

**Notes for a presentation to the Standing
Committee on Environment and Sustainable
Development concerning the review of the
*Canadian Environmental Assessment Act***

Robert B. Gibson, Professor, Department of Environment and Resource Studies,
University of Waterloo

3 November 2011

Revision of the Canadian Environmental Assessment Act as a next generation regime

Robert B. Gibson¹

1. Why it is time for next generation environmental assessment (EA)

The *Canadian Environmental Assessment Act* (CEAA) needs significant revision to correct long-standing deficiencies, to address new challenges and to incorporate lessons from experience. While the Act has important strengths and has sometimes served well, its application has often come too late, aimed too low, been too narrowly restricted to projects, and been treated as an approval requirement rather than as a means of improving decision making. The results have compromised both effectiveness and efficiency in a world that needs more of both.

1.1 *The basic background*

EA was initially conceived, designed and introduced 40 years ago (and CEAA is mostly of the original generation despite some updating, for example to recognize cumulative effects). Over that period the world has changed and understanding of EA needs and methods has expanded.

(i) EA began as an expansion of pollution prevention law, integrating environmental considerations to prevent significant adverse effects. The original US law and other advanced processes also included critical review of purposes and alternatives and added transparency and opportunity for public involvement. The critical review of purposes and alternatives has led to the greatest contributions of EA to better planning and better decisions, but remains weak in many assessment regimes and EA is often still treated as a glorified regulatory permitting exercise.

¹ Dr. Gibson is a professor of Environment and Resource Studies at the University of Waterloo, Ontario, Canada. His work has covered environmental policy issues and broader sustainability imperatives, with particular attention to how they may be addressed in decision making in environmental planning, assessment and regulation. Over the past decade he has focused on examining the integration of sustainability considerations in decision making in a variety of sectors and jurisdictions. He has been involved in assessment process design and application in most Canadian provinces and territories; has worked for public, private, Aboriginal and civil society clients; has taught two generations of EA practitioners and has published widely on related matters. His book, *Sustainability Assessment: Criteria and Processes* was published by Earthscan in the UK in late 2005.

(ii) Global best practice, including in Canada, has advanced far beyond what was anticipated when EA was established and when CEAA was introduced. Both needs and expectations for better planning, assessment and implementation are now much greater – especially concerning sustainability-based criteria, attention to cumulative effects, application at the strategic level (policies, plans and programmes, etc.), effective citizen engagement and process efficiency. Understanding of how to deliver more effective results is also much improved. These advances are, however, not yet well incorporated in EA law or regular implementation

(iii) Many proposed and continuing undertakings that merit assessment in Canada affect matters in the Constitutional jurisdiction and/or general responsibility of multiple authorities. In addition to the federal government level, substantively and procedurally different formal law-based EA processes have been adopted in every province and territory, in many land claim agreements, in municipal planning, and in sector-specific regimes (e.g. covering export development deals, nuclear facilities, and pits and quarries). There are also many and diverse interconnections between EA and adjacent planning and regulatory regimes. For assessment practice this is both a good sign and a source of confusion and frustration.

(iv) Similarly proliferating complexities are also evident in many other areas of governance concern (health, education, resource management, urban growth management, international development aid, communications systems, pollution abatement and contaminants control, probably even design of international financial institutions, etc.). In all of these areas, governance evolution has been typified by incremental expansion of considerations and initiatives, often at multiple levels (international, federal, provincial/territorial, Aboriginal, regional/municipal) accompanied by successive waves of cutbacks and downloading, rarely with much overall rethinking and reorganization.

1.2 EA between a rock and a hard place

Discussions about how to improve EA regime design (including the work of this committee) are now caught between what seem to be duelling imperatives to do more and better and to reduce, simplify and streamline.

- *Pressures to do more and better* though EA and related processes involve needs to address rising obligations and expectations, and to apply new understanding and best practice. These pressures have grown from many roots. Here are the major ones:

(i) The big context of EA law and practice is the evident unsustainability of current global conditions and trends. Human demands on the biosphere probably already exceed the limited biophysical carrying capacity for humans given current technology and

managerial ability,² while at least one billion people do not have enough,³ and most of the benefits of growth go to the already well off.⁴

(ii) More particular concerns centre on global economic system vulnerabilities, risks of increasingly ambitious technologies/applications (e.g. as demonstrated by the BP Gulf offshore oil drilling, Fukushima reactor), and general disregard for long term or legacy effects in favour of immediate, usually economic motives.

