.⁷⁰

Overall, it is important to remember that EIA should function as a planning process that will prevent adverse and irreversible environmental effects which would occur without the implementation of alternatives and mitigative measures being implemented before the project is completed.⁷¹

D. DIFFERENT INSTITUTIONAL FORMS FOR THE IMPLEMENTATION OF EIA

There is considerable diversity in the manner in which EIA has been, and could be, implemented. In the first instance, depending on the political structure of the country, EIA requirements may be passed at the municipal,⁷² the provincial

⁶⁸ See Wathern, *supra*, note 39 at 6 citing Davies & Muller.

⁶⁹ Jacobs & Sadler, *supra*, note 6 at 17.

⁷⁰ *Ibid.* at 17.

⁷¹ See M.T. Cirelli, A Comparative Investigation of Environmental Impact Assessment Approaches in North America and in the European Community (LL.M. Thesis, Dalhousie University, 1989) at 1 and 197 [Cirelli].

⁷² The City of Winnipeg adopted the first Canadian EIA process in January 1972. It was a strengthening of the new *City Of Winnipeg Act*; Armour, *supra*, note 66 at 15; A. Armour & J. Walker, "Canadian Environmental Impact Assessment: Three Case Studies" (1977) 17 *1 Plan Canada* 28 at 28.

⁷³ or the federal level.⁷⁴ Secondly, governments can choose different institutional forms through which to implement the process. EIA is generally enshrined in a law or a statute.⁷⁵ In Canada, however, the current federal process is in the form of a "Guidelines Order" which establishes a purely administrative procedure.⁷⁶ In the United Kingdom, EIA was incorporated into the existing system of planning and development control by instituting changes to the Town and Country Planning Act of 1971.⁷⁷ Finally, implementation differences in EIA can result from the triggering mechanisms embedded in the controlling statute or administrative guideline. For instance, the criterion triggering the application of EIA can be a "significant harm" threshold.⁷⁸ This is the case for federal guidelines and statutes

⁷³ Ontario was the first province to pass a specific EIA legislation; see, *the Ontario Environmental Assessment Act*, R.S.O., 1975, c. 69 amended in 1980 R.S.O., 1980, c.140 [hereinafter *Environmental Assessment Act*], A.R. Lucas & R.T. Franson, *Canadian Environmental Law*, 1st ed. (Scarborough, Ontario: Butterworths, 1976) at 991 [Lucas & Franson].

⁷⁴ At the Canadian federal level the Cabinet enacted on June 8, 1972 and on December 20, 1973 directives requiring for the first time EIA for federal projects, programs and activities of all federal departments regulating bodies and agencies, *Environmental Approvals*, *supra*, note 45 at 14.

⁷⁵ A legislated EIA process is very often found in an Environmental Quality Act as one element of it. For instance, this is the case in Switzerland and Quebec, *Loi sur la qualité de l'environnement*, L.R.Q. c. Q-2, arts. 31, 31.1, 31.3, 31.9, 124.1 [hereinafter EQA]; *loi fédérale sur la protection de l'environnement*, R.S. 814.01, 1983 [hereinafter LPE] and l'ordonnance relative à l'étude de l'impact sur l'environnement de 1988, R.O. 1988 1931, R.S. 814.01. However, in Ontario and the United States, the governments have passed a specific Act implementing the EIA process; M. Bothe & L. Gündling, *Neuere Tendenzen des Umweltrechts im Internationalen Vergleich: Bericht 2/90*, *Umwelt Bundes Amt* (Berlin: Erich Schmidt, 1990) at 183 [Bothe & Gündling].

⁷⁶ The Environmental Assessment and Review Process Guidelines Order, SOR/84-467 (June 22, 1984) [hereinafter EARP or Guidelines Order], see W.E. Rees, "Environmental Assessment and the Planning Process in Canada" in S.D. Clark, ed., *Environmental Assessment in Australia and Canada* (Vancouver: Westwater Research Centre, 1981) at 4 [hereinafter Rees in Clark];

⁷⁷ The Department of Environment promulgated on July 12, 1988 The Town and Country Planning (Assessments of Environmental Effects) Regulations 1988; S.W. Mertz, "The European Economic Community Directive on Environmental Assessments: How Will it Affect United Kingdom Developers?" (1989) *Journal of Planning and Environmental Law* 483 at 483.

⁷⁸ D.A. Wirth, "International Technology Transfer and Environmental Impact Assessment" in G. Handl & R.E. Lutz, eds., *Transferring Hazardous Technology and Substances: The International Legal Challenge* (London: Graham and Trotman/Martinus Nijhoff, 1989) at 85 [Wirth].

in both Canada and the U.S.⁷⁹ Other institutional designs for EIA, however, do not consider significant environmental harm as the defining criterion. Instead they require each activity within a defined project category be subject to an appraisal irrespective of the level of potential environmental risk.⁸⁰ The European Community [EC] Directive 85/337 on "*the Assessment of the Effects of Certain Public and Private Projects on the Environment*" lists projects submitted to an EIA into two different Annexes: projects listed in the first annex are always subject to an assessment;⁸¹ Annex II lists the types of projects - including agricultural, manufacturing, and infrastructure activities - which may be subject to an EIA where Member States consider that their characteristics so require.⁸²

E. GEOGRAPHICAL AND INTERNATIONAL DEVELOPMENTS WITH REGARD TO EIA

After over twenty years of legislative and administrative experience with respect to environmental impact assessment, two significant patterns can be identified: firstly, most countries accept EIA as a concept and implement it in their particular jurisdiction; secondly, there is an emerging recognition of the need for international co-operation and harmonization of EIA processes and standards.

⁷⁹ Section 12 of EARP. Only if the adverse environmental effects are *significant* will the proposal be referred for public review. NEPA in section 102 (c) contains a double threshold requiring the assessment of *major* federal actions *significantly* affecting the quality of the human environment.

⁸⁰ Wirth, *supra*, note 78 at 85.

⁸¹ Oil refineries, nuclear and thermal power stations, facilities for the storage and disposal of radioactive wastes or other hazardous wastes, certain chemical installations, and large highways, railroads, and airports; article 4 and Annex I. The European Community [EC] Directive "*on the Assessment of the Effects of Certain Public and Private Projects on the Environment*" was adopted on 27th June 1985, 28 O.J. Eur. Comm. (No. L 175) 40 (1985) [hereinafter EC Directive], for an analysis of the Directive, see, N. Haigh, "Environmental Assessment-The EC Directive" (1987) *J. Plan. & Env't* 4.

⁸² Art. 4 & Annex II.

1. Increased Acceptance by National Governments for EIA

Despite cultural, social, and political differences, countries are increasingly using EIA as a means of environmental protection and planning.⁸³ The United States, by enacting the *National Environmental Protection Act* [NEPA] became the first nation to require comprehensive appraisal of environmental impacts.⁸⁴ A host of other industrialized countries soon followed by implementing their own EIA processes.⁸⁵

Even, so-called "less developed countries" have begun to implement EIA mechanisms.⁸⁶ Presently, more than three-quarters of the developing countries have done impact assessments in at least one project.⁸⁷ Laws in several South American countries, as well as in certain countries in Asia and the Pacific Region, implicitly or explicitly, now require the application of EIA at the planning stage.⁸⁸

⁸³ Clark & Herington, *supra*, note 50 at 1; Wathern, *supra*, note 39 at 3.

⁸⁴ Congress passed the National Environmental Policy Act in 1969, *National Environmental Policy Act of 1969*, Pub. L. No. 91-190, (1 January 1970) 83 Stat. 852, 42 U.S.C., ss 4321-47 (1970) [hereinafter NEPA]

⁸⁵ Wathern, *supra*, note 39 at 3. Canada adopted a federal process in 1972-73. France in 1976: The *Nature Conservation Act* of 10 July 1976 (Ordre du 10 juillet 1976 relatif à la protection de la nature). The Netherlands in 1979. See, the *Governmental Standpoint on Environmental Impact Assessment* of 1979. Regulations came into force in 1987 as a component of the Environmental Protection (General Provisions) Act 1980 (*Wet Algeme Bepalingen Milieuhygiene*); Docter Institute for Environmental Studies, *European Environmental Yearbook*, 2nd ed. (London: Docter International U.K., 1990) at 147, 161 [hereinafter *Environmental Yearbook*] at 161.

⁸⁶ Indonesia, 1982 Act on "basic Provisions for the Management of the Living Environment", art. 16 and regulation was issued in 1986, see Robinson, *supra*, note 38 at 22. Korea in 1983; in 1986, Sri Lanka strengthened the 1980 National Environmental Act with the result that EIA is now to be conducted for all major impacts on the environment. Before, it was at the discretion of the authorities, N. Htun, "The EIA Process in Asia and the Pacific region" in Wathern, *supra*, note 39 at 225, 227-28 [Htun].

⁸⁷ Ahmad & Sammy, *supra*, note 60 at 3.

⁸⁸ Colombia became the first Latin American country to adopt an EIA system in 1974; V.I. Moreira, "EIA in Latin America" in Wathern, *supra*, note 39 at 239 [Moreira]; Htun, *supra*, note

There is, however, considerable room for improvement in the different FIA processes. Lack of resources and shortages of scientific research and technologies hamper these countries efforts to protect the environment⁸⁹. In fact, the Brundtland Commission recognizes these problems and recommends that "*interested governments should create an independent international assessment body to help developing countries, upon request, evaluate the environmental impact and sustainability of planned development projects*".⁹⁰

2. International Developments With Regard to EIA

International public law is increasingly recognising the importance of EIA. Various international organizations are involved in efforts to encourage adoption and implementation of the concept and several international agreements now contain EIA requirements.⁹¹

(a) The role of international organizations in promoting EIA

The actions of international organizations can be observed in three areas. In the first instance, they have established rules for the harmonization and standardization of national EIA schemes.⁹² Secondly, they have been working on

86 at 230. Information about African countries is poor

⁸⁹ Very seldom do the studies include advice on both alternatives location of the project as well as alternative means to carry it out. Furthermore, the environmental evaluation does not provide for specific monitoring and auditing mechanisms. Finally, the result of the EIA study is not appropriately communicated to decision makers, the media and the public. Study reports are often in English and not widely available, W.V. Kennedy, "Environmental Impact Assessment and Bilateral Development Aid: An Overview" in Wathern, *supra*, note 39 at 274 [Kennedy]

⁹⁰ *Brundtland Report*, *supra*, note 1 at 222

⁹¹ Bothe & Gundling, *supra*, note 75 at 171-182.

⁹² Wirth, *supra*, note 78 at 85.

developing standards for national actions having potential transboundary effects.⁹³ More recently, they have also started recommending the use of EIA in regard to technology transfers.⁹⁴

(1) The Organization for Economic Co-operation and Development (OECD) adopted two recommendations which call upon member countries to establish procedures and methodologies for assessing the environmental impacts of significant public and private projects. They further recommend the exchange of information on environmental matters that could assist states in forecasting the environmental effects of such projects more effectively.⁹⁵ UNEP has also actively promoted the development of guidelines for EIA.⁹⁶ In January 1987, the "Goals and Principles of Environmental Impact Assessment" were formally adopted by the organisation.⁹⁷ Another interesting attempt to harmonize the different national EIA practices was the 1985 EC Directive on *The Assessment of the Effects on Certain Public and Private*

⁹³ *Ibid.* at 85.

⁹⁴ *Ibid.* at 90-103.

⁹⁵ Kennedy, *supra*, note 89 at 272. OECD 1974. *Analysis of the Environmental Consequences of Significant Public and Private Projects* C (74) 216 (Paris: OECD); OECD 1979. *The Assessments of Projects with Significant Impacts on the Environment* C (79) 116 (Paris: OECD) [hereinafter OECD Recommendations]

⁹⁶ *Environmental Yearbook*, *supra*, note 85 at 381.

⁹⁷ UNEP WG 152/4 Annex (1987) adopted G.C. Dec. 14/25 (1987), 42 UN GAOR Supp. (No 25) at 77, UN DOC A/42/25 (1987) The Preliminary Note indicates that EIA of planned activities has the purpose of "ensuring environmentally sound and sustainable development". The first Goal states that before decisions are taken to proposal activities that are likely to significantly affect the environment, environmental effect should be taken fully into account at an early stage in the planning process. The second encourages the adoption of appropriate national EIA procedures. The third promotes the development of reciprocal procedures for notification, information, exchange and consultation on activities that are likely to have significant transboundary environmental effects. Then thirteen specific Principles follow which further elaborate the three Goals above mentioned; *Environmental Yearbook*, *supra*, note 85 at 381-82.

Projects on the Environment.⁹⁸ Indeed, the European Community, in addition to its international organization nature, has a supranational character enabling it to place binding obligations on the EC members states by using EC legislative instruments instead of international conventions.⁹⁹ As such, the so-called implementation gap between signing and ratifying that exists for international conventions is avoided in the EC procedures and institutions.¹⁰⁰ With regard to EIA, the EC passed a Directive in 1985 which binds the Members States to the result, but gives them the choice as to the form EIA should take in their respective national legislations.¹⁰¹

(ii) International organizations have also begun developing a body of both binding and non-binding standards that call for the assessment of the environmental impacts of actions taking place within one state's jurisdiction that may have adverse effects on another state or an area of common use.¹⁰² One such example is the *Montreal Guidelines for the Protection for the Marine Environment Against Pollution from Land-Based Sources*. This UNEP initiative recommends that member states conduct appraisals of extra-territorial environmental impacts of activities that take

⁹⁸ See EC Directive, *supra*, note 81. Other international organizations such as the International Association on Impact Assessment (IAIA) and the United Nations Economic Commission for Europe (ECE) have addressed the issue for EIA. For example, the Senior advisers to UN/ECE governments appointed a task force which compared some major civil works projects, particularly highways and dams. The final report was presented in 1986, UN/ECE, *Applications of Environmental Impact Assessment - Highways and Dams*, (New York, United Nations), ECE/FNV/50, 1987 [hereinafter ECE Report].

⁹⁹ These binding instruments are set out in art. 89 of the Treaty of Rome. they comprise regulations, directives and decisions, N. Haigh, "Impact of the EEC Environmental Programme: the British Example" (1989) *Connecticut J of Int'l L* 453 at 454 & 456 [Haigh]

¹⁰⁰ *Ibid.* at 454 & 457.

¹⁰¹ Members States had to adapt the EC Directive on EIA in their legislations or administrative procedures by July 3, 1988; Haigh, *supra*, note 99 at 4.

¹⁰² Wirth, *supra*, note 78 at 87.

place entirely within their state's jurisdiction.¹⁰³ Similarly, the afore-mentioned EC Directive, requires an EIA for projects that may have effects on other EC member states.¹⁰⁴

(iii) The third manner in which international organisations promote EIA is in the area of industrial shipments, technology transfers, and other forms of foreign investment activity.¹⁰⁵ Even development assistance in the form of technology transfers can have potentially significant environmental effects. Development projects by multilateral banks [MDBs], for example, attempt to encourage economic growth in less developed countries. No matter how laudable the purpose may be, it is necessary that such international activities should, besides weighing economic considerations, also assess the potential environmental effects.¹⁰⁶ Until recently, concern was not significant enough to have the MDBs adopt EIAs.¹⁰⁷ However, development assistance, like any international investment by a multinational corporation, can have disastrous environmental effects.¹⁰⁸ For example, in

¹⁰³ Guideline 12, UN DOC. UNEP/WG.120/23 (1985), repr. in (1985) 14 *Envil. Pol'y & L.* 77, noted G C. DEC. 13/18,40 UN GAOR Supp.(No.25) at 51, UN DOC.A/40/25 cited in Wirth, *supra*, note 78 at 89.

¹⁰⁴ Art. 7 of the EC Directive; Wirth, *supra*, note 78 at 86.

¹⁰⁵ The Bhopal disaster raised international awareness of the danger of the international manufacture of hazardous substances. It showed the need for EIA requirements in case of transferred technologies, see C. Klein-Chesivoir, "Avoiding Environmental Injury: the Case for Widespread Use of Environmental Impact Assessments in International Development Projects" (1990) 30 *Virginia J. of Int'l Law* 517 at 527 [Klein-Chesivoir]. Foreign investment is therein understood to mean transboundary shipments of industrial chemicals, pesticides or technology transfers, such as industrial processes, plants, and so on; see Wirth, *supra*, note 78 at 90-91. As defined by Ashford & Ayers, technology transfer means "exported products, industrial processes, plants, or skills needed to apply technical ideas". See N.A. Ashford & C. Ayers, "Policy Issues for Consideration in Transferring Technology to Developing Countries" (1985) 12 *Ecology L Q* 871 at 875).

¹⁰⁶ Klein-Chesivoir, *supra*, note 105 at 531.

¹⁰⁷ For a description of the several reasons for which development assistance by MDBs did not raise serious concern, see Klein-Chesivoir, *supra*, note 105 at 528.

¹⁰⁸ *Ibid.* at 528.

December 1987 the World Bank approved an \$ 85 million credit to Sudan for the purchase of dangerous chemical insecticides and herbicides.¹⁰⁹ However and fortunately, international Organizations are now routinely including EIA as part of the development assistance approval process.¹¹⁰ As early as 1980, six multilateral development banks including the World Bank signed a declaration of environmental policies and procedures relating to economic development¹¹¹ declaring their intention to incorporate environmental concerns into economic development planning.¹¹² This move was further strengthened by World Bank's adoption of the Environmental Assessment Operational Directive (OD) of 1990.¹¹³

The OECD has also been working on developing EIA standards for aid programs. In 1985 it adopted a non-binding recommendation on environmental assessment of development assistance projects and programs, listing categories of projects and programs most in need of EIA.¹¹⁴ A 1986 OECD recommendation elaborated standards for the preparation and content of an EIA of aid projects and programs.¹¹⁵

¹⁰⁹ Wirth, *supra*, note 78 at 95.

¹¹⁰ *Ibid.* at 95.

¹¹¹ *Ibid.* at 96.

¹¹² Klein-Chesivoir, *supra*, note 105 at 531. In 1985 the World Bank adopted in 1985 standards for Bank-financed projects to prevent industrial accidents at hazardous installations, World Bank Department of Environment, *Guidelines for Identifying, Analyzing, and Controlling Major Hazardous Installations in Developing Countries* (1985); see Wirth, *supra*, note 78 at 96.

¹¹³ This directive standardizes and formalizes the environmental impact assessment process, *Environmental Yearbook*, *supra*, note 85 at 333-34.

¹¹⁴ OECD Doc. C(85) 104 s.1(a), repr. in OECD and the Environment at 30; see Wirth, *supra*, note 78 at 93.

¹¹⁵ *Ibid.* at 87. ; OECD Doc. C (86) 26; see Wirth, *supra*, note 78 at 93.

(b) International conventions with regard to EIA

Different types of international agreements provide for the appraisal of potential environmental harm.¹¹⁶ For example, many of the regional agreements dealing with environmental marine protection and negotiated under the auspices of UNEP contain expressed EIA requirements.¹¹⁷ Similarly, under the 1982 *United Nations Convention on the Law of the Sea*, signatory States are obliged to conduct environmental appraisals if there is a reasonable possibility of harm to the marine environment.¹¹⁸

¹¹⁶ Certain bilateral agreements contain EIA procedures for planned activities that are likely to cause adverse transboundary environmental impacts, Wirth, *supra*, note 78 at 88. See for example, the *Agreement Between the United States and Mexico on Cooperation for the Protection and Improvement of the Environment in the Border Area*, 14 August 1983, T.I.A.S. no 10,828, reprinted in 22 I.L.M. 1025. Its article 7 states that: "The Parties shall assess, as appropriate, in accordance with their respective national laws, regulations and policies, projects that may have significant impacts on the environment of the border area, so that appropriate measures may be considered to avoid or mitigate adverse environmental effects". In the *Agreement for the Reconstruction of the Alaska Highway Between the United States and Canada*, 11 January - 11 February 1977, 28 U.S.T. 5303, T.I.A.S. no 863. The Parties agreed "to process an Environmental Impact Statement in accordance with the Laws of the United States and of Canada"; Klein-Chesivoir, *supra*, note 105 at 526.

¹¹⁷ Wirth, *supra*, note 78 at 88. For a brief history of the EIA requirements contained in International Conventions, see Bothe & Gundling, *supra*, note 75 at 171-72-73. The UNEP's Regional Seas Program include for instance: the *Agreement of the South-East Asian Nations on Conservation of Nature and Natural Resources*, 9 July 1985, (1985) 15 *Envil. Pol'y and L.* 64, arts. 14, 19 and 20; the *Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region*, 24 March, 1983, 22 I.L.M. 227, the *Convention for the Protection of the Natural Resources and Environment of the South Pacific Region*, 25 November, 1986, 26 I.L.M. 38.

¹¹⁸ Article 206 Assessment of Potential Effects of Activities
"When States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of or significant and harmful changes to the marine environment, they shall, as far as practicable, assess the potential effects of such activities on the marine environment and shall communicate reports of the results of such assessments in the manner provided in the article 205", UN. Doc. A/Conf. 62/122 of 7 October, 1982, 21 I.L.M. 1262.

The 1991 *Convention on Environmental Impact Assessment in Transboundary Context* represents the first international agreement devoted exclusively to EIA.¹¹⁹ Prior to the commencement of an activity that may have significant environmental effects, each State Party to the convention is required to assess all possible transboundary outcomes.¹²⁰ The Convention prescribes specific procedures for the preparation of EIA studies,¹²¹ and requires the notification of and consultation with all affected parties.¹²² Finally, the Convention provides for reciprocal public participation, post-project analysis, as well as mechanisms for dispute resolution.¹²³

To date, it is still not clear under customary international law whether states are obliged to perform EIA for domestic activities that may produce transboundary adverse environmental effects. According to Klein-Chesivour, assessment of potential transboundary environmental harm is "an element of customary international law".¹²⁴ However, for Bothe and Gündling this principle is still in its period of

¹¹⁹ The ECE *Convention on Environmental Impact Assessment in Transboundary Context* [hereinafter ECE Convention] or *la Convention sur l'évaluation de l'impact sur l'environnement dans un contexte transfrontière*, repr. in (1991-1992) 9 *Documents juridiques internationaux* at 115. This convention has been developed under the auspices of the senior advisors on Environmental and Water Problems (SAEWP) of the United Nations Economic Commission for Europe (ECE). SAEWP is a subsidiary body of the ECE, which is a United Nations regional regrouping North American, Eastern and Western European countries. The ECE Convention has been signed by Canada on the 25 February 1991.

¹²⁰ Art. 2(3).

¹²¹ Art. 4 & appendix XII.

¹²² Art. 3 & 5.

¹²³ Arts. 5, 7 & 15. It is important to note that the Eastern European countries are members of the ECE. The signature and ratification of this agreement by these countries may, certainly, enhance the well known disastrous situation of the environment in East Europe.

¹²⁴ Klein-Chesivour, *supra*, note 105 at 527.

gestation.¹²⁵ Further, such an EIA duty, if considered as a principle, could also be derived from the substantive principle in international environmental law requiring a state to abstain from activities within their jurisdiction or their control to cause environmental harm of other states or of areas beyond the limits of national jurisdiction.¹²⁶ This precautionary duty has several procedural companion elements such as prior information and consultation which are already part of customary international law.¹²⁷ Proper implementation of the principle of prevention of significant transboundary environmental harm would, logically, also call for a third procedural duty requiring states to assess the risk of transboundary environmental harm that could possibly be caused by their activities.¹²⁸ Notwithstanding international treaties and resolutions including the requirement of performing EIA in a transboundary context,¹²⁹ this third procedural obligation has

¹²⁵ As stated by Bothe and Gundling, one can assert without exaggerating that a principle of public international law is developing and soon to be accepted as such; see Bothe & Gundling, *supra*, note 75 at 182.

¹²⁶ This basic principle of international environmental law is a restatement of the rule of good neighbours and the maxim *sic utere tuo ut alienum non laedas*; Robinson in Saunders, *supra*, note at 22. This duty of prevention found first support in the 1938/1941 *Trail Smelter* decision (United States v. Canada) and further recognition in Principle 21 of the 1972 Stockholm Declaration, Declaration of the UN Conference on the Human Environment, principle 21, June 16, 1972, in Report of the UN Conference on the Human Environment, UN Doc. A/Conf.48/14, reprinted in 11 I.L.M. 1416.

¹²⁷ Handl, "Environmental Security and Global Change: The Challenge to International Law" [Handl] in *Environmental Protection* in W. Lang and others, *Environmental Protection and International Law* (London, Graham & Trotman, 1991) at 76 [hereinafter *Environmental Protection*].

¹²⁸ Handl, *supra*, note 127 at 76. Lammers, on the other hand, seems to derive the obligation for a State to perform an EIA in a transboundary context from the duty of prior notice. Indeed, only the assessment of the likely transnational environmental effects of planned activities will permit a State to verify if such impacts are such as to give prior notice and information to other States; J.G. Lammers, "International and European Community Law: Aspects of Pollution of International Watercourses" in *Environmental Protection*, *supra*, note 127 at 131 [Lammers].

¹²⁹ See, for example, earlier mentioned art. 206 of the UN *Convention on the Law of the Sea*; arts. 6 & 7 of the United States-Mexico *Environmental Cooperation Agreement*; art.7 of the EC Directive as well as the 1985 and 1986 OECD recommendations; see OECD Recommendations, *supra*, note 95.

not, until recently been considered as a principle in international law.¹³⁰ However, recent developments, namely the signature of the above mentioned I-CE-Convention on Environmental Impact Assessment in Transboundary Context,¹³¹ as well as the new Canadian EIA legislation, which contains provisions on transboundary impacts,¹³² may well by now have elevated the EIA duty to a custom of public international law.¹³³

F. THE NEXUS OF ENVIRONMENTAL IMPACT ASSESSMENT AND SUSTAINABLE DEVELOPMENT

As was stated at the outset, sustainable development is as yet a concept whose operational measures, as well the cost and benefits it may entail, are not yet fully identified and understood.¹³⁴ Thus, the challenge of this decade is to find the practical means of this principle. It is, however, obvious that the sustainability of projects from which we seek socio-economic development, is dependent on our ability to recognize, understand, and act upon the project's impact on the biophysical environment as well as its consequences on human health and well being.¹³⁵ Consequently, EIA processes can provide both a means to evaluate the full effects of development activities, and a means to implement any necessary measures to mitigate environmental harm. As such EIA becomes an indispensable tool in the quest for sustainable development.

¹³⁰ Handl, *supra*, note 127 at 76.

¹³¹ See ECE Convention, *supra*, note 119.

¹³² See sections 46-53 of the *Canadian Environmental Assessment Act*.

¹³³ Handl, *supra*, note 127 at 77.

¹³⁴ Saunders, *supra*, note 2 at 1.

¹³⁵ Elder & Ross, *supra*, note 4 at 127.

EIA can assist in achieving sustainable development by identifying the environmental repercussions of activities which are still at the planning stage.¹³⁶ By making this type of evaluation at such an early stage it maybe possible to manage the environment better by screening out projects with patently deleterious effects or unjustifiable social costs.¹³⁷ Further, depending on its scope, EIA may apply not only to "projects" such as dam construction or nuclear power generation, but also to policies and programs such as transportation policies, changes to income tax and fiscal programs, as well as agricultural subsidy programs. Environmental scrutiny of conceptual proposals is, perhaps, one of the key points by which EIA could promote sustainable development.¹³⁸ Indeed, as indicated earlier, the recognition and integration of environmental dimensions in all such decision-making activities is the "essence" of sustainable development.¹³⁹

1. Deficiencies in Contemporary EIAs

The experience to date with the Canadian and other national environmental assessment processes demonstrates that the adoption of EIA does not automatically lead to the goal of moving towards sustainable economic activities. Several reasons exist for this relative lack of success of current EIA mechanisms in this regard.

