

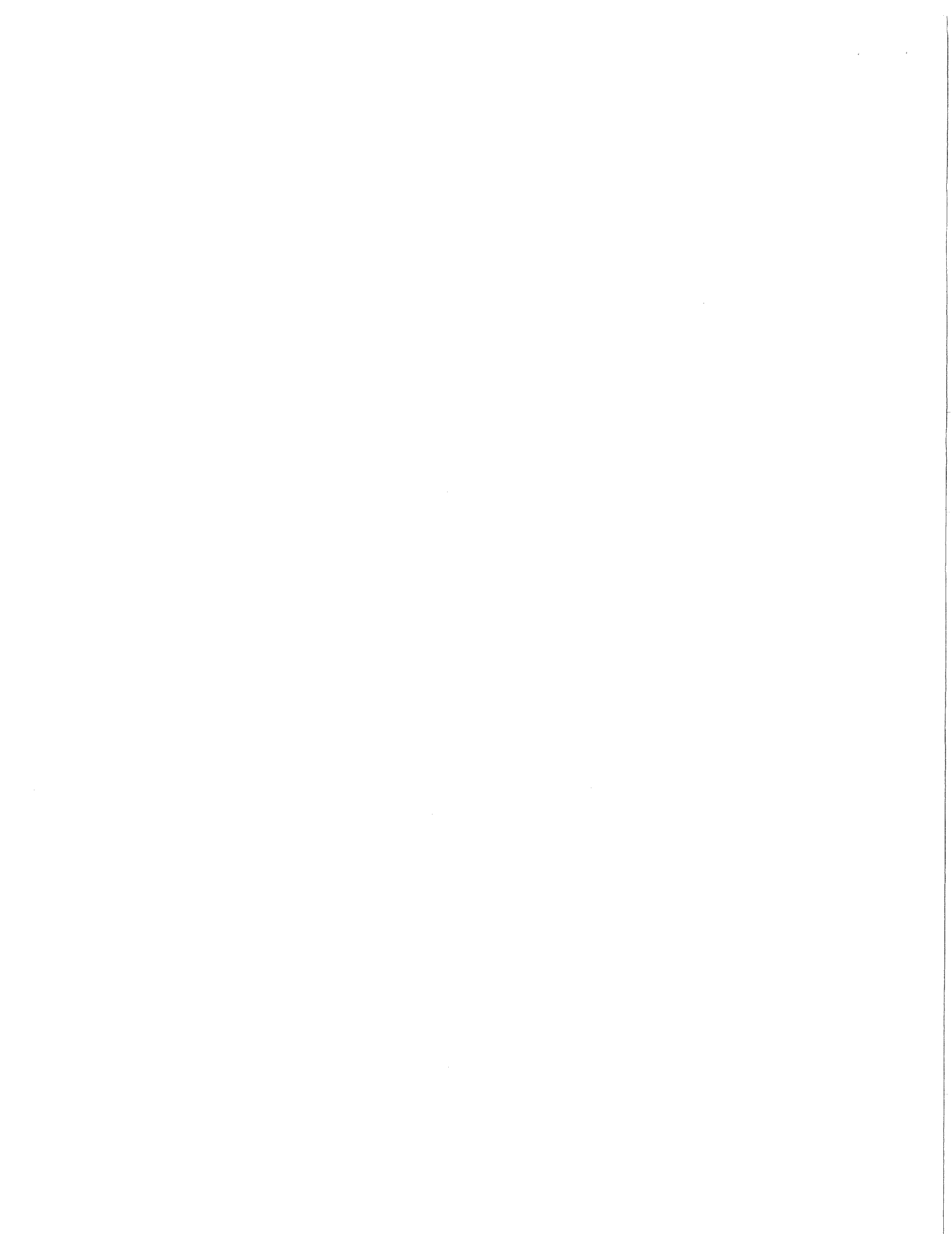
DRAFT FINAL REPORT

TOWARDS CREDIBLE AND EFFECTIVE ENVIRONMENTAL VOLUNTARY INITIATIVES: LESSONS LEARNED

**by
Pollution Probe**

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This DRAFT is not for distribution.



Executive Summary

The goal of this study is to propose a government policy framework that will lead to more credible and effective Voluntary Initiatives. Thirty-nine Canadian Voluntary Initiatives were studied and screened against twenty-five policy issues identified in the literature and through consultations with government, industry and environmental groups. The lessons learned from the Voluntary Initiatives were used to develop the proposed policy framework.

Voluntary Initiatives can accomplish three important results:

- Set new performance benchmarks or standards that can later be transferred into the regulatory system to ensure that all companies improve their environmental performance;
- Stimulate environmental performance beyond existing and anticipated regulatory limits;
- Encourage and reward exemplary environmental performance by highly motivated companies.

Pollution Probe believes that Voluntary Initiatives will be more effective if they are built upon a strong regulatory base and if governments are prepared to accept obligations and provide incentives to industry in return for binding commitments to pollution and energy use reduction targets and timelines. The credibility of Voluntary Initiatives will be enhanced if an improved climate of public trust is established between environmental groups, governments and industry, similar to the cooperative approaches that have characterized Voluntary Initiatives in wildlife and habitat conservation.

The following elements of a policy framework are proposed to support more credible and effective Voluntary Initiatives:

Appropriateness:

Voluntary Initiatives are appropriate when they go beyond existing regulatory limits and when they do not compromise the ongoing development of the regulatory system. Regulatory compliance should be a pre-requisite for acceptance into a Voluntary Initiative.

Voluntary Initiatives should be entered into with industries that demonstrate sufficient organizational structure and capacity to be able to share information, report publicly on results achieved and exert peer pressure within the industry sector. Individual companies participating in Voluntary Initiatives should have acceptable Environmental Management Systems and other means of ensuring adequate oversight of the initiative.

Goal-setting:

The goals and related performance targets and timelines of Voluntary Initiatives should be publicly debated to ensure that all relevant stakeholders have been provided with an adequate

opportunity for input. Company-specific agreements should accept the externally-set goals and targets and should focus on how to achieve them.

Measurement and Reporting:

Measurement and reporting protocols should be established and included within an expanded and enhanced National Pollutant Release Inventory (NPRI). To ensure public credibility and accountability, Voluntary Initiatives need to demonstrate adequate pollutant baseline information and ongoing monitoring in ways that allow progress to be measured and compared with other companies and industry sectors. Proper measurement and monitoring data are required for the future verification and evaluation of Voluntary Initiatives and are an essential input to continuous environmental improvement within companies and sectors.

Incentives:

The trade-offs and incentives included in Voluntary Initiatives should be explicitly stated and subjected to public debate. Parties to Voluntary Initiatives should understand their responsibilities and obligations and be prepared to explain them to the public. A variety of incentives should be identified and subjected to public debate before their inclusion in the policy framework. Incentives might include: regulatory relief; financial incentives; public recognition; information sharing; technical assistance; limited liability; and so on.

Level of Participation:

Sectoral Voluntary Initiatives should only be developed if there is a majority of companies participating from a given sector (i.e.; 50 per cent or greater) or if the companies in the initiatives represent greater than 50 per cent of total emissions from the sector. Non-participants should be advised that regulatory benchmarks and standards may result if full industry participation is not achieved within a set period of time (e.g.; five years).

Public Participation:

Governments should provide sufficient financial and technical assistance to ensure the equitable participation of community and public interest groups in Voluntary Initiatives.

Verification:

The policy framework should identify a range of verification mechanisms matched to the type of Voluntary Initiative and the need for varying levels of internal and external verification. In general, the greater the obligations and trade-offs accepted by governments, the greater the need to specify independent verification mechanisms with input from community and ENGO stakeholders.

Evaluation:

All Voluntary Initiatives should have mandatory evaluation requirements and sunset/renewal clauses linked to the evaluation (e.g.; every 3-5 years).

Registry of Voluntary Initiatives:

Governments should maintain comprehensive registries of all approved Voluntary Agreements, including their goals, targets and timelines, terms and conditions, parties to the agreements, public reports, and verification and evaluation reports. Reasons for changing or terminating Voluntary Agreements should be documented for future research purposes.

The “ideal” Voluntary Initiative

The ideal Voluntary Initiative has clearly stated and publicly supported goals, targets and timelines. Progress is measured and reported at regular intervals, with problems addressed openly and expeditiously. The initiative is evaluated and adjusted, as necessary, with the full participation of stakeholders. Independent verification of results demonstrates that the goals and targets are being achieved in a cost-effective way, and the company or sector is publicly recognized for exemplary environmental performance. The process used and the results of the Voluntary Initiative are shared with other companies and sectors and serve to stimulate similar approaches and initiatives.

Pollution Probe’s study of Voluntary Initiatives is intended to stimulate informed public debate and help move policy development forward in a productive way.

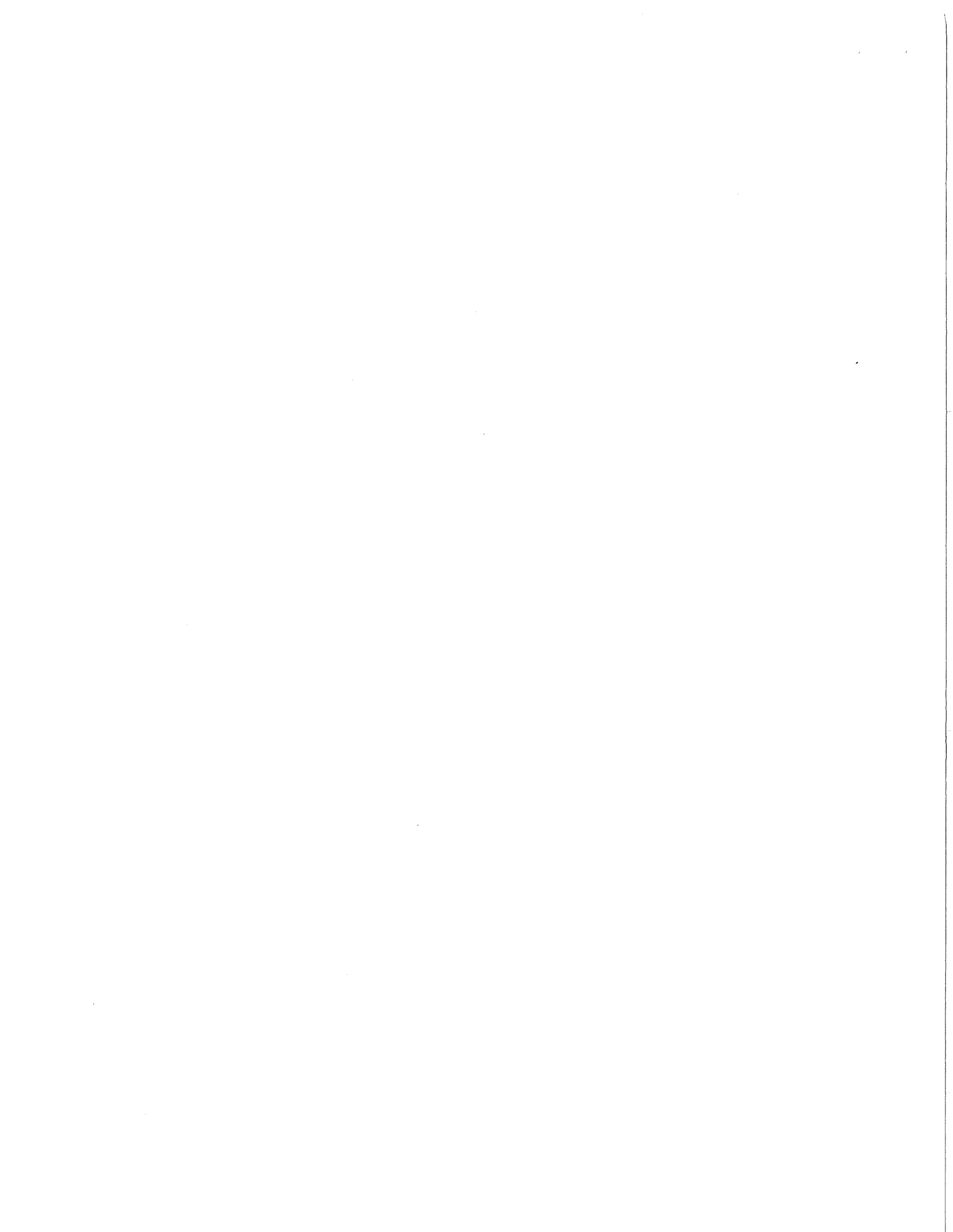


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Inventory of Canadian Voluntary Initiatives

1.0 Introduction

The goal of this study is to make Voluntary Initiatives a credible and effective part of the Canadian environmental policy tool kit, as a complement to regulations and the use of economic incentives and market mechanisms. Pollution Probe believes that Voluntary Initiatives can help advance environmental performance. There is, however, the potential for misunderstanding and misuse of such initiatives if they are not properly designed and implemented within a government policy and regulatory framework that ensures transparency, adequate measurement, monitoring and reporting, and accountability for achieving results.

The objectives of the study are to explore issues related to Voluntary Initiatives that have been raised by industry, governments, communities and environmental non-government organizations (ENGOs) and to propose a policy framework that will support the development of more credible and effective Voluntary Initiatives in Canada. These objectives have been accomplished by studying a wide range of Voluntary Initiatives, including ones that have performed well and achieved positive recognition, as well as ones that have not performed well or gained widespread stakeholder support. Appendix 'B' contains information on approximately forty Canadian Voluntary Initiatives.

Experience with Voluntary Initiatives by industry and other stakeholders has expanded considerably during the past decade in Canada. Currently, Voluntary Initiatives are being actively encouraged by governments at the federal and provincial levels. Concerns about the appropriateness of certain Voluntary Initiatives have been expressed by environmental groups. The potential for government emphasis on the voluntary approach at the expense of the regulatory framework is a particular concern, reinforced by the cuts that have been made in recent years to the budgets and staff of environment ministries across Canada. Thus, extensive use of Voluntary Initiatives raises a number of public interest and government policy issues that will have to be addressed before a harmonious balance among the application of various environmental policy tools can be realized. This study is intended to stimulate informed public debate and help move policy development forward in a productive way.

2.0 History and Evolution of Voluntary Initiatives

This section on the history and evolution of Voluntary Initiatives is not intended to be complete, but serves to distinguish Canadian *environmental* Voluntary Initiatives from *conservation* initiatives and from initiatives in Europe and the U.S. The Policy Analysis section of this report will return to these distinctions, since they are important considerations in the development of a Canadian policy framework for Voluntary Initiatives.

Voluntary Initiatives for environmental protection are not as widespread as those for conservation initiatives in Canada, nor do they benefit from as broad a constituency. The roots of the conservation movement in North America go back to the late 1800s, when concerns about the

over-exploitation of wildlife and timber led to the enactment of conservation laws and the founding of many conservation organizations that still exist today. The "stewardship ethic" in conservation has since become ingrained in North American society and is the principal driving force behind most voluntary conservation programmes.

Voluntary Initiatives in conservation are common for a variety of reasons, such as:

- the limited, shared or unclear responsibilities for natural resources among government agencies, which makes it difficult to develop and enforce regulations for resource management;
- the multiple use potential of land for recreational and commercial purposes, so that resource planning must meet the needs of a wide range of users and interests; and
- the location of many of Canada's threatened or endangered species and habitats on privately held land, thus requiring the development of cooperative relationships with private landowners.

Conservation "Voluntary Initiatives" start as voluntary and tend to end in land securement or legal protection by such means as: land donation, conservation easements, land purchase, or the voluntary relinquishment of rights.

Voluntary Initiatives for environmental protection do not have the same historical roots and driving forces as conservation initiatives. While pollution problems have been recognized for hundreds, if not thousands, of years, the development of the modern environmental movement only dates back to the late 1960s in Canada. Dedicated environment ministries were not formed until the early to mid-1970s in response to public alarm about industrial pollution. The creation of these ministries was stimulated and reinforced by the recommendations made at the 1972 Stockholm Conference on Humans and the Environment.

The 1970s witnessed the development of the command and control environmental regulatory framework, especially in the United States. Voluntary environmental initiatives by industry in the 1970s and early 1980s in both Canada and the U.S. were eclipsed by the rapidly expanding domestic regulatory agendas, and in the late 1980s and early 1990s by the rapidly expanding international environmental agenda. Faced with increasing pollution control costs, industry in the United States fiercely resisted the further development of command and control regulations in the 1980s. The use of economic incentives and market mechanisms, such as emissions trading, began to emerge as policy tools, along with a focus on pollution prevention as the new policy paradigm. The end-of-pipe technology approach of the traditional command and control regulatory framework did not easily adapt to the new policy tools and paradigm. Environment ministries in Canada were not equipped with the appropriate expertise, organizational cultures and legal authorities to respond quickly to these shifts.

Canadian industry responded similarly to the U.S. anti-regulation lobby by the late 1980s and early 1990s, but more in fear of Canada adopting a U.S. style regulatory approach than in response to an over-developed Canadian regulatory system. The Canadian policy response was not to implement economic incentives and market mechanisms, as in the United States, but to look for opportunities to promote the development of Voluntary Initiatives.

The United States also turned its attention to Voluntary Initiatives in the 1990s, but U.S. Voluntary Initiatives have been built on top of a more rigorous regulatory and economic incentive framework than in Canada. On the other hand, Canada has developed Voluntary Initiatives in the context of a stronger history and culture of public consultation and multi-stakeholder interaction, with less attention given to the legal effects or public policy implications of Voluntary Initiatives. This is not the case in other countries that have been leaders in using Voluntary Initiatives, such as the Netherlands and Japan. Voluntary agreements in these countries are often explicitly based on contract law. They are negotiated voluntarily, but once negotiated, they are legally binding. In concept, this is similar to the development of conservation Voluntary Initiatives in Canada.