(iii) A widening range of domestic concerns has arisen from growing pressures on valued resources. These have led to mobilization of more stakeholders, including Aboriginal participants with Constitutionally entrenched rights, seeking effective involvement in the relevant decisions.

(iv) Recognition of the ultimate interdependence of jobs and the environment, of lasting wellbeing and effective resource and ecological system stewardship, has been spreading at least since the Brundtland Commission popularized the concept of sustainable development.

(v) New understandings concerning the importance of cumulative effects, the implications of complex systems behaviour (multi-scale interactions, feedback loops, system thresholds, resilience needs, uncertainty and surprise) and the associated need for precaution, adaptive design and enhanced resilience, have been spreading from academic and professional circles into popular culture.

- *Pressures to reduce, simplify and streamline* EA have been present since serious assessment requirements were first introduced. Initially, the key factors were centred on the resistance of public and private sector proponents who did not welcome additional obligations, especially ones that threatened to slow approvals, impose outside oversight, require transparency in decision making, and demand different ways of thinking and acting. That resistance (almost always stronger in the public sector than the private) is still evident. But it has been joined by additional factors related to generally evident

² The evidence includes the most credible climate science findings (from the Intergovernmental Panel on Climate Change), and the most credible science findings on ecological and resource systems (from the Millennium Ecosystem Assessment). The World Wildlife Fund calculates that we crossed the threshold of demanding too much in about 1978 and that our demands are now about 50% beyond that threshold and still rising – see WWF, *Living Planet Report*, 2010, p.7.

³ Most of the 2.7 billion people who live on less than \$2/day are at best vulnerable to the risks of disease and disaster that come with poverty – see World Bank, <http://www.worldbank.org/data/wdi2004/>

⁴ The richest 10% of the world's population receive about 67% of the world's income while the poorest 10% get about 0.22% – see Branko Milanovic, *Worlds Apart: measuring international and global inequality* (Princeton University Press, 2005).

limits to the capacities of governments as currently organized. The most important pressures for reducing, simplifying and streamlining EA today include the following:

- (i) Requirements to ensure careful, critical assessment of environmentally significant undertakings that raise a broad range of interrelated concerns and opportunities fit uncomfortably with the traditional structure of government agencies with fragmented responsibilities, narrow expertise and inclinations to turf protection and jurisdictional jealousy.
- (ii) The evolution of government practice in many jurisdictions has been characterized by the incremental proliferation of different requirements and procedural steps, not only within EA but also in associated regulatory licensing and permitting.
- (iii) Many EA laws, policies and processes suffer from poor design. For example, they often call for early initiation of assessment work but rely on late decision making about whether and how particular undertakings will be subject to assessment requirements (e.g. through the CEAA law list trigger) and on case by case negotiation of specific expectations.
- (iv) Undue delay in deliberation and decision making can and too often does happen at several points throughout the EA process due to late initiation, negotiation of case specific requirements, weak assessment work by proponents who see assessment requirements as a regulatory hoop rather than a component of good planning, slow response from government reviewers who lack the necessary capacity and/or agency motivation, difficulties in ensuring adequate time for effective public engagement, and confusion about how to satisfy duties to consult with and respect the interests of those holding Aboriginal and treaty rights.
- (v) Special pressures that emerge at times of deficit concern and overall budgetary constraint reflect serious practical problems, but typically focus on cuts, rather than encouraging or allowing careful identification of the underlying causes of inefficiencies. The resulting changes may reduce effectiveness without reducing inefficiency. Neither efficiency nor effectiveness is likely to result, for example, from the simple deferral of EA responsibilities to a mixed bag of provincial and territorial processes that lack authority and expertise in matters of federal jurisdiction. Such deficit-cutting initiatives also rarely integrate consideration of how ecological debts to future generations are growing along with the financial debts and how the two might be addressed together.

1.3 The escape route

The points above are intended merely to sketch the bigger picture. The issues involved are much more numerous and complex than can be set out here. Many of the ones listed deserve considerably more detailed elaboration. Taken together, however, they provide a reasonable basis for three simple conclusions:

(i) The challenges facing EA in general and CEAA in particular cannot be addressed adequately by piecemeal tinkering.

(ii) Attention only to the pressures to do more and better, or only to the pressures to reduce, simplify and streamline, will fail in one way or the other.

(iii) The next generation of EA in Canada needs to be more demanding and more powerful and at the same time more efficient.

We can think of EA as now caught between a rock and a hard place, but there is a potential for escape by going up.