One of the most significant drawbacks of the EIA processes of many countries is that only "*proposed*" activities are subjected to the process.¹⁴⁰ "*Existing*" activities however may also lead to the deterioration of the social and

¹³⁶ *Ibid.* at 128.

¹³⁷ *Ibid.* at 125, 127-28.

¹³⁸ For further discussion on assessing policies and programs; see Holtz, *supra*, note 11 at 101.

¹³⁹ *Brundtland Report*, *supra*, note 1 at 62 & 313, *Achieving Sustainable development*, *supra*, note 21 at 131.

¹⁴⁰ Elder & Ross, *supra*, note 4 at 128.

biophysical environment, and this without any scrutiny. Consequently, even the adoption of an EIA process ensuring that only ecologically sound and equitably proposed developments are accepted would only be a watered down version of a true commitment to making EIA promote sustainable development. Indeed, by leaving existing activities outside the scope of its net existing activities, such an EIA process will allow the perpetuation of unsustainable forms of development. One method of mitigating this fundamental deficiency in the formulation of EIA schemes is by requiring the appraisal of "*major changes*" of existing activities that may cause "significant harm" to the environment.¹⁴¹ As will be observed in the next chapter, the new federal EIA Act in Canada stipulates that modifications, the decommissioning, as well as the abandoning of a project are activities subject to an assessment.¹⁴²

Another significant flaw of existing EIA processes is that the majority of them are confined to the evaluation of particular, "*concrete projects*", such as road widenings, dam constructions and nuclear power plant sitings. Although EIA literature continually underlines the crucial importance of subjecting all "policies, plans, and programs" to environmental assessment,¹⁴³ to date, many legislators have failed to legislate in that sense.¹⁴⁴

Environmentalists have criticised the lack of an ecological perspective in current EIA procedures.¹⁴⁵ Despite twenty years of experience with EIA, pre-

¹⁴¹ *Ibid.* at 128.

¹⁴² S. 2(1).

¹⁴³ See for example, *Brundtland Report*, *supra*, note 1 at 22, Holtz, *supra*, note 11 at 101; *Achieving Sustainable Development*, *supra*, note 21 at 131; Clark, *supra*, note 33 at 117.

¹⁴⁴ See *infra*, Chapter II, note 252 and accompanying text

¹⁴⁵ G.E. Beanlands & P.N. Duinker, *An Ecological Framework for Environmental Impact Assessment in Canada* (Halifax: Institute for Resource & Environmental Studies, 1983) at 1-7 [Beanlands & Duinker].

development baseline data are still insufficient. The lack of technical information on wildlife or ecosystem reactions caused by development activity has rendered assessment analysis more descriptive than predictive and with a tendency to lack rigour.¹⁴⁶ Unless governments and projects proponents devote more time and financial funds to scientific research,¹⁴⁷ and support the EIA with ongoing environmental monitoring and follow-up,¹⁴⁸ our limited knowledge of ecological systems will not generate reliable assessments and ecologically sound development projects.¹⁴⁹ Scientists also contend that more attention is paid to the political-legal aspect of the present EIA processes than to their scientific dimension. The final decision as to whether or not a project should be approved remains almost entirely "political" in that economic issues have tended to outweigh ecological considerations.¹⁵⁰ A serious commitment to sustainable development will require significant changes in thinking at the "political level"; ecological considerations must, at the very least, be placed on an equal footing with economic aspects.¹⁵¹

Other shortcomings in current EIA processes include the lack of accountability, limited opportunity for public participation, and the tenuous link

¹⁴⁶ Jacobs & Sadler, *supra*, note 6 at 18.

¹⁴⁷ R.D. Jakimchuk, "The Role of Environmental Assessment in Support of Sustainable Development" in Jacobs & Sadler, *supra*, note 6 at 85 [hereinafter Jakimchuk].

¹⁴⁸ Jacobs & Sadler, *supra*, note 6 at 18-19.

¹⁴⁹ Jakimchuk, *supra*, note 147 at 84.

¹⁵⁰ The assessment decision as to whether to proceed with a project or not is a political one. It balances economic considerations (energy production, energy independence and job creation) against the environmental effects caused by the project.

¹⁵¹ This may imply the abandoning of a project, although economically profitable. In particular, the creation of jobs or the production and sale of energy to a foreign country may not outweigh the ecological and cultural costs generated by the project.

between evaluation and implementation. It is, in particular, difficult to enforce the assessment decision and EIA schemes often lack of follow-up programs.¹⁵²

2. Areas of Extension and Consolidation in Existing EIAs

Notwithstanding these flaws mentioned above, EIA has evolved considerably over the years. Contemporary legislative and administrative EIA procedures are developing new approaches and areas of strength that can be exploited in order to achieve sustainable forms of development.¹⁵³ In particular, evolutionary trends are noticeable in two major areas. Firstly, there is an expansion in the scope of the assessment, and social well-being repercussions, risk assessment and health effects are receiving increasing scrutiny. Such attention was absent from the narrow spectrum of the issues that needed appraisal in the first generation of EIAs.¹⁵⁴ Secondly, procedural advances in the appraisal mechanisms have provided a new level of sophistication and credibility to, and acceptance of, the concept of environmental impact assessment.¹⁵⁵

¹⁵² Elder & Ross, *supra*, note 4 at 128-29. The implementation phase and follow-up programs will be examined in Chapter IV.

¹⁵³ Jacobs & Sadler, *supra*, note 6 at 17.

¹⁵⁴ EIAs, in the early 70's, focused mainly on the identification and prediction of environmental effects, such as impacts on species, water quality, pollution and did not encompass a wider range of investigations; J. A. McNeely, "Environmental Assessment in Support of Sustainable Development" in Jacobs & Sadler, *supra*, note 6 at 105 & 111 [McNeely], Jacobs & Sadler, *supra*, note 6 at 18

¹⁵⁵ Jacobs & Sadler, *supra*, note 6 at 17.

(a) Developments in the scope of EIAs

(i) More and more states are including the examination of social impacts in their environmental evaluations.¹⁵⁶ In fact, *social impact assessment* (SIA) or *socio-economic assessment* has evolved to such an extent that it is sometimes treated as an independent discipline.¹⁵⁷ Be that as it may, SIA developed to acknowledge that the EIA process necessarily involves social and economic considerations.¹⁵⁸ Moreover, it should be noted that the increased scrutiny of socio-economic factors into the more traditional "pure ecological assessments" renders the approach to environmental management and development planning more integrated.¹⁵⁹ As such, EIA represents a potential to be exploited in order implement sustainable forms of development.¹⁶⁰

(ii) The consideration of "*cumulative impacts*" is another element emerging in more recent national EIA processes. Duffy defines cumulative impacts as the "*sum of environmental effects resulting from a number of projects which may occur within*

¹⁵⁶ *Ibid.* at 17-18.

¹⁵⁷ Social impact assessment is "an area of systematic inquiry, which seeks to investigate and understand the social consequences of planned change and the processes involved in that change", in N.M. Krawetz, W.R. Macdonald & P. Nichols, *A Framework for Effective Monitoring: A Background Paper Prepared for the Canadian Environmental Assessment Research Council* (Ottawa: Minister of Supply & Services Canada, 1987) at 1 [hereinafter Krawetz]

¹⁵⁸ Emond, *supra*, note 52 at 10.

¹⁵⁹ Jacobs & Sadler, *supra*, note 6 at 17.

¹⁶⁰ Rees, *supra*, note 3 at 284.

a given area and time frame".¹⁶¹ More precisely, cumulative effects have two characteristics. Firstly, cumulative effects appear when ecological impacts occur so frequently in time or so densely in space, that affected ecosystems, despite a great resilience to incremental human activities and development, can no longer absorb them.¹⁶² Secondly, there may also be so-called "synergistic effects" which arise when different impacts on the natural and social environment "interact".¹⁶³ As such, the joint action of these effects increases each other's effectiveness.¹⁶⁴ Cumulative impacts are a serious matter of concern. It should be noted, in particular, that the more significant environmental problems presently existing are the result of cumulative impacts: global warming, ozone depletion, loss of biological diversity and acid rain represent cumulative effects of a range of economic activities taking place around the world.¹⁶⁵

With regard to EIA, early environmental assessment schemes failed to consider the additive and synergistic nature of some types of negative environmental

¹⁶¹ P.J.B. Duffy, ed., *Initial Assessment Guide. Federal Environmental Assessment and Review Process* (Ottawa: Minister of Supply & Services, 1986) [hereinafter *Initial Assessment Guide*].

¹⁶² N.C. Sonntag et al., *Cumulative Effects Assessment: A Context for Further Research and Development. A Background Paper Prepared for the Canadian Environmental Assessment Council* (Ottawa: Minister of Supply & Services, 1987) at 5 [Sonntag], *Achieving Sustainable Development*, *supra*, note 21 at 134.

¹⁶³ Sonntag, *supra*, note 162 at 5.

¹⁶⁴ The interaction of these effects is greater than the sum of the contribution of individual effects.

¹⁶⁵ *Achieving Sustainable Development*, *supra*, note 21 at 134. In addition, other factors, such as land clearance and tropical deforestation reinforce global warming and the disappearance of biological diversity; Jacobs & Sadler, *supra*, note 6 at 5.

consequences. Instead of the "project specific"¹⁶⁶ approach of an earlier era, the current practice is to consider the implications in terms of a much broader framework.¹⁶⁷ The development of guidelines for the appraisal of cumulative effects will help to control the negative, incremental consequences of relatively small and even unrelated, yet contiguous projects.¹⁶⁸ It is also important to recognise that the cumulative effects of routine public and private activities may prove far more damaging than the environmental repercussions of one large-scale project.¹⁶⁹

However, assessing cumulative effects will not be a trivial task. It will require a total rethinking of the "site-specific and short-term" perspective presently existing in EIAs. The EIA scope will have to move beyond the project level to programs and policies,¹⁷⁰ as well as broaden its narrow spatial and temporal perspective.¹⁷¹ Further, cumulative impact analysis will only be meaningful if ecological and social limits are defined. Rees notes that regional planning will certainly be the best way to set limits. For example, a regional plan could use the criterion of "carrying

¹⁶⁶ Sonntag, *supra*, note 162 at 29, Cirelli, *supra*, note 71 at 7.

¹⁶⁷ Rees, *supra*, note 3 at 281 & 283.

¹⁶⁸ *Ibid.* at 28. Projects with potential cumulative impacts are, for example,: (1) multiple developments in restricted geographical areas, such as railway, highway, pipeline and transmission lines in corridors (2) Industrial effluents emitted into a natural receiving system, such as multiple large and small industrial effluent outfalls on a river system with limited carrying capacity, above which water quality standards are exceeded. For more instances, see *Initial Assessment Guide, supra*, note ? at 25.

¹⁶⁹ Rees, *supra*, note 3 at 281

¹⁷⁰ As Boothroyd observes, cumulative effects will not be effectively assessed as long as "policies, regulations, and managerial decisions" are not included in the scope of EIA; Boothroyd, *supra*, note 21 at 151

¹⁷¹ Gardner, *supra*, note 13 at 46-47.

capacity" within which development and economic activity would be allowed.¹⁷² At the same time, proper management of cumulative impacts will require ongoing "environmental impacts monitoring" within existing regional frameworks in order to evaluate whether or not the level of economic development and activities are within the thresholds established by the carrying capacity.¹⁷³ According to Rees, economic developments and activities that do not exceed the carrying capacity of a management region will be ecologically sustainable.¹⁷⁴ In sum, the assessment and management of cumulative impacts seems to operationalize many of the necessary principles contained in the concept of sustainable development.¹⁷⁵ It requires the adoption of a global and long-term approach to the analysis of development and economic effects and it necessitates monitoring and the elaboration of regional plans. With respect to regional plans, it should be noted that Canada has no regional plans for the use and developments affecting wetlands, renewable resources or land use. As well EIA processes and assessment decisions are taken in a vacuum without clear environmental objectives.¹⁷⁶ As many EIA contributors have stated, cumulative impacts assessment is a promising area of development in the EIA process that can open the door to sustainable development.¹⁷⁷

¹⁷² *Achieving Sustainable Development*, *supra*, note 21 at 134-135. However, some ecologists have criticized the use of "carrying capacity", because of the difficulties to establish appropriate measures, *Global Sustainability*, *supra*, note 33 at 134.

¹⁷³ *Ibid.* at 135, Jacobs & Sadler, *supra*, note 6 at 21.

¹⁷⁴ *Ibid.* at 135.

¹⁷⁵ Gardner, *supra*, note 13 at 47.

¹⁷⁶ Holtz, *supra*, note 11 at 102.

¹⁷⁷ Jacobs & Sadler, *supra*, note 6 at 20-21; Boothroyd, *supra*, note 21 at 150-151; Gardner, *supra*, note 13 at 44 & 46-47, *Achieving Sustainable Development*, *supra*, note 21 at 133-139.

(b) Development of the EIA process

(1) As the Brundtland Report recognises, the reorientation of development onto more sustainable paths will require "*immense efforts to inform the public and secure its support*"¹⁷⁸ at both the national and the international level. Therefore, well designed environmental assessment mechanisms must provide for mandatory public participation in project development processes,¹⁷⁹ thereby enhancing the ability to achieve sustainable development.¹⁸⁰ It seems to be that EIA is showing development trends geared at improving its public participation aspect. For example, procedural changes in environmental assessment have been brought about by the growing recognition by all players that "traditional" mechanisms of participation and decision making are inadequate to deal with the complexities of modern environmental protection needs. As a result of different and often conflicting values, interests and needs, the evaluation of a project or activity must involve the full participation of all concerned groups including government, industry, environmental organizations, aboriginal people and local communities. The traditional adversarial model, more geared to finding the "truth", has proven to be inadequate in achieving the balance and consensus that is the essence of a socially, economically,

¹⁷⁸ *Brundtland Report, supra*, note 1 at 326.

¹⁷⁹ *Canadian Bar Report, supra*, note 37 at 6.

¹⁸⁰ *Brundtland Report, supra*, note 1 at 64. The importance of the public's right to know, to have free access to information in environmental matters and to alternative sources for technical expertise will permit an informed public debate, *Canadian Bar Report, supra*, note 37 at 6.

environmentally and politically optimal solutions.¹⁸¹ For example, locating a given facility might be regionally necessary, but locally unwanted.¹⁸² Facility siting commonly generates the "NIMBY (Not In My Back Yard) Syndrome" and NIMBY related issues are generally medium-scale projects. In the context of the federal EIA process, NIMBY issues lie beyond routine, technically based assessments and are not automatically referred for a full evaluation by a review panel.¹⁸³ All this suggests that another track in the EIA process would be necessary to solve NIMBY disputes.

There is accordingly a growing interest in alternative forms of dispute resolution that will help to mediate such "social conflicts". Collaborative techniques¹⁸⁴ including "*conciliation*" and "*mediation*" are seen as attempts at direct, face-to-face, voluntary negotiations between all interested parties in order to build consensus, and to reach agreements that are acceptable to all parties.¹⁸⁵ By broadening its focus of practice to include consultative procedures in order to achieve partnership between the public and governmental communities as well as

¹⁸¹ Hearings tend to be adversarial in nature. They encourage the parties involved to focus on their claims and alleged rights, rather than promoting a search for a solution, Sadler & Armour, *supra*, note 57 at 50. As it was stated, "*the process channels arguments along for - and - against lines, exaggerates rather than reconciles differences, and leaves to a board or panel to rationalize the evidence and make decisions or recommendations on whether and how a proposal would proceed*", *ibid.* 3.

¹⁸² *Ibid.* at 1

¹⁸³ Sadler & Armour, *supra*, note 57 at 76.

¹⁸⁴ Sadler & Armour, *supra*, note 57 at foreword.

¹⁸⁵ *Ibid.* at 3.

with private sectors, EIA schemes are indicating promising trends towards implementing sustainable development.¹⁸⁶

(ii) A second aspect of the increased sophistication of procedural developments in EIA is the recognition of the crucial importance of "*follow-up programs*". In the past, little attention was paid to the post-approval phase.¹⁸⁷ However, there is a new awareness that there does not exist a precise understanding of the environment's reaction, adjustment and response to "environmental stressors". Instead of continuing to believe in a non-existent ability to make exact predictions, the need must be recognized for on-going monitoring and readiness to deal with unpredictable and unexpected outcomes through adaptive and innovative management techniques.¹⁸⁸ Extending the scope of traditional EIAs to post-project actions may bring many positive aspects. Firstly, it will be possible to evaluate the accuracy and usefulness of the socio-environmental effects which had been predicted (and consequently reduce uncertainty). It will also measure the effectiveness and efficiency of the technical and administrative aspects of EIA.¹⁸⁹ Further, post-project analysis will allow for the monitoring of cumulative effects and bring the often missing link between EIA and comprehensive environmental

¹⁸⁶ As noted by the Brundtland Commission, scientists, individual citizens, community groups and NGOs can play a vital role in moving towards sustainable development paths, *Brundtland Report*, *supra*, note 1 at 326.

¹⁸⁷ B. Sadler, "The Evaluation of Assessment: Post-EIS Research and Process Development" in Wathern, *supra*, note 39 at 129 [hereinafter Sadler in Wathern]; see also, *infra*, Chapter IV which will be devoted to Post-Projects Analysis.

¹⁸⁸ Rees, *supra*, note 3 at 282.

¹⁸⁹ Gardner, *supra*, note 13 at 46.

planning and control.¹⁹⁰ In sum, the increasing use of "follow-up programs" is another key to opening the door to a sustainable future.

Once existing EIA deficiencies are addressed and present strengths in current EIA go on extending the scope of application as well as consolidating the procedural structure, Environmental Impact Assessment will prove to be a very effective and efficient vehicle in achieving the necessary transition to sustainable development.¹⁹¹

¹⁹⁰ *Ibid.* at 46 citing Munro & al.

¹⁹¹ Jacobs & Sadler, *supra*, note 6 at 17 & 20-24.

CHAPTER TWO: THE FEDERAL EIA PROCESS IN CANADA

A. INTRODUCTION

Chapter II, as well as Chapters III and IV will move from the abstract level to the more concrete review of one specific scheme. Although EIA processes have been implemented all over the world, the discussion will be confined to the proposed new federal EIA legislation in Canada. There are two principal reasons for this choice.

First, Canadian EIA processes have advanced beyond the experimental stage. For almost two decades, the federal government has required its departments to assess the potential environmental and/or socio-economic implications of their activities. Furthermore, every province now practices EIA. It is therefore interesting for a European to examine a North American process which can be considered well-developed when compared to those implemented in Europe.¹⁹²

Second, the federal government is poised to pass a new federal law on EIA. The decision to revise the existing federal scheme was mainly engendered by two events: Canada was the first country to adopt the principle of sustainable development, at least notionally, as a goal towards which public policy should be aimed.¹⁹³ In October 1986, the National Council and the Ministers of the

¹⁹² For example, the public participation component is not given the same importance in Europe as on the North American continent. The Netherlands, however, have a broad and advanced EIA process, Robinson, *supra*, note 38 at 22.

¹⁹³ Saunders, *supra*, note 2 at 1.

Environment created a National Task Force on Environment and Economy (NTFEE).¹⁹⁴ Its Report was published in September 1987, even before the presentation of the Brundtland Report to the UN General Assembly.¹⁹⁵ Among its 40 recommendations, the Report identifies the need for the increased use of EIA as a device for "environment-economy integration".¹⁹⁶ Thus, it will be interesting to determine if Ottawa has been consistent with its endorsement of sustainable development in its drafting of the new federal EIA process.¹⁹⁷ In addition, a series of decisions by the Canadian courts, holding that EARP has "*the force of law*" and applies to provincially initiated dams, rendered the ambit of the Guidelines Order uncertain. This alerted provincial governments to the possibility of encroachment by the federal government into provincial matters through EARP.

All this suggests that it is an opportune time to analyze the proposed Canadian EIA. Space, however, does not permit a comprehensive analysis of all aspects of the *Canadian Environmental Assessment Act*. Therefore, chapter II, III and IV will only focus on the principal EIA scheme contained in the Act unfolds, leaving

¹⁹⁴ The NTFEE was composed of environmental ministers, senior industry executives, and representatives from environmental organizations and academics; Canadian Council of Resource & Environment Ministers, *Report of the National Task Force on Environment and Economy* (Ottawa: CCREM, 1987) [hereinafter *NTFEE report*]; T. Hill, "Our Common Future. Reshaping Canada's EIA Process" (1988) 8:3 *Env. Impact Ass. Rev.* 197 at 197 [Hill].

¹⁹⁵ Starke, *supra*, note 27 at 48.

¹⁹⁶ *Canadian Bar Report*, *supra*, note 37 at 7. The NTFEE Report is considered a milestone by the government and industry. The environmentalists are, however, suspicious about it, see, Rees, *supra*, note 3 at 280.

¹⁹⁷ T. Schrecker, "The Canadian Environmental Assessment Act: Tremulous Step Forward, or Retreat Into Smoke and Mirrors?" (1991) 5:3 *C.E.L.R.S. (N.S.)* 192 at 193 [Schrecker]

aside other possible EIA processes included in the *CEAA*.¹⁹⁸ The procedural steps shaping the principal EIA process will be explored starting from the assumption that only a strong EIA scheme can ensure a move towards sustainable development.¹⁹⁹ As suggested in Chapter I, there is considerable disagreement as to what constitutes sustainable development and its specific implications are still not clear. While the following review will not attempt to establish a practical definition of sustainable development in the EIA context, it will nevertheless examine elements of the EIA process which are conducive to sustainable development, and clauses which are inimical to its enhancement.

¹⁹⁸ Sections 1 to 39 & 55 to 63. Among the various EIA processes possible under the Act, the following are included. the environmental assessment process of a project which requires the approval of the Cabinet for the implementation, for example, the issuance of a permit, will be developed by regulation; s. 5(2) & s. 59(g). Crown corporations in s. 8 and Commissions in s. 9 shall ensure that an EIA is conducted in accordance with regulations made by the Governor-in-Council; s. 59(j)-(k). There is also a specific evaluation system for projects having transboundary environmental effects which provides for either a review panel or mediation; s. 46-53. Furthermore, the *CEAA* contains provisions modifying the general EIA process when interjurisdictional issues are at stake. It provides for joint-review panels or mediation between the federal government and another jurisdiction, such as a province, s. 40-42.

¹⁹⁹ Indeed, the Brundtland Commission calls for tougher and extended environmental regulations, *Brundtland Report*, *supra*, note 1 at 330.

B. THE NEW FEDERAL EIA ACT IN ITS HISTORICAL CONTEXT

"I want to emphasize that the new Act will go much further than the original Guidelines. In fact, this legislation and Reform Package will result in an environmental assessment process which is more powerful in its impact on decision making than any other environmental assessment in the world".²⁰⁰

Is the proposed CEAA exemplary environmental legislation? Does it go much further than the earlier federal EIA process? Does it ensure the promotion of the principles of sustainable development? These questions will be discussed below in the analysis of Bill C-13.

The Federal Government established a federal EIA process, in the beginning of the 1970's. Responding to a 1972 Task Force Report on Environment Policies and Procedures,²⁰¹ Ottawa enacted an EIA scheme by way of cabinet directives, passed in 1972, 1973 and 1977.²⁰² In 1979, an amendment to the *Government Organization Act* brought the first statutory basis for federal EIA. Section 6 obliged the Minister of the Environment [MoE] to recommend programs to the Cabinet ensure that new federal projects, programs and activities be subjected to an

²⁰⁰ "Statement of the Honourable Robert de Cotret, Minister of the Environment, Introducing the *Canadian Environmental Assessment Act*" (June 18, 1990) at 6 [hereinafter Minister's Statement].

²⁰¹ This Task Force was created by Environment Canada, the Federal Department of the Environment. It completed its report in 1972. The Task Force proposed that the process be enshrined in legislation and that a provisory EIA program be established by Cabinet directive in the interim. However, the federal response to the report was a much more diluted process than the one proposed in the report; Emond, *supra*, note 52 at 232; McCallum, *supra*, note 48 at 386. The report is classified as confidential by the government.

²⁰² Directives of June 3, 1972 and December 20, 1973, see *Environmental Approvals, supra*, note 45 at 1.4. A 1977 directive made only minor revisions to the process, J.A. Robertson, *Environmental Impact Assessment in Canada. Proposals for Change. Background Paper - Research Branch of the Library of Parliament* (Ottawa: Supply & Services, 1990) at 2 [Robertson].

EIA.²⁰³ However, the modification of the *Government Organization Act* did not change the administrative status of the federal EIA process. In June of 1984, the *Environmental Assessment and Review Process* of the Guidelines Order adopted under the *Government Organization Act*, replaced the former directives.²⁰⁴ Nonetheless, the federal EIA process remained an administrative procedure.²⁰⁵

The reform initiatives of the present process began in 1987, embracing both the structural and procedural aspects of the EIA.²⁰⁶ On June 18, 1990 Bill C-78

²⁰³ The *Government Organization Act*, 1979, S.C. 1978-79, c.13, part III, s. 6(2), now known as the *Department of the Environment Act*, R.S.C. 1985, c. E-10, S.6, the enabling section has been repealed by S. 146 of the *Canadian Environmental Protection Act*, R.S.C. 1985 (4th Supp.), c. 16, Lucas & Franson, *supra*, note 73 at 995-9; *CELA Newsletter*, Feb 1979, issue 1 at 1. The acronym MoE throughout this thesis will refer to the Federal Minister of the Environment

²⁰⁴ It is in 1980, that FEARO started the reform of EARP. Indeed, environmental and aboriginal groups by the end of the 1970's expressed their dissatisfaction with the federal EIA process. The screening phase, for instance, was found to be ad hoc, secretive and no consensus existed among federal agencies as to what types of proposal needed initial assessment, see T. Fenge & G. Smith, "Reforming the Federal Environmental Assessment and Review Process" (1986) 12 *Canadian Public Policy* 596 at 598 FEARO is the Federal Environmental Assessment Review Office which administers the process [hereinafter FEARO].

²⁰⁵ Institutional barriers made the MoE and FEARO propose minor reforms to the process. Indeed, certain federal agencies feared the loss of their importance by the enlargement of the scope of the federal EIA process. The National Energy Board, the Department of Energy, Mines and Resources, Fisheries and Oceans, Indian Affairs and Northern Development among others, showed a strong reluctance to the improvement of EARP; Fenge & Smith, *supra*, note 204 at 599-602.