Since the Rio Summit in 1992, there has been a strong globalization trend in economic and political activity, as well as in environmental policy at both the industry and government levels. International competitiveness has emerged as a central policy concern. Governments in Europe and North America have responded with a growing interest in using non-regulatory tools to promote improved environmental protection in all countries. ISO 14000, in particular, is gaining momentum as a voluntary industry management tool that has the potential to link environmental responsibility to trade competitiveness. Governments are showing increasing interest in ISO 14000 as a policy tool, which has caused concern in the environmental non-government organization (ENGO) community, given the human resource-intensive processes under which ISO 14000 standards have been developed to date. Attempts are being made to open ISO 14000 to greater stakeholder involvement, but differences of view exist between ENGOs and industry, especially in relation to transparency, performance and accountability. Moreover, most ENGOs do not have the resources needed to effectively participate in these processes and usually have higher priority initiatives to which they devote their scarce resources.

The European Community (EC) has taken an active role in promoting Voluntary Initiatives. Voluntary approaches recognized in the EC's environmental policy include: the Eco-management and Audit Scheme (EMAS), which has similarities to ISO 14000, but is more performance-based; the Community Eco-label Award Scheme; and Environmental Agreements, which are voluntary agreements between industry and public authorities on the achievement of environmental objectives. Environmental Agreements can be legally binding and take the form of contracts (such as the Dutch Covenants) or they can be informal and non-binding, taking the form of unilateral commitments on the part of industry (similar to many Canadian Voluntary Initiatives). The reliance on Environmental Agreements between the EC and European industry is increasing, with more than 300 Agreements concluded by 1998.

The term "Voluntary Agreements" has been replaced in the EC lexicon with "Environmental Agreements" due to the view that compliance with Voluntary Agreements should not be voluntary. In November 1996, the EC issued a Communication on Environmental Agreements aimed at promoting the use of such agreements by presenting guidelines for their effective use. The guidelines are intended to improve the structure of voluntary agreements; however, no legally binding framework has been set for Environmental Agreements.

Work in Canada on environmental Voluntary Initiatives has its roots in the multi-stakeholder processes used in the mid-1980s to help develop the cradle-to-grave policy framework for managing toxic chemicals and to develop the Workplace Hazardous Materials Information System (WHMIS). The visit of the Brundtland Commission to Canada in 1986, and the subsequent creation of the National Task Force on Environment and Economy brought the concept of sustainable development into effect, with Round Tables on Environment and Economy established across Canada in the first five years following the September 1987 submission of the National Task Force report to the Canadian Council of Ministers of the Environment.

Energetic efforts were made throughout the 1990s to make the Round Table process work, but with little direct influence on government policy. The Round Tables, however, helped to lay the intellectual basis and establish the operating principles underlying sustainable development, and in this respect they have provided significant support for the development of Voluntary Initiatives in Canada. Active work continues to be done by the National Round Table and by the Manitoba Round Table, which until recently was chaired by the Premier.

In parallel with the development of the Round Tables, a group of senior industry and ENGO representatives created the New Directions Group (NDG). The NDG met in the early to mid-1990s and prepared a consensus report on toxic substances management that later led to the development of the Accelerated Reduction/Elimination of Toxics (ARET) programme, which is one of Canada's most successful environmental Voluntary Initiatives. The NDG convened again in 1996, and by November 1997 developed a set of "Criteria and Principles for the Use of Voluntary or Non-Regulatory Initiatives to Achieve Environmental Policy Objectives." (See Appendix 'A') The NDG criteria and principles have gained substantial recognition and support by governments, industry and several ENGOs in Canada.

During the past few years, Voluntary Initiatives in Canada have been studied by a number of university, industry and environmental organizations, as well as several individuals and consulting firms (see Section 5.0 for a brief overview of recent studies). The federal and provincial governments have given verbal and written support for Voluntary Initiatives, but have not yet developed comprehensive policy frameworks to guide, support and constrain these initiatives. In late 1998, the federal Minister of the Environment stated publicly that she would soon propose a policy framework for Voluntary Initiatives and take it to the federal Cabinet for approval. The policy framework is expected to draw heavily on the NDG criteria and principles.

3.0 Definition of Voluntary Initiatives

There is no widely accepted definition of what constitutes a Voluntary Initiative. While this may cause confusion and can be a barrier to the use of such initiatives, there are so many different types of initiative that a single definition may never emerge. There is also a concern that a narrow definition of Voluntary Initiatives might inhibit the flexibility that such initiatives need as motivators for performance. It is helpful for policy analysis purposes, however, to use a broad definition in concert with a general typology of various forms of Voluntary Initiative.

The broad definition of Voluntary Initiative used in this report has been adapted from a recent Government of Canada publication titled, "Voluntary Codes: A Guide for their Development and Use (March 1998)." The definition that Pollution Probe has used in this report is as follows (please note that "and performance" as well as "and publicly acceptable" have been added by Pollution Probe to the definition):

"A non-legislatively required commitment, agreed to by one or more entities, designed to influence, shape, control or benchmark behaviour and performance, and applied in a consistent and publicly acceptable manner to reach a defined outcome."

This broad definition needs to be supplemented by a more purposeful statement of the overall outcome that is desired. In this context, Voluntary Initiatives should contribute to transforming industry into more socially and environmentally responsible and sustainable enterprises. They should not just be about equalling or exceeding existing or anticipated environmental standards. Ideally, they should be part of the ongoing quest for global environmental sustainability, as well as social and economic well-being. Industry leaders, non-governmental organizations and others tend to call this the "triple bottom line."

There are many different views on how to categorize Voluntary Initiatives. The United Nations Environment Programme (UNEP) has used the following simple typology of Voluntary Initiatives (see Industry and Environment: Voluntary Initiatives; p.5; Volume 21, No. 1-2; January -June 1998; UNEP):

Industry initiatives -- in which industry has exclusive management responsibilities and governments have no formal role. Third parties may have advisory or indirect roles. A Canadian example is the Responsible Care programme.

Government initiatives -- in which governments have management responsibilities, including monitoring results. Industry is likely to be consulted or involved in the design of the programme. Third parties may have advisory or indirect roles. A Canadian example is the ARET programme.

Joint government/industry initiatives -- in which government and industry co-manage the

initiative, sharing responsibility for implementation and monitoring. Third parties may have indirect advisory roles. Examples include legally binding and enforceable negotiated agreements, such as the Dutch Covenants, and voluntary agreements that may be legally binding, but difficult to enforce, such as the Canadian auto sector Memorandums of Understanding.

Third party initiatives -- in which third parties, such as standard-setting organizations, non-governmental groups, etc., develop and run the initiative. Individual companies and industry associations may be involved. Governments are likely to be limited to indirect or informal roles. An international example is ISO 14000.

The UNEP typology is very useful, even if it does not fully capture the range and complexity of Voluntary Initiatives experimented with in Canada. For example, broad multi-stakeholder initiatives, such as the Ontario Smog Plan, have been promoted by governments as full partnership initiatives, although they are usually government-led and hence could be categorized as government initiatives. The value of using the UNEP approach is that it could become a recognized typology for which policy guidance on structure, contents and process would facilitate international comparisons.

The Conference Board of Canada has done a considerable amount of research on Voluntary Initiatives. In a recent Foundation Paper prepared by the Conference Board and consultant Paul Griss for the Enhanced Voluntary Table of the National Climate Change Strategy Process (November 1998), the following typology of Voluntary Initiatives was used:

Regulatory compliance or alternative initiatives -- aimed at meeting existing or potential environmental policy or regulatory requirements. Examples would include covenants, memorandums of understanding, regulatory compliance plans, environmental audit programmes and public disclosure of performance.

Environmental leadership initiatives -- to encourage participants to go beyond regulatory requirements. Examples include challenge programmes (e.g.; ARET), technology upgrades, eco-labelling and standards.

Sectoral initiatives -- to improve sectoral performance by working with industry associations to develop common performance standards for members. Examples include codes of practice and environmental policies.

Company/facility specific initiatives -- undertaken unilaterally, or in consort with local partners. Examples include internal programmes to ensure compliance or improve efficiency, and industry-community or industry-ENGO agreements.

Since the focus of this study is on proposing a government policy framework to guide and

support Voluntary Initiatives, Pollution Probe has used the UNEP typology because it distinguishes between initiatives that have government leadership or involvement and those that don't. The Conference Board typology is also very useful, especially in terms of the way that industry might view Voluntary Initiatives.

On December 3, 1998, Pollution Probe hosted an Ontario-based ENGO workshop on Voluntary Initiatives. At the workshop, it became clear that the role of governments in Voluntary Initiatives is a key issue for ENGOS. Voluntary Initiatives by industry that do not involve governments and have no policy consequences are supported by most ENGOS, but the use of Voluntary Initiatives that could have policy consequences, such as weakening or pre-empting the regulatory agenda, is a major concern.

This study has examined a broad spectrum of Voluntary Initiatives, including some that don't have significant government involvement, because there are lessons to learn from all of them. Properly designed government policies can encourage and support all types of Voluntary Initiative.

The following Voluntary Initiatives were examined in this study (see Appendix 'B' for brief descriptions of each initiative and information on noteworthy features and key policy issues). There are many more Voluntary Initiatives than those examined in this study (Industry Canada has identified more than 100 initiatives); however, the 39 initiatives noted below are sufficient to give significant information and insight into Canadian experiences.

Industry Initiatives:

- Responsible Care (Chemicals)
- Whitehorse Mining Initiative (Mining)
- Environmental Profile Data Sheet (Pulp and Paper)
- Canadian Polystyrene Recycling Association (Plastics)
- Environmental Commitment and Responsibility Programme (Electricity)
- ForestCare (Forestry)
- Company-Specific:
 - Interface, Inc.
 - Husky Injection Moulding
 - Dow Chemical

Government Initiatives:

- Accelerated Reduction / Elimination of Toxics (Chemicals)
- Ontario Smog Plan (Smog Pollutants)
- R-2000 (Energy)
- Energy Innovators/Energy Innovators Plus (Energy)
- Ontario Environmental Farm Plan Programme (Agriculture)

Great Lakes Remedial Action Plans (Multi-media)
Fraser Basin Management Board/Fraser Basin Council (Multi-jurisdictional)

Joint Government/Industry Initiatives:

Pollution Prevention MOUs (Autos; Auto Parts; Metal Finishing; Printing and Graphics)
Dofasco's Environmental Management Agreement (Steel)
Hamilton District Autobody Repair Association Partnership (Autobody Repair)
Corporations in Support of Recycling and the Blue Box Programme (Recycling)
Canadian Industry Programme for Energy Conservation (Energy)
Voluntary Challenge and Registry (Greenhouse Gases)
Alberta Flare Gas Initiative (Oil and Gas)
Emery Creek Environmental Association Industrial Community Partnership
(Commercial/Industrial)

Third Party Initiatives:

ISO14000 / Eco-Management and Audit Scheme (Environmental Management Systems)
Canadian Standards Association Sustainable Forestry Management System (Forestry)
Pollution Probe's MOU for Mercury Reduction/Elimination in Hospitals (Mercury)
Forest Stewardship Council (Forestry)

Biodiversity/Habitat Conservation:

(Note: Conservation initiatives have been included for comparison purposes, but have not been categorized under the UNEP typology.)

The North American Waterfowl Management Plan
National Recovery Plan for the Loggerhead Shrike
Western Hemisphere Shorebird Reserve Network
Wetlands/Woodlands/Wildlife Demonstration Projects
Wildlife Habitat Canada and the Ontario Wetlands Fund Programme
Eastern Spiny Softshell Turtle Study
Marine Tour Operators' Code of Ethics
Operation Burrowing Owl
Leatherback Sea Turtle Conservation in Maritime Canada
Harbour Porpoise Release Programme
Wildlife Watchers

4.0 Legal Aspects

[This section of the report draws primarily upon the text of an analysis prepared by Joe Castrilli for Pollution Probe titled, "*Legal Analysis of Voluntary Compliance Measures in Canada (1998)*." This report should be referred to for a more detailed analysis (including references) of the legal issues related to Voluntary Initiatives.]

Environmental protection in Canada has historically relied on government intervention in the marketplace. This intervention has generally taken the form of command and control regulations, which authorize governments to establish uniform, source-specific, technology-based and risk-based standards for the regulated community. Compliance with these standards is expected by governments, which may take enforcement measures to respond to non-compliance.

A "voluntary compliance measure" has been defined as "any initiative undertaken by the regulated community that is designed to improve environmental performance that is not required by law, but which may be influenced by or may influence legal requirements." [Saxe and Moffet] The Castrilli report examined the role law plays in the development and implementation of voluntary compliance measures. As noted earlier in this report, ENGOs are most interested in Voluntary Initiatives that have government involvement, as opposed to voluntary initiatives by industry that do not involve governments and have no policy consequences.

Law can provide a framework within which voluntary compliance measures operate. This can occur through two mechanisms: the establishment of minimum requirements, and the development of appropriate processes. Castrilli reviewed four categories of Voluntary Initiatives to illustrate these two roles, including: (1) voluntary agreements; (2) voluntary codes of practice; (3) industry voluntary challenge programmes; and (4) environmental management measures.

(1) Voluntary Agreements

Two types of voluntary agreement are of particular interest: industry sector-wide memoranda of understanding (MOUs); and company-specific agreements. The experiences in Ontario with these types of agreement were examined by Castrilli.

Memoranda of Understanding

MOUs in Ontario have usually been tri-party agreements, involving the federal and Ontario governments and an industry trade association. The objective of the MOUs has been to exceed regulatory requirements. The MOUs are not explicitly designed to be legally binding on the parties, unlike voluntary agreements in countries, such as the Netherlands and Japan, in which MOUs become contracts that can be enforced as between the parties.

The MOUs tend to be general in nature, do not set targets to be achieved or include obligations to verify compliance with agreement terms, and contain no penalty provisions. A Task Force or Steering Committee is usually created with the responsibility of identifying substances of concern. Third parties, such as community or environmental groups, are seldom included in the negotiations leading up to the signing of the MOUs or in goal setting. [Note: ENGOs and other stakeholders were invited to provide comments on and input into the Ontario MOUs after they were negotiated, but before they were finalized. At least six workshops were held from 1992 to 1996 in which ENGO input was solicited, but interest and participation were weak. Source:

Ontario Ministry of the Environment officials.]

Castrilli has noted that a legal view among ENGOs and some legal experts of voluntary environmental agreements, such as MOUs, is that the primary "consideration" that industry could provide to governments that would be of value, and hence enforceable in the courts, would be to agree to improve environmental performance beyond that required by legislation. In turn, the primary consideration that governments could provide in exchange to industry would be the forbearance from imposing certain regulatory requirements, or from seeking enforcement.

In Castrilli's view, most Canadian industry-government voluntary agreements (including both MOUs and Company-Specific Agreements) do not meet the requirements of enforceable contracts for several reasons: (1) many of the MOUs do not commit or bind industry to achieving targets for emission reductions by fixed dates; (2) even when targets and dates are established, industry usually only commits to "working to achieve" projected emission reductions, through "reasonable measures" that must fully factor in "technological and economic considerations" as to what is reasonable; (3) even if the agreements are viewed by the courts as binding, they may lack a true remedy by the government because the government would have to show that the Crown itself had suffered a loss in consequence of a breach of the agreement; (4) the usual solution to this type of potential problem is to build in a liquidated damage clause, but this remedy has not been negotiated in most, if not all, Canadian environmental voluntary agreements, and (5) under contract principles, only those who are parties to a contract can enforce its terms. Third parties, by definition, are blocked from contractual recovery by a lack of privity.

Company-Specific Agreements

The first company-government voluntary environmental agreement in Canada, between the federal and Ontario governments and Dofasco Inc. of Hamilton, Ontario, was entered into on November 3, 1997. The purposes of the agreement include: protecting and enhancing the natural environment; allowing Dofasco greater operational flexibility; and, committing Dofasco to achieve performance beyond compliance with applicable environmental laws. In the agreement, Dofasco commits to using all reasonable efforts to reduce emissions of certain air contaminants from certain of its facilities, to reduce waste generation, and to destroy certain stored toxic substances by specified percentages and dates. The agreement also commits the company to using all reasonable efforts to surpass discharge-loading requirements to the waters of Hamilton Harbour, and to report annually to the parties and the public on the results of its performance under the agreement (see Appendix 'B' for a more detailed description of the Dofasco agreement).

Government commitments to Dofasco under the agreement include: using all reasonable efforts to consolidate the company's existing certificates of approval; and, streamlining the process used to amend existing certificates of approval to accommodate facility modifications and future

industrial and process changes, and to increase operational flexibility.

In comparison to MOUs, whose terms have been more general, the Dofasco agreement includes some specific targets against which the effectiveness of the agreement can be judged. The enforceability of the agreement's provisions, however, is still an issue under dispute. In addition to the enforceability issue, the Canadian Environmental Law Association has raised concerns about perceived regulatory concessions in the agreement and the adequacy of public verification and information requirements. [Note: Ontario Ministry of the Environment officials and Dofasco officials dispute that there are any regulatory concessions in the agreement.] The weakness of the role for third parties, such as community stakeholders and environmental groups, in the negotiation of the agreement and in its implementation is also noted as an issue.

(2) Voluntary Codes of Practice

Voluntary codes of practice are arrangements between companies in a particular industrial sector that influence, shape and set benchmarks for industrial behaviour in the marketplace for that sector. They may be offered as supplements, or in some cases alternatives, to traditional regulations. A voluntary code may consist of several documents, including a general statement of principles and obligations, as well as technical agreements pertaining to operational requirements. Castrilli examined two approaches by industry to the use of voluntary codes of practice: a government framework approach; and, an industry framework approach. To a significant degree, both approaches studied are examples of self-regulation.