2. The basic substance of next generation EA

Many of the essential requirements for next generation EA are implicit in the discussion above about why such change is needed. Necessity is not the only factor, however. Next generation EA can and should be approached as a cheerful opportunity.

2.1 The principles

(i) The proper goal for EA today and into the future is positive contribution to sustainability, not just mitigation of significant adverse effects. In a world sliding into ever deeper unsustainability, mitigation can merely slow the sinking of our ship. Also, while assessment requirements do need to ensure careful attention to effects on the biophysical environment, they must also recognize the interdependence of ecological and socio-economic objectives, and establish planning and decision making practices that serve those objectives together. What we need from EA is motivation and process guidance to ensure that every one of our assessed undertakings – at the strategic and project levels – is conceived, selected, designed and implemented in a way that maximizes multiple, mutually reinforcing, fairly distributed and lasting gains, while also avoiding significant adverse effects.

(ii) EA law and process design should require and guide identification and evaluation of best options to move to more sustainable practice. Assessment properly starts with purposes and alternatives, not with an already selected undertaking. In some cases there may be few potentially reasonable alternatives, other than the null option. Also in some cases (e.g. ones where the initiating question is how best to deal with an existing stock of hazardous waste), the best option may be the “least bad” alternative. But if the purposes to be served are defined to focus on legacies in the longer term public interest and to cover reasonable alternatives, and if assessment is more often focused at the strategic level where more options are practically available, EA should often be able to deliver more consistently positive innovation.

(iii) *The desirable and undesirable effects that matter most are the cumulative ones.* The particular, specific effects of individual undertakings need to be identified for mitigation or enhancement, but what matters in the end for communities and ecologies is how they combine.

(iv) *The big options for improvements in efficiency as well as substantive gains are at the strategic level of policies, plans and programmes, regulatory and fiscal regimes, etc.*

Broader alternatives are available at the strategic level. Opportunities for effective attention to cumulative effects – for enhancing positive cumulative effects as well as for avoiding or mitigating adverse ones – are also greater at the strategic level. Moreover, if strategic level requirements and processes are suitably credible and authoritative they can provide early, clear and firm guidance to subsequent project planning and assessment, improving both the substantive quality of the resulting projects and the efficiency of project assessment process.

(v) *Efficiency in the delivery of positive contributions to sustainability is a key consideration in the design of individual regimes and in the design of and interactions among related regimes.* EA law exists because long and often bitter experience taught that business-as-usual motives and associated decision making gave too little attention to environmental considerations. Forcing due attention to these matters was never going to be easy, and as noted above, the demands and expectations for better performance have increased greatly over the decades since EA was introduced. But especially because EA will always be difficult and will always face resistance, it must be efficient. While the causes of inefficiencies and the means of overcoming them effectively are rarely simple, the major keys to efficiency in EA regimes are probably these:

- aim to force the integration of assessment objectives and practices directly into the mainstream of deliberations and decisions about new and continuing undertakings (move EA from a requirement to part of the culture)
- apply the requirements as widely as possible (spread the culture everywhere so the effects can be positively reinforcing), but focus efforts where there are the greatest prospects for improvements – i.e. where the largest threats are or may emerge, where positive alternatives are at least potentially available, where the fostered changes may have the most widespread and lasting influence
- ensure initiation of assessment at the point of conception when purposes and options are first considered, including by designing the application rules and substantive requirements so all relevant potential proponents know from the beginning that they will have to justify their purposes and their selection and comparison of alternatives in light of the positive contribution to sustainability test
- set clear and firm core requirements in law to reduce openings for interminable negotiation of basic scoping; provide more detailed guidance for significant categories of anticipated undertakings
- establish and use a credible strategic level assessment process to address cumulative effects and broad alternatives and to provide authoritative guidance to project level assessment (removing inappropriate burdens on proponents and other participants in reviews of individual undertakings to address cumulative effects and larger policy and planning issues)

- set a high fundamental standard for best practice assessment in federal law as a basis for collaborations and joint assessments with other regimes, and as a motivation for upward harmonization
- maximize transparency and engagement of relevant parties, including the public, from the outset in all assessments
- consolidate minor assessments to address cumulative effects and significant alternatives and to guide specific applications
- integrate commitments and assessment review conclusions in an enforceable decision
- capture and share the benefits from experience through monitoring and accessible reporting

(vi) *Especially as governments reduce their in-house expertise in key areas of EA concern, regimes will need to put more emphasis on engaging the broader public and independent review expertise.*

(vii) *Particular EAs will be more effective and more efficient if sustainability-based decisions making begins early, is integrated throughout the conception and planning of new undertakings, and is at the centre of decision making in review and approval, implementation, and monitoring and adjustment*

(viii) *EA regimes generally will be more effective and more efficient if they are embedded in a larger suite of policy and regulatory practice devoted to continuous improvement in its ability to deliver sustainability gains.*

2.2 Major implications for reworking CEAA

CEAA cannot be improved significantly without some substantial adjustments that combine greater effectiveness and greater efficiency. Many of the important changes should deliver both. The following list is not complete and lacks key details. It should, however, indicate the general nature and extent of what is needed.