²⁰⁶ In January 1987, FEARO established a study group which reviewed the procedural requirements in the public review phase of EARP; Study Group on Environmental Assessment Hearing Procedures, *Public Review: Neither Judicial nor Political, but an Essential Forum for the Future of the Environment - A Report Concerning the Reform of Public Hearing Procedures for Federal Environmental Assessment Reviews* (Ottawa: Supply & Services, January, 1988) [hereinafter FEARO Study Group]. That same year, the then Minister of the Environment released a discussion paper which intended to reform the existing process; Environment Canada, FEARO, *Reforming Federal Environmental Assessment - A Discussion Paper* (Ottawa: Supply & Services). Public meetings and a National Consultation Workshop on federal environmental assessment reform then took place in Ottawa in May 1988, FEARO, *The National Consultation Workshop on Federal Environmental Assessment Reform - Report of Proceedings* (Ottawa: Supply & services, 1988) [hereinafter National Consultation], *Environmental Approvals*, *supra*, note 45 at 1.9-1.10. & 6.12.

was introduced in the House of Commons.²⁰⁷ Opposition to the Bill was widespread. The private sector, the Conservatives,²⁰⁸ the provinces and environmentalists criticized many shortcomings contained of the draft legislation. Indeed, environmental associations wondered whether it represented an improvement over the Guidelines Order.²⁰⁹ Although amendments to the Bill were released by the Minister in October and December 1991, environmental interest groups still did not support the future legislation.²¹⁰ On March 19 1992, Parliament passed the *Canadian Environmental Assessment Act* [CEAA], which was adopted by Senate in June and received Royal Assent on June 23, 1992.²¹¹

²⁰⁷ M.J. Jeffery, "The New Canadian Environmental Assessment Act - Bill C-78: A Disappointing Response to Promised Reform" (1991) 36 *McGill Law Journal* 1070 at 1082 [Jeffery]. See Bill C-78, *An Act to Establish a Federal Environmental Assessment Process*, 2d Sess., 34th Parl., 1989-90 [hereinafter Bill C-78]. Bill C-78 died on the order paper, but was reintroduced in identical terms as Bill C-13, *An Act to Establish a Federal Environmental Assessment Process*, 3rd Sess., 34th Parl., 1991 [hereinafter the CEAA].

²⁰⁸ G. York, "Tories Resisting Changes to Bill" *The [Toronto] Globe and Mail* (3 December 1991).

²⁰⁹ Environmental Assessment Caucus, *Reforming Federal Environmental Assessment* (Ottawa: The Environmental Assessment Caucus on the Canadian Environmental Assessment Act, Bill C-78, 1990) [hereinafter CAUCUS]; T. Vigod, *Submissions of the Canadian Environmental Law Association to the Special Committee on Bill C-78, The Proposed Canadian Environmental Assessment Act* (Toronto: Canadian Environmental Law Association, 1990) [Vigod]; W.J. Andrews & A. Hillyer, *Recommendations for Improvements to Bill C-78, the Canadian Environmental Assessment Act* (Vancouver: West Coast Environmental Law Association, 1990) [Andrews & Hillyer].

²¹⁰ R. Lindgren, *Preliminary Response of the Canadian Environmental Law Association to the Legislative Committee on Proposed Amendments to Bill C-13 (the Canadian Environmental Assessment Act)* (Toronto: CELA, Oct. 1991) [hereinafter Lindgren/Oct. 91]; R. Lindgren, *Submissions of the Canadian Environmental Law Association Regarding Bill C-13 (The Canadian Environmental Assessment Act)* (Toronto: CELA, March 1992) [hereinafter Lindgren/March 1992].

²¹¹ "Environmental Assessment Act Receives Royal Assent" (1992) 35 *ALERT* at 4. For the purposes of this study, reference will be made to Bill C-13 or the CEAA when discussing the latest version and, to Bill C-78 when speaking about the draft first introduced in the House of Commons.

C. THE CANADIAN ENVIRONMENTAL ASSESSMENT ACT: THE PROPOSED FEDERAL EIA PROCESS

The proposed *CEAA* is the first federal EIA law in Canada and it will most probably come into force in January 1993. The *CEAA* sets out the requirements and the procedures of the federal environmental assessment process, as well as the responsibilities of the participants therein. However, the Act only describes the framework of the EIA process and subsequent regulations and manuals will complement the legislation and provide procedural details.²¹² For example, regulations will prescribe which projects are excluded from the main EIA process described in the *CEAA* because they have only insignificant environmental effects.²¹³ The drafting of two other regulations is presently receiving a lot of attention from environmentalists and the public.²¹⁴ Indeed, the "*List of Federal Statutes and Regulations*" (the "Law List") and the "*Comprehensive Study List*" (or *CSL*) are essential in setting out the scope of application of the proposed Act.²¹⁵ The Law List will contain the provisions of any federal Act or any regulations that confer powers, duties or functions on federal authorities, the exercise or performance of which will trigger an assessment under section 5(1)(d).²¹⁶ The

²¹² FEARO is presently elaborating manuals for follow-up programs, for evaluating what is considered a significant adverse environmental effect and for the assessment of cumulative impacts; Personal Communication with B. Hobby, Legal Adviser at FEARO (July 31st, 1992) [Hobby].

²¹³ S. 7(a) & s. 59 (c)(ii).

²¹⁴ In January and February 1992, 15 regional workshops were held by FEARO across the country to obtain public input, FEARO, *The Canadian Environmental Assessment Act: a Regulatory Update* (Ottawa: FEARO, June 1992) at 3 [hereinafter *FEARO Update*]; C. Boljkovac & K. Campbell, *Comments of the Canadian Environmental Law Association on Two Draft Regulations Under Bill C-13, the Proposed Canadian Environmental Assessment Act* (Toronto: Canadian Environmental Law Association, 1992) [hereinafter *Draft Regulations*].

²¹⁵ *FEARO Update*, *supra*, note 214 at 3. It should be noted, however, that a draft "exclusions" list has yet to be released by FEARO.

²¹⁶ S. 59(f). Further discussion of the Law List will be provided when examining para. 5(1)(d); see, *infra*, note 292 and accompanying text.

CSL will include the projects or classes of projects that will automatically be subject to an assessment because of the significance of their environmental effects.²¹⁷ Finally, although the *CEAA* will bring clarify somewhat which projects trigger an EIA under the federal Act, it is expected that many jurisdictional questions, such as the ambit and depth of a valid federal assessment, will be addressed in Canadian court rooms.²¹⁸

D. THE EIA PROCESS UNDER THE CEAA

Procedurally, the *CEAA* is not dramatically different from EARP.²¹⁹ Both processes are divided into two main phases: (1) *the initial assessment (or screening)* and (2) *the review panel or the mediation.*²²⁰ However, these two principal phases consist of many elements. For the purpose of this study, the EIA process of the new Act will be described in five procedural steps:

²¹⁷ S. 21-23 & para. 59(d). A short analysis of the comprehensive study will be provided later in this chapter.

²¹⁸ J. Hanebury, "The Supreme Court Decision in Oldman River Dam: More Pieces in the Puzzle of Jurisdiction Over the Environment" (1992) 37 *Resources the Newsletter of the Canadian Institute of Resources Law* 1 at 5 [hereinafter *Jurisdiction Over the Environment*]

²¹⁹ Schrecker, *supra*, note 197 at 212

²²⁰ EARP does not include mediation Schrecker, *supra*, note 197 at 209 & 213. Administratively, EARP is overseen by FEARO which is independent from Environment Canada and reports directly to the MoE. The *CEAA* replaces FEARO with a new agency - The Canadian Environmental Assessment Agency [the Agency] which is under the responsibility of the Minister, although separate from Environment Canada. Sections 57-60 state the duties and objects of the Agency. As for FEARO, its role is only advisory. FEARO, "Federal Environmental Assessment Reform - Fact Sheet #1, Key Advances of Reforms Over Current Environmental Assessment and Review Process at 1.2 (June 1990) [hereinafter Fact Sheet]; Lucas & Franson, *supra*, note 73 at 995-12; Jeffery, *supra*, note 207 at 1083

(1) *The screening of a proposed undertaking or activity; (2) the conduct of the environmental assessment and its review ; (3) the assessment decision; (4) the review of the assessment decision and (5) the enforcement of the assessment decision and follow-up programs.*²²¹

The first aspect will be examined in this chapter, while Chapter III will analyze points 3 and 4. A critique of the provisions for the enforcement of the assessment decision and the follow-up programs will be discussed in Chapter IV.

1. The Screening Phase

"Screening" is the pre-assessment of a proposed undertaking. It involves preliminary environmental evaluation, usually based on existing data. It is aimed at determining whether a project, because of its significant environmental repercussions, should be subjected to more detailed environmental assessment.²²²

In order to understand this phase, the following questions must be answered:

(a) What should be assessed? (b) Who should conduct this pre-environmental assessment? (c) To whom does it apply? (d) Which situations will trigger the process? (e) How should screening be done? (d) is it possible to review the screening decision?

These questions will be addressed below.

(a) What should be assessed:

In order to know what should be assessed three points must be examined. First, the breadth of the notion of environment in the Act? Second, the types of

²²¹ Hunt suggested six procedural steps generally found in EIA between jurisdictions; C. Hunt, "A Note on Environmental Impact Assessment in Canada" (1990) 20 *Environmental Law* 789 at 791 [hereinafter Hunt]

²²² Lucas in Clark, *supra*, note 66 at 149; Hunt, *supra*, note 221 at 791. The following definition is found in the Initial Assessment Guide: "Screening is a systematic, documented assessment of environmental implications of a proposal, including the significance of adverse environmental consequences", Initial Assessment Guide, *supra*, note ? at 3.

activities evaluated? Third, the factors to be taken into account during the preliminary assessment?

(i) *The definition of environment and its scope*

As observed in Chapter I, the notion of "environment" has evolved considerably over the years. Today, discussions about environment quality are not limited to biophysical surroundings, but also include the community's cultural, social and economic consequences of environmental changes.²²³ As EIA is a method of identifying the *environmental* consequences of an activity, the notion of environment is central to the effort and must be made clear. In fact, the definition of environment can considerably affect the scope of the process.²²⁴ Thus, a broad definition of "environment" is an essential component of a multi-faceted EIA, which will not only examine ecological implications, but also socio-economic, as well as cultural or aesthetic changes caused by development projects and activities.

The new *CEAA*, unlike *EARP*,²²⁵ defines "environment".²²⁶ The notion of environment used in the *CEAA* is the same as the one found in para. 2(1) of the *Canadian Environmental Protection Act*.²²⁷ However, this definition does not include the social, economic, cultural or built environments, but is limited to: (1) land, air, water, including all layers of the atmosphere; (2) all organic and inorganic

²²³ Holtz, *supra*, note 11 at 96. See also Justice La Forest in the S C C Oldman River case who stated that the "environment" is a diffuse notion that cannot be confined to the biophysical environment alone; *Friends of the Oldman River Society v Canada (Minister of Transport)* [1992] 1 S.C.R. 4 at 37.

²²⁴ According to Hanebury, the broader the definition of environment, the wider the scope of an assessment of environmental impacts, J. B. Hanebury, "Environmental Impact Assessment in the Canadian Federal System" (1991) 36 *McGill L. J.* 963 at 968.

²²⁵ *Ibid.* at 970.

²²⁶ S. 2(1).

²²⁷ S.2(1); Hanebury, *supra*, note 224 at 978.

matter and living organisms and (3) the interacting natural systems that include the components referred in (1) and (2). Environmental groups have recommended the adoption of the definition found in the *Ontario Environmental Assessment Act* in order to include social, economic, cultural or built environments.²²⁸ The *CEAA* also contains a definition for "*environmental effects*" and "*environmental assessment*". These three definitions seem give a broad scope to the process.²²⁹ For example, responding to environmentalists' criticisms and natives witnesses, Bill C- 13 has amended the earlier definition of "*environmental effects*" by making this expression to read as follow:

*"change on health, socio-economic conditions, on physical and cultural heritage, on the current use of lands and resource for traditional purposes by aboriginal persons, or on any structure, site or thing that is of historical, archaeological, paleontological or architectural significance".*²³⁰

The incorporation of "traditional aboriginal uses of the land" seems to be a significant step in acknowledging and accommodating native rights.²³¹ In addition, it should be noted that the protection of indigenous and tribal peoples life-styles is

²²⁸ Lindgren/ March 92, *supra*, note 210 at 2. The notion of environment, under para. 1(c) of the *Ontario Environmental Assessment Act*, includes: (i) air, land, water; (ii) plant and animal life, including man, (iii) the social, economic and cultural conditions that influence the life of man or a community, (iv) any building, structure, machine or other device or thing made by man; (v) any solid, liquid, gas, odour, heat, sound, vibrations or radiation resulting directly or indirectly from the activities of man, or (vi) any part or combination of the foregoing and the interrelationships between any two or more of them, in or of Ontario. The definition of the environment in s. 1(4) of the Quebec's *EQA* is, on the contrary, very narrow and means: "The water, atmosphere and soil or a combination of any of them or, generally, the ambient milieu with which living species have dynamic relations", *EQA*, *supra*, note 75.

²²⁹ This is a response to the fact that the prime concerns related to a project are the features perceived to have health, safety and socio-economic implications; Robertson, *supra*, note 202 at 7; Initial Assessment Guide, *supra*, note 161 at 20.

²³⁰ S 2(1)(a).

²³¹ J.J. Charest, Address (Legislative Committee on Bill C-13, 19 June 1991) [unpublished] at 4 [hereinafter Minister's Address].

also an objective of sustainable development and in this respect the CEAA is responding positively to the Brundtland Report.²³²

(ii) *What kind of activities are subject to an EIA?*

The CEAA seems to have a more restrictive scope here than EARP.²³³ It requires, in s. 4(a) and s. 5, the assessment of "projects", defined in s. 2 to mean "physical works" or "physical activities". Consequently, the evaluation of government policy lies outside the CEAA.²³⁴ Critics of the draft legislation have considered the exclusion of government policy assessment one of the most significant shortcomings of Bill C-13 and as a step backward from the definition of "proposal" found in the Guidelines Order.²³⁵ The assessment of policies, plans or programs is considered important as conceptual proposals contain the seeds for future "projects" and have considerable, albeit indirect, environmental implications.²³⁶ For example, agricultural policies providing for farm subsidies may encourage the use of fertilizers and pesticides that will, in turn, increase soil erosion and deplete soil nutrient.²³⁷ Secondly, by assessing transport policies, rather than merely a

²³² *Brundtland Report*, *supra*, note 1 at 12 & 114-16.

²³³ EARP applies to "proposals" defined in s.2 as including "any initiative, undertaking or activity for which the Government of Canada has a decision making responsibility" EARP, theoretically, can apply to all eligible federal programs and projects, if they fit within one of the categories in s. 6. Cirelli, *supra*, note 71 at 94. However, practice has shown that only specific projects have been assessed under EARP; Rees, *supra*, note 3 at 281. Furthermore, in *Angus v Canada*, it was decided that the Guidelines Order was not binding on the Governor-in-Council. In that case, the Cabinet issued an order under s. 64 of the *National Transport Act*, 1987, R.S.C., 1985, c. 28 (3rd Supp.) which required VIA Rail to eliminate or reduce certain passenger services, *Angus v. Canada* [1990] 3 F.C. 410 (C.A.).

²³⁴ Jeffery, *supra*, note 207 at 1086-87.

²³⁵ Consequently, they recommended that the notion of proposal as found in EARP be maintained, Vago, *supra*, note 209 at 5; Lindgren/March 92, *supra*, note 210 at 2-3, see also Schrecker, *supra*, note 197 at 224-227.

²³⁶ Consider the possible environmental implications of transportation, international trade, tax incentives, energy production; see Rees, *supra*, note 3 at 281.

²³⁷ Schrecker, *supra*, note 197 at 224.

particular project, it is possible to ask *whether* expected environmental implications should occur or not. At the project level, however, the remaining issue to examine is *where* the environmental effects will appear.²³⁸ Further, the evaluation of government programs would provide for a broad examination of alternatives, such as changing fundamental policy directions. Assessing offshore oil and gas drilling exploration and production, for example, could take into account alternative courses of action, such as economically competitive programs to improve energy efficiency, rather than just assessing another means to develop energy production by land-based oil drilling.²³⁹

Interestingly, the information package accompanying the legislation states that an EIA of policies and programs will also be established.²⁴⁰ The Government justifies the exclusion of the policy assessment in the *CEAA* by explaining that such assessments require very different procedures from those used in project evaluations. In addition, it should be noted that assessing government programs by policy and not by law flows directly from the parliamentary system of Canada where Cabinet's decisions are secret.²⁴¹ Allowing such decisions into the court room would fundamentally change the constitutional characteristic of Canada which is not the purpose of this Act.

The EIA reform package explains that "a statement of environmental implications for each new policy and program will be made public when the new

²³⁸ In addition, the assessment of conceptual proposals allow more time to collect and analyze the necessary environmental data; see, OECD, *Analysis of the Environmental Consequences of Significant Public and Private Projects* (Paris: OECD, 1979) at 14.

²³⁹ Schrecker, *supra*, note 197 at 227.

²⁴⁰ Fact Sheet # 7, Environmental Assessment of Policies and Programs, *supra*, note 220 at 7 & 7.2.

²⁴¹ McCallum, *supra*, note 48 at 407.

policy or program is announced".²⁴² However, such a policy has existed since June 1990. It requires any department responsible for a policy decision to provide assessment documents to the Cabinet. When the Cabinet releases the policy decision, the assessment documents are made public as well.²⁴³ Further, the effects of public scrutiny have been reinforced as the House of Commons' Standing Committee on the Environment has been given the power to request that a Minister appear before it to explain the likely environmental consequences of any new policy or program.²⁴⁴

As noted in Chapter I, bringing policies, plans or other conceptual proposals under the scope of the EIA seems to be one of the key principles or prerequisites to sustainable development.²⁴⁵ EIA literature, such as the Brundtland and the National Task Force Reports, has underlined the importance of requiring the assessment of the total range of activities of both public and private sectors.²⁴⁶ For environmentalists, the *CEAA* is disappointing in its scope. However, this point of view should be tempered. Firstly, assessing government policies may not mean that all policies have to be subject to the same kind of assessment as for development projects. A brief statement of assessment that is made public may be sufficient to raise government consciousness with respect to the environmental implications of its decisions. Secondly, unless there is a change in the concept of Cabinet secrecy, the constitutional structure of Canada may not permit such an open assessment process for government policies as the one proposed in the *CEAA* for

²⁴² Fact Sheet # 7, *supra*, note 220 at 7.

²⁴³ Hobby, *supra*, note 212.

²⁴⁴ Fact Sheet # 7, *supra*, note 220 at 7.

²⁴⁵ The Brundtland Report asked for broader EIA that "should be applied to policies and programmes, *Brundtland Report*, *supra*, note 1 at 222, see also Holtz, *supra*, note 11 at 101.

²⁴⁶ Elder & Ross, *supra*, note 4 at 129; Rees, *supra*, note 3 at 281 & 283; *Brundtland Report*, *supra*, note 1 at 222; *NTFEE report*, *supra*, note 194 at 8-9.

projects and activities. Finally, as discussed above, Ottawa has already implemented a policies and program assessment process. Therefore, it can be said that even if a statutory basis for that kind of process could have been enshrined in the *CEAA*,²⁴⁷ the reform of the EIA process as a whole is, nevertheless, a step in the right direction towards a sustainable future.²⁴⁸

It should be noted, that the scope of the proposed legislation is not as narrow as it may seem. First, Bill C-13 covers not only projects, but also "*physical activities*".²⁴⁹ For example, as under EARP, potential environmental and socio-economic implications of low-level flying exercises will be examined.²⁵⁰ Second, the new Act improves the Guidelines Order as the notion of "project" means a physical work to be constructed, as well as one to be *operated, modified, decommissioned, abandoned or otherwise carried out*.²⁵¹ Consequently, the new Act may apply to *existing facilities* incurring major changes.²⁵² As noted in Chapter I, many EIA processes do not assess "existing activities" or "projects". In sum, such a broad definition of project, including the notion of existing facilities and activities, is a positive element for effecting, at least at the project level, the principle of sustainable development.

²⁴⁷ Schrecker, *supra*, note 197 at 224-25.

²⁴⁸ For a proposed model, see Canadian Environmental Advisory Council, *Preparing for the 1990's: Environmental Assessment, an Integral Part of Decision Making* (Ottawa: Supply & services, 1988) [hereinafter CEAC report]. See also Schrecker for a discussion of some obstacles to policy and programs assessments, *supra*, note 197 at 225-26.

²⁴⁹ S. 2(1). Regulations will prescribe the types of activities which will be subject to an assessment, s. 59(b).

²⁵⁰ See, for instance, *Naskapi-Montagnai Innu Assn. v. Canada (Minister of National Defence)* (T.D.) [1990] 3 F.C. 381.

²⁵¹ Para. 2(1). EARP only applies to new projects and does not include any alteration or extension of an existing project, activity or structure, Robertson, *supra*, note 202 at 7.

²⁵² See Elder & Ross, *supra*, note 4 at 128.

(iii) *What are the factors to be assessed initially?*

Subsections 16(1)(a)-(e) set out the factors to be considered during screening. Most importantly, the "environmental effects" must be predicted.²⁵³ The definition of "environmental effects" means that changes in health, socio-economic conditions, as well as changes in the cultural heritage should be evaluated.²⁵⁴ Furthermore, the measures technically and economically feasible that are necessary to mitigate any significant impacts, as also public comments, must be considered.²⁵⁵

It should be noted that the latest version of Bill C-13 contains the possibility of assessing the "need for the project" and "alternatives to" it at the screening level.²⁵⁶ However, the language is not mandatory. Such requirements are important, because they move the EIA approach away from the specific project orientation towards a broader analysis, where alternative courses of actions to and the necessity of the proposed undertaking are examined. The *Ontario Environmental Assessment Act* seems to have a more extended scope with respect to the alternative issue than the *CEAA*,²⁵⁷ but the risk is that mega-assessments may result taking years to complete and costing fortunes. The discretionary wording of the alternatives factors may not be a problem in the *CEAA*. Providing public pressure is strong enough, the MoE, after consulting with the federal authority responsible for the

²⁵³ S. 16(1)(a).

²⁵⁴ S. 2(1) & s. 16(1)(a).

²⁵⁵ S. 16(1)(c).

²⁵⁶ S. 16(1)(e). Such requirements were absent from the first draft of the legislation as they were from EARP.

²⁵⁷ *Environmental Assessment Act*, *supra*, note 73. According to s. 5(3), an environmental assessment submitted to the Ontario Minister of Environment shall consist of: "(a) a description of the purpose of the undertaking; (b) a description of and a statement of the rationale for, (i) the undertaking, (ii) the alternative methods of carrying out the undertaking and, (iii) the alternatives to the undertaking".

assessment of a project, will feel compelled to address the alternative issue in the screening phase.²⁵⁸

Furthermore, in both the initial and full assessment phases, the *CEAA* requires the evaluation of the "cumulative effects" of the project in combination with other projects.²⁵⁹ This is a major improvement over *EARP* which did not include such a provision. As explained in the first chapter, the assessment of the cumulative effects of a project or an activity is a response to ecological reality and one of the most important keys to moving towards sustainable development.²⁶⁰ For example, the cumulative impacts of small and medium-scale projects may significantly affect the environment when combined with other unrelated undertakings. However, practice under the Guidelines Order has demonstrated that these kinds of proposals are not automatic candidates for the second phase of the process.²⁶¹ It is thus better that cumulative impacts are assessed in the screening phase.

Structurally, section 16 is divided into two subsections.²⁶² The first subsection lists the factors to be examined during "screening", "comprehensive study", "mediation" and "review by a panel". Subsection 16(2), on the other hand, only applies to comprehensive studies, mediations and review panels, leaving the following factors outside the scope of screening :

²⁵⁸ Hobby, *supra*, note 212.

²⁵⁹ S. 16(1)(a). A stringent EIA process according to environmentalists would consider cumulative impacts with all other relevant activities or operations, past, present and anticipated; Andrews & Hillyer, *supra*, note 209 at 24.

²⁶⁰ See Chapter I, *supra*, note 161 and accompanying discussion.

²⁶¹ Rees in Clark, *supra*, note 76 at 6-7; Sadler & Armour, *supra*, note 57 at 75.

²⁶² S. 16(1)-(2).

the purpose of the project; alternative means of carrying it out; the need and requirement of follow-up programs and the capacity of renewable resources that are likely to be significantly affected to meet the needs of the present and those of the future.

One may speculate as to why all these factors are not considered in the initial assessment. Environmental associations criticized the wording of s. 16. According to them, a project may advance in its development, because of the lack of examination of those factors in the screening phase.²⁶³ One of the purposes behind screening is to determinate whether or not a project should be submitted to a review panel or mediation. It is, therefore, only with a thorough scrutiny of all the factors set out in s. 16 that this preliminary evaluation can be correctly made. They have, consequently, recommended that a strong EIA process should require, at least, the preliminary assessment of all of the factors in s. 16 in the screening phase.²⁶⁴

There are also good reasons for not examining every factor during the pre-assessment phase however. The Federal Government screens thousands of projects every year. It would be too heavy a burden and too costly to request such a comprehensive appraisal for routine management activities. Further, projects or activities causing serious environmental harm will go through a "*comprehensive study*", right at the beginning of the EIA. This will, in turn, require an in-depth review where both the factors listed in both subsections 16(1) and (2) will be taken into account.²⁶⁵

²⁶³ Vigod, *supra*, note 209 at 8. Bill C-13 in its latest form did mark an improvement as it added to the screening phase the consideration of the "need of the project", where the MoE so requires, S. 16(1)(e).

²⁶⁴ Andrews & Hillyer, *supra*, note 209 at 24.

²⁶⁵ See the definition of "comprehensive study" in s. 2(1) & s. 21-23, Hobby, *supra*, note 212

(b) To whom does the process apply?

The *CEAA* applies to the "proponent" which is the "person, body or federal authority that proposes the project".²⁶⁶ The use of the words "person" and "body" shows that private interest groups or non-governmental bodies may be subject to the *CEAA*. However, this is only possible where a federal authority is involved through funding, property or regulatory consideration.²⁶⁷ In addition, as suggested by s. 5(1)(d), the proponent may also be a "federal authority" when it proposes a project.²⁶⁸

It should be mentioned that certain federal authorities are excluded from the main EIA process described in the Act.²⁶⁹ The purpose of these exclusions is to not hamper their ability to compete as these excluded bodies operate in the market place.²⁷⁰ However, the distinction between projects undertaken by federal departments or agencies and projects falling under the responsibility of Crown corporations or other bodies excluded from the application of the main EIA process is not ecologically correct. Indeed, the environment by itself cannot discern whether projects are initiated by federal departments or bodies exempted from the application of the Act. Sound environmental analysis would only take into account

²⁶⁶ S.2(1).

²⁶⁷ W.J. Couch, ed., 1988 *Summary of Current Practice: published under the Auspices of the Canadian Council of Resource and Environment* (Ottawa: Supply & Services, 1988) at 13 [hereinafter Couch] As such, the private sector is only subject to the *CEAA* when the Federal Government is involved in a certain manner with the proposed private project; see s. 5(1)(a)-(d).

²⁶⁸ See s. 2(1) & s. 5(1)(a), Couch, *supra*, note 267 at 13; S.2. The proponent can be, for example, Environment Canada or another federal agency, such as Transport Canada or Indian and Northern Affairs. Further discussion will be provided later in this chapter; see, *infra*, note 278 and accompanying text.

²⁶⁹ See s. 2(1). For example, the agencies of the Yukon Territory, the Harbour Commissioners or certain Crown corporations.

