

# Evaluation Framework to Examine EC Programs within the CESF Context: Case Study on Priority Ecosystems

**November 2005**

## **Plan Clearance Steps**

Planning phase initiated	June 2005
Ecosystem Sustainability Board	November 2005
Approval by DAEC	November 2005

## **Acronyms used in the plan**

A&E	Audit & Evaluation
CESF	Competitiveness and Environmental Sustainability Framework
DAEC	Departmental Audit and Evaluation Committee
EC	Environment Canada
ESC	Evaluation Steering Committee
OPG	Outcome Project Group
OPP	Outcome Project Plan

Prepared by Audit and Evaluation

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## 1. Rationale

At the Departmental Audit and Evaluation Committee (DAEC) meeting on June 15<sup>th</sup>, 2005, Audit and Evaluation (A&E) was asked to prepare an evaluation framework for Ecosystem Initiatives (now Priority Ecosystems) to be presented at DAEC in the fall of 2005. As part of this exercise, a logic model for associating Environment Canada's (EC) programs to the Competitiveness and Environmental Sustainability Framework (CESF) has been drafted. The purpose of the evaluation framework is to examine the effectiveness and alignment of any EC program to departmental strategic outcomes/CESF and examining Priority Ecosystems as a potential case study. At the DAEC meeting on October 14<sup>th</sup>, 2005, A&E provided the committee members with an update on the progress made.

## 2. Guidance

Given the complexity and importance of this project, an Evaluation Steering Committee (ESC) was created. The mandate of the committee is to provide strategic direction and guidance regarding the conduct of the evaluation and ensure that evaluation issues of importance to all stakeholders are addressed. The committee is chaired by Stephen McClellan, Director General of Audit and Evaluation, and is composed of senior management representatives from programs, including Outcome Project Group (OPG) leads. A&E staff plays the secretariat as well as resource roles. This report was presented to the Ecosystem Sustainability Board; they endorsed the recommendation and agreed to undertake an oversight role of future pilot project work.

## 3. Approach

Following the August meeting of the OPG on Priority Ecosystems, it became clear that the materials and approach on Ecosystem Initiatives were not sufficiently mature to permit the development of a draft framework or a logic model. Subsequently, an alternative approach was pursued which was to try to build a generic logic model connecting Environment Canada with the CESF, which could eventually serve as a template to potentially assess any of EC program's connection with the CESF. This framework is constructed using existing materials as drafted by various parts of the department (including the CESF Vision and Pillars, as well as National Environmental Objectives and departmental strategic outcomes).

## 4. The Framework

It is a traditional logic model<sup>1</sup>, built on the premise that one uses resources (Inputs) and does things (Activities) which result in products (Outputs), which are targeted at certain stakeholders (Reach) in order to achieve certain results, desired end-points or altered

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<sup>1</sup> All of the content of the model is based on the latest versions (as of September 1<sup>st</sup>, 2005) as described by the respective programs.

conditions (Outcomes). It is also based on the premise that the Pillars of the CESF are processes that precede and guide program development and have never been intended to produce outcomes in themselves. Thus, they are described as a Strategy Filter; they serve as an early checklist to guide program development.

The final outcome in the logic model is the CESF, which is in essence: to attain the highest level of environmental quality as a means to enhance the health and well-being of Canadians, preserve our natural environment, and advance our long-term competitiveness. The longer term National Environmental Objectives are currently under construction and address 6 major environmental areas – biodiversity, air, water, climate change, waste, and chemicals and substances. These objectives also attempt to define time-bounded outcomes that are forecast for 25 years in the future, based on these 6 overall areas. Lastly, the first set of outcomes (Outcomes II) focuses on strategic departmental outcomes with a focus on four subject areas of natural capital, weather and environmental prediction, protection from pollution and waste, and reducing climate change impacts as well as two enabling strategic objectives. Further details are available in Outcome Project Plans (OPP), OPG, Board level priorities (Outcomes I).