(i) Set a national best practices standard in federal law,⁵ to establish a basic approach with a consistent, firm, high standard for multijurisdictional application. The immediate benefit would be to minimize need for delay due to negotiation of case-by-case terms of reference in collaborative and joint assessments. However, the larger goal would be to foster and guide upwards harmonization, based on a strong federal approach, for clarity and consistency across Canada (and in applications, e.g. through CIDA, to strategic and project level Canadian undertakings outside Canada).

⁵ An early model was developed through a multi-stakeholder consensus process run by the Canadian Standards Association in the 1990s, with federal funding. The initiative was far advanced (at consensus draft 14, in July 1999), when for unclear reasons the provincial participants withdrew and the work was suspended. See The Working Group of the EIA Technical Committee, *Preliminary Draft Standard: Environmental Assessment*, Draft #14, Canadian Standards Association, July 26, 1999.

(ii) Entrench “positive contribution to sustainability” firmly and explicitly as the core criterion in the selection, design, approval and monitoring of all undertakings under CEAA. CEAA’s purposes already include “to encourage responsible authorities to take actions that promote sustainability development and thereby achieve or maintain a healthy environment and a healthy (s.4(1)(b)). And that purpose has guided several major assessment cases involving joint review panels over the past 15 years. But the Act and its more typical implementation is mostly focused on “mitigation of significant adverse environmental effects”.

(iii) Establish generic sustainability-based criteria and require explicit specification for particular cases and contexts. Also require open justification of trade-offs. This step would set an appropriate test, guide effective integration of major considerations in the conception, planning and design of new and revised undertakings, clarify the interpretation of the “acceptable in the circumstances” clauses in CEAA, introduce consistency in application of a broad definition of “environment”, and generally provide predictable expectations that would require integration of EA into the core of planning and decision making.

(iv) Provide a legislated foundation for, and put more assessment emphasis on, assessment application at the strategic level, with a focus on cumulative effects, best options and guidance for more particular initiatives. This would enable more effective and authoritative application of assessment requirements at the level where significant alternatives are available, and where clearer and more consistent guidance can be provided to enhance both effectiveness and efficiency of assessments at the project level. Details of a workable approach reflecting multi-stakeholder agreement were developed in 2009 by the Strategic EA Subcommittee of the Regulatory Advisory Committee under CEAA.⁶

(v) To ensure early initiation of EA work, revise the CEAA approach to defining the application of assessment obligations so that late triggering under the Law List is replaced by clear identification of assessment application in all major categories of undertakings that can be anticipated. Add special requirements (with process support for clarifications) for atypical cases. As noted above, assessment expectations should be applied as widely as possible to spread the culture of positive contributions to a desirable and durable future, but with efforts focused where there are the greatest prospects for improvements. In general, the rules and associated lists should err on the side of inclusion, with provisions for exemption with due public process. For undertakings of modest

⁶ See Regulatory Advisory Committee, Strategic Environmental Assessment Subcommittee, *Interim Report*, June 2009. See also the more detailed background report, most of which was published as Robert B. Gibson, Hugh Benevides, Meinhard Doelle and Denis Kirchoff, “Strengthening strategic environmental assessment in Canada: an evaluation of three basic options,” *Journal of Environmental Law and Practice*, 20:3 (2010), pp.175-211.

potential individual significance, the approach should emphasize consolidation into classes for strategic assessments centred on identifying best options in light of cumulative effects and providing standard guidance for individual projects. The biggest challenges in setting application rules involve undertakings that are difficult to anticipate. For these the key mechanisms include application rules that are based on the potential for significant specific or cumulative effects and provisions for early requests for designation.⁷

(vi) To strengthen pressures for early initiation, and to put more weight on effective public participation, require proponents to announce the beginning of EA deliberations with an initial statement of purposes and alternatives, open to public review and comment. This would initiate early and open discussions to specify issues, assessment criteria and other considerations for planning and assessment.