Government Framework Approach

The British Columbia Stewardship Programme illustrates the government framework approach. The province has established a regulatory framework within which a number of codes of practice have been developed and largely implemented by industrial associations.

For example, a self-regulation programme for agricultural waste control has been operating since the early 1990s in response to a regulation under the *Waste Management Act*. The regulation specifies an acceptable code of practice for the storage, use and discharge of agricultural waste, emissions and wood waste. The regulation is self-administered by the B.C. Federation of Agriculture. When government staff become aware of a potential violation of the statute, a regulation, or the code, they contact the association's peer advisor who investigates and resolves the problem. The advisor must recommend a solution and a timeframe within which to resolve the problem. The government retains discretion to accept or reject the recommended solution. If the solution is rejected, the government may resort to enforcement mechanisms available to it under the legislation.

The agricultural code of practice has been well-received by industry because of its involvement in the development of the code and because government and industry are viewed as partners,

rather than adversaries. Concerns about self-regulation regimes exist, however, including: the potential loss of government control over recognizing and enforcing non-compliance; reduced understanding over time in government regional offices of "in-the-field" issues; the potential for economic factors to outweigh environmental considerations; and, reduced public acceptance of the programme.

Other stewardship practice codes involving reliance on trade associations to self-regulate their member companies have been promulgated by regulations in B.C. dealing with matters such as post-consumer paints, solvents and other residual products.

Industry Framework Approach

The Responsible Care Programme, which was developed by the Canadian Chemical Producers Association (CCPA), is the best example of a purely industry-driven voluntary code (see Appendix 'B' for more detail on this Voluntary Initiative). The programme is based on a system of principles and rules designed to improve the safe and environmentally sound management of chemicals throughout their life cycles. The purpose of the Responsible Care Programme is to demonstrate that the chemical industry can voluntarily implement effective measures for managing chemicals, products and processes.

More than 70 chemical companies participate in the programme, which is a condition of CCPA membership. Companies participating in the programme must submit to regular compliance verification through a process that involves industry experts, public and community representatives. The CCPA makes monitoring results public, and the programme is subject to regular reviews and revisions. Adherence to Responsible Care codes requires companies to be in compliance with all statutory requirements; however, membership is not a guarantee by the CCPA that companies are in compliance with environmental regulations and other government requirements.

Among the benefits of Responsible Care that the CCPA has noted are reductions in legal claims and reduced delays in regulatory application proceedings.

Recently, the Responsible Care Programme has taken steps to implement a system of independent audits or verifications of management systems and performance measures.

(3) Voluntary Challenge Programmes

The Accelerated Reduction/Elimination of Toxics (ARET) Programme is a good example of a government voluntary challenge programme. The ARET Programme sets emission reduction goals for specific toxic substances, then "challenges" industry to join the programme and achieve the goals.

The ARET Programme was initiated in the early 1990s as a multi-stakeholder committee composed of government, industry, environmental, labour, health and other sector representatives. Environmental and labour groups eventually withdrew from ARET for a variety of reasons, including the need to use regulations, as well as industry's reluctance to agree to phase out the production and use of persistent toxic substances, rather than just reduce emissions of these substances (see Appendix 'B' for more detail on this Voluntary Initiative).

The ARET Programme is currently undergoing its first formal evaluation, with the results of the evaluation not expected until mid-1999. Environmental groups have pointed to problems in the verification of industry data reported to ARET. The dispute over the "virtual elimination" of persistent toxic substances versus the "reduction" in use of these substances remains unresolved, even though ARET is generally regarded as a success due to the results achieved to date.

(4) Environmental Management Measures

Industry is increasingly undertaking two additional types of voluntary compliance measurement initiatives: environmental audits; and, environmental management systems. The legal and financial reasons for these efforts include: (1) fear of corporate and personal liability for environmental clean-up and compensation; (2) the need to establish a defence of due diligence to possible prosecutions; and, (3) the requirement by lending institutions of an environmental audit and/or the implementation of an environmental management system as a condition precedent for financing.

Governments have encouraged environmental management measures by industry to complement their enforcement efforts, and as a partial substitute for reduced government inspections. The challenge for governments has been to establish an appropriate balance between creating incentives for industry to pursue environmental management measures and allowing government access to company information sufficient to determine whether or not compliance with regulations is occurring.

Environmental Audits

According to Environment Canada's enforcement and compliance policy, environmental audits are defined as internal evaluations by companies to verify their compliance with legal requirements, as well as their own internal policies and standards. Environmental audits are conducted on a voluntary basis and identify compliance problems, weaknesses in management systems, or areas of risk.

Industry has argued that the use of company environmental audit information in criminal or civil actions inhibits industry willingness to undertake audits. Governments have tended to respond to this concern by ensuring an audit's confidentiality when a corporation meets certain auditing criteria. Federal government policy in Canada attempts to: encourage the use of environmental

audits; stress their use as environmental management tools; assure the regulated community that inspectors will not request environmental audit reports as part of routine inspections; and promise to demand them only under the authority of a search warrant.

There are conflicting views on the effect, if any, that the federal government's policy and comparable provincial policies will have on the willingness of companies to conduct environmental audits and the ability of governments to measure compliance performance or to undertake enforcement actions. There do not appear to be any empirical studies to date that support either set of arguments.

Nova Scotia is the only province that has enacted legislation promoting the use of environmental audits. The *Environment Act (1995)* mitigates the consequences of non-compliance with the statute if the person responsible for the problem voluntarily provides the environment department with information obtained through an environmental audit. This incentive does not apply if the department becomes independently aware of the non-compliance before receiving the information from the person. It remains to be seen whether or not this statutory reform will encourage the regulated community to undertake environmental audits and disclose the results.

Environmental Management Systems

There are many different definitions of "Environmental Management Systems." The International Organization for Standardization (ISO) defines an EMS as "that part of the overall management system which includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy." Legal reasons that have been offered for why a company should adopt an EMS include: reduced liability and associated costs; reduced legal costs for permitting and compliance management; fewer fines and penalties; and the ability to demonstrate reasonable care or due diligence. Surveys of Canadian industry in 1994 and 1996 indicate that 60 per cent of survey respondents had an EMS, with smaller percentages reporting either having all of the ISO 14001 key components, or intending to seek ISO registration (see Appendix 'B' for a more detailed description of the ISO 14000 series).

The standards in the ISO 14000 series are not legally binding; however, governments, such as British Columbia, have stressed that for companies seeking to prevent and remediate pollution, it is important to increase awareness of the importance of an EMS, as specified in the ISO 14000 series.

While EMS' are intended to be voluntary, they may also be imposed under court orders. An Alberta court set an international precedent in 1996 by ordering a chemical company to complete the ISO 14000 EMS specification programme and to provide a copy of the ISO 14000 certificate to the Alberta environment authority. The company was ordered to post a letter of credit for \$40,000 to the province, which sum would be forfeited if the company did not achieve ISO

14000 certification within the specified timeframe. The company was also encouraged to join Responsible Care.

A concern of some ENGOs about EMS' is the potential for resource-constrained environmental regulatory agencies to decide to conduct less frequent inspections of companies that have implemented an EMS, such as ISO 14000. The fear is that EMS' will be viewed as a form of self-regulation, and that governments will lose the ability to verify compliance with regulations. Whether or not such scenarios will occur remains to be seen.

Conclusion

The overall conclusion reached by Castrilli about existing voluntary regimes in Canada is that they lack a sound legal and policy framework, as well as effective monitoring, reporting, measurable and verifiable goals, and a clear definition of the role of the public in the process of negotiating voluntary agreements.

5.0 Recent Studies

This section documents recent studies of Voluntary Initiatives and notes the conclusions reached by Pollution Probe in surveying this literature. It should be emphasized that there is still a relatively small research base on Voluntary Initiatives, although information is beginning to accumulate in Canada and internationally. More research and evaluation will be needed before a clear picture of the role of Voluntary Initiatives in the overall environmental policy framework can be established with confidence.

Table 1 lists some of the Canadian reports on Voluntary Initiatives that Pollution Probe encountered during the conduct of this study.

TABLE 1 - Recent Canadian Reports on Voluntary Initiatives

<u>Author/Source</u>	<u>Report Title</u>	<u>Date</u>
Leiss, William; Van Nijnatten, Debra and Darier, Eric (Queen's University)	Lessons Learned from ARET; A Qualitative Survey of Perceptions of Stakeholders	1996 (June)
Davies, Ann (KPMG Peat Marwick Thorne)	Canadian Environmental Management Survey	1996
Granek, Fred (Ontario Ministry of the Environment)	Ontario's Progress in Pollution Prevention	1997 (June)
Griss, Paul (New Directions Group)	Criteria and Principles for the Use of Voluntary or Non-Regulatory Initiatives to Achieve Environmental Policy Objectives	1997 (Nov.)

Webb, Kernaghan (Industry Canada)	Voluntary Codes: A Guide for Their Development And Use	1998 (Mar.)
Krahn, Peter (Environment Canada)	Enforcement vs. Voluntary Compliance	1998 (Mar.)
Moffet, John and Saxe, Dianne (Commission for Environmental Cooperation)	Voluntary Measures to Ensure Environmental Compliance	1998 (Mar.)
Legwork Environmental (for Industry Canada)	Voluntary and Non-Regulatory Initiatives (draft report)	1998 (Mar.)
Guthrie, Brian and Gagnon, Natalie (Conference Board of Canada, for Natural Resources Canada)	Framework Report: Incentives/Disincentives for Voluntary Action	1998 (June)
Kerr, Robert; Cosby, Aaron: and Yachnin, Ron (International Institute for Sustainable Development)	Beyond Regulation: Exporters and Voluntary Environmental Measures	1998
Moffet, John and Bregna, Francois (Resource Futures International)	An Overview of Issues With Respect to Voluntary Environmental Agreements	1998 (Aug.)
Guthrie, Brian; Yachnin, Ron; Gagnon, Natalie; and Griss, Paul (Conference Board of Canada/Paul Griss)	Foundation Paper: The Enhanced Voluntary Issue Table of the National Climate Change Process	1998 (Nov.)
Guthrie, Brian and Yachnin, Ron (Conference Board of Canada)	Innovators in Environmental Action Forum	1998 (Dec.)
Guthrie, Brian; Yachnin, Ron; Campfens, Jan and Gagnon, Natalie (Conference Board of Canada)	Case Studies in Voluntary and Non-Regulatory Environmental Initiatives	1998 (Dec.)
Webb, Kernaghan (Industry Canada)	Voluntary Initiatives and the Law	1998
Castrilli, Joseph (Consultant)	Legal Aspects of Voluntary Compliance Measures In Canada	1999
Harrison, Kathryn (University of British Columbia)	Talking with the Donkey: Cooperative Approaches to Environmental Protection)	1999
Gibson, Robert (Editor) (University of Waterloo)	Voluntary Initiatives and the New Politics of Corporate Greening	1999

There are many international studies and reports on Voluntary Initiatives that can also help

provide insight into Canadian initiatives. Coverage of all of these documents is beyond the scope of this study; however, particular note is made of the following reports:

TABLE 2 - Recent International Reports on Voluntary Initiatives

<u>Author/Source</u>	<u>Report Title</u>	<u>Date</u>
European Environment Agency	Report on Voluntary Agreements	1997
United Nations Environment Programme (UNEP)	Voluntary Industry Codes of Conduct for the Environment (Technical Report No. 40)	1998
UNEP (Industry and Environment quarterly review -- double issue)	Voluntary Initiatives: Improving Environmental Performance and Helping Achieve Sustainability	1998 (June)
Borkey, P. (Centre for Industrial Economics, Paris)	Negotiated Agreements for Environmental Protection in Europe, Japan and the USA (Paper presented at Nov. '98 workshop in Brussels)	1998
Gunningham, N. And Grabosky, P. (Clarendon Press, Oxford)	Smart Regulation: Designing Environmental Policy	1998

Collectively, the Canadian and international studies on Voluntary Initiatives convey the image of an evolving global environmental management regime, albeit one that is in the early stages of development. The literature suggests a major thrust towards developing an environmental management approach that will accommodate the globalization of markets for goods and services in the context of more open trade and greater international competition, while trying to get industry to maintain high standards of environmental performance and public accountability. The role of industry leaders assumes great importance in this regard, coupled with the development of tools to promote more widespread industry adherence to acceptable environmental standards and norms (e.g.; Environmental Management Systems, such as ISO 14000 and EMAS). The IISD report, "Beyond Regulation: Exporters and Voluntary Environmental Measures" contains useful information on the trade and competitiveness aspects of Voluntary Initiatives.

In Canada, the studies and communications around Voluntary Initiatives show efforts by governments and industry to promote the virtues of such initiatives, although there is an absence of adequate evaluations and independent assessments. ENGOs tend to characterize Voluntary Initiatives as failures, or as contrary to good public policy and possibly even illegal. The different views have been influenced by disagreements about budget cuts to environment ministries, regulatory streamlining and deregulation, and concerns about the overpromotion of Voluntary Initiatives in general. There are few in-depth case studies of Voluntary Initiatives and very little policy analysis, although several studies on the legal aspects and issues related to Voluntary Initiatives have been done (see Webb, Castrilli and Gibson).

Despite the debate that is occurring around the appropriateness and performance of Voluntary Initiatives in Canada, a number of government attempts to provide policy support for Voluntary Initiatives have been made or are under development. These include the issuance in March 1998 by Industry Canada and the federal Treasury Board Secretariat of "Voluntary Codes: A Guide for Their Development and Use." The Guide opens by noting that, "Voluntary codes represent an innovative approach to addressing the concerns and needs of consumers, workers and citizens while at the same time helping Canadian companies to be more competitive. In essence, they are codes of practice that set benchmarks for behaviour in the marketplace."

In Ontario, Voluntary Initiatives have been encouraged by the Government. Recently, a new voluntary programme called, "Recognizing and Encouraging Voluntary Agreements (REVA)/Performance Plus" has completed its comment period on the Environmental Bill of Rights Registry. REVA/Performance Plus is a programme intended to give industry leaders recognition and incentives for environmental performance beyond existing regulatory requirements. This programme proposal was developed jointly by the Canadian Chemical Producers Association (CCPA) and the Ontario Ministry of the Environment. It builds upon an existing MOU between the CCPA and the Ontario Ministry of the Environment.

At the federal government level, The Honourable Christine Stewart, Minister of the Environment, has stated publicly that she will issue policy guidelines supporting the increased use and accountability of Voluntary Initiatives. The guidelines will draw heavily upon the work of the New Directions Group (NDG), a body of senior industry and ENGO representatives that in November 1998 produced a document titled, "Criteria and Principles for the Use of Voluntary or Non-Regulatory Initiatives to Achieve Environmental Policy Objectives." (See Appendix 'A'.) The NDG principles have been endorsed by the CCPA and are currently guiding negotiations between the federal government and the CCPA on the renewal of their MOU on Responsible Care.

Canadian policy developments supporting Voluntary Initiatives parallel, and to some extent lag, similar developments within UNEP and in Europe and the United States. In response to the Earth Summit held in Rio de Janeiro (1992), the international community called upon industry to adopt and report on voluntary codes of conduct. In 1998, UNEP Technical Report No. 40 was published, titled, "Voluntary Industry Codes of Conduct for the Environment." The UNEP report identifies five critical aspects and seventeen key ingredients of an effective voluntary industry code of conduct. The report notes that voluntary industry codes of conduct cannot be effective without a sound governmental regulatory and policy framework, as well as public involvement.

The European Commission (EC) has become actively engaged in promoting the use of Environmental Agreements and has issued guidelines to this effect. The EC recognizes that an effective policy aimed at sustainable development needs to rely on a balanced mix of instruments. As noted earlier in this report, voluntary approaches to the EC's environmental policy include the Eco-management and Audit Scheme (EMAS), the Community Eco-label

Award Scheme, and Environmental Agreements, which are broadly defined as voluntary agreements between industry and public authorities on the achievement of environmental objectives. These agreements can be binding, in the form of contracts, or non-binding informal agreements. In light of certain disappointing experiences in the past, European Union member states have started to shift from informal to more formal agreements.

Because of concerns about “free-riders”, Environmental Agreements are seen to be appropriate only if the large majority of companies in a given sector participate. Quantified performance targets are being promoted in preference to “best effort” clauses, and penalties for non-performance are being stressed. Finally, due to the recognition that self-regulation by industry leads to reduced legal certainty, the European Parliament has highlighted the importance of “adequate control bodies with democratic legitimacy.”

The European Union (EU) experience with Voluntary Initiatives tends towards government-industry negotiated agreements. The 300 negotiated agreements in the EU hides a very uneven distribution. Germany and the Netherlands account for nearly two-thirds of the agreements. In Germany, the agreements are non-binding since the Constitution does not allow the government to sign negotiated agreements.

Dutch covenants are binding contracts that are tightly linked to the permit system. They constitute the key instrument of Dutch environmental policy as defined by the National Environmental Policy Plan (1989) and NEPP Plus (1990). These plans set quantitative pollution abatement targets for more than two hundred substances. As of 1996, one hundred and seven covenants were in force in the Netherlands, covering all major polluting industries. The government is generally unwilling to sign a covenant with an industry sector unless at least 50 per cent of the sector is covered in the agreement. The covenant with the chemical industry is one of the pioneering agreements. Today, the participation rate of chemical firms in the covenant is 91 per cent. Companies not included in a covenant or whose environmental plans are repeatedly rejected by the permit authorities are subject to stricter requirements than those included in and abiding by the covenant. It is not clear how strictly the Netherlands Government deals with companies that sign covenants but do not meet their targets. The comment has been made that in this circumstance, the approach is to discuss the situation with the company, rather than to go into an enforcement mode [personal communication with Gordon Lloyd, CCPA].