The reach of the programs extends to a wide variety of targeted stakeholders, including citizens, various levels of government (including international), private sector, Sector Sustainability Tables, and other groups and individuals with vested interests. The model shows an example of such reach. To apply the logic model, one would refer to the specific inputs, activities and outputs as defined by program OPPs and OPGs.

The major variant from a traditional logic model is that we use the CESF Pillars as a Strategy Filter as a precursor to program design. Thus, the 5 CESF Pillars are used to shape the program design of specific programs; any one program may refer to only one or several of the pillar elements depending on its context.

## 5. The Evaluation Questions

Subsequently, a suite of generic evaluation questions (along with associated indicators and data sources) was developed that could be applied to any program and examined in tandem with the completed logic model. The questions focus on the four main evaluation issues – relevance, success, cost-effectiveness and design and delivery. These generic questions (which include the 7 expenditure review questions) would be coupled with a handful of supplementary evaluation questions pertaining to the specific program being evaluated, which would be determined in the context of carrying out a specific evaluation.

## 6. Options to proceed

Provided that this framework and approach is approved by DAEC, the prototype framework could then be tested. Should that test prove successful, there is potential that this could be used to check alignment of any EC Program to the CESF.

### **Option 1: Apply the evaluation framework to one of the six ecosystem initiatives**

This option would be to test the developed framework to one of the six existing Ecosystem initiatives. The Steering Committee suggested two possible initiatives, namely the Georgia Basin Action Plan and the St. Laurent. Subsequent committee discussion favoured an examination of the Georgia Basin Action Plan as a first application.

**Option 2: Apply the evaluation framework to the Priority Ecosystem OPG**

This option would be to test the developed framework on the Priority Ecosystem Outcome Project Grouping. This could provide an opportunity to help develop this evolving OPG. However, its application would be contingent on sufficient maturity of this OPG to supply detailed information on its program; this OPG has changed significantly and now focuses exclusively on governance. This test would constitute a formative evaluation as this particular initiative is in its early development stages.

Should the timing of this test not be appropriate, it could be delayed until the OPG initiative sufficiently matures to permit this examination and thus assist in its future evolution.

Steering Committee discussions felt that the OPG might be at too high a level to apply this framework and did not favour this option.

**Option 3: Apply the evaluation framework to a selected EC program of interest**

This option would be to test the developed framework on some other EC program area that is of current management interest. This would permit the framework to be actively used and thus examine its potential to check alignment of any EC Program to the CESF. Thus, if proven successful, it could be applied more widely and assist with the overall transformation of EC into a results-based organization.

**Option 4: Apply the evaluation framework to one of the six ecosystem initiatives as well as to a selected EC program of interest**

This option suggests to combine option 1 with option 3 and conduct two pilots. The suggestion is to select a more regular national program than an ecosystem for a more complete testing process. Steering Committee discussions showed this to be a very large and ambitious undertaking above the effort levels initially forecast.

**Recommended Option:**

The Ecosystem Sustainability Board recommends to DAEC to accept option 4 using the Georgia Basin Action Plan as a case study as well as to test this methodology to a national departmental program. The next steps would be to create an evaluation plan in this fiscal year and launch the actual pilot at the beginning of the next year. This option would involve the OPG group in formulating the handful of supplementary subject specific evaluation questions for this case study. Work on any future pilots could be staged sequentially as needed.