(vii) Define the assessment expectations broadly but clearly so that all relevant potential proponents know from the beginning that they will have to justify their purposes and their selection and comparison of alternatives in light of the positive contribution to sustainability test. Consistent expectations reduce temptations to seek special treatment through basic scoping negotiations that cause process delay. Detailed guidance can be developed and strengthened over time for significant categories of anticipated undertakings.

(viii) Respond to the continuing depletion of government expertise on matters central to assessment review, strengthen provisions for process transparency and resources for effective engagement of relevant parties, including the public, from the outset in all assessments.

(ix) Replace the currently ambiguous commitment to “self-assessment” with clear distinction between assessment integration and assessment review/approval. Proponents of undertakings subject to assessment requirements must retain responsibility for integrating assessment requirements into their planning and decision making and for demonstrating that they have done so. Ensuring that proponents have met the requirements, that the proposed undertaking does promise positive contribution to sustainability, and that any trade-offs are acceptable in the circumstances must be the responsibility of an impartial, arm’s length review body or bodies. Concentrating administration and review responsibility in the Canadian Environmental Assessment Agency (CEA Agency) is broadly sensible. Delegation to other bodies (e.g. the National Energy Board) offers potential efficiencies only if those bodies are able to incorporate and apply EA principles, rather than reduce EA to a regulatory approvals process. Collaboration with bodies in other jurisdictions is often desirable and provides opportunities for greater effectiveness and greater efficiency if the principle of upward harmonization is applied.

⁷ The detailed report mentioned in note 6 above, discusses mechanisms for initiating as well as assessing relevant strategic initiatives.

(x) Establish an enforceable decision power under CEAA as a clear and consistent vehicle for integrating requirements for implementation of approved undertakings. The current approach relies on inclusion of approval requirements in a variety of permits and other binding documents that were not designed for the purpose and that cannot provide a consistent foundation for effective or efficient application.

(xi) Capture and share the benefits from experience through monitoring and accessible reporting. Limited monitoring of compliance with approval conditions and of actual (versus predicted) effects has been lamented throughout the history of EA everywhere. Electronic means of reporting and facilitating searchable access to assessment information are now highly advanced, but conventional resources for actual monitoring are declining. Promising solutions lie in more effective engagement of and resource support for local authorities (including Aboriginal organizations through co-management agreements) and civil society organizations.⁸

(xii) Consolidating federal EA application under CEAA is generally preferable to the further proliferation of multiple processes. Across jurisdictions, a multiplicity of EA processes is unavoidable and may have positive effects if CEAA is revised to set a high national standard that inspires upward harmonization across Canada. Integration of CEAA requirements with those of other existing authorities may also be beneficial as a means of extending the practice and culture of sustainability-based decision making and capturing associated efficiencies. But clarity and consistency of expectations and practices are likely to be better served by ensuring CEAA is broadly applicable than by introducing new versions of EA in other legislation. For example, effective application of sustainability-based assessment requirement by the Canadian International Development Agency should proceed under CEAA, perhaps under a specific CIDA-centred regulation, rather than under a separate regime.⁹

Each of these steps would contribute to effectiveness as well as efficiency. They should, however, be designed and implemented as a coherent overall package with careful attention to the core principles outlined above. And they will need to be combined with efforts to extend and facilitate sustainability-based decision making throughout government.

The world in which EA must be applied today is considerably more demanding than the world in which EA emerged 40 years ago and there are no serious prospects for the

⁸ See, for example, Carol Hunsberger, Robert B. Gibson and Susan K. Wismer, *Increasing citizen participation in sustainability-centred environmental assessment follow-up: lessons from citizen monitoring, traditional ecological knowledge, and sustainable livelihood initiatives*, monograph prepared for the Canadian Environmental Assessment Agency Research and Development Program, April 2004, <http://www.acee-ceaa.gc.ca/015/001/031/index_e.htm> also available in French.

⁹ Establishing a legislative foundation for strategic level assessment in CEAA will greatly enhance usefulness of the law for CIDA and other bodies whose major assessment applications are at the strategic level.

challenges to decline in the foreseeable future. We do need to ensure that every one of our new and continuing undertakings is designed to make a positive contribution to sustainability and leave a desirable legacy. That will not happen unless required and pushed. But it will also not happen if the obligations are vague and negotiable, or imposed too late, or in processes that are treated as regulatory hoop-jumping. We do not have the spare resources or the residual patience for ill-designed and poorly applied EA regimes. Next generation EA must do more and better while also being more efficiently delivered.