²⁷⁰ Andrews & Hillyer, *supra*, note 209 at 4.

the significance of the likely environmental implications of the proposed federal project.²⁷¹ Thus, environmentalists have asked for the universal application of the federal EIA.²⁷² It should be noted that under Bill C-13 EIA processes designed by regulation will require Crown corporations and other excluded bodies to assess the environmental consequences of their activities.²⁷³ Under EARP, by contrast, they were only "invited" to do an environmental impact assessment.²⁷⁴ Of course, the risk is that EIA processes prescribed by regulations will contain less stringent assessment requirements than the process described in the CEIA. It can, nevertheless, be stated that the new Act is bringing a welcome improvement to the Guidelines Order.

(c) Who should do the assessment: self-assessment principle

Self-assessment has been the cornerstone of EARP and has been reaffirmed in Bill C-13. Self-assessment leaves departments and agencies the task of assessing the potential environmental effects of all proposals for which they have decision-making responsibility.²⁷⁵ This principle has been established to give flexibility to

²⁷¹ M.-A. Bowden & F. Curtis, "Federal EIA in Canada. EARP as an Evolving Process (1988) 8:1 *Env Impact Ass. Rev.* 97 at 101, Vigod, *supra*, note 209 at 6.

²⁷² Lindgren/Oct. 91, *supra*, note 210 at 3.

²⁷³ See, s. 8, 9, 10 & 59(j)-(l). As Hobby stated, Crown corporations are in direct competition with private corporations and requiring from them the same EIA, as for the bodies operating in the public sector, would put them at a competitive disadvantage. However, the purpose of submitting them to a special process is not to design less stringent EIA requirements, but to have a process more appropriate to their nature, where, for example, consultation with the industry will be required, Hobby, *supra*, note 212.

²⁷⁴ Initial Assessment Guide, *supra*, note 161 at 2

²⁷⁵ Robertson, *supra*, note 202 at 5. Another solution is to give the responsibility of screening to one department, the Department of Environment or a branch of it. This approach is favoured at the provincial level in Canada. In Saskatchewan, it is the *Environmental Assessment Branch* within the *Saskatchewan Department of Environment and Public Safety* - in consultation with the *Interdepartmental Review Panel* which screens proposals, Couch, *supra*, note 267 at 27. A different

federal authorities.²⁷⁶ It helps to promote departmental responsibility for environmental matters and, theoretically, should favour their inclusion early in the planning process of federal departments and agencies. Self-assessment, however, also gives very broad discretion to the federal authorities and creates the risk of political manipulation.²⁷⁷

Bill C-13 refers to the federal authority which is required to ensure that an EIA for a project has to be conducted as the "*responsible authority*" [RA].²⁷⁸ As self-assessment suggests the RA, at the end of the screening stage, establishes the significance of the environmental impacts in a "*screening decision*". However, as indicated in section b, the RA can also be the proponent of the project. Therefore, because of the self-assessment principle, the *CEAA* may not provide an independent process in all cases. It will be difficult for the RA as the initiator of the project to avoid the temptation of favouring the implementation of the project.²⁷⁹ Does the federal EIA process include control mechanisms over the "*self-assessment screening phase*"?

Practice under the directives, which set out the first federal EIA, has shown that, because of a lack of control mechanisms, self-assessment was carried out

approach would be to require the screening phase to be entirely the responsibility of an independent screening board, with the participation of the public. This solution favours independence and objectivity, McCallum, *supra*, note 48 at 380.

²⁷⁶ Indeed, EIA is a complex administrative process; R. Cotton & D.P. Emond, "Environmental Impact Assessment" in J. Swaigen, ed., *Environmental Rights in Canada* (Toronto: Butterworths, 1981) 245 at 258 [hereinafter Cotton & Emond].

²⁷⁷ Cotton & Emond, *supra*, note 276 at 258.

²⁷⁸ S. 2(1) However, it can use the specialist knowledge and expertise of other federal departments (such as Environment Canada, Fisheries and Oceans or DIAND) to "undertake major components of work associated with given projects", Initial Assessment Guide, *supra*, note ? at 6-7.

²⁷⁹ Cotton & Emond, *supra*, note 276 at 255-56.

inconsistently and with little rigour.²⁸⁰ The adoption of the Guidelines Order, however, has brought more control and certainty to the self-assessment principle. EARP stipulates in particular: (a) that lists of projects which would produce significant adverse effects must be established by each federal department,²⁸¹ (b) that the screening of nonlisted projects must be made pursuant to written procedures outlined by the responsible department in consultation with EEARO, and finally²⁸² (c) that public concern is a factor to be taken into account during the pre-assessment, as well as an element that can require the responsible department to refer the project directly to a review panel.²⁸³ Despite these improvements, self-assessment has still been criticized under the Guidelines Order. The 1988 National Consultation Workshop on federal EIA,²⁸⁴ consequently, proposed further means to provide consistency and rigour in the exercise of the screening phase:²⁸⁵ clear criteria for the conduct of screening, public information by way of a registry, preparation of an annual report on the performance of the process, and the right to appeal in order to review contested self-assessment decisions would certainly enhance the credibility of self-assessment.²⁸⁶

²⁸⁰ For example, the major east coast offshore drilling programs were not referred to a review panel. The Energy, Mines and Resources department which had the decision-making authority in these cases, found those proposals "not to have significant adverse environmental effects", Lucas in Clark, *supra*, note 66 at 153.

²⁸¹ S. 11(b) of EARP. Projects included in the lists would automatically be referred to the MoE for public review.

²⁸² S. 18(a) of EARP.

²⁸³ S. 4(b) of the Guidelines Order. However, it is the federal authority who decides if there is a sufficient degree of public concern to refer the project to a review panel; s. 13, see Bowden & Curtis, *supra*, note 271 at 103-104.

²⁸⁴ See National Consultation, *supra*, note 206.

²⁸⁵ National Consultation, *supra*, note 206 at 11-12.

²⁸⁶ *Ibid.* at 11-12.

While self-assessment remains the key principle of the proposed legislation,²⁸⁷ certain improvements have been made. For example, Bill C-13 includes provisions for public comment on the screening report²⁸⁸ and the establishment of a public registry permitting access to information.²⁸⁹ Projects which, by nature, will cause significant adverse environmental effects will automatically undergo a comprehensive environmental study.²⁹⁰ In addition, transferring the screening decision from the RA to the MoE with respect to projects subject to comprehensive studies may reduce the discretionary power of the RA.²⁹¹

(i) *The comprehensive study*

It can be anticipated that there will be less danger under the *CEAA* that the RA not rigorously screens projects falling under the scope of the federal EIA process. This will be due in large part to the fact that projects or activities which are likely to have significant adverse environmental effects will be placed on a "*Comprehensive Study List*" [CSL] and in turn, be automatically subject to a comprehensive environmental evaluation.²⁹² The requirement to list projects which significantly affect the environment was first introduced in the 1984 Guidelines Order,²⁹³ however, the lists were elaborated by each department in an in-house

²⁸⁷ Minister's Address, *supra*, note 231 at 6.

²⁸⁸ S.18(3). However, there are some limits to public comments under the *CEAA*. Not every screened project will permit public comments. According to Hobby, this would block the process. Routine managerial activities will not require the taking into account of the public's opinion; Hobby, *supra*, note 212

²⁸⁹ See Schrecker, *supra*, note 197 at 230-34

²⁹⁰ See s. 14(a) & s. 21-23.

²⁹¹ S. 23; Schrecker, *supra*, note 197 at 220.

²⁹² S. 59(d).

²⁹³ S. 11(b) of EARP.

process.²⁹⁴ On the other hand, the drafting of the CSL under the new Act is an open process where the public is consulted and can comment on its content.²⁹⁵ Second, every project listed in the CSL will be subject to an EIA where both the factors included in subsection 16(1) and (2) must be examined.²⁹⁶ Contrary to the system found in EARP, projects included in the CSL will not be directly referred to a review panel.²⁹⁷ They will first be submitted to an in-depth examination, that may be followed by mediation or an assessment by a review panel, if the comprehensive study concludes that the predicted effects are likely to be significant.²⁹⁸ Further, the comprehensive study and the ensuing decision are the responsibility of the Federal Minister of the Environment and not the RA.²⁹⁹ Therefore, depending on how serious the federal government is about the kind and number of projects that will be placed in the CSL, the self-assessment approach could be curtailed under the *CEAA*.³⁰⁰

Finally, it should be noted that self-assessment is considered an important means for effecting sustainable development. It is aimed at rendering every federal department and agency responsible for the likely environmental implications of their

²⁹⁴ Some departments did not have a list.

²⁹⁵ *FEARO Update*, *supra*, note 214 at 3.

²⁹⁶ S. 2(1) & s. 16 of the *CEAA*.

²⁹⁷ S. 11(b).

²⁹⁸ In addition, uncertainty as to the degree of the significance of the environmental effects or important public concern, are two other possible situations triggering a referral to a mediator or a review panel; s. 23(b)(i)-(iii).

²⁹⁹ S.23.

³⁰⁰ Environmentalists have shown many concern as to the present content of the draft CSL. In addition, they do not support that projects which, by nature, have serious adverse environmental effects, are placed into regulations, rather than in the *CEAA* itself, *Draft Regulations*, *supra*, note 214 at 2.

decisions.³⁰¹ According to the National Consultation Workshop, self-assessment is the "*most effective approach to integrate economic and environmental issues in order to achieve sustainable development*".³⁰² As noted by the Brundtland Commission, the sectoral fragmentation of responsibility in the organization of government is an important cause of our present environment/development problematic.³⁰³ Moving towards sustainable development will necessitate the abolition of sectoral divisions into governments' structure and self-assessment is a promising approach to reach that goal.

(d) How should the initial assessment be done?

The CEAA, like EARP, takes a "*significance test*" approach.³⁰⁴ This technique distinguishes between projects/activities that are likely to cause significant environmental impacts and those which are not. Therefore, under section 20(1)(c)(ii), proposals having potentially adverse environmental effects will be referred to a full assessment, while the ones with insignificant ecological impacts may directly proceed.³⁰⁵ However, the "threshold test" to link the screening phase to the second phase of the process in the CEAA focuses not only on the significance of likely environmental effects, but also on "*whether the environmental effects are mitigable*" or not.³⁰⁶ Certain environmental associations have expressed concern

³⁰¹ Hill, *supra*, note 194 at 198

³⁰² National Consultation, *supra*, note 206 at 11.

³⁰³ See Chapter 1, *supra*, note 30 and accompanying text, *Brundtland Report*, *supra*, note 1 at 63.

³⁰⁴ See s. 12(c) & 12(e). In addition to this significance test, an initial environmental evaluation [IEE] may be required under s. 12(d), see, *Environmental Approvals*, *supra*, note 45 at 1.8.

³⁰⁵ S. 20(1)(a) NEPA has very vague criteria, requiring an EIA for "major projects" which have "significant impacts upon the environment; Emond, *supra*, note 52 at 16.

³⁰⁶ Under EARP, mitigative measures are not taken into account to assess the significance of the ecological effects, see s. 12(e). S. 14 empowers the responsible authority to take mitigative measures. However, it is not clear when such measures can be adopted. As this section follows the

over the wording of the threshold test, as the significance of the effects is evaluated taking into account the implementation of mitigative measures. The result is that the implementation of mitigation measures reduce the significance of the environmental effects to a minor degree that will preclude a review panel or mediation.³⁰⁷ It can be however argued that the inclusion of mitigating measures in the threshold test will force the RA to consider means to reduce the likely environmental harm at the beginning of the process, which in turn will enhance the environmental consciousness of the proponent and the responsible federal authority.³⁰⁸ The definition of "*mitigation*" in s. 2(1) of the Act may prove, however, much more critical than the threshold test as mitigation means .. "*restitution...through compensation*". Is it intended that the disbursement of money will render the environmental effects insignificant, therefore allowing a project to proceed? If so, this would run contrary to the purpose of promoting sustainable development and would take Bill C-13 backwards from the Guidelines Order.

(e) Is it possible to review the screening decision?

It is at the review stage that the self-assessment approach has the greatest implications.³⁰⁹ Indeed, neither in the EARP nor in the CEAA is the RA required to motivate its screening decision. In addition, no right to appeal is expressly stated. Such a right of appeal to the MoE or the Agency - in cases where the RA proceeds with a project without referring it to a full assessment - would give

description of the screening, these measures should most probably be implemented after screening

³⁰⁷ See, for example, Andrews & Hillyer, *supra*, note 209 at 6-7, Lindgren/Oct.91, *supra*, note 210 at 21-22. Under the Ontario assessment scheme, a public hearing is, nevertheless, open although the proponent must describe possible mitigative measures in its EIS, see s.4(3)(iii) of the *Environmental Assessment Act*, *supra*, note 73; *ibid.* at 22.

³⁰⁸ Hobby, *supra*, note 212

³⁰⁹ Lucas & Franson, *supra*, note 73 at 995-16.

the public or concerned parties the possibility of influencing the screening decision.³¹⁰ According to environmentalists, the RA is thus given too wide a discretion. They argue that the screening decision should be written with reasons and be expressly appealable to the Minister.³¹¹ In this respect, the *CEAA* does not seem to offer a strong EIA process. Consequently, it does not follow the recommendation of the Brundtland Report, which argues for greater public participation for decisions impacting on the environment.³¹²

(f) Situations triggering the EIA process under the *CEAA*: section 5

The above explanations of the screening process will help clarify section 5. Indeed, this provision sets out the governing principle of the *CEAA* by describing the situations in which proposed projects are to be assessed.³¹³ An EIA must be carried out for proposed projects where:

- (1) *The proponent is a federal authority, s. 5(1)(a);*
- (2) *The federal authority provides financial assistance, s. 5(1)(b);*
- (3) *The project is to be carried out on federal lands, s. 5(1)(c) or*
- (4) *In circumstances where the authority issues a permit or licence, grants an approval or takes any other action for the purpose of enabling the project to be carried out, pursuant however to a statutory provision prescribed by the Governor-in-Council under paragraph 59(f); s.5(1)(d).*

³¹⁰ CEAC report, *supra*, note 248 at 54; Andrews & Hillyer, *supra*, note 209 at 35. An implicit right to appeal seems to exist, since s. 28 allows a person to ask the MoE at any time to exercise its authority and to refer the project to mediation or a panel review; Andrews & Hillyer, *supra*, note 209 at 25.

³¹¹ Lindgren/Oct.91, *supra*, note 210 at 22.

³¹² Brundtland Report, *supra*, note 1 at 326 & 328; Canadian Bar Report, *supra*, note 37 at 6. Public participation will be discussed later, see Chapter III, *infra*, note 400 and accompanying text.

³¹³ Andrews & Hillyer, *supra*, note 209 at 11.

Section 5 has encountered strong opposition from environmental groups who argued it would considerably narrow the application of the federal process.³¹⁴ According to these groups the main shortcoming is s. 5 (1)(d) which states that "*the exercise of all federal regulatory responsibility remains outside the EIA legislation unless incorporated by regulation*"[emphasis added].³¹⁵ Environmental associations have consequently recommended that s. 6(b) of EARP remain intact. As such, the proposed federal EIA legislation should apply to any proposal "*that may have an environmental effect on an area of federal responsibility*".³¹⁶

One factor in a strong EIA system is that it be cast as broadly as possible. Section 5(1)(d) certainly does not favour the universal application of EIA.³¹⁷ However, Ottawa must take into account that the division of powers provisions under the Canadian constitution does not grant the Federal Government exclusive powers,³¹⁸ and that different heads of powers enable both the provinces and the

³¹⁴ CAUCUS, *supra*, note 209 at 9; Vigod, *supra*, note 209 at 4. S. 5(b) states that assessment is not necessary when the financial contribution is in the form of a tax break (any reduction, avoidance, deferral, and so forth); unless that financial assistance is specifically named in the Act, regulation or order that provides the relief. The rationale for only assessing projects receiving positive financial assistance and not the ones receiving federal assistance in a negative form does not seem particularly logical? Andrews and Hillyer, *supra*, note 209 at 11 & 13-14.

³¹⁵ Schrecker, *supra*, note 197 at 243. Another concern is that s. 59(1)(iv) removes the certainty of the application of the CEAA by allowing the Governor in Council to vary or exclude any procedure or requirement of the EIA process in situations where federal financial assistance and decisions involving Canada lands are involved; *ibid.* at 244, Andrews & Hillyer, *supra*, note 209 at 82-83.

³¹⁶ *Ibid.* at 11; see also CAUCUS, *supra*, note 209 at 9. The list of regulatory statutes triggering an EIA prescribed under s. 55 (1)(g) should provide "particular instances", therefore, it would not be an exhaustive list; Andrews & Hillyer, *supra*, note 209 at 12.

³¹⁷ The principle for environmentalists is, "all in unless expressly exempted", Lindgren/March 92, *supra*, note 210 at 3.

³¹⁸ See *Constitution Act, 1867* (U.K.) 30 & 31 Vict. c. 3 ss 91 & 92, see, for example, D. Gibson, "Constitutional Jurisdiction over Environmental Management in Canada" (1973) 23 *UTLJ* 54 at 54-55; D.P. Emond, "The case for a Greater Federal Role in the Environmental Protection Field: An Examination of the Pollution Problem and the Constitution" (1972) 10 *Osgoode Hall LJ* 647, Hanebury, *supra*, note 224, R.T. Franson & A.R. Lucas, *Environmental Law Commentary Case*

Federal Government to be competent in environmental management.³¹⁹ Further, as there are no clear jurisdictional boundaries between the two levels,³²⁰ an unresolved problem is what the valid scope and depth of a federal EIA is?³²¹ Knowing the "interactive role" of the federal government and the provinces in EIA, one may wonder if the solution adopted by the *CEAA* in s.5(1)(d) is not better than the broad wording of s. 6(b) of the Guidelines Order. Moreover, taking into account the recent Supreme Court decision in the *Oldman River* case, the scope of the *CEAA* may even be broader than under EARP.

(1) *The Oldman River cases*

The Oldman River cases took place in the context of the construction of a dam on the Oldman River in Southern Alberta. In 1986, in order to comply with the *Navigable Waters Protection Act*,³²² the Alberta Department of the Environment applied to have the federal Minister of Transport issue the approval required under section 5 of this Act. In so doing, the Minister of Transport did not request a pre-assessment and the project was, consequently, not referred to the MoE for a public review.³²³ Thus, in August 1989, the Friends of the Oldman River Society launched a suit before the Federal Court in Edmonton. They sought a *certiorari* order quashing the approval issued by the Minister of Transport pursuant to s. 5 of the *Navigable Water Protection Act*,³²⁴ as well as a *mandamus* order directing the same Minister to comply with EARP. The notice of motion also applied for a

Digest, vol. 1 (Toronto: Butterworth, 1978) at 151 [hereinafter *Environmental Commentary*].

³¹⁹ *Environmental Commentary*, *supra*, note 318 at 270.

³²⁰ Hanebury, *supra*, note 224 at 1003.

³²¹ *Jurisdiction Over the Environment*, *supra*, note 218 at 7.

³²² R.S.C. 1985, c. N-22 [hereinafter NWPA].

³²³ Jeffery, *supra*, note 207 at 1078.

³²⁴ R.S.C.1985, c N-22 [hereinafter NWPA].

declaration that the Department of Fisheries and Oceans was an "initiating department" according to EARP's definition.³²⁵ This motion, was based upon ss. 35 and 37 of the *Fisheries Act*,³²⁶ which empower the Minister to allow interference with fish habitat in certain circumstances. The application was dismissed,³²⁷ but on appeal the Federal Court decided that the Guidelines Order did apply to the dam project, as it fell squarely within the purview of sub-paragraph 6(b). S. 6(b) bears repeating here: *These Guidelines shall apply to any proposal (b) "that may have an environmental effect on an area of federal responsibility"*. The court had no difficulty concluding that the proposed dam had various environmental impacts on areas of federal responsibility, such as navigation, Indians, lands reserved for Indians and inland fisheries matters.³²⁸ Thus, EARP would apply if the project could be qualified as a "proposal" the meaning of which includes "*any initiative, undertaking or activity for which the Government of Canada has a decision making responsibility*" (emphasis added).³²⁹ Judge Stone, writing for the Federal Court of Appeal, concluded that "proposal" in the Guidelines Order had a broader sense than its ordinary meaning and was not limited to something resembling of an application.³³⁰ Consequently, the issuance of an approval by the Minister of Transport was a proposal which had environmental effects on an area of federal responsibility. Judge Stone decided as well that the Minister of Fisheries and Oceans was also required to apply EARP, as s.37(1) of the *Fisheries Act*, which grants

³²⁵ M.-A. Bowden, "Darnning the Opposition: EARP in the Federal Court" (1990) 4 C.E.L.R. (N.S.) 227 at 230-31 [hereinafter Bowden]; Hunt, *supra*, note 221 at 802-03.

³²⁶ *The Fisheries Act*, R.S.C 1985, c. F-14.

³²⁷ *Friends of the Oldman River Society v. Canada (Min. of Transport and Min. of Fisheries and Oceans)* (1989), [1990] T.F.C. 251, 30 F.T.R. 108 (T.D.) [hereinafter *Oldman River I*, cited to F.C.], Jeffery, *supra*, note 207 at 1078.

³²⁸ *Friends of the Oldman River Society v. Canada (Minister of Transport)* [1990] 2 F.C. 18 at 34 [hereinafter *Oldman River II*].

³²⁹ S. 2 of the Guidelines Order.

³³⁰ *Oldman River II*, *supra*, note 328 at 44.

discretionary powers to the Minister to request specific actions, such as plans, analyses or other actions related to the proposed dam construction, fell under the definition of "proposal" in the Guidelines Order. In brief, this decision gave a very wide scope of application to EARP, as the process is triggered where federal jurisdiction is affected. This decision was appealed to the Supreme Court of Canada, which in January 1992 confirmed the application of the Guidelines Order to the dam on the Oldman River.³³¹ The Court unanimously declared EARP constitutionally valid. Further, it was held that federal authority to apply EARP to a provincially initiated dam where: (1) a project may have an environmental effect on an area of federal jurisdiction and, (2) the Government of Canada has an affirmative regulatory duty pursuant to an Act of Parliament which is related to the proposed project or activity.³³² This decision brought some clarification to the notion of "decision-making responsibility", contained in the definition of proposal. Justice La Forest, writing for the majority, held that the dam "proposal" signified that the federal authority must have some degree of regulatory power, such as issuance of permits and licences.³³³ The Federal Minister of Transport had, therefore, a decision-making responsibility and was compelled to apply the Guidelines Order when issuing an approval under s.5 of the NWPA. However, Justice La Forest considerably restricted the scope of application of EARP by holding that no affirmative regulatory duty existed under the *Fisheries Act* and the Department of Fisheries and Oceans was not subject to EARP's requirements.

The question is whether this decision will have an effect on s. 5(1)(d) of the CEEA and the Law List which will include the provisions of any Act of Parliament

³³¹ *Friends of the Oldman River Society v. Canada (Minister of Transport)* [1992] 1 S.C.R. 3 [hereinafter *Oldman River III*].

³³² *Oldman River III*, *supra*, note 331 at 47.

³³³ He finds this intention in particular in ss. 12(f) & 14; *Oldman River III*, *supra*, note 331 at 47-48; see also, *Jurisdiction over the Environment*, *supra*, note 218 at 3.

or any regulation pursuant thereto that will trigger an FIA under s. 5(1)(d)³³⁴ First and foremost, the S.C.C. *Oldman River* case is a decision with respect to the 1984 Guidelines Order and the Court does not comment on the constitutional authority of the federal government to pass EIA legislation.³³⁵ Second, it can be argued that Justice La Forest, in an effort to tighten the very broad and unclear wording of s. 6(b) along with the definition of "proposal" found in s. 2(1), declared that only situations involving a regulatory scheme would trigger EARP. On the other hand the scope of application of Bill C-13 is clear: it is meant to assess "projects" and not "policies" and it does not contain the word "proposal", but "project".³³⁶ Third, Ottawa does not seem to follow the S.C.C. *Oldman River* case when it is holding that some degree of regulatory power is necessary to trigger EARP under s. 6(b). To date, the draft Law List does not consider that an "affirmative duty" is necessary under s. 5(1)(d) and it does not seem that Ottawa intends to reduce the Law List to only federal affirmative regulatory provisions.³³⁷ Space does not permit a detailed discussion on this topic, but it can be affirmed that more litigation is to be expected which may examine in particular the kind of projects/activities triggering the *CEAA*;³³⁸ Another question that will need to be answered is, once a project falls under the new Act, what will be the scope and depth of the

³³⁴ s. 5(1)(d) & s.59(f).

³³⁵ As noted by Hanebury, this case will, nevertheless, provide some direction with respect to the ambit of a federal EIA process; *Jurisdiction over the Environment*, *supra*, note 218 at 4, FEARO, *Canadian Environmental Assessment Act Statutory and Regulatory Provisions Regulation Summary of Comments from the 1992 Regional Workshops* (Ottawa: FEARO, July 1992) at 18 [hereinafter *Summary of Comments*].

³³⁶ Hobby, *supra*, note 212.

³³⁷ *Ibid.*

³³⁸ Indeed, s. 5(1)(d), by requiring the Minister to issue a permit, grants an approval or "takes any other action" seems to have a higher threshold test to trigger an EIA than EARP which did only ask for a decision making responsibility, *Summary of Comments*, *supra*, note 335 at 18

environmental assessment.³³⁹ Reference to *Oldman River III* will certainly be necessary in that context.

Apart from the four situations triggering the EIA process under s. 5(1), Bill C-13, in its latest version, permits under section 5(2) to assess projects/activities requiring the approval of the Governor-in-Council.³⁴⁰ For example, s. 4(1) of the *Arctic Waters Pollution Prevention Act* stipulates that the deposit or permit of deposit of waste in the arctic waters is forbidden unless authorized by the Governor in Council.³⁴¹ Supposing that, in the context of its activities, the Federal Department of Indian and Northern Affairs must sink a ship which cannot be moved, it will assess the activity and give the EIA to the Cabinet who will take its decision aware of the predicted environmental effects. As discussed earlier, the *CEAA* is not a governmental policy assessment, but it nevertheless moves in the right direction by extending the scope of application to Cabinet decision-making.³⁴²

Finally, it is also worth noting that s. 5 does not encompass purely private sector undertakings.³⁴³ This last point made Rees ask whether it is not a tacit

³³⁹ Will the assessment examine all likely environmental effects or only the ones pertaining to federal jurisdictions? See *Jurisdiction over the Environment*, *supra*, note 218 at 2 & 5.

³⁴⁰ S. 5(2); Lindgren/Oct. 91, *supra*, note 210 at 15.

³⁴¹ S.4(1) & (3) of the *Arctic Waters Pollution Prevention Act*, R.S.C. 1985, c.6 s. 91.

³⁴² Environmentalists consider this subsection to be undermined by the fact that the assessment will only take place if these matters are listed by regulation; s. 59(g); Lindgren/Oct. 91, *supra*, note 210 at 15.