All member states of the EU have shown an increasing use of negotiated agreements since the early 1990s. Industry and energy are by far the most important sectors of economic activity in which negotiated agreements are in use. Almost one-third of negotiated agreements in the EU are in the chemical industry.

The Organization for Economic Cooperation and Development (OECD) has studied voluntary agreements and is currently conducting further studies. The OECD has stated that there is a lack of *ex post* assessment of Voluntary Agreements, to a large extent due to their recent history.

Some scepticism among analysts and public authorities about Voluntary Agreements' desirability is appearing because of the lack of data on their effectiveness. A recent study by the European Environment Agency that compares voluntary agreements to the results that might be expected if regulations had been used states that, "no conclusions on the environmental effectiveness (evaluation of the agreement against the 'counterfactual' or business as usual situation) of the agreements could be drawn, although some wider environmental benefits could be detected."

A major OECD study on voluntary agreements is under way and expected to be completed by mid-1999. The objectives of the study are to:

- obtain a perspective on voluntary approaches/agreements representative of OECD countries;
- obtain a perspective on the role of voluntary approaches/agreements in the context of environmental policy;
- identify and analyse implementation issues, on the basis of concrete cases;
- assess the outcome and effectiveness of voluntary approaches/agreements in case studies, and the influencing factors; and
- draw practical and policy-oriented conclusions.

The European Environmental Bureau (EEB), which is a federation of 126 environmental citizens' organizations primarily within the European Union, gave its careful and conditional support to the EC's framework for Environmental Agreements (1996). This support was based on the awareness that, in some cases, legislation would not do a better job than an agreement with an industrial sector "provided the authorities set the targets and timetables, and identify monitoring systems and evaluation moments, and that transparency is guaranteed." The Secretary General of the EEB has noted, however, that "On the European level, it is difficult nowadays to envisage well-functioning Environmental Agreements. The decision-making procedures in the European Union do not easily lead to clear-cut, uncompromised targets and timetables. Public involvement in implementation is hard to envisage, and there are no sanctions to keep participating companies from free-riding." It was further noted that, "The case has been made that if targets and timetables for an Environmental Agreement are not fixed, business will try to relieve the pressure."

Voluntary Initiatives in the United States tend to be predominantly schemes in which participating firms agree to environmental standards set unilaterally by public authorities, usually at the federal level. Borkey has noted that more than two-thirds of U.S. voluntary approaches are "public voluntary programmes" of this nature. Negotiated agreements in the U.S. are primarily used to enhance the scope and efficacy of individual laws on air, water, waste and toxic

emissions. They are therefore mainly perceived as possible complements to existing legislation.

U.S. Voluntary Initiatives can be seen as an attempt by the Environmental Protection Agency (EPA) to reform environmental regulation. They were devised in response to complaints from the business community about the growing detail and complexity of federal pollution laws (see Borkey article). Negotiations between firms, public authorities and ENGOs in U.S. Voluntary Initiatives, such as Project XL and the Common Sense Initiative (CSI), concentrate on two aspects: the environmental target to be met by companies, and the regulatory relief that the EPA will grant to participating firms. The major difference between U.S. and European agreements is that whereas negotiated agreements substitute for traditional regulation in Europe, the U.S. initiatives are designed as a complement to regulation, with the objective of improving regulation rather than substituting for it. The U.S. trade-off is to simplify regulations in turn for improved commitments to environmental performance.

The U.S. Congress has not given the EPA the authority to provide firms with relief from existing laws and regulations. This has led to sub-optimal outcomes, according to Borkey, with projects not developing their full potential for regulatory and organizational innovations. This has limited participation rates in Voluntary Initiatives, such as Project XL, in which only seven companies have joined. Another consequence has been the need for the EPA to achieve some degree of consensus on Voluntary Initiatives with industries and their trade associations. Each participant (including ENGOs) thus has a potential veto power, which sometimes leads to large transaction costs. This problem mainly explains the CSI's failure to attract a significant number of projects, and to the EPA's dismissal in 1996 of two CSI participants. As a result, four years after the EPA implemented the CSI, none of the initiative's efforts have translated into regulatory change

The relatively lesser success of negotiated agreements in the U.S. compared to European agreements mainly derives from the limited discretionary powers of the EPA, combined with the adversarial tradition in U.S. environmental policy making. Sufficient incentives are not available to be offered to participating firms, both in terms of the threat of regulation and the promise of regulatory relief. Thus, U.S. negotiated agreements are used mostly as complements to existing regulations.

The literature on Voluntary Initiatives in Canada and internationally notes that the main industry motivator for these initiatives is a desire to avoid or obviate the burden and liability associated with regulations (see Davies and Krahn). It is also clear that industry, by and large, is not yet willing to accept binding performance targets and, to a lesser extent, independent verification, monitoring and reporting as trade-offs to regulations, viewing these obligations as equivalent to regulations, if not even more onerous. On the other hand, governments in Canada have not been willing to accept substantive obligations, such as granting regulatory relief, in return for industry commitments. The country in which industry has come closest to making these trade-offs is the Netherlands, with its covenant approach. European ENGOs have a generally positive view of the Dutch covenants. Canadian ENGOs have shown some interest in this approach. Industry in

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Canada, however, has so far reacted negatively to proposals to introduce the covenant approach, due, in part, to disageement that the Dutch covenants are, in fact, "binding" in the same sense that this term applies to regulations in Canada [personal communication, Gordon Lloyd, CCPA].

6.0 Key Policy Issues

Governments, industry, environmental/non-profit groups and community members -- referred to in this report as "stakeholders" -- all have concerns about Voluntary Initiatives. These range from government concerns about the level and quality of industry participation, free riders, verification of monitoring data/reports and accountability for performance, to industry concerns about flexibility, regulatory stability, cost-effectiveness and public recognition, to environmental group and community concerns about goal-setting, access to information, transparency of voluntary processes and capacity to participate effectively and equitably. These and other key issues are outlined below. It should be noted that some of the same concerns and issues exist about the efficacy of the regulatory approach (see letter by Jean Belanger in the Responsible Care write-up in Appendix 'B').

The identification of issues drew upon the New Directions Group document *Criteria and Principles for the Use of Voluntary or Non-regulatory Initiatives to Achieve Environmental Policy Objectives (November 1997)*, supplemented by issues identified in Pollution Probe's review of Voluntary Initiatives literature and interviews with a range of stakeholders.

The issues are organized by stakeholder group, but it should be noted that each group shares some of the concerns of the other groups, to greater or lesser degrees. The questions included with the issues illustrate some of the major concerns of stakeholders, rather than a complete list of questions that arise under each issue. As will be seen later in the report, many of the policy issues identified below do not show up frequently in practice.

Public Interest Issues (ENGOS and Communities)

- P1: Appropriateness -- Is a voluntary initiative an effective way to achieve the desired results? Do all relevant stakeholders agree that a voluntary initiative is appropriate?
- P2: Goal-setting -- Who proposes or leads the voluntary initiative and how are key stakeholders identified and brought into the goal-setting process? Is there a "social consensus" around the goals and the process?
- P3: Role of government -- What role should governments play in voluntary programmes and initiatives? Should governments lead these initiatives by setting targets and establishing incentives and penalties for participation and performance, or should governments be just another stakeholder? Should governments promote widespread Voluntary Initiatives in the absence of a supporting guiding policy framework?

- P4: Potential for collusion -- Do voluntary agreements negotiated between governments and industry create opportunities and pressures for collusion and regulatory capture by industry?
- P5: Transparency -- How can open access to information and transparency of process be assured in voluntary initiatives?
- P6: Level of commitment -- At what levels are governments and industry making commitments to Voluntary Initiatives(e.g.; Minister and CEO level)?

Public Policy Issues (Governments):

- G1: Participation criteria -- What criteria should be used to determine whether or not to accept the participation of facilities/companies in voluntary agreements?
- G2: Level of participation -- What level of recruitment of facilities/companies in an industry sector is needed to establish the credibility of the voluntary initiative (50%, 75%, 100%)?
- G3: Free riders -- What measures can be taken to address the problem of free riders in a sectoral voluntary initiative? How can small and medium sized companies be effectively engaged in voluntary initiatives? Should regulation of non-participants be a standard feature of voluntary initiatives?
- G4: Performance -- What is the meaning of "beyond compliance"? Will voluntary agreements accomplish greater overall environmental protection than the regulatory approach?
- G5: Regulatory/financial backstops -- How can regulatory and/or financial backstops be integrated into voluntary agreements and triggered when participants fail to meet performance objectives?
- G6: Administrative burden -- Will Voluntary Initiatives create ad-hoc administrative practices that are more resource intensive and costly to manage than current practices?
- G7: Regulatory capture -- Will Voluntary Initiatives result in governments effectively losing their coercive authority over industry, or will it add to their coercive authority?
- G8: Regulatory framework -- What policy, legislative and regulatory structures are needed to support successful voluntary initiatives?
- G9: Bargaining power -- Do governments have sufficient expertise and resources to adequately participate in a broad range of voluntary agreement negotiations?

- G10: Innovation -- Will Voluntary Initiatives foster environmental protection innovations by industry, or will they tend to entrench the status quo?
- G11: Investment -- Will the voluntary approach draw industry investment to Canada, or will it create uncertainty and inhibit investment?

Industry Issues:

- I1: Flexibility -- How can Voluntary Initiatives permit flexibility to allow for innovative solutions that achieve other industry goals beyond environmental protection?
- I2: Incentives for participation -- What motivates participation in voluntary initiatives? What "differentiates" a company that participates from one that does not?
- I3: Incentives for performance -- What incentives are available to recognize and reward performance?
- I4: Regulatory stability -- What assurance is there that a company engaged in a voluntary initiative will not be subject to new regulatory requirements before the initiative is completed?
- I5: Verification -- How can confidential information be protected while still maintaining publicly credible monitoring and reporting, as well as transparency of the voluntary initiative process?
- I6: Level playing field -- How can all competitors in a given industry sector be treated equitably as part of a voluntary initiative? And how can equity between sectors be maintained?
- I7: Cost-effectiveness -- How can both economic and environmental performance be enhanced through voluntary initiatives?
- I8: Opting out -- What are the consequences of opting out of a voluntary initiative if unforeseen company or industry-specific problems arise?

The policy issues identified in this section were used in the following section to examine close to forty Canadian Voluntary Initiatives.

7.0 Canadian Voluntary Initiatives

Appendix 'B' contains descriptions of a range of Voluntary Initiatives in Canada, including both

conservation and environmental initiatives. The approach used in this study was to assess a large number of Voluntary Initiatives in sufficient depth to allow broad conclusions to be reached about factors that lead to credible and effective initiatives. This approach has been useful from a policy perspective, which is the main focus of this report. There is still a great amount to be learned from more in-depth case studies of Voluntary Initiatives. Pollution Probe strongly supports the need for further research in this area.

The main policy issues and lessons learned from examining the environmental Voluntary Initiatives contained in Appendix 'B' are summarized in Table 3 below: The Company-Specific Initiatives and the Biodiversity/Habitat Conservation Initiatives are not included in Table 3, but are examined in the Policy Analysis section of this report for lessons learned that can be applied to environmental Voluntary Initiatives.