Appendix 1: Logic Model linking Competitiveness and Environmental Sustainability Framework to EC

Strategy Filter  PILLARS (For program design considerations) NB: Programs touch one or several	Inputs  (Resources)  OPP/OPG	Activities  (What is done)  OPP/OPG	Outputs  (Products /services)  OPP/OPG	Reach  (Client/audience)	Outcomes I  BOARD/OPG/OPP OUTCOMES	Outcomes II  STRATEGIC DEPARTMENTAL OUTCOMES	Time Bounded Outcomes  NATIONAL ENVIRONMENTAL OBJECTIVES	Longer Term Outcomes  NATIONAL ENVIRONMENTAL OBJECTIVES	Final Outcomes  CESF
1. Decision-making ➤ All stakeholders work together on shared priorities to align environmental and economic decisions. ➤ Governments, industry and citizens take decisions that affect the environment with a full understanding of the impacts of those decisions and their contribution to achieving national environmental objectives. ➤ Governments understand the kinds of decisions other stakeholders make and the opportunities they have to influence those decisions. 2. Information ➤ Ensure that credible, relevant, integrated, usable, nationally and locally representative environmental information is accessible by all users and supports the full range of activities under the CESF that depend on it 3. Science & Technology	<ul style="list-style-type: none"><li>• Money</li><li>• People</li><li>• Materials</li></ul> ➤BY PROGRAM UNDER REVIEW◀	▶INSERT PROGRAM ACTIVITIES◀	▶INSERT PROGRAM OUTPUTS◀	▶INSERT PROGRAM REACH◀ Example: <ul style="list-style-type: none"><li>• Citizens of Canada</li><li>• Various Interest Groups<ul style="list-style-type: none"><li>• Academics/ Researchers</li><li>• NGOs</li><li>• Etc.</li></ul></li><li>• Governments<ul style="list-style-type: none"><li>• Federal provinces, territories, cities, etc.</li><li>• Foreign</li></ul></li><li>• Non-Canadians with vested interest</li><li>• Private Sector<ul style="list-style-type: none"><li>• Industry</li><li>• Recreation</li><li>• Etc.</li></ul></li><li>• Sector Tables</li></ul>	▶INSERT PROGRAM OUTCOMES ◀	<ul style="list-style-type: none"><li>• Canada's natural capital is restored, conserved and enhanced</li><li>• Weather and environmental predictions and services reduce risks and contribute to the well-being of Canadians</li><li>• Canadians and their environment are protected from the effects of pollution and waste</li><li>• The impacts of climate change on Canada are reduced</li><li>• Contributes to achieving departmental strategic objectives</li></ul>	UNDER DEVELOPMENT	UNDER DEVELOPMENT	<ul style="list-style-type: none"><li>• Attain the highest level of environmental quality as a means to enhance the well-being of Canadians, preserve our natural environment, and advance our long-term competitiveness.</li></ul>

<div><div>➤ Strengthen and integrate the national system of environmental scientific knowledge production and technology advancement, making it responsive to current and emerging demand</div><div>➤ Engage a broad community of users, providers and facilitators of environmental S&amp;T</div><div>➤ Support the CESF's goals for the health and well-being of Canadians, their environment and their economy.</div><div>4. Performance Promotion &amp; Enforcement</div><div>➤ Conditions that promote &amp; reward environmental leadership are in place</div><div>➤ Broad mixes of instruments are considered and used</div><div>➤ Environmental results are secured</div><div>➤ Performance is measured and tools and management strategies are adjusted accordingly</div><div>5. Education &amp; Engagement</div><div>➤ Strategic approaches to education and engagement are developed and implemented</div><div>➤ Education and engagement are considered and included among the broad mix of instruments</div><div>➤ Decision-making information, tools and approaches are accessible and useable</div><div>➤ Capacity to make and influence informed decisions is increased</div></div>								
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Appendix 2: Evaluation Questions