³⁴³ A federal authority must be involved through funding, property rights or regulatory powers; Couch, *supra*, note 267 at 13.

affirmation of the superiority of the economic interests over public environmental values?³⁴⁴ The private sector does not, however, operate without any control as most of the provincial EIA schemes apply to private projects/activities.³⁴⁵

(g) Screening: a very important step

In sum, the screening phase is a very important step in the federal EIA process. Depending on the screening decision, the project will go through to a full assessment or proceed directly to its implementation.³⁴⁶ Experience under EARP has shown that hundreds of projects are screened every year, but very few are referred to a review panel. Therefore screening is without doubt the most important part of the federal EIA. This will remain true for the *CEAA* as well. The rare occurrence of formal review prompted a commentator to state that the "bulk of EARP-related activity unfolds in this phase".³⁴⁷ In the writer's opinion, the screening phase of the *CEAA* is not disappointing. Of course, the self-assessment-screening approach gives a broad discretion to the RA. It is also true that increased public participation would have provided for greater mechanisms to control the self-assessment approach.³⁴⁸ However, the public can make use of certain provisions to check the quality and rigour with which the RA is screening projects: s. 16(1)(c) provides for public comments; s. 16(1)(e) allows the inclusion of other factors during

³⁴⁴ Rees, *supra*, note 3 at 281.

³⁴⁵ For example, the definition of "person" in s. 1(9) of the EQA is: "an individual, partnership, cooperative or a corporation other than a municipality; EQA, *supra*, note 75 .

³⁴⁶ Implementation is the responsibility of the RA, s. 20(1)(a).

³⁴⁷ Rees in Clark, *supra*, note 3 at 14.

³⁴⁸ In particular, a right to appeal either to the MoE or to a board.

screening; s. 18(3) stipulates that the RA shall give the public an opportunity to examine and comment on the screening report; s. 25(b) empowers the MoE, if public concerns warrant it, to refer the project at any time to a mediator or a review panel, s. 27 and s. 28(b) in particular allow the termination of the environmental assessment. These provisions either take into account public concern or will be used if public pressure with respect to a project is strong enough. The public has an important role to play in the implementation of this Act.³⁴⁹ The screening phase is not perfect, but the public has the possibility to improve it.

In short, under the CEAA, apart from the many situations where an EIA is not required,³⁵⁰ an EIA will take place for (1) projects or classes of projects included in the comprehensive study list³⁵¹ and (2) projects fulfilling one of the four situations set out in s. 5(1). The EIA process begins with the screening stage or the mandatory study.³⁵² Screening is conducted whenever an RA is of the opinion that a project is not listed on a comprehensive study list, nor on an exclusion list.³⁵³ Section s. 16(1) then comes into play, defining the factors to be assessed during screening. After the completion of the screening report, the RA may choose among three different courses of actions.

³⁴⁹ Hobby, *supra*, note 212.

³⁵⁰ Different exclusions are possible under the CEAA. See the definition of federal authority in s. 2(1) and see s. 7(1), Schrecker, *supra*, note 197 at 208.

³⁵¹ *Ibid.* at 207.

³⁵² S.13(1)(b) & s.17(a); *ibid.* at 210.

³⁵³ S.13(1).

The first permits the project to proceed: *(1) The project proceeds if taking into account the implementation of any mitigation measures, it is not likely to cause significant adverse environmental effects.*³⁵⁴ *The RA shall ensure that any mitigation, it considers appropriate, will be implemented.*

The second course of action is to stop the development of the project³⁵⁵: *(2) The project, taking into account the implementation of any mitigation measures, is likely to cause significant effects that cannot be justified in the circumstances, the RA should take no action permitting the carrying out of the project.*³⁵⁶

The third option triggers the second phase of the EIA process. A review panel or mediation will evaluate the potential repercussions of a proposed project: *(3) The project will be referred to the Minister for a full assessment when, (a) taking into account the implementation of any mitigation measures, it is uncertain whether it is likely to cause significant adverse environmental effects;*³⁵⁷ *(b) when taking into account of any mitigation measures, it is likely to cause significant adverse environmental effects;*³⁵⁸ *or public concern warrant a full assessment.*³⁵⁹

³⁵⁴ S. 20(1(a)).

³⁵⁵ It is unlikely that an RA, who can be the initiator of a project, will ever stop his project using this clause. Will this disposition ever be used? Is it not stillborn? Only experience will provide an answer.

³⁵⁶ S. 20(b); Schrecker, *supra*, note 197 at 212.

³⁵⁷ S. 23(C)(i).

³⁵⁸ S. 20(c)(ii).

CHAPTER III: THE ENVIRONMENTAL ASSESSMENT AND THE ASSESSMENT REVIEW

A. INTRODUCTION

In the second phase of the EIA process, a project is referred to a full assessment. Although it is the part best known to the public, this phase represents merely "*the tip of the impact assessment iceberg*".³⁶⁰ According to the 1988 FEARO Study Group, under EARP only 0.1% of proposals are referred to the MoE for a public review.³⁶¹ For example, by mid-1976, only one EIA had been completed and eleven were still being assessed. Under *NEPA*, by comparison, after 3 years of existence more than four thousand studies had been completed.³⁶² For the purposes of this study, the second level of the process will itself be divided into the "*assessment process*" and the "*assessment review*".

B. THE ASSESSMENT PROCESS

Under EARP, the full assessment by a review panel unfolds as follows. On a case by case basis, the Federal Minister of the Environment [MoE] appoints the

³⁵⁹ S. 20(1)(C)(iii). Referral is also possible at any time by the RA for reasons (b) & (c); s. 25. Referral can take place under s. 28, at any time by the MoE. The process for a project described in a comprehensive study list is somewhat the same as screening, see sections 21-23. As mentioned earlier, it is the MoE who takes the assessment decision at the end of the comprehensive study; s. 23, Schrecker, *supra*, note 197 at 216-17.

³⁶⁰ Lucas in Clark, *supra*, note 66 at 150.

³⁶¹ FEARO Study Group, *supra*, note 206 at 6.

³⁶² Hanebury, *supra*, note 224 at 970. In 1981, only 31 projects had been referred to the review phase, Rees in Clark, *supra*, note 3 at 14. In 1990, the thirty-four panel report was published by FEARO. In September 1991, the Report of the Environmental Assessment Panel of the Rafferty Alameda Project was submitted to the MoE.

panel which will review the *Environmental Impact Statement* [EIS].³⁶³ The EIS is the documented assessment of the significant environmental consequences of a proposal,³⁶⁴ and the main instrument of the EIA.³⁶⁵ The panel's task is to prepare the guidelines for the EIS.³⁶⁶ The "proponent" (the person proposing the project)³⁶⁷ is responsible for preparing the EIS and for submitting it to the panel.³⁶⁸ This procedure has been left unchanged in the new Act.

The scope and content of the EIS in the federal process is established in each individual case.³⁶⁹ Section 16 of Bill C-13, however, provides guidelines for the scope of the assessment by listing certain factors that must be examined. It is interesting to discuss some of the factors which must be assessed in order to realize the improvements the *CEAA* has brought to EARP and to discern the scope of the proposed EIA scheme.

³⁶³ S. 33 of the *CEAA*; Couch, *supra*, note 267 at 13. Panels, under EARP have been chaired by the Executive Chairman of FEARO or his/her delegate; s. 23 of EARP

³⁶⁴ Lucas in Clark, *supra*, note 66 at 158.

³⁶⁵ EIS is defined to mean: "a detailed documented assessment of the potential significant environmental consequences of any proposal that is produced by, or for, a proponent, in accordance with the information requested by an environmental assessment panel for a public review", FEARO, *The Federal Environmental Assessment and Review Process* (Ottawa: Supply & Services, 1987) at 7 [hereinafter *Federal Process*]; Armour, *supra*, note 66 at 10.

³⁶⁶ Emond, *supra*, note 52 at 17.

³⁶⁷ See Chapter II, *supra*, note 266.

³⁶⁸ One commentator presented four alternatives concerning who is to do the EIS: (1) the *Department of the Environment*, therefore favouring consistency in methodology; (2) a new agency; (3) *individual departments* (every department which has to grant an approval for a project would assess it before approving it); (4) *the originator or the proponent*, McCallum, *supra*, note 48 at 382-83-84. A 10 nation comparative study of EIA methods found only processes which opted for the principle of the proponent preparing the EIS; Schrecker, *supra*, note 197 at 219. Such an approach, however, does not preclude the use of independent consultants

³⁶⁹ Emond, *supra*, note 52 at 17.

Firstly, if the *CEAA* is to promote sustainable development, it should require a broad examination of the questions of alternatives to the project and means to carry it. In the latest version of Bill C-13, the full assessment, either by way of mediation or a panel will include: (1) the "*purpose*" of the project and (2) "*alternative means*" of carrying out the project. As explained in Chapter II,³⁷⁰ subsection 16(1)(e) permits the inclusion of: (3) *the assessment of the "need" for the project*³⁷¹ and (4) *the examination of the "alternatives to the projects"*, if the RA so requires. the examination of alternatives is a welcome change to the EARP which was silent of this issue.³⁷² Further, the first version of the proposed Act did not include within its procedural framework the assessment of "*the need for the project*", and "*the alternatives to the project*". If properly applied, the evaluation of "*need for*" and "*alternatives to*" the project will move the project-oriented environmental assessment to a broader scope where other courses of actions, rather than the mere justification for the proposed project, are examined.³⁷³

A second important improvement of the *CEAA* in comparison to EARP is the consideration of "*cumulative environmental effects*".³⁷⁴ As noted in Chapter

³⁷⁰ See, Chapter II, *supra*, note 262 and accompanying text.

³⁷¹ The examination of the need for the project would also encompass the alternative of "doing nothing".

³⁷² Vigod, *supra*, note 209 at 8-9, CAUCUS, *supra*, note 209 at 13. Subject to the MoE's approval, the assessment of the need for the project was possible under EARP, s.25(3). Bill C-13 is here a welcome modification, although these factors may only be used with discretion. Indeed, the MoE show his desire to see them being used selectively on major projects; Minister's Address, *supra*, note 231 at 7. Environmentalists criticize the fact that the consideration of alternatives is not mandatory, R. Lindgren, "Parliament passes Flawed Environmental Assessment Legislation" (1992) 17:2 *Intervenor* 1 at 3 [hereinafter *Flawed Legislation*].

³⁷³ See R.N.L. Andrews, "Environmental Impact Assessment: Learning from Each Other" in P. Wathern, ed., *Environmental Impact Assessment. Theory and Practice* (London: Unwin Hyman, 1988) 85 at 88.

³⁷⁴ As noted in Chapter II, cumulative effects will already be evaluated in the screening phase. However, they have to be taken into account with other "projects". A more ecological approach would assess cumulative impacts "in combination with all other relevant activities or operations, past,

I, there is a growing concern over cumulative impacts. The inclusion of cumulative effects in the EIA process of the proposed Act reflect the fact that the focus is less on the effects of a single project, than it traditionally was and that there is a trend towards implementing a broader planning and decision-making framework.³⁷⁵ Certainly such a trend will help promote and render effective the principle of sustainable development.

A third major issue in the scope of the assessment is the evaluation of "socio-economic impacts".³⁷⁶ Section 16 does not specifically require that they may be considered. However, "environmental effects", the first element listed,³⁷⁷ is defined as including any change that the project may cause in the environment, including any effect on socio-economic conditions.³⁷⁸ Moreover, the broad notion of environment and environmental effects found in the *CEAA* are compatible with the view adopted by the Supreme Court with respect to the meaning of the environment.³⁷⁹

present and anticipated"; Andrews & Hillyer, *supra*, note 209 at 24.

³⁷⁵ Rees, *supra*, note 3 at 282-83.

³⁷⁶ Lucas in Clark, *supra*, note 66 at 161. Under EARP, only the social effects directly related to the environmental effects generated by the proposal would be taken into account, s. 4(1)(a). Subject to the approval of the MoE and the Minister of the initiating department (the RA), socio-economic effects could be considered; s. 4(2).

³⁷⁷ S.16(1)(a).

³⁷⁸ S.2(1). As seen in Chapter I, EIA is expanding its field of application to socio-economic matters. But to what extent should the assessment of these factors be carried out? The *CEAA* does not respond to this question.

³⁷⁹ The Supreme Court considers the environment being a diffuse subject matter encompassing not only the biophysical environment, but also socio-economic or health consequences caused by environmental changes; *Oldman River III*, *supra*, note 331 at 37.

Fourthly, the *CEAA* stipulates that the *need for and design of follow-up programs* must be considered during the assessment process.³⁸⁰ In so doing, the new Act improves upon EARP by acknowledging that post-approval requirements are an integral part of the environmental impact assessment process. More generally, it can be noted that EIA schemes are presently changing their traditional orientation by attempting to make accurate ecological and socio-economic impacts predictions and are moving towards adaptive management by monitoring the socio-environmental effects and auditing the assessed projects.³⁸¹

Lastly, subsection 16(2)(d) requires that the absorptive capacity of renewable resources, which are likely to be significantly affected by a project, be considered in order to meet the needs of the present and those of the future. As one can see the expression of sustainable development is absent from this provision. This can be explained by the fact that the present state of scientific knowledge does not provide the drafters of the Act with an operational definition of sustainable development and that sustainable development itself is a notion too vague to be perceived by a proponent responsible for the EIS. In turn, the terms of "capacity of renewable resources" and "intergenerational equity"³⁸² have been inserted in the Act.³⁸³ How this provision will be implemented and whether it will be implemented at all is a matter of speculation. It should be noted, however, that the application of s. 16(2)(d) is mandatory and it is hoped that environmental assessments under the *CEAA* will provide the necessary documentation for clarifying what sustainable

³⁸⁰ S.16(2)(C).

³⁸¹ Rees, *supra*, note 3 at 282.

³⁸² Intergenerational equity is an important element of the Brundtland Commission's definition of sustainable development, *Brundtland Report, supra*, note 1 at 43.

³⁸³ Hobby, *supra*, note 212.

development means in practical terms.³⁸⁴ This is the first step towards creating an effective notion of sustainable development and s. 16(2)(d) will be amended once the practical definition of sustainable development is elaborated by the jurisprudence.³⁸⁵ Despite the weaknesses contained in this provision, the CEAA is the first EIA Act to include such a requirement.³⁸⁶

In short, the official recognition of the need to identify the socio-economic and cumulative effects of projects and activities, to require different types of alternatives to be assessed, to establish follow-up programs and finally to require the preservation of the ecological integrity of renewable resources are all encouraging trends aiming for compatibility with sustainable development.³⁸⁷

C. THE ASSESSMENT REVIEW

Once the EIS is completed, the proponent must file it with a reviewer.³⁸⁸ Under the CEAA, the reviewer is either an "environmental assessment panel" or a "mediator".³⁸⁹ The intention behind having a reviewer is to provide an a-political

³⁸⁴ Case experience, debates will be necessary to produce documentation clarifying what is required under s. 16(2)(d); see Elder & Ross, *supra*, note 4 at 130.

³⁸⁵ Hobby, *supra*, note 212.

³⁸⁶ The environmental panel that will review the assessment made for the hydro-electric transmission line project to be constructed in North Centre of Manitoba will examine whether the project conforms to the principle of sustainable development, Ministère de l'environnement, Communiqué: aide financière aux participants à l'évaluation environnementale du projet de ligne à haute tension Nord-Centre (Ottawa: Ministère de l'environnement, juin 1992) annexe at 2.

³⁸⁷ Rees, *supra*, note 3 at 282 & 288.

³⁸⁸ This marks the end of the self-assessment stage under the Act; see Bowden & Curtis, *supra*, note 271 at 99.

³⁸⁹ Cotton & Emond, *supra*, note 276 at 261-62. In some processes, the reviewer is a section within the Department of Environment. New Brunswick has a Review Committee determining if the EIA report is deficient or not, Couch, *supra*, note 267 at 45. In other processes, certain stages of the assessment review are the responsibility of boards, committees or agencies, Lucas in Clark, *supra*,

supervisory body or panel for the assessment in order to increase the independence of the EIA process, thus giving credibility to the final decision taken by politicians.³⁹⁰

Mediation as a tool applied during the full-assessment stage is an innovation over EARP.³⁹¹ What lies behind the mediation approach is an attempt to reach an acceptable agreement through voluntary face-to-face negotiation.³⁹² This method may provide better solutions than review by a panel,³⁹³ when there are a limited number of clearly identifiable issues at stake and all parties consent to mediation.³⁹⁴ In addition, s. 29(1)(b) allows the MoE to refer certain issues to mediation and to send others to the panel.³⁹⁵ The first draft of the legislation did

note 66 at 163. Hearings, when required, are held by the Environmental Assessment Board in Ontario, s.1(b), s.12, s. 13 & s. 18-23 of the *Environmental Assessment Act*. Under s. 31.3 the *EQIA*, hearings are the responsibility of the "Bureau d'Audiences Publiques sur l'Environnement".

³⁹⁰ Indeed, the assessment decision will ultimately have a political component. Giving the authority over certain parts of the process to panels or boards may enhance the objectivity of the process and permit the representation of the community at large, Cotton & Fmond, *supra*, note 276 at 259-260, Lucas in Clark, *supra*, note 66 at 163.

³⁹¹ Schrecker, *supra*, note 197 at 212-13. As suggested in Chapter I, environmental law is moving towards co-operative methods to problem-solving.

³⁹² Sadler & Armour, *supra*, note 57 at 3.

³⁹³ Public hearings, either formal or informal are adversarial in nature. They permit proponents and the public to present their respective points of view. But little possibility is given for them to find a solution. Each party tries to undermine the position of the other. The proponent suffocates the intervenors under a large quantity of information, often irrelevant. And the public attempts to exhaust the patience of the proponent by focusing on the shortages of the proponents' EIS. No doubt, the proceedings can become time and money consuming and it often finishes without the parties having agreed to a shared position, Sadler & Armour, *supra*, note 57 at 2-3, Greening, *supra*, note 43 at 759.

³⁹⁴ As hinted in this last statement, the use of mediation seems to be limited when certain conditions are present: clear issues, potential for compromise, possibility for the parties to participate effectively, Sadler & Armour, *supra*, note 57 at 54.

³⁹⁵ For example, mediation can be restricted to establish compensation and mitigation procedures, while the questions of siting, construction planning, impact prediction, impact monitoring of a hydro-electric project are left to a review panel, *ibid.* at 11.

not contain this combination of alternative.³⁹⁶ Nevertheless, mediation in the CEAA is viewed as a complement to the review panel, rather than as a substitute for it.³⁹⁷ Even so, having mediation legislatively mandated will foster the use of co-operative approaches to environmental problem-solving.³⁹⁸

1. Public Participation

A very important element of the review panel process is the *public participation*. EIA experts believe that effective public participation leads to better decisions that ultimately will benefit society as a whole.³⁹⁹ A significant public role early and often in the planning process is therefore essential to a strong EIA.⁴⁰⁰ The endorsement of sustainable development also requires broad public participation in processes involving decisions impacting on the environment.⁴⁰¹

³⁹⁶ Furthermore, it should be mentioned that panels reviews under the CEAA may take two special forms. (1) "Joint review panels" between the Federal Government and another jurisdiction. This is an attempt to avoid unnecessary duplication of proceedings. Will the provisions setting the joint public review panels facilitate the harmonization of EIA processes in Canada and be used whenever the interests of a province overlap the federal interests? "Parliament Passes Controversial Assessment Law" (1992) 34 *ALERT* at 3-4 [hereinafter *Controversial Assessment Law*]; s.40 & 41. (2) "Substitution" for the review panel process by the process followed for assessing environmental impacts by another federal authority or a body referred to in paragraph 40(1)(d), s.43-45; Schrecker, *supra*, note 197 at 215.

³⁹⁷ S. 29(4) The panel review is kept as a "safety net" in cases where mediation does not lead to an acceptable agreement between parties; Sadler & Armour, *supra*, note 57 at 4 & 76.

³⁹⁸ *Greening*, *supra*, note 43 at 768.

³⁹⁹ *Environmental Approvals*, *supra*, note 45 at 4.1 & 4.2. The public may provide additional information to decision makers. For example, values which are not easy to measure, may be identified thanks to public involvement in the process. Furthermore, accountability of and confidence in the political and administrative decision makers will certainly be strengthened if EIA is open to the public opinion, Cotton & Emond, *supra*, note 276 at 267 citing the 1972 Task Force on Environmental Impact Policy and Procedure.

⁴⁰⁰ Lindgren/ Oct.91, *supra*, note 210 at 4.

⁴⁰¹ Rights to know, to have access to information on the environment, to be consulted and to participate in decision-making on activities with potential environmental effects should be recognized and extended, *Brundtland Report*, *supra*, note 1 at 326 & 328.

The preamble and s. 4, the provision setting out the principles of the CEAA, affirm that public participation will be ensured.

Public hearings held by the panel are the principal forum for public comment.⁴⁰² Bill C-13 stipulates that hearings must be held "in a manner that offers the public an opportunity to participate in the assessment".⁴⁰³ Respecting the recommendations made by a FEARO Study Group reviewing the public review phase, the CEAA adopted the "informal hearing model" which already existed under the Guidelines Order.⁴⁰⁴ The new Act, nonetheless, brings welcome improvements to the panel review process of EARP. The panels established by the CEAA have been given the power to summon witnesses, compel evidence, require the production of documents, and subpoena witnesses.⁴⁰⁵ Despite these positive aspects, environmentalists consider the public hearing provisions to be too vague, since hearing procedures are to be developed by means of guidelines and codes established by the MoE.⁴⁰⁶ For example, "fairness" and due process warranties

⁴⁰² "Environmental proceedings invariably address issues that concern large numbers of people and impact upon many interests. Unlike many administrative or judicial decisions, environmental assessment is a decision-making and inquiry procedure which has direct repercussions that go beyond one or two parties[]. EIA processes have an "inherently participatory character", C. Prophet, "Public Participation, Executive discretion and Environmental Assessment: Confused Norms, Uncertain Limits" (1990) 48:2 *U.T. Faculty of Law Review* 279 at 281-82.

⁴⁰³ S.34(b)

⁴⁰⁴ S.35(1)(2). Basically, there are two kinds of public hearing models. The quasi-judicial hearing procedure is chosen when the board has delegated powers to take administrative decisions. The forum is adversarial, parties give evidence under oath and challenge each other's position through cross-examination. This model is close to a regular court proceeding, because it is relatively structured and follows defined rules of practice. The other model is an informal hearing procedure. It is favoured when the board has the power to only advise the government and has no decision making powers. Parties are to assist the panel, not to challenge the proponent's position, FEARO Study Group, *supra*, note 206 at 1, 4, 6, 18, 27, 29-30, 41, *Environmental Approvals*, *supra*, note 45 at 1.10-11.

⁴⁰⁵ S. 35.

⁴⁰⁶ S. 58(1)(a); Schrecker, *supra*, note 197 at 234.

are not guaranteed.⁴⁰⁷ Environmental groups fear that the lack of formality may undermine the rights of the public.⁴⁰⁸ Accountability demands a clear EIA process. In response to these criticism, it may be said that Bill C-13 only sets the framework for environmental assessment, and regulations as well as guidelines respecting the application of this Act⁴⁰⁹ will precise the process. "Packing" too much into the legislation itself would make the *CEAA* too complicated and any amendments would require the revision of the Act.

Public hearings held by a panel are a well-known technique for involving the public in the EIA process.⁴¹⁰ But to be effective, public participation should exist throughout the entire process.⁴¹¹ Public participation should be provided for the screening phase, during the assessment, in the handling of the panel's report and, finally, in the post-implementation stage. Some statutory requirements in Bill C-13 allow public participation at the initial stage. Provisions for publication and receipt of comments on screening and comprehensive study reports are an improvement in comparison to EARP.⁴¹² However, the public is not involved in the development of generic initial screening criteria as the Canadian Environmental Assessment

⁴⁰⁷ A number of procedural provisions related to standing, notice, right to be represented by counsel are missing; Lindgren/Oct. 91, *supra*, note 210 at 26; Vigod, *supra*, note 209 at 13-14.

⁴⁰⁸ Lindgren/Oct.91, *supra*, note 210 at 26.

⁴⁰⁹ See s. 58(1)

⁴¹⁰ McCallum, *supra*, note 48 at 379. Hearings under EARP are held at the beginning of the assessment for the drafting of the guidelines for the EIS. Called "*scoping sessions*", they permit the identification of the important issues and reduce the possibility that the EIS be attacked on the ground that the wrong issues were examined. At the end of the public review, "*proposals hearings*" take place, *Environmental Approvals*, *supra*, note 45 at 1.8. , FEARO Study Group, *supra*, note 206 at 8-9

⁴¹¹ D.P. Emond, "Environmental Planning and Environmental Assessment Proactive Regulation by Administrative Board" Paper Presented at a National Seminar on Law and the Environment. Canadian Institute for the Administration of Justice, 1988. [unpublished] at 22 [hereinafter *Environmental Planning*].

⁴¹² S. 16(1)(c), s. 18(3) & s. 22(2); Schrecker, *supra*, note 197 at 229-30.

Council [CEAC] proposed.⁴¹³ Nor has the Act conferred a right to the public to be notified and adequate time for comment on drafts of the anticipated lists (exclusion lists, comprehensive study list and the Law List) and regulations to the Act.⁴¹⁴

During the second phase of the process, the public is not involved in the selection of panel members, nor in the development of the terms of reference of the panel.⁴¹⁵ One may wonder, however, if such requirements would not make the public participation too broad, the consequences being that the federal EIA process becomes a difficult exercise for the proponent and the government. Questions of practicability have to be balanced with the concept of allowing a broad public participation. However, excluding the public from any decision-making power in the assessment decision is a serious concern that will be discussed later in this chapter. Public participation in post-approval is addressed by s. 38(2).⁴¹⁶ It requires the RA to notify the public of the details of measures it will adopt after having decided to allow a project to proceed.⁴¹⁷ Furthermore, the RA will have to advise the

⁴¹³ CEAC report, *supra*, note 248 at 18.

⁴¹⁴ CAUCUS, *supra*, note 209 at 13. Public participation is a more serious problem at the screening phase than at the panel hearing level, because screening is a more invisible phase than the public review phase. In the present situation, Bill C 13 exempts the public from such important question as to whether a proposed undertaking should be screened and at the end of screening from deciding as whether to refer a project to a full assessment.

⁴¹⁵ *Ibid* at 13. The MoE, in consultation with the RA, fixes the terms of reference of the panel, s. 33(2)(b). The terms of reference outline the scope of the public review.

⁴¹⁶ Post-approval participation "should be part of the overall impact management process, as an extension of earlier involvement"; CEARC, *Evaluating Environmental Impact Assessment: An Action Prospectus* (Ottawa: Supply & Services, 1988) at 2-3 [hereinafter CEARC study].

⁴¹⁷ S.38(2)(a)-(c).

public of any follow-up program designed for the project and of any result of any follow-up program pursuant to subsection s. 38(1).⁴¹⁸

Bill C-13 further encourages public participation by two rather remarkable new requirements. First, a public registry of records in relation to every project for which an EIA is conducted has to be established.⁴¹⁹ Second, after encountering opposition from various environmental activist groups which criticized the fact that the draft legislation did not contain provisions for intervenor funding, the *CEAA* now gives to the MoE the power to initiate participant funding.⁴²⁰ The government did not include this requirement in the first draft legislation, because such participant funding already existed as a policy since June 1990.⁴²¹

EIA literature considers that intervenor funding is essential in assisting less well-off groups.⁴²² Interested parties in an EIA process are often individual citizens or community and environmental groups, who lack the financial resources and expertise to evaluate the impacts of a project. Consequently, they cannot

⁴¹⁸ This latter requirement did not exist under Bill C-78. This is a welcome amendment which will be discussed in Chapter IV. However, no "citizen public advisory committee" as part of a follow-up program is conceived in the draft legislation, Andrews & Hillyer, *supra*, note 209 at 53.