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Responsible Care (chemical)</p> <p>[Industry Initiative]</p>	<p>Initiated in 1985.</p> <p>Motivated by "events", such as Love Canal (late 1970s), Mississauga train derailment (1979), and Bhopal, India (1984).</p> <p>A Canadian chemical industry initiative that has spread to 42 countries and now accounts for 86% of the world's chemical production.</p> <p>Acknowledged as the leading industry voluntary code of practice in the world.</p> <p>Aims at creating a "cultural shift" within the industry (i.e.; ethical and behavioural change) and at spreading this ethic to customers, suppliers and allied industries.</p>	<p>P2 and P5 Goal-setting and Transparency: A National Responsible Care Advisory Panel of public interest and community representatives reviews and provides advice on Responsible Care. Member companies have set up local community advisory processes.</p> <p>P3 Role of Government: Responsible Care has for most of its existence been industry driven, with no governmental guiding policy framework. There is, however, an Environment Canada-CCPA MOU on Responsible Care that is up for renewal. Current indications are that the government is seeking additional targets and commitments before renewing the MOU. Thus, some aspects of Responsible Care may become more like a joint government-industry initiative.</p> <p>P6 Level of Commitment: The ongoing pressure from the CCPA to keep senior management involved in leadership groups is considered essential to the success of Responsible Care.</p> <p>G2 Level of Participation: The very high level of company (and country) participation is a major strength and is helping set a benchmark for participation by other industry sectors in their Voluntary Initiatives. Membership in the CCPA requires participation in Responsible Care.</p> <p>G4 Performance: Annual publicly available reports on emissions and five year projections show significant and continuous improvement.</p> <p>G10 Innovation: Responsible Care has developed a more ambitious emissions reporting system than the National Pollutant Reporting Inventory and is developing an independent verification programme. It is also using senior management participation (i.e.; Responsible Care Leadership Groups) to achieve peer pressure for environmental improvement.</p> <p>I5 Verification: The major weakness of Responsible Care in terms of public credibility relates to the need for independent or third party verification of results achieved. The CCPA, however, has shown leadership in developing the verification process, and further progress is expected on this issue.</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Whitehorse Mining Initiative (WMI) (mining)</p> <p>[Industry Initiative]</p>	<p>Initiated in 1994.</p> <p>The WMI broke the traditional government-industry approach to mining by introducing a multi-stakeholder approach to addressing the economic, environmental and social aspects in an integrated way.</p> <p>Despite signing a Leadership Council Accord in September 1994, the WMI lost momentum and has still not issued a report on the integration of its principles and recommendations in the operations of participating companies.</p>	<p>P2 Level of Commitment: After the Accord was signed, various federal and provincial advisory committees were set up, as well as a federal interdepartmental implementation committee. These committees dissolved after only a few short meetings due largely to a shift in government policy and direction (see P3).</p> <p>P3 Role of Government: By the mid-1990s, government environmental policy in Canada shifted rapidly towards cutbacks, regulatory streamlining and Voluntary Initiatives by industry. The mining industry developed a "keep mining in Canada" public campaign that focussed on regulatory downsizing. This alienated conservation and environmental groups and undermined the WMI.</p> <p>G1 Participation: Participation in the WMI is low, especially by junior mining companies and some major companies. These companies appear to respond only to regulations and legal codes.</p> <p>G4 Performance: No assessment done.</p> <p>I5 Verification: The WMI is primarily a policy statement, or "vision". It lacks a formal mechanism to engage the mining industry. The recommendation of the Mines Ministers' meeting that governments establish a tracking and reporting procedure to monitor company accomplishments was not adopted.</p>
<p>Environmental Profile Data Sheet (EPDS) (Pulp and Paper)</p> <p>[Industry Initiative]</p>	<p>Initiated in 1998.</p> <p>The EPDS developed out of a marketplace demand for environmental information on products, including life cycle impacts.</p> <p>It is the first initiative of its kind in the world and should be studied as it is implemented to see if multi-stakeholder involvement, independent audit, etc., lead to good performance.</p>	<p>P2 Goal-setting: A multi-stakeholder group was involved in the development of the EPDS.</p> <p>Performance: Too early to assess.</p> <p>I3 Incentives for Performance: Since the EPDS is a market instrument, the principal incentives for performance are the demands of commercial customers and the need to keep pace with competitors.</p> <p>I5 Verification: An independent auditor (currently TerraChoice) verifies the EPDS, which is only valid for one year in order to maximize the relevancy of the data.</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Canadian Polystyrene Recycling Association (CPRA) (Plastics)</p> <p>[Industry Initiative]</p>	<p>The CPRA was established in 1989, at the historical height of public concern about the environment. It was formed in response to significant public and government pressure on the industry to establish a recycling capacity, especially for the disposable foam cup.</p> <p>When CPRA was established, it was an unusual organization, combining a typical industry association with a recycling business, which was established and managed by CPRA staff.</p> <p>In 1998, CPRA members decided to wind down its communications activities and focus solely on the recycling operation, believing that public and government concern about recycling polystyrene products had virtually disappeared.</p>	<p>G2 Level of Participation: Although the recycling operation has performed better than expected financially, CPRA membership fees remain high, while membership has gradually declined in concert with decreasing public concern and government pressure.</p> <p>G3 Free Riders & I6 Level Playing Field: The free rider problem has been significant. Several large polystyrene resin suppliers and converters have not supported the CPRA, thus limiting the ability of the recycling operation to expand both within and external to Ontario. The CPRA has repeatedly tried to solve this problem, without success. Government action would be needed to solve the free rider problem.</p> <p>G4 Performance: Performed well initially when industry motivation was strong due to public concern and a regulatory threat, but lost momentum when these driving forces weakened.</p> <p>I7 Cost-effectiveness: In the mid-90s, municipal governments in Ontario began to lower landfill disposal fees, and private waste haulage firms began to consolidate and reduce management options. This became an economic disincentive for food packaging generators.</p> <p>P3 Role of Government: The absence of enforceable regulatory measures supporting recycling over disposal has undermined efforts to maintain and expand recycling capacity.</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Environmental Commitment and Responsibility Programme (Electricity)</p> <p>[Industry Initiative]</p>	<p>Initiated in 1999?</p> <p>Introduced in response to major changes in the industry, including: deregulation, the emergence of competitive electricity markets and the introduction of new, less-polluting technologies.</p> <p>The programme requires every participant to implement an environmental management system (EMS) consistent with ISO 14000 by the year 2002.</p> <p>The programme includes a Public Advisory Panel composed of a broad range of stakeholders.</p>	<p>G2 Level of Participation: Participation in the ECR Programme will be required for membership in the Canadian Electricity Association. In order to help smaller utilities cope with the requirements, they will be allowed more time to comply, and they are not obligated to achieve full registration of their EMS programmes.</p> <p>G4 Performance: This is a new programme, and it is not yet clear what performance measures and verification requirements will be set.</p>
<p>ForestCare (Forestry)</p> <p>[Industry Initiative]</p>	<p>Initiated in 1990.</p> <p>The Alberta Forest Products Association (AFPA) was the first industry association in Canada to establish, implement and formally audit Codes of Practice.</p> <p>ForestCare audits are conducted by experienced AFPA company auditors or by qualified independent consultants. Independent community observers are invited to participate in every audit.</p>	<p>P2 Goal-setting: The Codes of Practice were developed with input from a range of stakeholders, including aboriginal peoples.</p> <p>P6 Level of Commitment: ForestCare has been accepted by the senior person responsible for Alberta operations of each participating member company.</p> <p>G4 Performance: [Data on performance to be added.]</p> <p>I1 Flexibility: The AFPA is committed to conduct a major re-evaluation of ForestCare every year. As a result, new issues have been identified and changes made to the programme to encourage continual improvement (which has proven to be very important for some of the smaller companies).</p> <p>I2 Incentives for Participation: All new AFPA members since January 1995 must become signatories to ForestCare.</p> <p>I5 Verification: Independent community observers on audits have commented favourably on the professionalism of the audit teams.</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Accelerated Reduction / Elimination of Toxics (ARET) (Industry) [Government Initiative]</p>	<p>Initiated in 1994.</p> <p>The ARET programme grew from an initiative of the New Directions Group, an independent network of corporate executives and ENGO leaders.</p> <p>In September 1993, environmental and labour representatives withdrew from the ARET committee over disagreements about the reduction versus the elimination of targeted substances, the need to use regulations, the absence of workplace safety concerns, and the lack of government leadership.</p> <p>After NGO withdrawal, the remaining industry and government participants continued on to develop ARET into a Voluntary Initiative that focused on reducing pollutant discharges.</p> <p>ARET is one of the highest profile non-regulatory environmental initiatives in Canada.</p>	<p>P2 Goal-setting: The original multi-stakeholder ARET Committee agreed on criteria for defining toxicity and on a list of target substances, but did not agree on the means by which to address toxic emissions. Today, five years after the first ARET challenge was issued, the renewal of ARET is under consideration. A key issue is whether or not ENGOs and labour will participate in the renewal process, and, if so, under which terms and conditions.</p> <p>P3 & P6 Role of Government & Level of Commitment: For the first five years of ARET, Environment Canada has been the main support agency of the federal government, although it only gives ARET minor resource support and limited policy support. Given the generally high performance of ARET and its contribution to government, environmental and economic goals, the question of broader government support to a renewed ARET should be considered, including more visible policy support and guidance. In addition, greater provincial support for a renewed ARET should also be secured.</p> <p>I5 Verification: Achievements on progress are reported in ARET Environmental Leadership reports; however, the absence of consistent yardsticks to measure or estimate emissions is widely viewed as a weakness.</p> <p>G2 Level of Participation: More than 50 per cent of the eligible plants had joined ARET by 1995 (i.e.: 278 plants according to the ARET Secretariat, 1997). This makes ARET one of the more ambitious government challenge programmes. There is still scope for increasing participation by recruiting new companies.</p> <p>G3 Free Riders: Given the success of most companies participating in ARET, more attention should be paid to "free-riders" (i.e.: companies that don't join ARET and don't perform to the same standards as ARET participants, as well as ARET participants that are not performing but are getting the benefits of being seen to be part of ARET).</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Accelerated Reduction / Elimination of Toxics (ARET) (Industry)</p> <p>[Government Initiative]</p> <p>continued</p>		<p>G4 Performance: To date, discharges of ARET substances have been reduced by almost 50 per cent relative to base year levels (including a 60 per cent reduction in the 30 highest priority substances. The programme objective of reducing overall emissions by 50 per cent by the year 2000 will be exceeded, but the 90 per cent reduction target for the highest priority substances will not be met.</p> <p>I2 & I3 Incentives for Participation & Performance: The first round of ARET achieved a reasonable participation rate and good performance. A renewed ARET faces greater challenges since motivated companies already tend to participate and since these companies may have made the relatively easy reductions (i.e.; the "low-hanging" fruit).</p>
<p>Ontario Smog Plan (Smog Pollutants)</p> <p>[Government Initiative]</p>	<p>Initiated in 1998.</p> <p>The Smog Plan has been billed by the Ontario Government as a voluntary, multi-stakeholder, partnership initiative, but it is linked to regulatory initiatives, such as the mandatory Vehicle Inspection and Maintenance programme, that have been developed outside of the Smog Plan process.</p> <p>To date, the Smog Plan has not been signed onto by any health or environment groups.</p>	<p>P1 Appropriateness: Many of the measures required to control smog pollutants are mandatory in nature (e.g.; vehicle inspection and maintenance; low sulphur gasoline). These do not fit well with a cooperative, multi-stakeholder process and should be implemented in separate policy/regulatory processes.</p> <p>P2 Goal-setting: Industry members of the Smog Plan process do not accept accountability for the reduction targets set, preferring to call them "Ministry of the Environment targets." ENGOs don't believe the targets and timetables are stringent enough. Most of the industry sector targets were developed and agreed to by governments and industry as part of the 1990 CCME NOx/VOCs Management Plan (Phases I and II).</p> <p>P3 Role of Government: The Ontario Ministry of the Environment (MOE) is playing multiple roles and causing confusion with its core regulatory role. Can the Ministry be a facilitator, partner and regulator simultaneously?</p> <p>P6 Level of Commitment: The Smog Plan only has the backing and participation of the MOE, despite the need for other Ministries to implement parts of the Smog Plan.</p> <p>G4 Performance: Too early to assess.</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>R-2000 HOME Programme (Energy)</p> <p>[Government Initiative]</p>	<p>The programme was created in 1982, and has ranged from being very successful (when large subsidies were available) to financially unsustainable.</p> <p>R-2000 has very well developed quality assurance, quality assurance audit and certification audit procedures.</p> <p>The direct benefits (i.e.; energy savings from the registered R-2000 homes) are much less important than the indirect benefits that such a programme has had on increasing the minimum energy efficiency provisions contained in provincial building codes.</p>	<p>P2 Goal-setting: The programme has not been financially sustainable in the past few years and revitalization of the programme is needed. A public consultation process has been held to help define new goals and directions.</p> <p>G4 Performance: This programme is a clear example of a voluntary initiative that results in the construction of that are more efficient than is required by the building code.</p> <p>Product innovation and techniques have also been introduced in residential construction because of R-2000.</p> <p>I5 Verification: Independent quality assurance and verification procedures are very well developed.</p>
<p>Energy Innovators / Energy Innovators Plus (Energy)</p> <p>[Government Initiative]</p>	<p>NR Can's Energy Innovators, established in 1992, encourages companies in the commercial and institutional sectors to make energy investments to reduce operating costs and limit greenhouse gas emissions.</p> <p>Energy Innovators Plus, launched in April 1998, is aimed at increasing partnerships with associations to engage entire market sectors. It is providing funding to energy efficient pilot projects.</p>	<p>P6 Level of Commitment: The establishment of the Office of Energy Efficiency to implement and operate activities has increased the government's commitment to meeting its Kyoto targets to reduce greenhouse gases. Since 1990, spending on efficiency and alternative energy programmes has steadily increased.</p> <p>G4 Performance: Performance and recruitment targets have been set and achieved for the Energy Innovators Initiative. Performance information on the achievements of energy efficiency is made available to the public.</p> <p>I2 Incentives for Participation: Energy Innovators provides resource materials, support services and access to a national network of energy efficiency allies to participants. Energy Innovators Plus provides funding for pilot projects.</p> <p>I5 Verification: Both Energy Innovators and Energy Innovator Plus pilot projects will be subject to Innovator Audits to estimate energy use. Further development on the accuracy of the estimates is still required.</p> <p>I7 Cost-effectiveness: The basis for the development of Energy Innovators / Energy Innovators Plus is to find innovative ways to reduce the use of energy, while saving money.</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Ontario Environmental Farm Plan Programme (EFP) (Agriculture)</p> <p>[Government Initiative]</p>	<p>Initiated in 1992.</p> <p>EFPs are documents voluntarily prepared by farm families to raise awareness of the environment on their farms.</p>	<p>P2 Goal-setting: EFPs are prepared by farm families themselves.</p> <p>G2 Level of Participation: Since its inception, close to 14,000 farm families, managing an estimated 3.7 million acres of Ontario crop land, have actively participated in the programme.</p> <p>I3 Incentives for Performance: The EFP incentive provides up to \$1,500 per farm business to help farmers implement environmental solutions or new management practices. About 200 EFP workshops are delivered every year across Ontario.</p>
<p>Great Lakes Remedial Action Plans (RAPs) (Clean-up / Restoration)</p> <p>[Government Initiative]</p>	<p>Initiated in 1987.</p> <p>RAPs are directed towards restoring full beneficial uses of Great Lakes rivers, bays, harbours and ports.</p> <p>RAPs themselves are not Voluntary Initiatives, but provide the impetus for a range of local Voluntary Initiatives.</p> <p>RAPs stimulate a strong level of local community support.</p>	<p>P1 Appropriateness: Since harbours, bays, etc., are faced with multi-jurisdictional issues and often competing industrial and community interests, a multi-partite cooperative approach is the best way to proceed with restoration.</p> <p>P2 Goal-setting: Remediation goals are set by the stakeholders, with significant public input.</p> <p>P3 Role of Government: Local Voluntary Initiatives depend for their sustainability on government financial and technical support. Provincial funding cutbacks and financial constraints risk undermining the momentum of these initiatives.</p> <p>P6 Level of Commitment: Because of government cut-backs, RAPs may shift towards being more community-based initiatives with local industry support (e.g.; Hamilton Harbour RAP), or they may wither and die due to lack of commitment and funding.</p> <p>I2 & I3 Incentives for Participation & Performance: Local industries have often volunteered to assist with remediation to demonstrate good corporate citizenship and to avoid potential environmental litigation. The shift towards non-point and non-industry sources of pollution has created further obstacles to progress unless additional incentives are provided.</p> <p>G4 Performance: To date, only Collingwood Harbour has been de-listed as an Area of Concern in Canada.</p> <p>G11 Investment: Many communities hope that remediation will lead to revitalization of their waterfronts and investment in re-development.</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Fraser Basin Management Board (FBMB) (Multi-jurisdictional)</p> <p>[Government Initiative]</p>	<p>The Fraser Basin was created in 1992 to assist with the protection of the Fraser Basin (i.e.; the fifth largest drainage basin in Canada).</p> <p>This initiative is the first time that four levels of government (i.e.; including First Nations) have joined together in a consensus-based process to manage a large area.</p> <p>Because of the wide variety of communities in the Basin, it works from the "bottom up" rather than the "top-down".</p>	<p>P2 Goal-setting: Community-based multi-stakeholder goal-setting is a major feature of the Council. Twenty-five specific goals and 28 actions, in which to achieve these goals, are clearly laid-out in the Council's 1998 Five Year Action Plan.</p> <p>P3 Role of Government: Four levels of government participate in the ongoing development of the activities of the Council.</p> <p>P5 Transparency: Open, inclusive processes and communications are critical to the success of achieving sustainability in the Fraser Basin. Community stewardship and easy access to the decision making process is encouraged to enable residents to take action to protect, restore and enhance the local environment.</p> <p>G10 Innovation: The development of the Fraser Basin Management Programme was innovative in its approach to ensure that the ecosystem would be maintained. The interests of all the stakeholders being represented at the table ensured that there was considerable buy-in into actions leading to sustainability and lead to increased accountability and progress towards shared decision making.</p> <p>I5 Verification: The Board's commitment to achieving a sustainable Basin, called on the need to monitor and verify results of the actions laid out. Monitoring included looking at the quality of ground water, pulp effluents, employment, salmon fisheries, education levels and economic diversification. The rolling Five Year Action Plan will also monitor and assess the progress towards a sustainable Basin.</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Pollution Prevention Memorandums of Understanding (MOUs) (Autos, Auto Parts, Metal Finishing, Printing & Graphics and Dry Cleaning)</p> <p>[Joint Government / Industry Initiative]</p>	<p>The Great Lakes Pollution Prevention Voluntary Agreement (i.e.; MOUs) were initiated as part of the federal government Green Plan (1991).</p> <p>The MOUs were negotiated between governments and industry with no ENGO or public input, but with provision for comments prior to finalizing the MOUs.</p>	<p>P2 Goal-setting: The MOUs to date have been government-industry initiatives with no public or ENGO input in their negotiation or implementation, but public comment periods have been included prior to finalization of the MOUs.</p> <p>P3 Role of Government: Governments initiated, responded to and participated in MOU negotiations as a means to promote the concepts of pollution prevention and voluntary approaches. The MOUs recognize that existing legislation and regulations will not be compromised by the agreements.</p> <p>P5 Transparency: Annual reports are issued for MOUs, but there is still no role for ENGO and public input into the management and implementation of the MOUs.</p> <p>G4 Performance: The MOUs appear to have succeeded in achieving significant reductions of pollutants in relatively cost-effective ways, but no independent assessments have been done. MOUs have target substances, but do not have specific pollutant target reductions and timetables.</p> <p>G5 Regulatory/Financial Backstops: There are no direct consequences to industry of not meeting performance expectations.</p> <p>I1 Flexibility: The MOUs give maximum flexibility to industry to achieve pollutant reductions.</p> <p>I5 Verification: Annual reports are prepared on MOU achievements, but there is no independent audit or third party verification of results.</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Fraser Basin Management Board (FBMB) (Multi-jurisdictional)</p> <p>[Government Initiative]</p>	<p>The Fraser Basin was created in 1992 to assist with the protection of the Fraser Basin (i.e.; the fifth largest drainage basin in Canada).</p> <p>This initiative is the first time that four levels of government (i.e.; including First Nations) have joined together in a consensus-based process to manage a large area.</p> <p>Because of the wide variety of communities in the Basin, it works from the "bottom up" rather than the "top-down".</p>	<p>P2 Goal-setting: Community-based multi-stakeholder goal-setting is a major feature of the Council. Twenty-five specific goals and 28 actions, in which to achieve these goals, are clearly laid-out in the Council's 1998 Five Year Action Plan.</p> <p>P3 Role of Government: Four levels of government participate in the ongoing development of the activities of the Council.</p> <p>P5 Transparency: Open, inclusive processes and communications are critical to the success of achieving sustainability in the Fraser Basin. Community stewardship and easy access to the decision making process is encouraged to enable residents to take action to protect, restore and enhance the local environment.</p> <p>G10 Innovation: The development of the Fraser Basin Management Programme was innovative in its approach to ensure that the ecosystem would be maintained. The interests of all the stakeholders being represented at the table ensured that there was considerable buy-in into actions leading to sustainability and lead to increased accountability and progress towards shared decision making.</p> <p>I5 Verification: The Board's commitment to achieving a sustainable Basin, called on the need to monitor and verify results of the actions laid out. Monitoring included looking at the quality of ground water, pulp effluents, employment, salmon fisheries, education levels and economic diversification. The rolling Five Year Action Plan will also monitor and assess the progress towards a sustainable Basin.</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Pollution Prevention Memorandums of Understanding (MOUs) (Autos, Auto Parts, Metal Finishing, Printing & Graphics and Dry Cleaning)</p> <p>[Joint Government / Industry Initiative]</p>	<p>The Great Lakes Pollution Prevention Voluntary Agreement (i.e.; MOUs) were initiated as part of the federal government Green Plan (1991).</p> <p>The MOUs were negotiated between governments and industry with no ENGO or public input, but with provision for comments prior to finalizing the MOUs.</p>	<p>P2 Goal-setting: The MOUs to date have been government-industry initiatives with no public or ENGO input in their negotiation or implementation, but public comment periods have been included prior to finalization of the MOUs.</p> <p>P3 Role of Government: Governments initiated, responded to and participated in MOU negotiations as a means to promote the concepts of pollution prevention and voluntary approaches. The MOUs recognize that existing legislation and regulations will not be compromised by the agreements.</p> <p>P5 Transparency: Annual reports are issued for MOUs, but there is still no role for ENGO and public input into the management and implementation of the MOUs.</p> <p>G4 Performance: The MOUs appear to have succeeded in achieving significant reductions of pollutants in relatively cost-effective ways, but no independent assessments have been done. MOUs have target substances, but do not have specific pollutant target reductions and timetables.</p> <p>G5 Regulatory/Financial Backstops: There are no direct consequences to industry of not meeting performance expectations.</p> <p>I1 Flexibility: The MOUs give maximum flexibility to industry to achieve pollutant reductions.</p> <p>I5 Verification: Annual reports are prepared on MOU achievements, but there is no independent audit or third party verification of results.</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Dofasco's Environmental Management Agreement (EMA) (steel)</p> <p>[Joint Government / Industry Initiative]</p>	<p>Initiated in 1997.</p> <p>The Dofasco Agreement is the first of its kind in Canada as a negotiated agreement between the provincial and federal governments and one company. Other MOUs in Canada are typically among governments and industry sectors.</p> <p>The Dofasco Agreement has set reductions for specified pollutants that go beyond existing regulatory requirements. Generally, Canadian MOUs do not include targets and timelines.</p>	<p>P5 Transparency: The negotiation of the agreement did not include community and environmental input, but the EMA was posted on the Environmental Bill of Rights registry for public comments. ENGOs have criticized the agreement for the lack of public involvement in the negotiation phase.</p> <p>G2 Level of Participation: This is a company-specific agreement that does not have any linkages to commitments by other companies in the steel sector.</p> <p>G4 Performance: Too early to assess.</p> <p>I1 Flexibility: The agreement allows for the consolidation and streamlining of existing Certificates of Approval and increased operational flexibility to phase-in plant improvements. Dofasco claims that this will increase the likelihood of new capital investments.</p> <p>I5 Verification: The Agreement does not require third-party auditors to monitor or assess performance. ENGOs have criticized the lack of independent verification and legal accountability of the agreement, as well as the lack of clearly specified roles for third parties.</p>
<p>Hamilton District Autobody Repair Association Partnership (HARA) (Autobody Repair)</p> <p>[Joint Government / Industry Initiative]</p> <p>[Note - check with MOE for accuracy.]</p>	<p>Initiated in 1995 as a HARA/MOE partnership agreement.</p> <p>This is an example of self-management by small businesses that have traditionally been very difficult to monitor and control with conventional regulations.</p> <p>The leadership and enthusiasm of key individuals in the industry has been a major driving force for progress.</p> <p>Discussions are under way between the Collision Industry Standards Council of Ontario and the Insurance Bureau of Canada to develop a proposal for the accreditation of collision repair and auto refinish shops in Ontario. Legislation has been proposed to require these shops to be licensed and to meet specific environmental standards. Thus, the programme may become mandatory across Canada.</p>	<p>P1 Appropriateness: This is an example of a Voluntary Initiative that is leading towards a proposed self-regulation (i.e.; the Autobody Repair, Registration, Inspection & Verification (ARRIV) programme).</p> <p>P3 Role of Government: The role of the government in setting objectives and providing oversight will be critical to protecting the public interest.</p> <p>G4 Performance: Too early to assess.</p> <p>I2 & I3 Incentives for Participation and Performance: Auto refinish facilities that meet environmental standards will be accredited and will receive certain benefits, such as preferred referrals by insurers and insurance-based funds to refinish vehicles.</p> <p>I6 Level Playing Field: The proposed legislation will make the programme mandatory across Canada.</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Corporations in Support of Recycling and the Ontario Blue Box Programme (Recycling)</p> <p>[Joint Government / Industry Initiative]</p>	<p>Initiated in 1986.</p> <p>The Ontario Blue Box system of boxes, bags, styles of promotion and level of participation far exceeds curbside recycling initiatives by other provinces across Canada.</p> <p>The Blue Box programme made a transition from a voluntary community-driven initiative to a programme mandated by the province.</p>	<p>P1 Appropriateness: Proponents of refillable soft-drink systems believe that recycling systems precluded the widespread use of a refillable system in Ontario.</p> <p>G2 Level of Participation: The creation of an industry-funded organization to promote recycling allowed the Blue Box programme to extend across the province and achieve high public participation rates.</p> <p>G3 Free Riders: Since Blue Box funding support was provided by the Ontario Soft Drink Association and provincial and municipal governments. Many small soft drink companies did not pay into the system. The principal free riders, however, are the non soft drink packagers, such as glass and can packagers.</p> <p>G4 Performance: Ontario has among the highest rates of recycling in the world.</p>
<p>Canadian Industry Programme for Energy Conservation (CIPEC)</p> <p>(Energy)</p> <p>[Joint Government / Industry Initiative]</p>	<p>CIPEC was created in 1975 in response to the OPEC oil crisis.</p> <p>Statistics Canada developed survey and reporting formats for CIPEC and collects and publishes the data gathered.</p> <p>The programme has evolved through three distinct management phases since 1975.</p> <p>CIPEC is not well known by the general public and ENGOs.</p>	<p>P2 Goal Setting: Each of the 21 Task Force Working Groups establishes specific energy performance targets for their sectors.</p> <p>G2 Level of Participation: More than 3,000 companies currently participate in CIPEC (indirectly through their industry associations). Statistics Canada's annual CIPEC surveys cover 85-90 per cent of manufacturing and mining activity in Canada.</p> <p>G4 Performance: In Phase I of CIPEC, from 1975 to 1990, more than 700 companies representing about 70 per cent of industrial energy use participated and accomplished a 26.1 per cent overall reduction in energy use per unit of production (i.e.; an average of 1.5 per cent per annum).</p> <p>I5 Verification: The use of Statistics Canada expertise and survey forms ensures a high degree of consistency of data collection.</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Voluntary Challenge and Registry (VCR) (Greenhouse Gases)</p> <p>[Joint Government/ Industry Initiative]</p>	<p>Initiated in 1995.</p> <p>The VCR is Canada's major response to the National Action Programme on Climate Change.</p> <p>The VCR has focussed its efforts on "recruiting" as many companies as possible, but has not imposed any performance requirements.</p>	<p>P3 Role of Government: The Pembina Institute has criticized the federal government for not creating meaningful incentives for industry to participate in the VCR, for offering little technical support, and for not setting standards to ensure the performance and credibility of action taken by VCR participants.</p> <p>G2 Level of Participation: The VCR has successfully recruited more than 870 organizations representing more than 75 per cent of Canada's industrial greenhouse gas emissions.</p> <p>G4 Performance: The Pembina Institute's evaluation of the VCR indicates that the majority of companies have not adopted even basic "framework actions" necessary to reduce greenhouse gas emissions.</p> <p>I2 & I3 Incentives for Performance & Participation: The VCR, in its current state, does not build in sufficient incentives to ensure meaningful participation and high levels of performance.</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Alberta's Flare Gas Initiative (Oil and Gas)</p> <p>[Joint Government and Industry Initiative]</p>	<p>Initiated in 1998.</p> <p>Led by the Clean Air Strategic Alliance (CASA), which is a multi-stakeholder, non-profit alliance with a mandate to formulate public policy and regulatory proposals to the Government of Alberta. CASA works on a consensus model.</p> <p>Nearly all the recommendations of the project team assigned to the flare gas issue either have been carried out, or are in the process of being implemented. The government of Alberta altered many regulations not directly related to flaring in order to cost-effectively reduce the volume of flared gas in the province. Several government agencies worked closely together to coordinate their policies and regulations related to the environment, health, deregulation of electrical generation, distribution, and use, royalty policy, etc.</p>	<p>P1 Appropriateness: The citizens' Oil and Gas Council of Alberta has challenged the Government of Alberta's decision to let the oil and gas industry self-regulate on a voluntary basis, due to the "disproportionate advantage of the oil and gas industry."</p> <p>P5 Transparency: The Project Team within CASA recommended changes to the approval process to enhance public consultation with respect to flaring facilities. It also operates in an open, multi-stakeholder, consensus based approach.</p> <p>P6 Level of Commitment: CASA's Board of Directors is made up of senior executives from eight industry sectors, five government agencies, and five provincial NGOs. The president of the organization is the Deputy Minister of Energy, supported by two vice presidents representing the Canadian Association Petroleum Producers, and the Pembina Institute (an environmental advocacy and consultancy group). CASA and the project team for gas flaring have made considerable contributions to changes in gas flaring practices.</p> <p>I1 Flexibility: Technological advancement gives companies the flexibility required to reduce gas flaring. In addition, regulations require that companies assess the options available to them for the capture of natural gas.</p> <p>I7 Cost-effectiveness: Economic options using available technologies can reduce total volumes of solution gas flared by about 30%. Solution gas flaring might be reduced economically by an additional 30% depending on the effectiveness of evolving micro-turbine technology for electricity generation.</p> <p>The high cost of dealing with flare gas concerns (potentially hundreds of millions of dollars) made flexibility and cost-effectiveness key industry concerns.</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Emery Creek Environmental Association Industrial Community Partnership (Industrial Pollution Prevention)</p> <p>[Joint Government/ Industry Initiative]</p>	<p>The Emery Creek initiative was formed in 1993 as a result of public concerns expressed during an environmental assessment process for a storm water quality pond.</p> <p>The Association is predominantly composed of local industry representatives.</p> <p>The main focus of the Association has been on education.</p> <p>The Association has been recognized internationally as an innovative industrially based pollution prevention initiative.</p>	<p>P3 Role of Government: The local businesses believe that government financial and technical support should be provided to help sustain the initiative. The Ontario Ministry of the Environment and Environment Canada consider this to be an industry-based initiative, which should receive minimal government funding. Ontario has provided technical assistance in pollution prevention, whereas Environment Canada has provided small amounts of funding support.</p> <p>G2 Level of Participation: Innovative companies and companies with a sense of environmental stewardship may already have joined the Association (i.e.; about 100 companies out of 3,000 located in the watershed). It is becoming challenging to get new companies to join and to retain existing members.</p> <p>G4 Performance: Measuring the success of the initiatives is a challenge. To date, water quality improvements have been difficult to measure. There are, however, several success stories at local industries.</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Canadian Standards Association's Sustainable Forest Management System (Forestry)</p> <p>[Third Party Initiative]</p>	<p>Initiated in 1996.</p> <p>Canada is the first country to have independently established national standards for the registration of a Sustainable Forest Management System.</p> <p>The CSA standard is a merger of an ISO 14000 compatible EMS with elements of the criteria and indicators developed by the Canadian Council of Forest Ministers. Unlike conventional EMS', the CSA standards address the "scope of area" in which the system is intended to perform.</p> <p>The CSA standard is relatively new and no SFMS registrations have yet occurred in Canada.</p>	<p>P2 Goal-setting: The SFMS standards were developed in a consensus-oriented process. Draft standards were released for public review. Pilot audits were undertaken to test the standards, and a technical committee reviewed the results.</p> <p>P3 Role of Government: Budget reductions to wildlife agencies across Canada will result in gaps in wildlife/biodiversity information that will weaken the ability to implement an appropriate registration system. Forest companies and conservation NGOs, such as Wildlife Habitat Canada, are trying to fill these gaps, but may fall short.</p> <p>P5 Transparency: The public has access to all relevant information as defined by the company, including audits.</p> <p>G2 Level of Participation: A recent survey found that 15 major forest products companies were implementing the CSA standards, but many of the companies were initially implementing the standards on only one of their woodlands divisions in order to gain experience.</p> <p>G4 Performance: Too early to assess.</p> <p>I6 Level Playing Field: There is some concern by industry about the clarity of the standards and their interpretation. A CSA Technical Committee exists that is responsible for official interpretations of the standard. To date, 48 interpretations have been approved. There is also concern about having a level playing field internationally.</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Pollution Probe's MOU for Mercury Reduction / Elimination in Hospitals (Mercury)</p> <p>[Third Party Initiative]</p>	<p>Initiated in 1996.</p> <p>The mercury MOU is unique in Canada since it was initiated by an ENGO and developed in cooperation with hospitals and the federal and provincial governments.</p> <p>As a result of the initial MOU with three hospitals, a number of hospitals have formed the Ontario Mercury Health Care Steering Committee to promote the implementation and reduction of mercury-containing products in the health care sector.</p>	<p>P1 Appropriateness: Mercury is a powerful neurotoxin, which arguably should be banned for unnecessary uses, rather than subject to voluntary elimination and reduction initiatives.</p> <p>G2 Level of Participation: There are hundreds of hospitals in Ontario and across Canada. To date, only a handful of MOU signatories have been obtained, which is not likely sufficient to stimulate widespread behavioural change and establish markets for alternative products.</p> <p>G4 Performance: To date, only five hospitals have signed mercury MOUs.</p> <p>G8 Regulatory Framework: Despite numerous Acts and regulations pertaining to mercury, they have not been effective in preventing mercury pollution since many of them focus on emission controls and not on preventative mechanisms.</p>