Issue	Question (questions in bold are the 7 Expenditure Review questions)	Statement of what should be observed	Indicator What information	Source Where to find it
Relevance	1. Overall, does the program make sense in terms of the CESF?	Mission/raison d'être connects with final outcome (CESF)	Demonstration of the program connection with CESF	OPP/OPG/ Board CESF
	2. <b>Role of Government - Is there a legitimate and necessary role for government in this program area or activity?</b>	The program objectives are part of the federal government agenda	Justification for program is linked to government priorities	Speech From the Throne, Budget speech OPP, OPG, Program documentation
	3. <b>Federalism - Is the current role of the federal government appropriate, or is the program a candidate for realignment with the provinces/territories?</b> How does this activity or program balance the need for coordinated Canada-wide action with the need for flexibility to reflect the diverse needs and circumstances of provinces/territories and regions?	The program is situated at the appropriate level of government without need for realignment	Justification for program is linked to federal government priorities	Constitution Act, 1867 Federal Speech From the Throne; Federal Budget speech Provincial/territorial budget speech Provincial/territorial programs; interviews
			Federal government has constitutional jurisdiction	
			Justification for program is linked to provincial/territorial government priorities	
			Provincial government has constitutional jurisdiction	
			Territorial government has jurisdiction	
	4. What would be the consequences if the activity or program did not exist?	The program does or does not serve a recognized and needed function	Demonstration of the utility/ rationale for program	OPP/OPG/Board RMAF; RBAF; Corporate Risk Profile; interviews
	5. <b>Public Interest – Does the program area or activity continue to serve the public interest?</b> Is the program defined in citizen-focused terms?	The program is connected with societal needs	Reach is analyzed and targeted and connected to societal requirements	OPP/OPG/Board Program literature; interviews
	6. Does the planned work clearly contribute to delivering departmental outcomes (OPP, OPG & Board) and Board priorities?	The program is aligned with departmental outcomes and Board priorities	Demonstration of the direct outcome linkages with Board and departmental outcomes	OPP/OPG/Board, Board priorities
	7. Are changes required to ensure alignment with current departmental priorities as well as the CESF? If yes, does the Program (OPP) and its activities address	Refer to answers to questions 1 and 6. Program rationale addresses required changes if needed.	Demonstration of the need for change and response in program	OPP/OPG/Board ; interviews

Issue	Question (questions in bold are the 7 Expenditure Review questions)	Statement of what should be observed	Indicator What information	Source Where to find it
	the need for such changes.			
	8. Do all OPPs within the scope of the OPG need to exist?	There is sound/ explicit rationale for all OPPs with regards to the OPG	Demonstration of the need for suite of OPPs within an OPG; explicit linkage of each OPP to its OPG	OPP/OPG/Board interviews
Success	9. What has happened as a result of the program? Have any outcomes been achieved as a result of the program? What have been its environmental impacts?	The program shows results and outcomes	Documentation of outputs, documentation reports program impacts	Program literature; periodic reports on progress Stakeholder/ partner surveys
	10. What are the implications for Canada’s economic growth and competitiveness?	The program may have impacts on Canada’s economic growth and competitiveness	Economic reporting demonstrates links between with this environmental program and economic growth and competitiveness	Economic reports; quarterly statistics; Bank of Canada reports; DPR, OPP, OPG, TB submission
	11. Have there been any unanticipated results, either positive or negative, that can be attributed to the program? If so, how were they addressed?	Unintended outcomes are present that can be attributed to the program	Presence of impacts beyond that outlined in expected program design and delivery outcomes	Survey of partners/stakeholders Program management interviews
		Actions to address unintended impacts are undertaken	Management determines actions to be taken given unanticipated results by maximizing the positive and mitigating the negative	Review of meeting minutes; correspondence
Cost- Effectiveness	12. Are there better ways of achieving the results? Have alternative programs been examined that might achieve the objectives and intended impacts and effects?	Alternative delivery methods have been analyzed	Analysis of various delivery options / opportunities	Program design reports; case studies Program management
	13. <b>Efficiency - If the program or activity continues, how could its efficiency be improved?</b>	Program or activity shows opportunity for efficiency increases	Analysis of cost/time in program delivery	Cost/time analysis Costing details (e.g. salaries, operating costs, etc.)
			Analysis of cost profile of program	Program design literature; documentation