⁴¹⁹ Free access to relevant information is especially required in the Brundtland Report, *supra*, note 1 at 64. S 55(4) should specifically contain the requirement that the information in the register is available to the public, CAUCUS, *supra*, note 209 at 13. Of course, an acceptable balance between elements of confidentiality and matters open to public scrutiny has to be found, see, Schrecker for more details about the information available to the public under the new federal EIA, *supra*, note 197 at 230-34. It should be added, however, that under EARP, a Bulletin of Initial Assessment Decisions and a "Register of Panel Projects" was published for the first time in 1986; Hanebury, *supra*, note 224 at 971.

⁴²⁰ S 58(1)(1)

⁴²¹ Fact Sheet # 10, *supra*, note 220 at 10.2-10.4; Hobby, *supra*, note 212.

⁴²² *Environmental Planning*, *supra*, note 411 at 20. Panels under the Guidelines Order advised for intervenor funding several times.

present their cases effectively.⁴²³ At the same time, project proponents are often powerful companies, which can hire experts, consultants and spend large amounts of money in the preparation of their EIS. As a result interests of large companies, and also public utility corporations, could be favoured by administrative tribunals at the expense of the public interest.⁴²⁴ Funding is, therefore, proposed to help placing less well-off interested parties on an equal footing with project proponents.

Public participation has considerably evolved in Canada. Its starting point is often attributed to the 1974 *Mackenzie Valley Pipeline Inquiry* where Justice Berger, for the first time, recommended that a federal department, DIAND⁴²⁵ *in casu*, provides funding. The funding program established in this inquiry has served as the principal model for public participation in Canada.⁴²⁶ Ontario, for example, has a very advanced system of intervenor funding. After 15 years of experience with intervenor funding, the criteria used mainly by the Joint Board, The Environmental Assessment Board [EAB] and the Ontario Energy Board⁴²⁷ have been codified in the *Intervenor Funding Project Act* [IFPA] enacted in 1988.⁴²⁸ No hearings will take place until the funding panel under one of the three boards above named has been decided.⁴²⁹ Part II of the IFPA empowers the EAB to award costs in order

⁴²³ Robertson, *supra*, note 202 at 12; Cotton & Emond, *supra*, note 276 at 266; S.J. McWilliams, "Ontario's Intervenor Funding Project Act: The Experience on the Ontario Energy Board", (198.) *Canadian Administrative L and Practice* 202 at 202 [McWilliams].

⁴²⁴ McWilliams, *supra*, note 423 at 202.

⁴²⁵ The Federal Department of Indian and Northern Affairs.

⁴²⁶ *Environmental Approvals*, *supra*, note 45 at 4.2 & 4.3

⁴²⁷ *Ibid.* at 4.12 & 4.13.

⁴²⁸ The *Intervenor Funding Project Act*, S.O. 1990, c.1.13 [hereinafter IFPA]; *Environmental Approvals*, *supra*, note 45 at 4.8

⁴²⁹ And in case where there are no applications, the board cannot proceed until the last day to apply for intervenor funding has passed, s. 3(4)(a)-(b), *ibid.* at 4.27.

to allow the hearing panel to compensate parties that have made significant contribution to the hearing process.⁴³⁰

Although public funding is now enshrined in the draft legislation, environmentalists continue to be concerned that participant funding is not mandatory for public review or mediation.⁴³¹ Furthermore, the technical questions concerning who should pay, how much should be spent, which procedure for payment should be adopted, who should receive, and who should oversee the money spent, are also not specified in Bill C-13.⁴³² Environmental groups have recommended that funds should be made available for mediation and review panels. Funds should also be provided in the scoping sessions and early enough before proposal review panels take place.⁴³³ The proposed Act lacks clarity as it leaves these technical, but nevertheless important, questions to future regulations. Ottawa, however, was concerned about the problem of "packing" too much into the Act and to make it too complicated. Further, funding programs are within the realm of the Federal Government since 1990.⁴³⁴

⁴³⁰ S. 18 of IFPA.

⁴³¹ "For the purpose of this Act, the Minister may establish a participant funding program to facilitate the participation of the public in mediation and assessment by review panels"; s. 58(1)(i); *Flawed Legislation*, *supra*, note 372 at 1.

⁴³² The IFPA, for example, could be used as a basis for a federal funding program, Vigod, *supra*, note 209 at 15; Cirelli, *supra*, note 71 at 114-15.

⁴³³ Furthermore, the mediator and the panel should be given the power "to award both interim costs and costs at the end of their processes", Vigod, *supra*, note 209 at 15-16. For further discussion concerning who should pay, who should receive the funds and who should oversee the allocation of funding, see FEARO Study Group, *supra*, note 206 at 35, 37; Robertson, *supra*, note 202 at 12.

⁴³⁴ For example, Environment Minister J. Charest announced on July 2, 1992, the awarding of \$ 128,500 to assist groups to participate in the federal-provincial environmental assessment of the proposed Halifax-Dartmouth Metropolitan Waste Water System, Minister of the Environment, *Release: Participant Funding for Environmental Assessment of the Halifax-Dartmouth Metropolitan Waste Water Treatment System* (Ottawa: Minister of the Environment, 1992).

Lastly, the reviewer, either a panel or a mediator, examines the thoroughness and the technical quality of the EIS prepared by the proponent. It then, evaluates the public concerns and interests expressed during the public hearings or the mediation and finally prepares a report with its recommendations related to the project or activity. The second phase ends when the environmental assessment panel or the mediator transmits its report to the MoE and the RA.⁴³⁵

D. THE ASSESSMENT DECISION

Once a project has been assessed and the report concerning its possible effects has been transmitted to the RA, the final decision has to be taken whether the project should be carried out. Five aspects need to be underlined in this context. Firstly, there is no distinction either under the EARP or the CEAA as to the nature of the decisions taken at the end of the process. In reality, there are two parts to an assessment decision. One is related to the *acceptability of the assessment document itself*. Here the adequacy of the information provided in the EIS is examined. The second is related to the *suitability of the proposed undertaking*. This is the approval to proceed.⁴³⁶ Concerning the nature of these two kinds of decisions, the second one, the "go/no-go decision" is a value judgment, where the net benefits of the proposed project outweigh its net costs and where the environmental effects reflect the least harmful trade-offs possible between the economic advantages, creation of jobs and energy production.⁴³⁷ Such a decision depends more on personal value and general policy than technical information.⁴³⁸ Interestingly, the *Ontario Environmental Assessment Act* distinguishes between the decision to accept the EIS

⁴³⁵ S. 34(c) & s. 36.

⁴³⁶ Emond, *supra*, note 52 at 20; Lucas in Clark, *supra*, note 66 at 168.

⁴³⁷ McCallum, *supra*, note 48 at 386.

⁴³⁸ Emond, *supra*, note 52 at 20-21.

and the decision to approve the project.⁴³⁹ Be that it may, the *CEAA* remains a politically conservative EIA scheme as it leaves both decisions in the hand of the RA.⁴⁴⁰

Secondly, the role of the review panel or mediator is only "advisory". Their report is prepared in the form of recommendations.⁴⁴¹ As such, the proponents are free not to follow them.⁴⁴² The question is whether the solution adopted by the *CEAA* will ensure effective public participation as required by sustainable development? Would it not have been a step towards the promotion of this principle, to have empowered the panel or the mediator to make a decision regarding the suitability of proposed project?⁴⁴³ According to Hobby, planning tools, such as the EIA process, should not play the role of environmental police, but should favour people integrating the concept of environmental protection into their daily activities. Thus, having the mediator or the review panel having decision making powers would prevent federal departments to merge environmental considerations into their decisions.⁴⁴⁴ The *CEAA* is a consciousness raising

⁴³⁹ S. 11(2)(c) & s. 14(1)(a)-c) of the *Environmental Assessment Act*, *supra*, note 73. For the acceptability of the EIS, the Ontario Minister of Environment must consider among other items, the purpose of the Act, the filed EIS, the assessment review, written submissions, further reports, s. 14(2), Lucas in Clark *supra*, note 66 at 168, Emond, *supra*, note 52 at 26.

⁴⁴⁰ Environmentalist sceptics would even go to the point where the entire process and its decisions are in the hands of an independent board, Emond, *supra*, note 52 at 20.

⁴⁴¹ The recommendations are frequently wide-ranging, Rees in Clark, *supra*, note 76 at 9. Under EARP, the report usually would contain, a brief description of the proposal, the characteristics of the proposed site and impact areas, the potential impacts, comments, issues and analysis, and conclusion and recommendations; Federal Process, *supra*, note 365 at 4. Panels under the Guidelines Order could recommend that projects proceed with modifications or subject to conditions, or may not proceed, Lucas & Franson, *supra*, note 73 at 995-17.

⁴⁴² *Flawed Legislation*, *supra*, note 372 at 3.

⁴⁴³ For instance, CELA and the Caucus on the Canadian Environment Assessment Act recommended that the final decision be made by the review panel or the mediator; CAUCUS, *supra*, note 209 at 15, Vigod, *supra*, note 209 at 19.

⁴⁴⁴ Hobby, *supra*, note 212.

exercise.⁴⁴⁵ not only for the public, but especially for federal departments and bodies.

Thirdly, consequent to the above mentioned procedure, the RA is to take the final decision⁴⁴⁶ following receipt of a report made by a mediator, a review panel or when a project, subject to a comprehensive study has been referred back to the RA pursuant to paragraph 23(a).⁴⁴⁷ Without going so far, as to give the decision-making authority to a panel or mediator in case of a full assessment, the RA's final decision making power could have been channeled in several ways: (a) by increasing the authority of the MoE in s. 37(1)(a), so that the RA should take its decision under this paragraph in consultation with the MoE; (b) in addition to that, by providing an appeal to the Federal Cabinet and thus rendering the RA not the final arbiter in the assessment decision.⁴⁴⁸

Fourthly, there is serious concern about the *criterion* to be applied in taking the assessment decision.⁴⁴⁹ The RA is given too much discretion by being able to implement the mitigation measures "*it considers appropriate*".⁴⁵⁰ One should recall that essential components of a strong EIA are the establishment of clear criteria to guide the planning and review of proposals and the minimization of

⁴⁴⁵ *Ibid.*

⁴⁴⁶ S. 37; Andrews & Hillyer, *supra*, note 209 at 49

⁴⁴⁷ S. 23(a) stipulates that after the comprehensive study is completed, the MoE refers the project back to the RA in cases (1) where the project is not likely to cause significant environmental harm or (2) it generates significant environmental effects that are not justified in the circumstances

⁴⁴⁸ Andrews & Hillyer, *supra*, note 209 at 49-50

⁴⁴⁹ Like for the threshold test in the screening decision, environmentalists argue that the evaluation of the significance of the potential environmental effects should be made without taking account of the possible mitigation measures, see Chapter II, *supra*, note 308 and accompanying text

⁴⁵⁰ S. 37(1)(a) What does "appropriate" mean? As suggested earlier, will the disbursement of money be considered appropriate mitigable measures? See, *supra*, Chapter II, 2/

discretionary decision-making within the EIA process.⁴⁵¹ Section 37(1)(a)(b), unfortunately, does not meet these requirements.

Finally, it has been argued that only "ecologically sound" and "equitable" projects should be approved to ensure that EIA is to be used for the long-term sustainability of the environment.⁴⁵² Thus, the statutory assessment test provision⁴⁵³ should contain a *criterium* that the project "*will contribute to sustainable development*".⁴⁵⁴ Inserting such a condition would represent an official recognition that the environment stands on an equal footing as economics. Rees goes even further by stating that ecological integrity should be the governing factor and the acceptable level of economic activity the dependent consideration.⁴⁵⁵ Although the assessment decision provision in the *CEAA* does not ensure that environmental considerations have priority over economic matters, it, nonetheless, requires in s. 16(2)(d) that the project must be in tune with the principle of sustainable development by ensuring that renewable resources will be maintained for present and future generations.

In sum, for environmentalists, the assessment decision step is fundamentally flawed. Especially because, in certain situations, the RA is also the proponent which seeks to have its projects carried out.⁴⁵⁶ But, it should be recognized that the *CEAA* is the only legislative Act in the world that: (a) comprises of independent review panels; (b) envisages a second track for the full assessment; (c) requires the

⁴⁵¹ CAUCUS, *supra*, note 209 at 3. Lindgren/Oct.91, *supra*, note 210 at 3.

⁴⁵² Lindgren/Oct. 91, *supra*, note 210 at 7.

⁴⁵³ S. 37(1).

⁴⁵⁴ Andrews & Hillyer, *supra*, note 209 at 34.

⁴⁵⁵ Rees, *supra*, note 3 at 283.

⁴⁵⁶ Which is contrary to the principle of *mitior judex in causa sua*; Lindgren/March 92, *supra*, note 210 at 5.

proponent to consider the capacity of renewable resources to be maintained for present and future generations, and (d) gives a broad public information system, by establishing a public registry, by permitting the public to comment during screening in certain circumstances and by allowing it to participate in review panels and mediation.

E. THE REVIEW OF THE ASSESSMENT DECISION

Once an assessment decision has been taken in favour of carrying out the proposed project, will it be possible to review the approval decision? Rigor and consistency in the application of the EIA requirements as well as accountability of the EIA process could be greatly enhanced by the availability of a right of appeal either at the executive (cabinet and/or ministerial review) or the judicial level.⁴⁵⁷

1. Executives Appeals

The decision following the receipt of the report made by a mediator or a review panel is entirely dependent on the decision making authority of the RA and no formal executive appeal is provided to review this decision.⁴⁵⁸ It should be noted that there are several other decisions made in the EIA process which also lack formal review:

(a) The decision made by the RA to require an undertaking to be assessed by the federal EIA process, either by way of screening or comprehensive study, and also a determination stating that the project is excluded under s.7.⁴⁵⁹

⁴⁵⁷ Schrecker, *supra*, note 197 at 201-02, Cotton & Emond, *supra*, note 276 at 270

⁴⁵⁸ Andrews & Hillyer, *supra*, note 209 at 49-50. For instance, the assessment decision could be appealable to the MoE or the Cabinet, Lucas in Clark, *supra*, note 66 at 171.

⁴⁵⁹ S. 5, s. 7, s. 59(c)(1)(ii) & s. 59(1). Under Bill C-13, the RA has the final decision-making authority to exclude a project under s.7.

(b) The screening decision whether the project will proceed without going through a full assessment or the decision to refer a project to a panel or a mediator⁴⁶⁰.

(c) The decisions taken under s. 23(b) and s. 28 where it is the MoE who decides whether a project should be referred to a full assessment.

Examining Bill C-13, one thus notices that no "formal executive appeals" are provided for determinations made or decisions taken in the above mentioned circumstances.

2. Judicial Review

Limitations to judicial review can result from a lack of formal judicial appeals, a lack of statutory basis for some EIA processes,⁴⁶¹ limited decision criteria,⁴⁶² extensive discretionary powers⁴⁶³ and restricted *locus standi*.⁴⁶⁴

⁴⁶⁰ S. 20.

⁴⁶¹ EARP was considered as a government policy until the Trial Division Federal Court in the *Canadian Wildlife Federation* case declared that it was an instrument that has the force of law; see, *infra*, note 470 and accompanying text; Schrecker, *supra*, note 197 at 194.

⁴⁶² As seen earlier, the RA does not have to give reasons for its decision: whether to proceed directly to the implementation of a project or for deciding that a full assessment is necessary. The same happens at the end of the assessment review. The draft federal legislation does not set clear criteria for the assessment decision.

⁴⁶³ Broad subjective discretionary powers to order assessment or to permit exemptions leave little room for application of error of law or jurisdictional principles, Lucas in Clark, *supra*, note 66 at 157. EIA processes should combine legislatively imposed non-discretionary obligations with discretionary decision. Furthermore, criteria to circumscribe discretion are necessary; CAUCUS, *supra*, note 209 at 7.

⁴⁶⁴ Public interest standing in federal administrative matters was very narrow in Canada until the *Finlay* case. This Supreme Court decision has elaborated a four condition test to be fulfilled by the applicants in order to have standing to bring a motion; *Finlay v. Canada (Minister of Finance)* [1986] 2 S.C.R. 607. In the U.S., the *Administrative Procedure Act* provides that any person aggrieved by agency action has the requisite locus standi to seek judicial review; S.K. McCallum, "Discretion in Decision-Making: a Problem for Environmental Impact Assessment" (1975) 23.3 *Chutty's Law Journal* 73 at 74.

Judicial review of any federal departments' action under the EARP, because of its legal status, was ambiguous.⁴⁶⁵ Indeed, the federal government, since the first appearance of federal EIA in Canada in the mid-70's, consistently resisted to legislate the federal environmental assessment process. Through the use of an administrative procedure, Ottawa retained much flexibility in the application of EIA to its governmental activities.⁴⁶⁶ However, as described beneath, a series of court decisions at the end of the 1980's hold that EARP was not a mere description of policy or programme, but has the force of law.⁴⁶⁷ It should be noted that judicial review is also very limited for bodies which have only recommendatory powers such as "federal panels" or the "Bureau des Audiences Publiques under the Quebec EIA scheme. At most, these bodies can be halted by an application to review their procedural fairness.⁴⁶⁸ However, lack or excess of power in a broad inquiry proceeding is difficult to prove.⁴⁶⁹

⁴⁶⁵ Lucas & Franson, *supra*, note 73 at 995-18-19. This is the main difference with *NEPA*. Courts in the U.S. have jurisdiction to ensure that actions met strict procedural requirement of *NEPA*. However, they took a very strong stance by adopting an active role and by strictly overseeing agency action under this statute. As noted by McCallum, "judicial review has centred upon the action forcing procedure set forth by s. 102(c)". "Nearly every clause to this section has been discussed", McCallum, *supra*, note 48 at 395.

⁴⁶⁶ Jeffery, *supra*, note 207 at 1072

⁴⁶⁷ See, for example, *Oldman River II*, *supra*, note 328 at 19

⁴⁶⁸ See *Nicholson v. Haldimand-Norfolk Regional Board of Commissioners of Police* [1978] 23 N.R.410 (S.C.C.) and *Minister of National Revenue v. Coopers and Lybrand* [1979] 24 N.R. 163 (S.C.C.).

⁴⁶⁹ Lucas in Clark, *supra*, note 66 at 172. P.S. Elder, "Environmental Impact Assessment in Canada: the Slave River Project" (1986) 14:2 *Alta.L. Rev.* 205 at 213.

a) *The Canadian Wildlife cases [CWF]*

Under these headings, there are in fact a series of different court decisions launched by opponents of the Rafferty Alameda dams in Saskatchewan. However, only certain aspects of the Trial Division and Federal Court of Appeal can be here presented.⁴⁷⁰

"*CWF I*": In 1986, the Saskatchewan government announced its intention to build two dams (the Rafferty Alameda dams).⁴⁷¹ An EIS under the provincial *Environmental Assessment Act*⁴⁷² was prepared and approval to proceed with the project was granted by the provincial Environment Minister. Subsequently, following an application by the Saskatchewan Water Corporation, a licence for dam construction pursuant to the *International River Improvement Act* [IRIA] was issued by the federal MoE in June 1988.⁴⁷³ In response to the issuance of this licence, the Canadian Wildlife Federation brought a suit in the Federal Court, seeking a *certiorari* order to quash and set aside the licence issued by the Minister under IRIA, and a *mandamus* order requiring the Federal Minister of Environment to comply

⁴⁷⁰ *Canadian Wildlife Federation Inc v Canada (Minister of Environment)* [1989] 3 F.C. 309, [1989] 4 W.W.R. 526 (T.D.), Cullen J. [hereinafter *CWF I* cited to F.C.], affirmed in *Saskatchewan Water Corp v Canadian Wildlife Federation Inc.* (sub nom. *Canadian Wildlife Federation Inc. v. Canada (Min of Environment)*) (1989) [1990] 2 W.W.R. 69, 38 Admin. L.R. 138 (F.C.A.) [hereinafter *CWF II*]

⁴⁷¹ They are located within the Souris River Basin, a system which flows internationally south to North Dakota and then provincially into Manitoba, Bowden, *supra*, note 325 at 227. It was the Souris Basin Development Authority (S.B.D.A.) as agent for another Crown Corporation, the Saskatchewan Water Corporation, which was charged with the supervision of their construction; Jeffery, *supra*, note 207 at 1075.

⁴⁷² S.S. 1979-80, c. E-10.1.

⁴⁷³ R.S.C. 1985, c. I-20, s.4 [IRIA]; Jeffery, *supra*, note 207 at 1075.

with EARP.⁴⁷⁴ The decision of Cullen J. in April 1989 determined that the "*Guidelines Order is not a mere description of a policy or a program but may create rights that are enforceable by way of mandamus*".⁴⁷⁵ As such EARP is an "enactment" or "regulation" according to s. 2 of the *Interpretation Act*.⁴⁷⁶ In examining whether compliance with EARP was required when issuing a licence under the IRIA, Justice Cullen found that the project was a "proposal" corresponding to s. 2, that has an environmental impact on several areas of federal responsibility".⁴⁷⁷ It was held that s. 6(b) was thus invoked and EARP had to be applied when issuing the licence under IRIA.⁴⁷⁸ Consequently, the licence was quashed and set aside and the Minister was required to comply with EARP. This decision was upheld on appeal.⁴⁷⁹

CWF II: following these proceedings, Environment Canada released a "Draft Summary Environmental Evaluation", with opportunity for the public to comment. However, without a public review, a final IEE⁴⁸⁰ was issued on August 1989, and the same day, the Federal Minister of Environment granted a new licence for the

⁴⁷⁴ Hunt, *supra*, note 221 at 798.

⁴⁷⁵ *CWF I*, *supra*, note 470 at 322.

⁴⁷⁶ *Interpretation Act*, R.S.C. ch. 1-21 (1985).

⁴⁷⁷ Such as international relations, migratory birds, interprovincial affairs, fisheries and the Boundary Waters Treaty; *CWF I*, *supra*, note 470 at 323; see Bowden, *supra*, note 325 at 228.

⁴⁷⁸ *Ibid.* at 311, Hunt, *supra*, note 221 at 798.

⁴⁷⁹ *CWF II*, *supra*, note 470 at 309.

⁴⁸⁰ See s. 12(d) of EARP. When potential adverse environmental effects or mitigation possibilities are unknown, further study is made resulting in an Initial Environmental Evaluation [IEE]; Lucas & Franson, *supra*, note 73 at 995-13; Initial Assessment Guide, *supra*, note 161 at 4 & Appendix 2.

projects. The Canadian Wildlife Federation again attacked the Minister before the Federal Trial division, seeking certiorari and mandamus orders on the basis that the Minister had failed to comply with s. 12 of EARP.⁴⁸¹ Justice Muldoon, in examining the IEEs, noted that its authors did not follow the language of s. 12(c) and (e), which refer to "*significant*" and "*insignificant*" adverse environmental effects when assessing the impacts of a project. They IEE authors, instead, spoke to "significant" and "moderate" impacts. Justice Muldoon concluded that "*moderate*" impacts, as they were not "insignificant", meant "*significant adverse environmental effects*".⁴⁸² Thus, the Trial Division concluded that the Minister should have appointed a review panel, because both s. 12(a), nor s. 12(c) which allow a project to proceed without full assessment were not appropriate in the present case.⁴⁸³ An order of *mandamus* was issued requiring the Federal Minister of the Environment to comply with EARP by appointing a review panel. Certiorari was also ordered to quash the licence issued in August 1989, unless before January, 30, 1990, the Minister appointed an Environmental Assessment Panel. The Federal Court of Appeal upheld this decision.⁴⁸⁴

In summary, what can be derived from the *Canadian Wildlife Federation* and the *Oldman River* cases in the context of judicial review? Principles evolving from these cases first confirm the mandatory character of EARP which creates judicially

⁴⁸¹ *CWF II*, *supra*, note 470 at 2 & 12.

⁴⁸² *Ibid.* at 13.

⁴⁸³ *Ibid.* at 20-22. S. 12(a) stipulates that projects causing no adverse environmental effects can directly proceed, under s. 12(c), proposals having insignificant environmental repercussions or environment effects, which can be mitigated with known technology, can also proceed.

⁴⁸⁴ *Tetzlaff v. Canada (Min of Environment)* (21 December 1990), T-2729-90 (F.C.A.) [unreported], *Jellery, supra*, note 207 at 1077

enforceable obligations on the part of the federal government requiring it to assess the environmental implications of its activities.⁴⁸⁵ This will hold true for the *CEAA*, as it is a statute. These decisions, especially the *CWF II*, have established the rules that steps within the federal process, such as the screening phase and its resulting decision, are open to judicial scrutiny.⁴⁸⁶ This holding should also be applicable to the new Act although, as noted earlier, it does not contain any appeals provisions.

Thirdly, both *CWF* and the *Oldman River* cases interpreted the federal EIA process to apply to provincially located dam projects. This has made the relationship between provinces and the federal government decline.⁴⁸⁷ Does the proposed *CEAA* resolve this interjurisdictional problem related to the ambit and scope of the federal EIA process?⁴⁸⁸ Sections 40-42 authorize the MoE to establish a joint review panel with other Canadian jurisdictions and also with foreign jurisdictions. Conditions, such as granting MoE the power to appoint the chairperson or co-chairperson and to fix or approve the terms of reference, may not satisfy the provinces. Also, Bill C-13 does not state that both parties will be bound by the

⁴⁸⁵ Schrecker, *supra*, note 197 at 194.

⁴⁸⁶ Hunt, *supra*, note 221 at 801. Before this case, between 1973 and 1987, only 29 projects were referred to a review panel for a full assessment, Schrecker, *supra*, note 197 at 219, CFAC report, *supra*, note 248 at 13.

⁴⁸⁷ Hanebury, *supra*, note 224 at 964 & 976

⁴⁸⁸ It seems not. Space, however, does not permit the examination of this problem. Nevertheless, it should be noted that Alberta and Quebec mainly fear that the *CEAA*, because of its uncertainty will permit Ottawa to interfere in provincial resource management. R. Ray, "Provinces, Lawyers see Disputes over jurisdiction" (1990) 17 *Environment Policy & Law* 1 at 1. Quebec has shown the most serious opposition, certainly about its own mega-dam projects. The Quebec Environment Minister Pierre Paradis described the Bill to be a form of "totalitarianism" that would allow Ottawa to "dictate" the province's economic development. The federal government, however, has sought to assure them by stating that its purpose is not to grab jurisdiction, but just to protect federal interests, see *Controversial Assessment Law*, *supra*, note 396, 488 at 1 & 3.

panel's report. According to Jeffery, the RA apparently seems to remain the final arbiter with respect to a project referred to a joint panel review.⁴⁸⁹ Further, these cases have clearly demonstrated that scrutiny is necessary. Without it, federal departments and other bodies required to apply the federal EIA process, may not rigorously carry out assessments.⁴⁹⁰ Finally, both the Rafferty Alameda and Oldman River decisions provided major boosts to the legislative strengthening of the federal EIA. As the courts were showing advanced considerations related to the EIA, Ottawa could not pass an Act that failed to meet the standards established by jurisprudence and was backward what the courts hold.⁴⁹¹

F. CONCLUSION

Chapters II and III have described how the process under the *CEAA* unfolds. Many environmentalists who have long pressed for a new mandate of the environmental assessment review process have had second thoughts and do not support the proposed *Canadian Environmental Assessment Act*. In these two chapters, it was attempted to offer a more positive view of Bill C-13 by presenting some of its key provisions. Nevertheless, only its implementation and application will allow for an effective evaluation of the EIA process contained in the new Act. Further, the assessment of projects under the *CEAA* will show whether the provisions promoting sustainable development are translated into concrete actions

⁴⁸⁹ Jeffery, *supra*, note 207 at 1085.