VOLUNTARY INITIATIVE	NOTEWORTHY FEATURES	KEY POLICY ISSUES - LESSONS LEARNED
<p>Forest Stewardship Council's Certification Programme (FSC) (Forestry)</p> <p>[Third Party Initiative]</p>	<p>The FSC is an international, independent, non-profit, non-governmental organization established in 1993.</p> <p>The FSC's mission is to promote environmentally appropriate, socially beneficial and economically viable management of the world's forests.</p> <p>The FSC is the only global system for the certification of forest products.</p> <p>The FSC is decentralized in order to encourage local involvement in the development of national or regional standards, yet international principles and criteria provide a consistent framework for worldwide certification.</p>	<p>G4 Performance: It is too early to comment on the FSC's performance in Canada, since there have been very few certifications to date.</p> <p>I1 Flexibility: Since the standards that will be set can be regional, there is an opportunity to customize the standards for unique situations.</p> <p>I3 Incentives for Performance: The FSC provides a consumer-visible eco-label which certifies that the product has met the performance standards.</p> <p>I5 Verification: The FSC is based on performance standards that are measurable, auditable and specific to the eco-region where they are being applied. The FSC has multiple stakeholders and is thus not controlled by any single sector.</p>

8.0 Policy Analysis

This section of the report is divided into two parts -- an analysis of conservation Voluntary Initiatives and an analysis of environmental Voluntary Initiatives. The analysis draws upon the research and interviews on specific Voluntary Initiatives done for this study over the past year (see Appendix 'B'), as well as the information obtained from various studies and reports that were acquired during the course of the study. The analysis of conservation initiatives was done to help provide insights into the issues that arise with environmental initiatives, which are the main focus of this report. A comparison of conservation and environmental Voluntary Initiatives is made at the end of this section of the report in order to identify lessons learned that can help improve the credibility and effectiveness of environmental initiatives.

8.1 Conservation Voluntary Initiatives

Voluntary programmes to support wildlife and habitat conservation are prolific across Canada. Most programmes engage a combination of government, industry, landowners, recreational users (such as birdwatchers and hunters), commercial users (such as trappers and fishers), conservation NGOs and individuals in a partnership approach to achieving conservation objectives. This section looks at some of the factors that contribute to the level of support enjoyed by voluntary conservation programmes, which provide some parallels to the environmental protection arena. It also identifies some of the challenges to making existing and new voluntary conservation

programmes even more effective.

Understanding the level of volunteer support for conservation requires an appreciation of the history of the conservation movement in North America. Its roots extend back to the late 1800s when concerns arising from the over-exploitation of wildlife (e.g.; bison, passenger pigeon) and timber led to the enactment of conservation laws and to the founding of many conservation organizations that still exist today, such as the National Audubon Society, the Sierra Club, and the Canadian Forestry Association. In fact, the governments of Canada, the United States and Newfoundland first met in 1909 to discuss international cooperation in the conservation of wildlife, lands and waters. The "stewardship ethic" in conservation has since become ingrained in North American society and is the principal driving force behind most voluntary conservation programmes.

Some of the reasons why voluntary programmes in conservation are extensively used include:

- the limited, shared or unclear responsibilities for natural resources of government agencies, which makes it difficult to impose a rigid "command and control" approach on resource management;
- the fact that most land in Canada is owned by the Crown in trust for Canadians and thus land use and resource planning must meet the needs of a wide range of users and interests;
- some of the more acute conservation problems occur in regions where land is primarily owned privately (e.g.; the agricultural landscape) and thus a cooperative approach with landowners is required to secure progress;
- many natural resources are used for recreational (e.g.; hunting and fishing) or commercial (e.g.; trapping, ecotourism) purposes by individuals who see benefit in maintaining the resources they use for the future and are willing to contribute to that cause;
- conservation NGOs have long understood the stewardship ethic and have chosen to embrace a partnership rather than a confrontational approach in securing progress.

A general overview of each of these issues will be provided to establish the context for voluntary conservation programmes and will be followed by some preliminary observations on the challenges faced by proponents of such initiatives.

Limited Government Authority

Authority over natural resources is limited, shared or uncertain in Canada. Protecting migratory species, for example, is a federal responsibility that can only be done effectively in partnership

with the provinces, countries along the migratory route and landowners (e.g.; North American Waterfowl Management Plan). At the provincial level, natural resources agencies may come into internal conflict as they often have the responsibility for both protecting and exploiting resources (e.g.; housing wildlife and forestry under the same minister) or they may come into conflict with more powerful agencies (e.g.; agriculture departments). In some cases, responsibility for protecting wildlife and habitat may be shared among several agencies within a government (e.g.; wildlife and parks departments). Finally, most natural resource agencies evolved to manage species with commercial or recreational value and often lack the resources or expertise needed to address the much larger range of species associated with the concept of biodiversity conservation, the vast majority of which fall outside of those categories. In order to be effective, natural resources departments - and in particular wildlife agencies - have developed a range of "soft" approaches, such as partnerships and voluntary programmes, to attempt to share and/or leverage expertise and resources from other sources and have employed influence rather than power in the pursuit of conservation objectives.

Operating on Crown Land

Most land in Canada is owned by the Crown and is managed on behalf of all Canadians by governments. This is associated with an active role for government in natural resources management planning. The result is that those who wish to use natural resources - from forest products companies to anglers - must work with provincial or territorial governments in the pursuit of their activity. Such an arrangement lends itself to partnerships and voluntary programmes as both the user and the government benefit from improvements to the resource no matter how that improvement is achieved.

While the nature of the roles and responsibilities of the Crown and users varies among provinces, one thing that is constant is the desire of users to demonstrate to the public whose resources they are using that they are responsible stewards. The Ontario Forest Industries Association has a Code of Forest Practice that is binding upon members, the Alberta Forest Products Association has an audit programme called ForestCare and the Mining Association of Canada spearheaded the Whitehorse Mining Initiative to find common ground with environmental and aboriginal groups on a range of topical issues. Whale watching enterprises in eastern Canada are currently developing a code of ethics for their operators. Anglers, hunters and trappers conduct similar, although less structured, initiatives. Through education programmes, habitat protection initiatives, "catch and release" programmes and other activities - not the least of which is fund-raising - these users demonstrate their concern for the future of the public resources on which they depend.

Importance of Private Land and Landowners

The majority of endangered species or habitats are located in areas of Canada where land ownership is primarily private. On Crown lands, governments have a clear option - create a park

or protected area. Governments have ultimate control over the activities that take place upon the land or within the habitats of the species of concern. On private lands, however, these options are not easily available, although zoning and land use restrictions influence activities in some areas.

As it is difficult to force landowners to take the requested action more creative approaches need to be encouraged. A further consideration on private land is that landowners, through their management actions, provide or destroy ecological services to society. This can include conserving wildlife or protecting watersheds, which provide benefits to a wide range of people but for which the landowner may receive little or no compensation for his or her efforts.