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	14. Should the program or activity include a cost recovery element? If yes, does it?	Delivery of customized goods/services to the gains of niche audiences. A cost recovery mechanism is present; if applicable.	Analysis of reach/outputs. Financial analysis/reporting on cost recovery	Program financial reports Documentation of cost recovery mechanisms,Program literature, program interviews
	<b>15. Value-for-money - Are Canadians getting value for their tax dollars? Is the program or activity cost-effective?</b>	The program shows value for money by demonstrating its cost effectiveness	Analysis of costs and impacts of program in its design and delivery	Cost effectiveness analysis/reporting
	<b>16. Affordability - Is the resultant package of programs and activities affordable? If not, what programs or activities would be abandoned?</b>	The program is financially affordable without the need to abandon components	Delivery options / opportunities documented; Cost of program is benchmarked with comparable programs	Program design reports; case studies; interviews
Design & Delivery	17. Does the program identify clear deliverables and expected results?	Expected results and deliverables are clearly identified	Description of the program’s expected deliverables and results	OPP/OPG/Board Plans; reports; work plans; TB submissions
	18. Are the activities and outputs of the program consistent with its mandate and plausibly linked to the outcomes in terms of clarity and attribution?	Activities and outputs are linked with mandate and outcomes	Documentation that describes program and links between mandate, activities, outputs and its outcomes	OPG/OPP/Board Documentation of program design)
		The attribution of outcomes to the program is plausible	Program design documents causality of logic model	
	19. Are decision-making processes in place to allow for the highest areas of importance to be reflected in the allocation of resources (priorities)?	Allocation of resources is based on highest importance and resourced according to priorities	Selection process for areas of importance are applied	Documentation (e.g. Meeting minutes); reports; plans; Corporate Risk Profile; interviews
			Criteria that are used to evaluate proposals, as to priorities and commensurately allocate resources are applied	
	20. How has risk been addressed? Has a risk management strategy been	Risk is adequately addressed and managed	Risks are identified with mitigating strategies	OPP/OPG/Board

Issue	Question (questions in bold are the 7 Expenditure Review questions)	Statement of what should be observed	Indicator What information	Source Where to find it
	developed? Is it adequate?		Risk management strategy is present; and is robust	Risk assessments; RBAF; Corporate Risk Profile
	21. Is there a clear and compelling analysis of capacity requirements? Are any proposals for increased capacity well justified?	Program capacity requirements are recognized; requests for program capacity increases are well-justified	Demonstration of the program’s capacity is commensurate with its design and delivery	OPP/OPG/Board Documentation; TB Submission; RMAF
			Demonstration of the need for increases in the program’s capacity	
	22. Is there a clear link between program design and the strategy filter from the logic model?	Appropriate strategies are present in program design	Demonstration of application of CESF Pillars to program design is clear and explicit	OPP/OPG/Board CESF Pillar Decks Program Management Minutes from management decision-making meetings
	<b>23. Partnership - What activities or programs should or could be transferred in whole or in part to the private/voluntary sector?</b> Have opportunities for partnerships with communities, voluntary sector and private sector been considered?	There is rationale for activities or programs to remain federal	Justification for program is linked to government priorities	Speech From the Throne; documentation of departmental priorities; interviews
		Partnerships have been explicitly and exhaustively explored	Documenting that stakeholders are involved; engaged; contribute resources where appropriate; jointly plan	OPP/OPG/Board Survey stakeholders and partners; file review; reports on program design; interviews
			Partnerships have been analyzed and knowingly selected	

Issue	Question (questions in bold are the 7 Expenditure Review questions)	Statement of what should be observed	Indicator What information	Source Where to find it
	24. How consistent is the program or activity with its own proposed approach (has the program been delivered as designed)?	The program is consistent with and follows its defined approach/ methodology	Program design matches program delivery; any deviations are documented and well-justified	Reports on program design Program management