⁴⁹⁰ In both *Rafferty Alameda I* and *Rafferty Alameda II*, it is the MoE who respectively fell to apply EARP and failed to apply the federal EIA process correctly; Schrecker, *supra*, note 197 at 202.

⁴⁹¹ Hobby, *supra*, note 212 .

and whether assessed projects are ecologically sound. However, this study would not be complete absent a discussion of the enforcement mechanisms designed to implement the new federal EIA as well as its post-approval requirements. These aspects will be given an analytical treatment in the next chapter.

CHAPTER IV: IMPLEMENTATION AND POST-APPROVAL PHASE

A. INTRODUCTION

Chapter IV will describe what follows the assessment decision. As in Chapter II and III, the analysis is based on the assumption that only a strong and efficient post-EIA phase can place us on the path toward sustainable development.

Behind the expression "*post-EIA phase*" lies, in fact, two distinct, but related aspects. First, the post-approval stage contains an "*implementation and enforcement facet*". As described below, the *indicia* of an effective EIA process should include mechanisms to compel adherence to the EIA's requirements, such as offense and penalty provisions for failure to comply with them.

Second, an effective environmental appraisal scheme should not be a "*once-and-for-all*" process ending with the release of the assessment decision. EIA should, on the contrary, be shaped in such a manner as to include a "*post-project analysis*"⁴⁹² and thus provide an "*ongoing monitoring*" of environmental and socio-economic impacts during construction, operation and abandonment of the project.

⁴⁹² M. Davies & B. Sadler, *Post-Project Analysis and the Improvement of Guidelines for Environmental Monitoring and Audit* (Ottawa: Minister of Supply & Services, 1990) at 7 [Davies & Sadler].

B. IMPLEMENTATION AND ENFORCEMENT OF THE ENVIRONMENTAL IMPACT ASSESSMENT DECISION

EIA is commonly referred as a "*planning tool*" rather than as a regulatory mechanism. It provides governmental decision makers and other interested parties with information about the probable consequences of a proposed activity. However, to be effective the EIA process must be linked to the regulatory mechanism in order to make sure that the environmental appraisal and its resulting decision are implemented by the proponent.⁴⁹³ Insufficient or ineffective compliance provisions would eventually render an environmental impact assessment a futile exercise, used mainly for the issuance of a development permit.⁴⁹⁴ Further, in the context of sustainable development, a serious commitment to compliance would imply a comprehensive environmental assessment scheme, which provides for the effective implementation and enforcement of the decisions generated by it.⁴⁹⁵

Legislation without enforcement capability risks being perceived as a mere statement of aspirations.⁴⁹⁶ Those required to comply with a particular statute or regulation may find little incentive to do so. Furthermore, no remedy will be

⁴⁹³ See M.I. Jeffery, "Environmental Enforcement and Regulation in the 1980's: Regina v. Sault Ste-Marie Revisited" (1984) 10 *Queen's L.J.* 43 at 51-54, Lucas in Clark, *supra*, note 66 at 145-46

⁴⁹⁴ R. Bisset & P. Tomlison, "Monitoring and Auditing of Impacts" in P. Wathern, ed., *Environmental Impact Assessment Theory and Practice* (London: Unwin Hyman, 1988) 117 at 126 [Bisset & Tomlison].

⁴⁹⁵ CAUCUS, *supra*, note 209 at 4.

⁴⁹⁶ *RE Industrial Hygiene Decision No 167* (1975) 2 W.C.R. 234 at 252 cited in D. Saxe, *Environmental Offenses. Corporate Responsibility and Executive Liability* (Aurora, Ont: Canada Law Book, 1990) at 25 [Saxe].

provided for a breach of statute. Briefly, environmental statutes must contain mechanisms to achieve regulatory compliance.

There is a lack of consensus among legislative drafters and scholars about the best way to ensure compliance with and to enforce environmental protection laws. The use of administrative penalties, licensing, suspension of licences and permits, injunctions for non compliance, frequent inspections, public education, etc., as well as an enhanced prosecution strategy are some of the measures suggested to ensure adherence to environmental statutes.⁴⁹⁷

It has been noted, with respect to the environmental assessment process in particular, that there is a strong reluctance to apply these procedures.⁴⁹⁸ Hence, it becomes clear that EIA regulators should incorporate compliance and enforcement mechanisms into EIA statutes. For example, the private sector has often shown a strong opposition to EIA requirements which it considers too costly and time-consuming. According to some, administrators also rarely perceive the environmental examination as being a priority component of their mission.⁴⁹⁹ For example, in Canada, judicial review of the *Rafferty Alameda* cases clearly demonstrated that even the federal Department of the Environment failed to correctly and rigorously apply the Guidelines Order. Thus, it is essential to draft strong EIA processes which, in particular, include administrative systems of permits

⁴⁹⁷ *Ibid.* at 25-26.

⁴⁹⁸ Robinson, *supra*, note 38 at 23-24.

⁴⁹⁹ *Ibid.* at 23.

and certificates of approval as well as penalties and sanctions in case of failure to comply with the required EIA standards and procedures.⁵⁰⁰

Provincial EIA schemes are usually binding on the proponents.⁵⁰¹ The *Ontario Assessment Act*, for example, stipulates that the Ontario Minister of Environment may attach terms and conditions when approving the undertaking and consequently require their compliance.⁵⁰² Furthermore, failure to observe either the provisions of the Ontario EIA Act or its regulations, as well as non-compliance with an order, a term or a condition of approval, is an offence which may give rise to prosecution for breach of the statute.⁵⁰³ In addition, the proponent is required to report any potential or actual inability to comply with the stated terms and conditions contained in the approval.⁵⁰⁴ Finally, for the purposes of implementation of the Environmental Assessment Act, provincial officers are authorized to inspect buildings, dwellings, lands, etc. The Act authorizes investigations when they become necessary.⁵⁰⁵

⁵⁰⁰ Saxe, *supra*, note 496 at 55 & 59.

⁵⁰¹ B. Sadler, ed., *Audit and Evaluation in Environmental Assessment and Management: Canadian and International Experience*, vol. 1 (Ottawa: Minister of Supply & Services, 1987) at 1 [hereinafter *Audit & Evaluation*].

⁵⁰² S. 14(1)(b) & 16(1) of the *Environmental Assessment Act*, *supra*, note 73

⁵⁰³ S. 39. of the *Environmental Assessment Act*.

⁵⁰⁴ Ontario Environment, *Towards Improving the Environmental Assessment Program in Ontario* (Toronto: Ministry of the Environment, 1990) at 39 [hereinafter *Improving the EA Program*]

⁵⁰⁵ S. 25; Lucas in Clark, *supra*, note 66 at 173.

Similarly, the *Quebec Environmental Quality Act* [EQA] contains binding mechanisms to ensure compliance with the EIA process.⁵⁰⁶ First, section 31.1 prohibits any person from undertaking any operation related to projects that must be submitted to an environmental assessment impact without obtaining an authorization certification beforehand. Similar to the Ontario EIA process, the Quebec scheme attaches conditions to the certificate which grants permission or authorizes the project to be carried out.⁵⁰⁷ Further, s. 106 of the EQA stipulates that it is an offence not to comply with a condition imposed under section 31.5. In addition, the authority issuing the certificate has the right to amend or to cancel it in the cases where the holder of the authorization does not conform to it or does not comply with the provisions of the EQA or a regulation thereunder.⁵⁰⁸

In the 1984 federal Guidelines Order there are no mechanisms to ensure adherence to the decisions taken there. Of course, some provisions deal specifically with the post-approval phase. For example, s. 14 of EARP sets out that the "*initiating department*" (the body equivalent to the "responsible authority" under the *CEAA*) bears the responsibility for implementation of mitigation and compensation measures. In addition, it decides as to what extent the review panel recommendations are to be taken into account.⁵⁰⁹ Finally, it has to decide which

⁵⁰⁶ See in particular the EIA scheme described in sections 31.1 to 31.9 of the EQA, *supra*, note 75.

⁵⁰⁷ S. 31.5. of the EQA.

⁵⁰⁸ S. 122.1(b)-(c) of the EQA.

⁵⁰⁹ S. 33(1)(c) of EARP.

measures are necessary for implementing, inspecting and monitoring the project proposal.⁵¹⁰

With regard to the proponent, s. 34(f) stipulates that it is responsible for the carrying out of appropriate post-assessment monitoring, surveillance and reporting as required by the initiating department. Notwithstanding the above measures, it can be stated that there are no specific implementation clauses in the federal Guidelines Order. As noted by Emond, "what happens after" the transmission of the panel's report to the Minister "is a matter for conjecture".⁵¹¹

According to environmentalists, the new *Canadian Environmental Assessment Act* does not improve the implementation and enforcement aspect of the EIA process. In their view, Bill C-13 is characterized by inadequate provisions for ensuring effective adherence to the process' requirements as well as with the implementation and enforcement of the approval decision.⁵¹² They suggested that the new Act include a separate section dealing specifically with enforcement.⁵¹³ The proposed enforcement section was to contain regulatory requirements such as permits and licences that would prescribe the conditions of the assessment decision and the required mitigative measures. Failure to comply with the licence conditions

⁵¹⁰ S.33(1)(d). Implementation can be directed by interdepartmental committees made up of representatives from provinces or territories and also the private sector, Federal EIA Process, *supra*, note 365 at 4.

⁵¹¹ D.P. Emond, "Fairness, Efficiency, and FEARO. An Analysis of EARP" in Canadian Institute of Resources Law, *Fairness in Environmental and Social Impact Assessment Processes* (Calgary University of Calgary, 1983) at 62 [hereinafter *Fairness*].

⁵¹² CAUCUS, *supra*, note 209 at 16.

⁵¹³ Andrews & Hillyer, *supra*, note 209 at 66.

was to be attended by administrative sanctions.⁵¹⁴ A penal provision was to be included making a violation of any order or a provision under the Act punishable with fines.⁵¹⁵ Along with such a penalty clause, it was suggested that the *CEAA* have provisions for investigations, seizures and related matters similar to those existing in Part VII of *CEPA*. It was also proposed that ministerial orders should authorize the MoE to stop a project from proceeding while it is in the assessment process. Moreover, the MoE was to have the power to impose, by orders, conditions on a project.⁵¹⁶ To allow for the effective enforcement of ministerial orders, injunctive relief was to be made available to any person from the public. Furthermore, this remedy was to be extended to any violation under the Act or its regulations. It was argued that an effective enforcement scheme would also authorize the court to order the performance of positive actions besides allowing for the restraining orders.⁵¹⁷

Two points must be made clear with respect to the enforcement aspect of the proposed federal EIA. Firstly, while the *CEAA* has been designed to integrate socio-environmental considerations in the planning of federal projects, the purpose of *CEPA* is to protect the environment by controlling the introduction and release of

⁵¹⁴ CAUCUS, *supra*, note 209 at 15.

⁵¹⁵ The federal EIA Act should adopt the same penalties as section 116, the residual offenses provision, of the *Canadian Environmental Protection Act*; Andrews & Hillyer, *supra*, note 209 at 71.

⁵¹⁶ S 50 gives the MoE the authority to stop a project which falls into the provisions dealing with projects having transboundary effects, ss. 46(1), 47(1) or 48(1) or (2); Andrews & Hillyer, *supra*, note 209 at 67.

⁵¹⁷ S 51 of the new federal Act is very limited in its scope. It only authorizes the Attorney General of Canada to issue an injunction to a court of competent jurisdiction to enforce an order taken under s. 50. The injunction relief should also be applied against the Crown; Andrews & Hillyer, *supra*, note 209 at 70, CAUCUS, *supra*, note 209 at 15.

substances capable of causing serious health and environmental effects, for example toxic substances.⁵¹⁸ Thus, the environmental protection regime of *CEPA* must be implemented with the help of tough sanctions.⁵¹⁹ A comparison of *CEPA* and *CEAA* is not appropriate as both designed to protect the environment yet as using two different methods. Secondly, the *CEAA* applies to federal departments and, unlike provincial schemes, not to the private sector.⁵²⁰ Therefore, suggesting the adoption of the same enforcement mechanisms as in provincial EIA legislation might not be appropriate. It is indeed difficult to imagine the MoE suing the federal department of Transport or Health for non-compliance with the federal EIA process.⁵²¹

Some sections in the *CEAA* can however be considered enforcement provisions. First, Bill C-13 makes an attempt to address one significant flaw plaguing the Guidelines Order. The unsatisfactory outcome of the *Rafferty Alameda* and *Oldman River* cases was that environmentalists won their motion but could not get the project halted.⁵²² Construction went on during the court proceedings. The

⁵¹⁸ See Part II of *CEPA*.

⁵¹⁹ Hobby, *supra*, note 212.

⁵²⁰ See the definition of "responsible authority" under s. 2(1).

⁵²¹ Hobby, *supra*, note 212.

⁵²² EARP, however, contains a provision requesting that EIA be applied early in the planning phase of a proposal. But as Justice Muldoon in *CWF II* stated: "because the Minister did not embrace willingly the EARP Guidelines prior to April 1989, and even subsequently, as this Court finds, the devolution of events described in section 3 of the Guidelines is now savagely distorted. . . ."; *CWF II*, *supra*, note 470 at 22.

Rafferty and Alameda dams were almost completed by October 1989.⁵²³ The panel appointed by the MoE resigned in protest of the continuation of the construction. An injunction sought by Ottawa in the Saskatchewan Court of Queen's Bench in November 1990 to stop the construction until public hearings were completed was unsuccessful.⁵²⁴ Further, in *Naskapi-Montagnais Innu Association v. Minister of National Defence*, it was stated that EARP does not contain any provision obliging a project to be halted until the end of the review by a panel and the transmission of its report.⁵²⁵

Under Bill C-13, such a situation can no longer arise. Section 5(1) stipulates that an environmental assessment of a project is required before the four situations described in subsections (a)-(d) take place.⁵²⁶ Section 11(2) stipulates that the RA "shall not exercise any power or perform any duty referred to in s. 5 unless the course of action it takes is a screening decision allowing the project to proceed or an assessment decision permitting the carrying out of the project."⁵²⁷ And, where

⁵²³ Jeffery, *supra*, note 207 at 1077. Similarly, the Oldman River dam was already 70% completed when the appeal court rendered its decision; K. Pole, "Proposal Labelled World's 'Most Comprehensive'" (1990) 14 *Environment Policy & Law* 1 at 3 [hereinafter Pole].

⁵²⁴ Jeffery, *supra*, note 207 at 1077 *A.G. Canada v. Saskatchewan Water Corp.* (15 November, 1990), QB-4277/90 (Sask.Q.B.) MacPerson C.J. [unreported]. Another application for an injunction was rejected by the Federal Court Trial Division, but the court obliged the MoE to appoint a new panel; *Tetzlaff v. Canada (Min. Environment)*, T-2729-90 (F.C.A.) [unreported].

⁵²⁵ *Naskapi-Montagnais Innu Association v. Minister of National Defence* [1990] 3 F.C. 381 (F.C.T.D.) at 382.

⁵²⁶ (1) A project is proposed to be carried out by a federal authority; (2) financial assistance is provided by a federal authority to a project proponents; (3) a project is to be carried out on federal lands and (4) a federal authority issues a permit or licence, grants an approval or takes any other action for the purpose of enabling the project to be carried; s. 5(1)(a)-(d).

⁵²⁷ S. 20(1)(a) & s. 37(1)(a).

a project is carried out after the pre-assessment phase, s. 20(2) requires the RA to implement mitigation measures. Further, the mandatory language of s. 13 prescribes, in the cases of projects subject to a comprehensive study or assessed by a review panel or mediation, that no other federal Act or regulation shall be invoked which would permit the project to be carried out unless an EIA has been achieved and an assessment decision allowing the project to proceed has been taken.⁵²⁸ Again, at the end of the assessment, the RA must implement mitigation measures when allowing a project or an activity to proceed.⁵²⁹ For example, every federal licensing scheme will come under s. 5(1)(d).⁵³⁰ In order to comply with the above-mentioned provisions, a federal authority will have to insert into the licence it delivers a condition requiring the project to be subject to a licence, which will be issued on completing assessment. Only once the environmental appraisal is completed will the licence come into force.

In both *Rafferty Alameda* and *Oldman River* cases, the federal Minister of the Environment under the *International River Improvement Act* and the Federal Minister of Transport would have been responsible for the screening of the projects before issuing the required federal licenses under the *Navigable Waters Protection*

⁵²⁸ According to environmental associations, s. 13 should not be limited to the projects described in the comprehensive study list or referred to mediation or a review panel. It should also apply to projects being screened; *ibid.* at 23; Schrecker, *supra*, note 197 at 222. However, such a requirement may render the Act unworkable. Notice to inform other federal departments would be necessary for every tiny project or activity undertaken by a federal authority, Hobby, *supra*, note 212.

⁵²⁹ S 37(2).

⁵³⁰ The draft Law List containing the federal Acts and regulations triggering the EIA process under s. 5(1)(d) is rather generous and contains every licensing scheme, Hobby, *supra*, note 212.

Act.⁵³¹ If the screening decision had found that the projects could potentially cause significant adverse environmental effects, the projects would have had to be referred to a full assessment. Further, according to s. 13, any federal action allowing the projects to proceed would have been blocked, unless the projects had reached the assessment decision stage where both Ministers decided to carry out the projects according to the conditions set out in s. 37(1)(a)(i). Finally, both Ministers would have been obliged to implement mitigation measures pursuant s. 37(2).

Accordingly, federal authorities are now under the obligation to assess projects falling within the scope of the *CEAA*. Under the present provisions, provinces are not bound by s. 11(2) or s. 13. However, the construction of provincial projects often requires the issuance of a federal licence. Thus the project may not be carried out unless the federal licence comes into force, that is after the condition inserted in the licence to have a federal EIA has been fulfilled. If, however, a province continues building a project without a valid federal licence or without respecting the conditions of the licence, an injunction may be obtained against the province or the licence may be revoked.⁵³²

It is true that the *CEAA* does not have an enforcement provision and that no offenses are attached to the violation of its requirements or regulations adopted pursuant it. Unlike certain provincial processes, the new federal legislation does not foresee an enforceable and revocable licence or permit that would allow the

⁵³¹ The draft Law List presently includes the licences required under s. 10 of the *International River Improvement Act* and s. 5 of the *Navigable Waters Protection Act*; *Summary of Comments, supra*, note 335 at 19.

⁵³² Hobby, *supra*, note 212.

implementation of terms and conditions attached to the final assessment decision.⁵³³ Its wording does allow, on the other hand, the insertion of conditions into existing licensing schemes and bars federal authorities from acting unless a screening decision or an assessment decision has allowed the project to proceed. In both cases, the RA must implement mitigation measures.⁵³⁴ Now everything is in the hands of federal departments and proponents who must rigorously assess the projects falling under the *CEAA* and the public must act as a watchdog over the Federal Government's application of the new EIA process.

C. POST-PROJECT ANALYSIS

1. Introduction

Current EIA processes lack effectiveness. This has been characterized as one of the most serious problems troubling EIA schemes.⁵³⁵ As suggested in Chapter I, this major drawback is partly due to the fact that EIA schemes contain little continuity between the "*assessment phase*" and the "*post-approval stage*".⁵³⁶ The environmental impact examination is often considered a "*predictive tool*". Much energy and money is spent on the identification, prediction and evaluation of harmful environmental and socio-economic effects caused by the development of a project. However, little effort is made to examine whether or not the predicted

⁵³³ CAUCUS, *supra*, note 209 at 15.

⁵³⁴ s.20(2) & s.37(2).

⁵³⁵ Elder & Ross, *supra*, note 4 at 128; Sadler in Wathern, *supra*, note 187, 537 at 139.

⁵³⁶ See Chapter I, *supra*, note 187 and accompanying text.

effects occurred and whether or not appropriate mitigation measures were actually implemented. Without a so-called 'post-assessment analysis', it is doubtful whether the EIA can be a meaningful tool for environmental management.⁵³⁷ In addition, non-existent or insufficient follow-up programs prevent the transmission of experience from one project to the next one.⁵³⁸ Consequently, an efficient and effective EIA mechanism should include post-approval actions.⁵³⁹

2. Definition of Post-Project Analysis

Follow-up activities, such as monitoring and auditing are new and emerging areas of research.⁵⁴⁰ A review of the relevant literature indicates that there is, as of yet, no clear agreement on the terminology, definitions and interpretations of post-project studies.⁵⁴¹ A wide range of terms and expressions are used such as "monitoring", "EIA follow-up programs", "verification", "evaluation" and "post-development audit".⁵⁴²

⁵³⁷ Sadler in Wathern, *supra*, note 187, 537 at 129.

⁵³⁸ *Audit & Evaluation*, vol. I, *supra*, note 501 at 303.

⁵³⁹ R. Lang, "Environmental Impact Assessment: Reform or Rhetoric?" in W. Leiss, *Ecology versus Politics in Canada* (Toronto: University of Toronto Press, 1979) at 247 [hereinafter Lang in Leiss].

⁵⁴⁰ Davies & Sadler, *supra*, note 492 at 7.

⁵⁴¹ Krawetz, *supra*, note 157 at 84.

⁵⁴² Further, the word "monitoring" can be preceded by the term "baseline", "effects", "impact", "environmental", "ongoing" monitoring or "compliance" monitoring, see P. Duinker, "Effects Monitoring in Environmental Impact Assessment", V.W. McLaren & J.B. Whitney, *New Directions in Environmental Impact Assessment in Canada* (Toronto: Methuen, 1985) at 118 [Duinker].

Four expressions, as presented by Davies and Sadler, will be used throughout this chapter:⁵⁴³

(a) Monitoring: "monitoring is the systematic collection of data through a series of repetitive measurements".⁵⁴⁴ A dynamic environmental impact assessment process would, at minimum, incorporate baseline monitoring, effect or impact monitoring and compliance monitoring".⁵⁴⁵

(b) Auditing: based on the data gathered through monitoring, the EIA audit is a post-project analysis which examines the cause of differences between predicted and existing environmental repercussions. The underlying rationale for an audit is the search to improve scientific understanding and EIA technology. The EIA audit is more oriented forwards developing the EIA practice and experience than to providing information for proper management of individual projects.⁵⁴⁶

(c) Evaluation: it questions the effectiveness of the EIA procedures used to assess the environmental impact. In comparison to an audit which implies an independent and objective analysis of whether the actual effects comply with what was predicted, the evaluation exercise is more subjective. As noted by Sadler, evaluation entails

⁵⁴³ Sadler & Davies, *supra*, note 492 at 7-8

⁵⁴⁴ *Ibid.* at 8.

⁵⁴⁵ (i) "*Baseline monitoring*" is the measurement of environmental variables during a representative preproject period to try and determine existing conditions, ranges of variation, and processes of change. (ii) "*Effect monitoring*" or "*impact monitoring*" measures environmental variables during project construction and operation to determine the changes which may have occurred as a result of the project (iii) "*Compliance monitoring*" involves regular sampling and/or continuous measurement of waste discharge levels, noise, or similar emission, to ensure that conditions are observed and standards are met. For this purpose, surveillance and inspection may also be used, *ibid* at 8.

⁵⁴⁶ *Ibid.* at 8.

making policy-oriented judgements about the effectiveness of the EIA process and its results.⁵⁴⁷

(d) **Post-Project Analysis [PPA]**: is used to refer to all research and supporting activities which take place after a project has been accepted. It is the all-encompassing expression for the above cited terms.⁵⁴⁸

3. Purposes of Post-Project Analysis

Many EIA experts have proposed the development of post-project examination for the improvement of environmental assessment processes.⁵⁴⁹ According to a report of the U.N. Economic Commission for Europe, post-action procedures play two main roles.⁵⁵⁰ Firstly, they permit a better management of the approved and implemented project and provide the necessary link between the environmental assessment phase and the post-approval stage. Secondly, more information on the environment and its reactions to environmental stressors is gained if on-going monitoring and other post-approval activities exist. In addition, post-approval activities can, by improving the knowledge and experience, permit the improvement of the procedural steps involved in EIA.⁵⁵¹

⁵⁴⁷ Sadler in Wathern, *supra*, note 187, 537 at 130.

⁵⁴⁸ *Ibid.* at 7-8

⁵⁴⁹ Sadler in Wathern, *supra*, note ? at 130.

⁵⁵⁰ The Senior Advisors to ECE Governments on Environmental and Water Problems undertook a project on the use of environmental impact assessment auditing and released their report in 1988; Economic Commission for Europe, *Post-Project Analysis in Environmental Impact Assessment: Report Prepared by the Task Force on Environmental Impact Assessment Auditing with Canada as Lead Country* (New York, United Nations Publication, 1988) [hereinafter *ECE/Post-Project Analysis*].

⁵⁵¹ *Ibid.* at 21.

(a) Post-project analysis for environmental management of the activity

Project management would be greatly enhanced if post-EIA activities were implemented. They would, in particular, provide for "*compliance monitoring*" in order to make sure that regulations, terms and conditions attached to the approbation certificate and operating licences are observed.⁵⁵² Thus, post-approval provisions should stipulate that the environmental effects of the project must be analyzed in order to cope with risks and uncertainties. Thirdly, necessary modifications to the activity or project and the application of mitigation measures should be implemented where unpredicted adverse impacts on the environment have been observed.⁵⁵³ Such a strategy would have the advantage of reducing scientific uncertainty in environmental assessment schemes. As noted in Chapter I, EIA-specialized literature is increasingly recognizing the lack of information concerning the functioning of ecological processes and the difficulty encountered when trying to predict the precise effects and reactions of natural systems to a development project.⁵⁵⁴ All of this suggests that by attempting to predict future environmental and socio-economic

⁵⁵² *Ibid.* at 2 & 21-22.

⁵⁵³ *Ibid.* at 21-22. For instance, following the construction of a Soviet pulp and paper mill in the mid-60's, monitoring studies were developed in order to obtain environmental data on the state of the environment in the Lake Baikal region. Many years of reporting by the agency of the state of Lake Baikal demonstrated that the mill was damaging the ecosystem in and around Lake Baikal to such a significant degree, that the Soviet Government decided to shut the mill down and to convert it into an environmentally-sound industry. Public pressure resulting from the post-project studies also influenced the government to make the decision to close the mill. Less dramatic modifications as a result of post-project programs could necessitate, for example, the reduction in the rate of the ground-water extraction of a facility constructed to provide drinking water, *ibid.* at 18-19, 13-14 & 23.