The focus of numerous habitat conservation programmes is on educating private landowners on the importance of the wildlife and habitats on their lands and on soliciting their cooperation in conserving them and supporting their efforts (e.g.; Operation Burrowing Owl, Ontario's WWW Demonstration Project). As a result, an important characteristic of voluntary conservation programmes is their reliance on face-to-face interaction with landowners, with institutions generally in the background.

A Tradition of Voluntarism

Activities such as birdwatching, hiking and canoeing are some of the most popular recreational activities in North America. Millions of North Americans also hunt and fish recreationally. All of these activities depend on healthy and abundant natural resources and participants have proven time and again their willingness to contribute volunteer time, effort and funds in support of conservation objectives. These voluntary programmes tend to be informal and result from the initiatives of individuals or groups at a local level. They can include restocking lakes with fish, providing nesting platforms for waterfowl or birdhouses for bluebirds, and participating in programmes such as Christmas Bird Counts or Project Feederwatch. People may also serve as volunteer "wardens" or as interpreters for a protected area. Participating individuals and groups get to indulge in their favourite recreational activity while contributing to the conservation of the resources on which their activity depends. Voluntary programmes that capitalize on this commitment (e.g.; Ontario's Wildlife Watchers) can complement limited government resources for research and monitoring of wildlife populations.

Conservation NGOs

As stated, many of Canada's largest conservation organizations can trace their roots back fifty years or more. These groups also tend to be funded and supported by people with an active interest in conservation (naturalists, birdwatchers, landowners, hunters and anglers). The orientation of the groups and the individuals who comprise them are intertwined. A confrontation mentality has never dominated the conservation movement whose historic orientation has been pragmatic and focused on partnerships and cooperation. This approach

translates into widespread public support. Canada's six largest conservation organizations (Ducks Unlimited, Canadian Wildlife Federation, Canadian Nature Federation, World Wildlife Fund, Nature Conservancy of Canada and Wildlife Habitat Canada) raise close to \$100 million in annual revenues and have a combined membership and donor base of well over 250,000 Canadians.

Challenges to Voluntary Conservation Programmes

Despite the proliferation of voluntary programmes in conservation, they are not without challenges. Three of the key issues faced by proponents of voluntary programmes in conservation are:

- overcoming the conflicting signals that may be sent by others that might compromise conservation objectives;
- providing tangible benefits to participants rather than relying on altruism, and nurturing existing partnerships or developing new ones in the face of growing polarization within the conservation movement; and
- demonstrating the success or failure of voluntary conservation programmes.

Removing Economic Barriers and Disincentives

Voluntary action can be impeded by other programmes that unintentionally conspire against conservation objectives, especially those with financial implications. Until recently, for example, a gift of land for conservation purposes did not qualify for the same federal tax treatment as a gift of an object to a museum. Private woodlots in southern Ontario used to be taxed on their development potential meaning that owners often had to cut trees simply to pay the taxes. Subsidies can also be a problem as is the case when one agency rewards farmers for bringing more land into production while another is trying to get farmers to not operate on marginal lands. As long as there is no comparable benefit to the partner of taking the requested action for conservation (see below), these disincentives can often be an insurmountable obstacle to securing progress. In recent years, the conservation movement has had some success in removing such barriers (e.g.; the aforementioned changes to the federal tax laws and the establishment of conservation easements in Alberta).

Providing Economic Benefits to Partners

The benefits of participating in voluntary conservation programmes are indirect. Landowners and volunteers are rarely compensated for their time and expenses. Proponents of such programmes rely on the willingness of participants to cooperate. Problems occur when this imposes costs, particularly on those with an economic stake in the conservation activity to be

undertaken. Whether on private or public land, but particularly on private land, those who are the custodians of natural resources through ownership or tenure arrangements are expected to maintain public goods or services at private expense. In the case of a forest products company, this may have competitiveness implications as companies operating in other provinces or countries may not be subject to the same requirements and costs. And on private lands, the costs are borne directly by the landowner who may not have the capacity to absorb them. As has been shown in the case of fiscal signals, landowners can even be penalized for doing the right thing. Along with removing disincentives, there is a need to reward landowners in a more tangible way for taking the necessary steps to conserve the natural resources under their stewardship.

Dealing With Increasing Polarization

Recent years have seen an increase in the number of individuals and groups who are demanding stronger action to protect Canada's wildlife and wild lands. Canada's ratification of the Global Convention on Biodiversity has provided a platform upon which groups who believe that not enough is being done for conservation can argue their case. Increasingly, that case is a legal one as decisions or developments are challenged in the courts and as advocates press for stronger laws to protect wildlife and wild lands. Even groups that have a history of working in constructive partnerships have occasionally adopted these methods, which they may have shunned in the past.

No matter how warranted, some campaigns of conservation NGOs have the potential to place landowners and land users, in particular, on the defensive and in the process may compromise good initiatives taking place on the land. A case in point is the campaign for strong federal endangered species legislation. Endangered species recovery has been one of the models of the cooperative approach to conservation engaging the federal government, provincial and territorial governments, the private sector, volunteers, landowners, land users and conservation NGOs. To state that strong legislation is the only way to address the issue sends a message to partners that they are not trusted and that their efforts to date are unappreciated.

Demonstrating Performance

If there is one fundamental criticism of voluntary programmes in conservation it is that the emphasis on engaging individuals and organizations has come at the expense of setting hard performance targets for the programmes. Volunteers are recruited to the vision of saving wildlife or wild spaces with landowners and land users being exhorted to do their best towards achieving that vision. Establishing targets, timelines and verification procedures is contrary to the goodwill approach that characterizes most voluntary programmes in conservation. The rewards or consequences of performing are not usually apparent to the partner. Fortunately, due to the depth of the stewardship ethic described earlier, this is often sufficient if the partner is approached in the right way, provided with support in undertaking the requested actions, and recognized for the efforts that are made.

In the absence of more rigorous design features, though, the gains made by voluntary programmes may be illusory or transitory. For example, taking land out of agricultural production may be more feasible when there is less demand for agricultural products, but keeping the land out of production becomes a challenge when economic circumstances change.

Conclusions

The prevalence of voluntary programmes in conservation is due to the long history of such initiatives, the stewardship ethic inculcated in generations of Canadians, the ownership and tenure arrangements on high priority lands, and the limited ability of governments to invoke a "command and control" approach. These programmes are so widespread and popular that efforts to circumvent them through strong government intervention could be counterproductive. However, the primary motivator behind such programmes - the stewardship ethic - is a form of altruism and will only take programmes so far. Few partners will be willing to make long-term investments in conservation to the point at which it starts to cause them immediate harm. At the same time, they will be reluctant to have conservation requirements imposed upon them, with or without compensation. More substantive programmes will only come about when incentives can be provided to a landowner or land user that will reward (or not penalize) him or her for doing the right thing.

8.2 Environmental Voluntary Initiatives

The policy analysis of environmental Voluntary Initiatives contained in this report presents the arguments for and against such initiatives and examines some of the evidence supporting these arguments. But, as Gunningham and Grabosky have noted (see Table 2 for reference), "the very approach of couching the debate in terms of *either* regulation *or* de-regulation kindles a spurious and sterile ideological debate, which inhibits attempts to find solutions combining the best of both approaches." The either/or debate is not the focus of this study, but elements of the debate frame some of the issues for which a government policy framework is needed.

Pollution Probe's goal in this study is to make Voluntary Initiatives a credible and effective part of the Canadian environmental policy toolkit, along with regulations, economic incentives and market mechanisms. All of these tools are inter-related and seldom, if ever, operate in isolation. A flexible approach to policy making offers better prospects of improved environmental performance than rigid adherence to any single policy tool. Depending on the industry sector or company in question, there are situations in which Voluntary Initiatives might be better able to improve environmental performance than regulations or market mechanisms, and there are situations in which the reverse applies. Often, however, a mix of policy instruments might be best suited to a given situation (see Gunningham and Grabosky).

In opening this report, Pollution Probe noted that "Voluntary Initiatives can help advance environmental performance." It was also noted that there is "the potential for misuse of such

initiatives if they are not designed properly and implemented within a supportive government policy and regulatory framework.” The analysis in this section reinforces these statements by exploring key policy issues that arise in relation to Voluntary Initiatives and identifying some of the critical success factors that underlie credible and effective initiatives.

Table 4 contains a summary of some of the main arguments for and against Voluntary Initiatives encountered by Pollution Probe in the literature and through stakeholder interviews during the course of the study. These arguments frame the main elements of the “voluntary” versus “regulatory” debate that has been underway in Canada during much of the 1990s.

TABLE 4 - Arguments For and Against Voluntary Initiatives

Arguments for Voluntary Initiatives

Offer more flexibility and lead to greater innovation and enhanced performance.

More cost-effective than regulations.

Employ positive motivators, such as self-initiative and pride, rather than negative motivators, such as as regulatory coercion.

May provide a defence of due diligence when environmental problems occur, thus reducing legal liability.

Deal better with multi-jurisdictional issues (i.e.; easier to get federal-provincial and international cooperation).

Better suited to rapidly changing technologies and to pollution prevention strategies.

More environmentally conscious consumers are creating a demand for cleaner products and cleaner production processes, thus increasing industry interest in voluntary ecolabelling, etc.

Arguments Against Voluntary Initiatives

Performance not independently audited or verified.

Increase government’s administrative burden and divert scarce resources from needed regulatory measures.

Lack accountability mechanisms for both “process” and performance.

Allow governments to avoid making “hard” decisions.

Negotiated in processes that are neither open nor transparent to the public.

The public understands and supports the regulation of industry, not Voluntary Initiatives.

Create an “unlevel playing field” for industry and offer regulatory concessions not available to all industries, thus violating principles of fairness and equity.

Gibson (see Table 1 for reference) has noted that "The skeptics' [of Voluntary Initiatives] main concern ... is not that they are undesirable, but that they are being proposed and adopted as substitutes for regulation and justifications for dismantling regulatory capacity." With budget cuts to environment ministries in Canada as high as 50% over the past five years (e.g.; Ontario Ministry of the Environment), there is evidence to support concerns about the loss of regulatory capacity, but it is not clear that Voluntary Initiatives have been used as the justification for the cuts. The potential for Voluntary Initiatives to achieve environmental protection more cost-effectively and/or to achieve environmental gains beyond regulatory requirements is their main attraction from public interest and public policy perspectives.

Industry frequently makes the cost-effectiveness claim for Voluntary Initiatives. Governments tend to accept this claim, or at least do not seriously challenge it. The lack of independent evaluations that support the cost-effectiveness and performance claims for many Voluntary Initiatives, however, suggests that other motivators also drive government policy agendas. These motivators include the desire to avoid conflict with industry and, in the case of the federal government, conflict with the provinces, as well as the need for down-sized environment ministries to find ways to achieve environmental objectives in ways that are less resource-intensive than regulations and prosecution. In addition, the federal government does not have the authority to regulate in areas of provincial jurisdiction, but often delivers incentive-based voluntary programmes, such as the construction or retrofitting of buildings and houses for energy efficiency, which depend upon research, education and financial incentives.

Discussion of the findings on key policy issues and the lessons learned from the Canadian Voluntary Initiatives examined during this study are presented and discussed on the following pages.

Industry Initiatives

As noted in Section 3.0, industry initiatives are those in which industry has exclusive management responsibilities and governments have no formal role. Third parties may have advisory or indirect roles. These initiatives usually do not require major government investments of time and resources. It is reasonable to assume that industry Voluntary Initiatives are designed to be cost-effective for industry participants, but Pollution Probe did not find studies that substantiate this assumption.

Table 3 in this report contains information on six industry Voluntary Initiatives, including: Responsible Care; Whitehorse Mining Initiative (WMI); Environmental Profile Data Sheet (EPDS); Canadian Polystyrene Recycling Association (CPRA); Environmental Commitment and Responsibility Programme (ECR); and *ForestCare*. Government resource inputs to these initiatives were small, with the possible exception of the WMI.

Of the six industry Voluntary Initiatives examined by Pollution Probe, only Responsible Care has

a clear track record of performance. The WMI remains as a “vision”, with no tracking of accomplishments since the leadership Council Accord was signed in 1994. The EPDS is a new programme with some progressive features built into it, but it will be a few years before its success can be assessed. The ECR is also a new initiative that should be watched carefully as it evolves. The CPRA is suffering from waning industry support and from free rider problems. Finally, *ForestCare* seems to be working well. Public credibility of this initiative would be enhanced if an independent audit or evaluation was conducted.

One of the important features of most of the industry Voluntary Initiatives is the recruitment of participants. Responsible Care and the ECR require participants to be members of their respective Associations, as does *ForestCare* for new members since 1995. The Canadian Chemical Producers Association requires senior management involvement in Responsible Care leadership groups, and the Alberta Forest Products Association requires that *ForestCare* be accepted by the senior person responsible for the Alberta operations of each participating member company. In Pollution Probe’s view, recruitment obligations and senior level support for and engagement in Voluntary Initiatives are two of the critical success factors.

Verification of results achieved is also a key factor in achieving public recognition and credibility for any Voluntary Initiative. Responsible Care, EPDS and *ForestCare* have all paid attention to audits, measurement criteria and/or verification, and the ECR is likely to have some form of verification built into it. Most of these initiatives, however, involve internal audits or verification, although there are attempts to build in external stakeholder inputs into *ForestCare* and the ECR. The EPDS has an independent audit requirement, and Responsible Care has third party participation as part of its verification process. The president of the European Chemical Industry Council recently called for the development of independent verification systems for Responsible Care (see *Tomorrow Essentials*, March 1999 edition).

In addition to cost-effectiveness and environmental performance, the most frequent motivators for the industry Voluntary Initiatives studied were (in Pollution Probe’s view): fear of regulation or response to a crisis (Responsible Care; WMI; ECR); maintenance and/or development of consumer markets (EPDS; CPRA); and, restoration and/or enhancement of public image (Responsible Care; *ForestCare*). From an industry perspective, “doing the right thing” was also an important element in these initiatives [personal communication, Gordon Lloyd, CCPA].

Government Initiatives

These initiatives are ones in which governments have management responsibilities, including monitoring of results. Industry is likely to be consulted or involved in the design of the programme. Third parties may have advisory or indirect roles.

Table 3 contains information on seven government Voluntary Initiatives, including: Accelerated Reduction/Elimination of Toxics (ARET); Ontario Smog Plan; R-2000 HOME Programme;

Energy Innovators/Energy Innovators Plus; Ontario Farm Plan Programme (EFP); Great Lakes Remedial Action Plans (RAPs); and Fraser Basin Management Board (FBMB).

The first point to make about government initiatives is that they are generally much "broader" than industry initiatives in terms of participants, sources and pollutants. They tend to be multi-sectoral, rather than sectoral. Government initiatives often take the form of "challenges", rather than tightly managed initiatives.

The second observation about government initiatives is that, in general, they create a higher level of concern among ENGOs about the policy issues of appropriateness, goal setting and the role of government than do industry initiatives. As noted earlier in the report, ENGOs have the greatest interest in Voluntary Initiatives that involve governments in more formal roles than initiatives in which industry takes the lead and governments have minor involvement or policy interests. The ARET programme is the Voluntary Initiative that raises the largest number of policy issues of concern. The debate around these issues is amplified by ARET's high public profile and unverified reporting of substantial environmental performance. At the time of writing of this report ARET was undergoing its first independent evaluation.

If Responsible Care sets the benchmark for industry Voluntary Initiatives in Canada, ARET is equally important for government Voluntary Initiatives. The renewal of ARET will likely seek to broaden industry participation by adding new members and improving the performance of existing members. It will also need to build in better measurement/estimation of pollutant emissions, as well as independent verification of results.

The Ontario Smog Plan is a government initiative that has repeated one of the same mistakes as the VCR (see joint government/industry initiatives). It has focused on recruitment of participants over quality of participation. It also needs government policy support, both in terms of incentives to perform and the threat of regulation for non-participants and non-performing participants.

As with many other government initiatives, the Ontario Smog Plan raises policy issues around goal-setting and the role of government. The ownership of the smog pollutant reduction targets is not shared by the industry participants, who prefer to call them "Ministry of the Environment targets." ENGOs and health groups have not signed the Smog Accord, which is a statement of commitment by participants to the Smog Plan. In addition, the Ministry of the Environment is the only ministry that participates in the Smog Plan process. There is no formal commitment by other ministries to the reduction targets, despite the fact that many of the actions required to reduce smog pollutants will have to be led by these ministries. Also, questions arise as to whether or not the Ministry of the Environment can and should play multiple roles within the framework of the Smog Plan (i.e.; facilitator, partner and regulator). The role of regulator, in particular, seems to have been made secondary to the roles of facilitator and partner.

a clear track record of performance. The WMI remains as a “vision”, with no tracking of accomplishments since the leadership Council Accord was signed in 1994. The EPDS is a new programme with some progressive features built into it, but it will be a few years before its success can be assessed. The ECR is also a new initiative that should be watched carefully as it evolves. The CPRA is suffering from waning industry support and from free rider problems. Finally, *ForestCare* seems to be working well. Public credibility of this initiative would be enhanced if an independent audit or evaluation was conducted.

One of the important features of most of the industry Voluntary Initiatives is the recruitment of participants. Responsible Care and the ECR require participants to be members of their respective Associations, as does *ForestCare* for new members since 1995. The Canadian Chemical Producers Association requires senior management involvement in Responsible Care leadership groups, and the Alberta Forest Products Association requires that *ForestCare* be accepted by the senior person responsible for the Alberta operations of each participating member company. In Pollution Probe’s view, recruitment obligations and senior level support for and engagement in Voluntary Initiatives are two of the critical success factors.