⁵⁵⁴ Davies & Sadler, *supra*, note 492 at 9. As De Jongh observed, until the 1980's, consideration of scientific uncertainty was not found in the literature referring to EIA, P. De Jongh, "Uncertainty in EIA" in Wathern, *supra*, note 39 at 63, 64 [hereinafter De Jongh].

events, EIA processes are necessarily vested with a great deal of uncertainty.⁵⁵⁵ It is virtually impossible to precisely anticipate and estimate all future repercussions of a proposed undertaking. While research can reduce uncertainties, uncertainty will always be an element of prediction *per se*.⁵⁵⁶ The best solution is, then, to provide means to cope with "the unexpected"⁵⁵⁷ and "surprise" effects.⁵⁵⁸ On-going monitoring reinforced by audits will be necessary if one is to integrate and overcome scientific uncertainty in EIA processes.⁵⁵⁹

(b) Post-project analysis for EIA process development

Apart from assuring that the benefits expected by the review assessment are effectively realized as the project is carried out, PPAs can play two other roles. First, post-project activities can study the accuracy of predictions made by the EIA and they can also test the effectiveness of mitigation measures adopted in a particular project.⁵⁶⁰ Such analyses can then be transmitted to future environmental assessments of undertakings of the same type.⁵⁶¹

⁵⁵⁵ Bisset & Tomlinson, *supra*, note 494 at 120.

⁵⁵⁶ *Ibid.* at 120, De Jongh, *supra*, note 554 at 67 68-75.

⁵⁵⁷ Davies & Sadler, *supra*, note 492 at 9.

⁵⁵⁸ *Sustainability*, *supra*, note 16 at 843.

⁵⁵⁹ Davies & Sadler, *supra*, note 492 at 9.

⁵⁶⁰ It is important to note that EIA processes mainly emphasize the adoption of mitigation measures that will prevent or reduce potential environmental damages; Beanlands & Duinker, *supra*, note 145 at 32-33 & 103.

⁵⁶¹ *ECE Post-Project Analysis*, *supra*, note 550 at 22. For example, the ECE report gives the example of a regulation in Maine requiring that construction projects eliminating or degrading existing salt marshes, compensate for these losses by creating salt marsh habitats corresponding to those destroyed. Consequently, a marsh creation project was developed as a part of the relocation

The EIA process can also be developed by studying the procedural and the administrative aspects of the EIA. Post-project programs can examine how well the EIA procedures did work in a particular instance.⁵⁶² This will be called an "evaluation".

4. Post-Project Analysis in the Federal EIA Process in Canada

For all the reasons mentioned above, EIA schemes encompassing monitoring, auditing and evaluation requirements would be much more effective than traditional EIA processes. However, a review of different environmental impact assessment processes reveals that none of these post-project activities are firmly enshrined in Canadian EIA statutes or those of other countries.⁵⁶³

The federal Guidelines Order pays little attention to post-project requirements. With respect to the screening phase, an "evaluation" exercise can be

of a five-kilometre section of a highway project around Harrington because this highway construction necessitated the displacement of a segment of the Harrington River salt marsh. In order to learn from marsh reconstruction for future projects of the same kind, a program was established which monitored and evaluated the relocated salt marsh. The studies started before the construction of the project in 1975 and continued through 1986. The study started with the gathering of marsh vegetation species which would be used for comparison with later development stages of the created marsh. Construction and transplanting methods were then examined, recorded and estimated. Subsequently, the ecological system of the created marsh was studied. Clearly, such post-project analysis offers a *modus operandi* and insight that can be used for future projects assessments, *ibid* at 19-20 & 24

⁵⁶² *Ibid.* at 24.

⁵⁶³ Sadler in Wathern, *supra*, note 187, 537 at 137.

found in the fact that initial assessment decisions must be reported.⁵⁶⁴ Beyond this there is no statutory hint at post-approval activities for projects receiving only an initial assessment. For the small number of proposals undergoing a full assessment, post-project analysis is addressed in two provisions. First, subsection 33(1)(d) gives authority to the "*initiating department*" to ensure that the assessment decision is incorporated into the design, construction and operation of the project and that suitable implementation, inspection and "*environmental monitoring programs*" are established. Second, section 34(f) stipulates that the "proponent" is responsible for making sure that "appropriate post-assessment monitoring, surveillance and reporting, as required by the initiating department are carried out".⁵⁶⁵ The Guidelines Order contains no post-project programs or mechanisms.⁵⁶⁶ Some review panel reports, however, did recommend ongoing monitoring functions for FEARO through *ad hoc* monitoring committees.⁵⁶⁷

The absence of follow-up mechanisms in EARP does not mean that federal departments do not implement post-project analysis. Parks Canada, for example, adopted manuals of application of EARP in 1981 and 1985, and a regional directive

⁵⁶⁴ S. 15 of EARP, D.R. McCallum, "Environmental Follow-up to Federal Projects: a National Review" in B. Sadler, ed., *Audit and Evaluation in Environmental Assessment and Management: Canadian and International Experience* (Ottawa: Minister of Supply & Services, 1987) vol. II 731 at 732 and 745 [hereinafter *Follow-Up*]

⁵⁶⁵ See Hunt, *supra*, note 221 at 808, see Federal EIA Process, *supra*, note 365 at 4 & 10.

⁵⁶⁶ Hunt, *supra*, note 221 at 808.

⁵⁶⁷ See Shikwak Highway Environmental Assessment Panel, *Shikwak Highway Project: Report, Federal Environmental Assessment and Review Process 5* (Ottawa: Federal Environmental Assessment Review Office, 1979) cited in *Fairness*, *supra*, note 511 at 53.

on EARP was issued in 1982 and updated in 1987.⁵⁶⁸ Parks Canada's manuals present the advantages and disadvantages of several methods of pre-assessment.⁵⁶⁹ Further, they contain a section dealing with monitoring. The 1985 Manual states that monitoring serves three main functions. (1) It acts as an early warning system: unexpected impacts and mitigation measures that do not work can be monitored and appropriate changes can be undertaken; (2) a monitoring program will permit the collection of information and increase the knowledge with respect to environmental effects occurred and which mitigative measures proved to be efficient; (3) the information collected through steps (1) and (2) above will be used in similar cases and will help to develop and implement effective mitigative measures in future projects.⁵⁷⁰

The Environmental Program Improvement Project (EAPIP) Task Force formed by the Ontario Ministry of the Environment in 1989 also recognizes that the Ontario *Environmental Assessment Act* pays little attention to monitoring the results of EIA decisions.⁵⁷¹ S. 14(1)(b)(iii) allows the Minister of the Environment to give an approval to proceed with the undertaking subject to monitoring programs

⁵⁶⁸ Parks Canada officially adopted EARP in 1979 by directing that the principles and spirit of EARP were to be applied to all its developments, plans and management activities, Natural Resources Division, National Parks Branch, *Manual on the Application of the Environmental Assessment and Review Process Within Parks Canada* (Ottawa: Parks Canada, 1981 and 1985) [hereinafter Manual].

⁵⁶⁹ As Parks Canada's main goal is environmental protection and management of the Canadian Parks, it is evident that this federal department will not propose important projects likely to cause significant environmental harm. Consequently, its manuals focus on the screening phase.

⁵⁷⁰ Manual 1985, *supra*, note 568 at 5-38 to 5-40. It should be noted that every federal department has manuals or guidebooks on the application of the Guidelines Order. National Defence has the best manual implementing EARP according to Hobby, *supra*, note 212.

⁵⁷¹ *Improving the EA Program*, *supra*, note 504 at Executive Summary.

and reports.⁵⁷² Accordingly, the most important type of conditions for approval are related to monitoring programs.⁵⁷³ However, this was considered insufficient and the EAPIP Task Force recommended the adoption of a monitoring program in the Ontario EIA legislation.⁵⁷⁴ In Quebec, the regulation adopted pursuant to s. 31.9 of the EQA merely prescribes that the proponent must include in the EIS measures of monitoring and supervision.⁵⁷⁵

A review of the *Canadian Environmental Assessment Act* suggests that the proposed federal EIA process incorporates more post-approval requirements than EARP does. First, the expression "*follow-up programs*" is defined in section 2(1). Follow-up programs established under the new Act have twin purposes: (1) verifying the accuracy of the environmental assessment of a project subjected to the *CEAA*; (2) examining the effectiveness of any mitigative measures that have been implemented in order to prevent adverse environmental effects otherwise caused by the project. As such, post-assessment programs under point 1 will allow for the

⁵⁷² The decision of the Minister is subject to the approval of the Lieutenant Governor in Council or of such Ministers of Crown designated by this latter; s. 14(1).

⁵⁷³ For example, ground water monitoring and leachate monitoring have been inserted into the approval with the undertaking; *Environmental Approvals*, *supra*, note ? at 5.34, 5.36 & 5.38.

⁵⁷⁴ Such a program would include (1) monitoring compliance with conditions and standards; (2) verification by requiring the proponent to report, surveillance by the regulatory agencies and auditing of the performance and effectiveness of the monitoring program; (3) environmental effects monitoring; *Improving the EA Program*, *supra*, note 504 at 39-44.

⁵⁷⁵ Section III(e) of the "Regulation Respecting Environmental Impact Assessment and Review, R.R.Q. 1981, c. Q-2, r. 9. The 1983 "Directive sur les études d'impact sur l'environnement" describes what kind of monitoring program is required from the proponent. This program should contain the monitoring of mitigation measures and compliance monitoring with the terms and standards inserted in the certificate of approval (see 5.2.5.1). In addition, the proponent has to describe in the EIS how he is going to monitor the environmental effects of the project and how the results will be transmitted to the Minister of the Environment (5.2.5.2); P.B. Bernier, *Droit québécois de l'environnement. directives politiques et autres textes officiels québécois*, vol.2 (Montréal: Yvon Blais, 1991) at D-11.

integration of the concept of scientific uncertainty into the EIA process. By monitoring the accuracy of the predictions relating to environmental effects during the assessment phase, necessary modifications to the activity or implementation of new or different mitigative measures will be possible in case where other or more serious ecological effects are discovered. Follow-up programs under point 2 above will be more oriented toward the development of EIA process as information regarding the effectiveness of mitigative measures will necessarily be transmitted to future projects.

Secondly, section 14 acknowledges that follow-up activities are to take place in addition to screening (and comprehensive study) and mediation or review by a panel, which is the third procedural phase of the *CEAA*. EARP, on the contrary, described its process as consisting of only two stages, the "screening" and the "full assessment" phase.⁵⁷⁶ The statutory recognition of post-project analysis as one main phase of the federal EIA process is a welcome improvement in comparison to EARP and a promising move towards the implementation of sustainable development.

Section 16(2)(c), then, prescribes that follow-up programs are a factor to be considered during a comprehensive study and during mediation or review by a panel. As pointed out in Chapters II and IV, section 16 is drafted in two paragraphs, where factors listed in the second are only examined when a project is listed in a comprehensive study list or is referred to a mediator or a review panel. Consequently, follow-up programs are not automatically examined during

⁵⁷⁶ See the title of sections 10 to 17 and the title above section 20 of EARP.

screening.⁵⁷⁷ Under the EARP, after screening, the federal authority responsible for the project has only to ensure that mitigation measures are implemented and respected.⁵⁷⁸ As such, follow-up programs have been limited to surveillance and compliance with the screening decision. However, s. 38(1) of the *CEAA* stipulates that after screening, when deciding to allow a project to be carried out,⁵⁷⁹ the RA shall design any follow-up that it considers appropriate and arrange for the implementation of that program. Although the RA has discretion as to the type of post-assessment program that is necessary in each case, it is, nonetheless, required to design follow-up activities. This is a welcome improvement in comparison to the Guidelines Order.

The key provision in the context of post-project activities is section 38. Section 38(1) requires that the RA designs any follow-up program after a screening decision allows a project to proceed as well as after an assessment decision permits the carrying out of a project.⁵⁸⁰ Such wording did not exist in the first Bill as presented to the Parliament. It is the latest amendment of Bill C-13 that now allows the RA to implement post-project activities for both types of projects, ie., projects that have only been subjected to screening as well as projects which have been fully assessed. In addition, the RA shall arrange for the implementation of the above

⁵⁷⁷ However, s.16(1)(e) allows for the inclusion of any other matter relevant to the screening. The need for and design of follow-up programs could be included in a screening exercise if the RA and the MoE feel it is necessary.

⁵⁷⁸ S. 14 of EARP.

⁵⁷⁹ S. 20(1)(a).

⁵⁸⁰ It should be noted that in the context of projects having transboundary effects and being referred to the EIA processes described in s. 46, 47 & 48, it is the federal Minister of the Environment who has the responsibility designing or approving any follow-up program that it considers appropriate; s. 53 of the *CEAA*.

mentioned program. Section 38(2) then requires the RA to notify the public of any follow-up programs established for the project pursuant to subsection (1). Section 38 is thus an overall a satisfactory provision in the eyes of environmentalists,⁵⁸¹ as well in the opinion of the author.

Section 38(1), nonetheless, contains certain weaknesses. First, post-project programs are to be designed and implemented "in accordance with any regulation made for that purpose".⁵⁸² Environmentalists⁵⁸³ that fear if such regulation is not established, the obligation imposed on the RA under the s. 38(1) will be negated.⁵⁸⁴ However, FEARO is presently drafting a manual for follow-up programs which should come into force in October 1992. A guidebook was preferred to first examine how these post-assessment activities are working and later regulations will be adopted.⁵⁸⁵ More importantly, the RA is not given the authority to require the proponent to take part and implement such post-project program.⁵⁸⁶ Finally, it should be noted that the legislation does not propose any components of a post-project program. For example, the Act does not provide for the establishment of a citizens committee as an element of the program.⁵⁸⁷

⁵⁸¹ Andrews & Hillyer, *supra*, note 209 at 53.

⁵⁸² S.38(1).

⁵⁸³ Andrews & Hillyer, *supra*, note 209 at 53.

⁵⁸⁴ Second, environmentalists would have welcomed a provision giving the federal Minister of the Environment the power to ensure consistency among different follow-up programs established by federal departments being responsible authorities for particular projects, *ibid.* at 53.

⁵⁸⁵ Hobby, *supra*, note 212.

⁵⁸⁶ Andrews & Hillyer, *supra*, note 209 at viii & 53.

⁵⁸⁷ *Ibid.* at 53.

Again, one can speculate that the Federal Government was concerned with the problem of inserting too much into the law. The result is, however, that the breadth of the scope of the *CEAA* will only be fully evaluated when regulations are adopted.

Other provisions of the *CEAA* will permit the "evaluation" the federal process and its application by federal authorities. For example, the establishment of a public registry where documents related to a project subject to an environmental impact assessment can be consulted will greatly enhance evaluation of the effectiveness of the federal process. The public will, in particular, be able to determine how serious federal departments are in relation to environmental assessment of their activities.⁵⁸⁸ It should be noted that the result of the implementation of any follow-up activities will also be recorded in the public registry.⁵⁸⁹ Moreover the *CEAA* contains auditing powers. It was FEARO who wanted to be given auditing powers in order to control the implementation of the *CEAA* by federal departments.⁵⁹⁰ Those powers were, however, given to Parliament by two provisions: (1) RAs must maintain a statistical summary of their activities under the *CEAA* which will be included in the MoE annual report and⁵⁹¹ (2) the MoE must present an annual report explaining how the EIA process is applying to the Parliament.⁵⁹² These requirements are all mandatory. They will eventually

⁵⁸⁸ See s. 55(1)-(2).

⁵⁸⁹ S. 55(3)(d).

⁵⁹⁰ Hobby, *supra*, note 212.

⁵⁹¹ A statistical summary is required for (1) all environmental assessments undertaken or directed by an RA, (2) for all courses of actions and (3) for all decisions made in relation to the environmental effects of the project after the assessments are completed; s. 56(1) & s. 71(2).

⁵⁹² S. 71(1)-(2).

enhance accountability and rigour in the application of the federal EIA process under the *CEAA* as well as examine the effectiveness of the federal legislation.

Finally, the West Coast Environmental Association has criticized the fact that the Governor-in-Council is not given the power to make regulations related to post-project programs.⁵⁹³ In addition, section 58 describing the powers of the MoE does not confer any authority to the MoE relating to follow-up activities. It would have been particularly indispensable to give the MoE the power to compel the proponent to participate in follow-up programs established by the RA.⁵⁹⁴

In summary, the *CEAA* contains more requirements in relation to post-project analysis than *EARP* did. Nonetheless, further provisions would be welcome, in order to develop a strong federal EIA process moving towards sustainable development. However, in its present state, the post-approval phase of the new legislation is quite promising. Many of its provisions are mandatory. What is now necessary, may not be to create further legislative provisions, but to address post-project analysis on the practical level. Design and implementation of post-approval programs will create a documentation explaining the components of effective follow-up programs under the *CEAA*. The proposed legislation certainly contains one of the most advanced EIA processes in the world when it comes to statutory requirements for follow-up programs. Although the post-approval phase remains the shortest and the least precise stage described in the *CEAA*, it represents a laudable step in the right direction.

⁵⁹³ Andrews & Hillyer, *supra*, note 209 at 81.

⁵⁹⁴ *Ibid.* at 53 & 78.

V CONCLUSION

To date, there is still no common and universally accepted definition of the concept of sustainable development. Also, its practical consequences are not well defined or understood. However, as envisioned by the Brundtland Commission, sustainable development calls for the integration of economics and ecology. It has been suggested that an essential element of the move toward sustainable development is the mandating of EIA for any economic and social development initiatives.⁵⁹⁵ Today, most countries have implemented EIA schemes. The process is also increasingly recognized by international organisations and is reflected in international conventions.

Canada has almost twenty years of experience in the field of environmental impact assessment and the Federal Government is about to enact its first Environmental Impact Assessment Act. This critique of the *CEAA* has been based on the belief that only a strong and efficient EIA scheme could lead humankind towards achieving a more sustainable development. The *CEAA* has also been examined to determine whether it is capable of ensuring that the notion of sustainable development is more than merely a promising idea. As presented throughout this work, some environmentalists,⁵⁹⁶ even with the latest amendments, have not supported the passing of the new federal law.⁵⁹⁷ However,

⁵⁹⁵ Rees, *supra*, note 3 at 274, Jacobs & Sadler, *supra*, note 6 at 1.

⁵⁹⁶ See *Flawed Legislation*, *supra*, note 372 at 2-3, *Controversial Assessment Law*, *supra*, note 396, 488 at 3-4, Lindgren/March 92, *supra*, note 210 at 1-6.

⁵⁹⁷ Amendments were from October, December 1991 and March 1992; see *Flawed Legislation*, *supra*, note 372 at 2-3; J.J. Charest, Address (Legislative Committee on Bill C-13, 10 October 1991) [unpublished] at 4-13.

by its legislative nature, its detailed procedures and some of its innovations, the *CEAA* is, in the opinion of the author, a better scheme than *EARP* and a first step in the right direction towards a sustainable future.

Indeed, the *CEAA* contains some very important clauses. First and foremost, Bill C-13 specifically mentions the principle of sustainable development. Concern expressed from environmental associations made the MoE include this concept in the preamble and in s. 4.⁵⁹⁸ Section 2(1) borrows the definition of sustainable development found in the Brundtland Report. Thus, the proposed legislation, as presently worded, expresses more clearly the need to integrate environmental and economic concerns into decision-making.⁵⁹⁹ The inclusion of the principle of sustainable development is an encouraging first step. As Keating pointed out, "*statements of intent..... are the necessary precursors to action*".⁶⁰⁰ Concrete actions must now be taken, but the vagueness of the concept of sustainable development will not facilitate its implementation. It should, however, be noted that the daily application of EIA's and public debate may certainly develop an operational definition of sustainability.⁶⁰¹ Secondly, contrary to *EARP*, the new EIA process is now enshrined in legislation. EIA literature has consistently advocated the need for a legislated federal EIA process, as being that the benefit of relying upon executive discretion, that is flexibility, does not outweigh its negative aspects, namely,

⁵⁹⁸ Minister's Statement, *supra*, note 200 at 3.

⁵⁹⁹ Lindgren/Oct. 91, *supra*, note 210 at 7

⁶⁰⁰ M. Keating, *Toward a Common Future: a Report on Sustainable Development and its Implications for Canada* (Ottawa: Minister of Supply & Services, 1989) at 23.

⁶⁰¹ Elder & Ross, *supra*, note 4 at 130.

uncertainty, lack of enforcement and loss of confidence in EARP.⁶⁰² Thirdly, the *CEAA* applies to "*projects*". One may argue that a serious commitment to achieving sustainable development requires the integration of environmental matters into *all activities of government* as recommended in the Brundtland Report.⁶⁰³ However, the *CEAA* creates the only process to have this principle statutorily expressed. Furthermore, despite the fact that Bill C-13 only addresses the assessment of projects, it should be recalled that the notion of projects is very broad and encompasses "existing activities" as well as "activities".

As explained in Chapter II, the *CEAA* maintains self-assessment as a key principle of the federal EIA.⁶⁰⁴ This principle forces every department to integrate environmental assessment into its own program planning-system.⁶⁰⁵ Mechanisms to ensure that the EIA process is rigorously and consistently applied are, of course, necessary. The new Act contains attempts to control self-assessment. The comprehensive study list, the public registry, the reduction of the discretionary power of the RA⁶⁰⁶ and the possibility for public comment on the screening are

⁶⁰² B M L Crommelin, "Discussion Paper" in Clark, *supra*, note 33 at 513; Robertson, *supra*, note 202 at 3-4.

⁶⁰³ *Brundtland Report*, *supra*, note 1 at 222, Schrecker, *supra*, note 197 at 224. As explained in Chapter II, the federal government has already a "policies and programs assessment", Fact Sheet # 7, *supra*, note 220 at 7.1

⁶⁰⁴ Minister's Statement, *supra*, note 200 at 6.

⁶⁰⁵ Cirelli, *supra*, note 71 at 100.

⁶⁰⁶ Amendments to Bill C-13 removed some of the discretionary language found in the previous draft in relation to lists and process decisions. For example, Bill C-78 contained the test "*in the opinion of the RA*" in the screening decision as well as in the assessment decision provision; s.16 & 34 of Bill C-78. However, the *CEAA*'s wording still contains more administrative discretion than EARP. Opposition from environmental organizations did not cause the MoE to remove discretionary language removed, explaining that he wanted to preserve the RA accountability and keep self-assessment as a basic principle of the federal EIA. For environmentalists, the "significance test" in

provisions that can channel the self-assessment approach during the screening phase. If the public plays the role of a watchdog, using all the provisions allowing for control and supervision, then self-assessment will not become a way to avoid the EIA requirements.⁶⁰⁷ As a consequence of self-assessment, the ultimate decision-making authority lies with the RA, which chooses the action to be taken, either at the end of the screening phase, or at the end of the second phase. The EIA literature has consistently repeated that the decision-making body should be generally representative of the community as a whole and free from special interest groups, private or public.⁶⁰⁸ The questions are then whether the public should have been made part of the decision-making power and whether such solution would have been a major step towards sustainable development in the new Act? The principle of sustainable development requires the linking of ecological realities in daily activities of governments. Giving the responsibility to the RA to take the decision after screening may be a way to raise the consciousness of the federal departments and to implement one of the principles of sustainable development. Consequently, the *CEAA* does not offer a disappointing solution with respect to its decision-making authority provided that there are sufficient opportunities to control the activities of the authorities. One deficiency of the legislation at this level is that the RA is the final arbiter and that there is no appeal, for example, to the Governor-in-Council. While the RA is the only decision-making authority in the *CEAA*, review panels and mediation serve mere advisory functions. However, it

the screening and assessment decision should not be whether a project is "*likely to cause significant adverse environmental effects*", but whether the potential environmental impacts are significant, as in s. 12(e) of EARP; Minister's Address, *supra*, note 231 at 5-6

⁶⁰⁷ National Consultation, *supra*, note 206 at 11-12.

⁶⁰⁸ Cotton & Emond, *supra*, note 276 at 274.

should be noted that Bill C-13 is the only process having independent review panels and offering a mediatory track for the second phase of EIA.⁶⁰⁹ Another recurrent criticism of Bill C-13 is that important aspects of the Act are not set out, but will be spelled out in subsequent regulations.⁶¹⁰ Projects or classes of projects will be included in the comprehensive study list or in the exclusion list.⁶¹¹ In addition, statutes and regulations that will trigger the EIA process under paragraph 5(1)(d) will be established by way of regulations.⁶¹² As explained in the previous chapters, making the legislation too detailed may render it unreadable, unworkable and less flexible. It is, indeed, easier to modify regulations to reflect changing needs than it is to amend the law itself.

With respect to the factors to be examined in the EIS, it has been noted that Bill C-13 casts its assessment net very widely. For example, cumulative effects must be considered in both screening and the full assessment phases of the process. The *CEAA* also requires the RA to design and arrange for the implementation of a follow-up program following the decision to allow a project to proceed after a screening or an assessment decision.⁶¹³ As mentioned in Chapters I and IV, such

⁶⁰⁹ Mediation may foster and strengthen an ongoing relationship between negotiating parties. By having reached an acceptable agreement, the parties may be more inclined to work together in future relationship. For example in the post-approval phase; Sadler & Armour, *supra*, note 57 at 17.

⁶¹⁰ S. 59, as R. Robinson, Executive Chairman of FEARO stated "the scope of the Act cannot be determined by what you have in front of you", cited in Pole, *supra*, note 523 at 1.

⁶¹¹ S. 7(1)(a) & s. 59(c)-(d)

⁶¹² S. 59(f). The draft list on statutes and regulations required under s. 59(f) contains the provisions found in the *Navigable Waters Protection Act* and the *International River Improvements Act* which triggered both the Canadian Wildlife and the Oldman River cases; "Amendments to Federal EA Bill Proposed" (1991) 26 *ALERT* at 3 [hereinafter *Amendments to Federal EA Bill*].

⁶¹³ S. 20(1)(a) & s. 37(1)(a), see Jeffery, *supra*, note 207 at 1087.

requirements are promising. They acknowledge that environmental predictions cannot always be accurate, due to a lack of perfect environmental knowledge.⁶¹⁴ A wider EIA context is, therefore, necessary and will allow uncertainty and unexpected to be dealt with. Finally, the concept of sustainable development is reflected in the list of factors that must be taken into account when assessing the effects of a project.

The *CEAA* remains a piece of legislation with technical deficiencies and loopholes.⁶¹⁵ Many of its provisions, however, have promising features for developing a practical understanding of sustainable development. Yet even if properly designed, alone an EIA scheme will not be sufficient for effecting sustainable development. Some experts have proposed that the EIA process be completed with an "environmental bill of rights" establishing legislative duties upon decision makers. Procedural rights would be guaranteed, such as the right to information about a proposal, to be heard before approval and to be compensated for reasonable costs incurred in the process.⁶¹⁶ Further, the Brundtland Commission has called for the use of more legal instruments. Remedial and predictive tools for environmental protection should be expanded as should other legal devices not considered to be environmental policy instruments *per se*, but which nonetheless have environmental implications.⁶¹⁷ However, successful

⁶¹⁴ Rees, *supra*, note 3 at 282.

⁶¹⁵ *Flawed Legislation*, *supra*, note 372 at 3.

⁶¹⁶ Elder & Ross, *supra*, note 4 at 133.

⁶¹⁷ For example, Cassils suggests that a reform of tax laws could quicken the promotion of sustainable development, J.A. Cassils, "Structuring the Tax System for Sustainable Development" in Saunders, *supra*, note 2 at 141; see Saunders, *supra*, note 2 at 5

implementation will require even more. If Canada, as all other countries, is to move towards sustainable development, it will require more than just have to minimizing the ecological and societal impacts of human activities.⁶¹⁸ Canada will have to adopt a radical change in its political, socio-economic, cultural and ethical behaviour. In short, sustainable development will require a total change of our perception of the world.

⁶¹⁸ Elder & Ross, *supra*, note 4 at 140.

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