Verification of results achieved is also a key factor in achieving public recognition and credibility for any Voluntary Initiative. Responsible Care, EPDS and *ForestCare* have all paid attention to audits, measurement criteria and/or verification, and the ECR is likely to have some form of verification built into it. Most of these initiatives, however, involve internal audits or verification, although there are attempts to build in external stakeholder inputs into *ForestCare* and the ECR. The EPDS has an independent audit requirement, and Responsible Care has third party participation as part of its verification process. The president of the European Chemical Industry Council recently called for the development of independent verification systems for Responsible Care (see *Tomorrow Essentials*, March 1999 edition).

In addition to cost-effectiveness and environmental performance, the most frequent motivators for the industry Voluntary Initiatives studied were (in Pollution Probe’s view): fear of regulation or response to a crisis (Responsible Care; WMI; ECR); maintenance and/or development of consumer markets (EPDS; CPRA); and, restoration and/or enhancement of public image (Responsible Care; *ForestCare*). From an industry perspective, “doing the right thing” was also an important element in these initiatives [personal communication, Gordon Lloyd, CCPA].

Government Initiatives

These initiatives are ones in which governments have management responsibilities, including monitoring of results. Industry is likely to be consulted or involved in the design of the programme. Third parties may have advisory or indirect roles.

Table 3 contains information on seven government Voluntary Initiatives, including: Accelerated Reduction/Elimination of Toxics (ARET); Ontario Smog Plan; R-2000 HOME Programme;

Energy Innovators/Energy Innovators Plus; Ontario Farm Plan Programme (EFP); Great Lakes Remedial Action Plans (RAPs); and Fraser Basin Management Board (FBMB).

The first point to make about government initiatives is that they are generally much “broader” than industry initiatives in terms of participants, sources and pollutants. They tend to be multi-sectoral, rather than sectoral. Government initiatives often take the form of “challenges”, rather than tightly managed initiatives.

The second observation about government initiatives is that, in general, they create a higher level of concern among ENGOs about the policy issues of appropriateness, goal setting and the role of government than do industry initiatives. As noted earlier in the report, ENGOs have the greatest interest in Voluntary Initiatives that involve governments in more formal roles than initiatives in which industry takes the lead and governments have minor involvement or policy interests. The ARET programme is the Voluntary Initiative that raises the largest number of policy issues of concern. The debate around these issues is amplified by ARET’s high public profile and unverified reporting of substantial environmental performance. At the time of writing of this report ARET was undergoing its first independent evaluation.

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The R-2000 Home programme is an example of a programme with exemplary goals, but serious under performance compared to initial expectations. Without incentives (i.e.; subsidies), R-2000 may face a considerable uphill battle. A new company, called EnerQuality has been formed by the Canadian Energy Efficiency Alliance and the Ontario Home Builders' Association to revitalize and manage the R-2000 programme. To achieve long-term financial viability, EnerQuality has begun to expand the range and products that it offers, manages contract research projects, is expanding its training role, and has introduced annual fees. This for-profit company may overcome the limitations of a government subsidized programme.

Energy Innovators and the subsequent enhancement to the initiative, Energy Innovators Plus, has seen a steady increase in participation levels, emission reductions, and energy cost savings since 1992. Operated by the Office of Energy Efficiency at Natural Resources Canada, these two programmes are focused primarily on providing businesses (commercial and institutional) with the information required to implement long-term management plans for energy efficiency through new technologies and retrofits. Financial options are also made available, providing economic incentives to participate. The assistance provided by Energy Innovators often allows companies to overcome the barriers to participate; however, better tracking and reporting of energy usage is still required to increase transparency and accountability.

The Ontario Environmental Farm Plan Programme (EFP) is an attempt to help farm families develop and implement their own environmental plans. It works by sharing information, raising awareness of environmental issues and providing a financial incentive to help farmers solve problems or implement new management practices. Recruitment has been high, with close to 14,000 farm families managing an estimated 3.7 million acres of Ontario crop land having participated in the programme since the first pilot project was initiated in 1993. About 200 EFP workshops are delivered each year across Ontario.

The Great Lakes Remedial Action Plans (RAPs) are directed towards restoring full beneficial uses of Great Lakes rivers, bays, harbours and ports. To date, only Collingwood Harbour has been de-listed as an Area of Concern by the International Joint Commission. Canadian RAPs, in general, are losing momentum due to provincial funding cutbacks. It remains to be seen whether or not the RAPs can shift towards more community-based initiatives with local municipal and industry support.

The Fraser Basin Management Board (FBMB) is a four-government cooperative initiative with a strong base of community involvement in goal setting. It features open and inclusive planning, consultation and communication processes. The first State of the Basin report was issued in 1995, with report cards issued in 1995 and 1996. A Charter for Sustainability was released in 1997, and the Fraser Basin Council was established to operationalize it. The Charter is a five-year plan focused on goals, actions, and implementation strategies. Because the focus is on education and involvement of the communities, accountability and transparency of established goals are higher than for other government initiatives. Taking an ecosystem approach to the

Basin also ensures that environmental, community, government and industry stakeholders all have equal voices in the negotiations.

In general, government initiatives focus on recruitment of participants and on inclusiveness of stakeholders. Targets are sometimes set, but accountability for performance is not built in, although in some cases there may be an implied threat of regulation if adequate performance is not achieved. Government initiatives tend to include a large element of education and awareness-building.

Joint Government/Industry Initiatives

Joint government-industry initiatives are ones in which government and industry co-manage the initiative, sharing responsibility for implementation and monitoring. Third parties may have indirect advisory roles.

Table 3 contains information on eight joint government/industry initiatives: Great Lakes Pollution Prevention MOUs (for example, auto manufacturing, auto parts, metal finishing, printing and graphics, dry cleaning); Dofasco's Environmental Management Agreement (EMA); the Hamilton District Autobody Repair Association (HARA); Corporations in Support of Recycling and the Ontario Blue Box Programme (CSR); the Canadian Industry Programme for Energy Conservation (CIPEC); the Voluntary Challenge and Registry (VCR); the Alberta Flare Gas Initiative (AFGI); and the Emery Creek Environmental Association Industrial Community Partnership (Emery Creek).

The evidence available to date for government/industry negotiated Voluntary Initiatives (which might best be referred to as "Voluntary Agreements") suggests that this type of initiative can be time-consuming and resource-intensive at the front end of the process. However, there is no comparative analysis of the expenditures that might have been required if a regulatory approach was used.

The industries involved in MOUs claim that significant reductions in pollutants have been achieved in cost-effective ways. For some MOUs, such as printing and graphics, only a few of the eligible companies signed the original MOU, with additional companies signing on when the MOU was renewed. There has, however, been a progressive strengthening of most of the MOUs over time, both in terms of the number of participants and the number of substances and initiatives included in the MOUs. For example, the MOU with the "Big Three" automakers in Ontario was renewed in late 1998 with strengthened commitments in the following areas: reporting of progress; inventories for additional substances not already covered by the MOU; continued outreach to suppliers and the promotion of environmental management systems; and a commitment to improved consultation with the public.

The uneven participation rate, quality of participation and performance within some of the

MOUs remain as issues. This is partly related to governmental goals and strategies for the MOUs. There has been an evolution over time within the MOUs, tending towards greater participation rates and adding more substances to be addressed. This reflects the initial priority of getting "recruitment" over achieving pollutant reductions, at least in the early stages of MOU creation. According to Ontario Ministry of the Environment officials, the logic behind recruitment as an initial priority is to bring a range of companies of varying sizes into the MOUs as a way to build awareness and introduce the pollution prevention philosophy that should lead to behavioural change and hence improved performance. If the goal of the MOUs had been to maximize pollutant reductions, then the MOUs would likely have focused initially on the larger companies and negotiated performance targets and timetables.

The MOUs have been criticized by ENGOs for their lack of public involvement, the absence of targets and timetables for pollutant reductions, the lack of consequences for not performing and perceived high administrative costs to governments in a time of resource constraints. The absence of third party audits or independent verification of performance claims has also been criticized.

The same criticisms of MOUs have been made of the Dofasco EMA, although the Dofasco agreement contains target reductions for some pollutants. As the first agreement in Canada between a single company and the federal and Ontario governments, the performance of the Dofasco EMA is likely to continue to come under ongoing scrutiny by ENGOs.

The HARA partnership is an interesting attempt at self-management by small businesses that have traditionally been difficult to monitor and control. It is a Voluntary Initiative that is leading towards a possible self-regulation arrangement between the Ontario Ministry of the Environment and a group called the Autobody Repair, Registration, Inspection and Verification (ARRIV) programme. It will contain a built-in incentive whereby auto re-finishing facilities certified by ARRIV would receive certain benefits, such as preferred referrals by insurers. If the ARRIV arrangement goes through, it will make for an interesting case study of self-regulation by small business. **[Update to be made when MOE information is available.]**

The CSR/Blue Box programme is a joint government/industry initiative that has made Ontario an internationally recognized leader in curbside recycling. It has also caused concern about the policy issue of appropriateness since advocates of refillable systems believe that the recycling system has precluded the widespread use of a refillable system in Ontario, although there is evidence that support for refillables collapsed before the recycling system was put in place in 1986. The issue of free riders has also been noted since the non soft drink packagers and others do not pay into the Blue Box system, but derive benefits from it.

CIPEC has gone through three distinct phases in which commitment to the programme has varied. It has, however, achieved significant reductions in energy use and has widespread industry participation. Data collection tends to be consistent since Statistics Canada expertise

and survey forms are used.

The Voluntary Challenge and Registry (VCR) is Canada's main response so far to the issue of climate change. External views of the VCR are not encouraging, based on annual assessments of the VCR by the Pembina Institute for Appropriate Development. Whereas ARET may be a good example of Voluntary Initiative performance without full industry participation, the VCR is an example of participation without performance (i.e.; 870 participating organizations representing 75% of Canada's industrial greenhouse gas emissions, the majority of whom have not implemented the basic "framework actions" necessary to reduce these emissions).

The VCR needs to build in performance requirements to gain public credibility. Incentives to encourage performance are likely required, while incentives that address non-participants and non-performers should be developed. The VCR is moving beyond the initial focus on recruitment of participants by recognizing "Championship Reporting". The public credibility of the VCR will remain low, however, until there is a formal requirement for performance and the independent verification of results.

The Alberta Flare Gas Initiative is an example of a multi-stakeholder, consensus-based initiative that resulted in the agreement that the overall, long-term objective of the CASA project was to "eliminate routine solution gas flaring." The final agreement for the gas flaring initiative included four key elements. First, a timetable was agreed upon to voluntarily reduce total flare volumes in the province by 70% by the end of 2006-2007. Second, these targets were to be supported by performance requirements, and a review of all remaining flares over the period 1999-2001 was to be conducted. Third, a hierarchy of regulatory tools was also proposed, some of which will only be implemented if the industry fails to reach the voluntary targets and timelines; some are intended to set a minimum standard for the industry (to prevent free riders); and some are intended to ensure public notification and appeal mechanisms. Fourth, greater public review and involvement was built into the approval process.

Nearly all the recommendations of the project team have either been carried out or are in the process of being implemented. The government of Alberta altered many regulations not directly related to flaring in order to cost-effectively reduce the volume of flared gas in the province. Several government agencies worked closely together to coordinate their policies and regulations related to the environment, health, deregulation of electrical generation, distribution, and use, royalty policy, et cetera.

Given the controversial nature of gas flaring, and the amount of money (hundreds of millions of dollars were potentially on the table), getting the regulatory/management system right was essential for all the stakeholders. In this sense, the initiative required incredible buy-in from the community, industry and government groups.

The Emery Creek Association is an initiative by local businesses to help clean up water quality in

Emery Creek. Despite some successes, the Association faces major challenges related to recruiting new members, financing its educational and organizational activities and measuring the impact of its clean-up efforts on the quality of the creek. The role of governments in providing financial support and other incentives has been discussed, but governments generally view Emery Creek to be an industry-based initiative for which only limited government support will be provided.

In summary, MOUs, CSR and CIPEC are joint government/industry initiatives that appear to be performing well. Emery Creek has made some progress, but faces barriers to further progress unless additional support is provided by governments. RAPs are losing momentum due provincial funding cuts, but some RAPs may find ways to continue as community-funded initiatives. The HARA/ARRIV, Dofasco EMA and Alberta Flare Gas initiatives are too new to assess their performance, but each has interesting features that should be monitored closely as implementation occurs.

Third Party Initiatives

In these initiatives, third parties, such as standard-setting organizations and non-government groups, develop and run the initiative. Individual companies and industry associations may be involved. Governments are likely to be limited to indirect or informal roles.

Table 3 contains information on three "third party" initiatives: Canadian Standards Association's Sustainable Forest Management System (SFMS); Pollution Probe's Memorandum of Understanding for Mercury Elimination/Reduction in Hospitals; and the Forest Stewardship Council's Certification Programme (FSC). Another third party initiative studied, but not contained in Table 3, was Environmental Management Systems (EMS), such as ISO 14000. Appendix 'B' contains a more complete discussion of EMS' and their role in industry environmental management. Some of the key issues surrounding the development and implementation of ISO 14000 are reviewed in this section.

Third party initiatives tend to be distinct from each other, which is not surprising given the different types of organizations that become involved in them. Two of the initiatives, the SFMS and the FSC are relatively new to Canada and do not have sufficient track records to make significant comments on their performance. There is little criticism of the FSC by ENGOs and conservation groups, but the Canadian forest industry has expressed concern about the verifiable "chain of custody" requirement for use of the FSC logo (i.e., there must be a clearly documented chain of custody for the product stretching all the way back to the forest from which the wood originated). The SFMS, on the other hand, has been criticized by ENGOS and others for giving broad scope to forest managers to define their own performance requirements and for not tracking the chain of custody of products.

Pollution Probe's mercury hospital MOU is a rarity in Canada, with an ENGO initiating a

Voluntary Initiative in cooperation with hospitals and the federal and provincial governments. To date, only five hospitals have signed MOUs. The MOU approach has worked well with a limited number of hospitals, but faces difficult questions about how to stimulate widespread hospital uptake and behavioural change. The process of diffusing the mercury MOU approach throughout the hospital sector and across other sectors, such as the electrical products sector, presents major resource and administrative challenges. The appropriateness of using Voluntary Initiatives for a chemical as toxic as mercury has also been questioned, with ENGOs generally favouring a regulatory approach (i.e.; banning non-essential uses of mercury in products).

Environmental Management Systems/ISO 14000

Environmental Management Systems (EMS') are increasingly becoming a standard part of the management systems of large corporations, as well as some medium-sized companies. This is especially true for companies engaged in international trade. Thus, it is not surprising that much attention is being given to developing policies, principles and guidelines for the implementation of EMS'. There is also activity at the international level to standardize corporate environmental reporting (CER) formats, although far less progress has been made to date in this area.

The most recognized EMS' are ISO 14000 and EMAS (i.e.; Eco-management and Audit Scheme). Both of these systems are under active development and are being implemented by many companies. Prior to the development of ISO 14000 and EMAS, a number of progressive companies implemented their own EMS', many of which are considered equal to or better than these systems since they are tailored to company needs. ISO 14000 and EMAS are both striving to become broad-based standard systems that can be used to promote compliance with environmental laws, minimize corporate liability, meet customers' and insurers' requirements, enhance corporate image and obtain competitive advantages, in addition to improving environmental performance.

ISO 14000 is most often criticized by ENGOs as not requiring publicly available environmental performance targets and audits. There are concerns (shared by ISO itself) that ISO 14000 has been and will be used to make unjustified claims of environmental performance. This issue is likely to come under increased scrutiny by ENGOs, industry and other ISO stakeholders.

ISO has responded to concerns about the transparency of the standard-setting process by opening up the domestic and international ISO 14000 technical committees and advisory groups to greater stakeholder input; however, these processes are time-consuming and difficult to participate in for the majority of ENGOs.

Government policy interest in ISO 14000 has increased as ISO 14000 has become more accepted by industry, either as a formal part of a corporation's EMS or, more often, as a benchmark against which companies are developing or comparing their EMS'. The Canadian experience is that most companies are not yet registering and becoming ISO 14000 certified, due to the high

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cost of registration and the perception that there are few market benefits, but a significant number are benchmarking their EMS' against ISO 14000. There is also some evidence, although not extensive, of larger corporations encouraging their suppliers to implement verifiable EMS' or become registered under ISO 14001 standards (e.g.; Northern Telecom, General Motors, Ford).

Legal and policy linkages are being made to ISO 14000, and EMS' in general, by governments and the courts. On March 12, 1998, the U.S. Environmental Protection Agency (EPA) issued a formal position statement on EMS', including those based on ISO 14000. The EPA's interest centres around the ability of EMS' to lead to improved environmental performance. Companies are encouraged by the EPA to "make information on the actual performance outcomes of their EMS' available to the public and government agencies."

U.S. states, such as Wisconsin, have developed programmes that offer regulatory flexibility to industry "in the form of whole facility, multi-media permits for firms that adopt an ISO 14000 EMS with early and extensive stakeholder involvement and superior environmental performance."

In 1997, the Oregon Legislature authorized "Green Permits", which recognize superior environmental performance beyond compliance with regulations. The state has a four-tiered system that matches higher levels of environmental performance with increasing levels of regulatory flexibility. The highest level of achievement possible includes pre-approvals for permitting flexibility, emissions caps, regulatory waivers, modified recordkeeping and reporting requirements, as well as public recognition as an environmental leader.

In Canada, the federal and provincial governments have not formally endorsed ISO 14000, although several provincial environment ministries encourage companies to implement ISO 14001 or an equivalent EMS. Nor have any incentive programmes been developed for companies registering under ISO 14000 or implementing equivalent or better EMS'. There have, however, been cases in which companies have been issued court orders to implement the ISO 14000 standard. The first court order set an international precedent and was issued by an Alberta court against Prospec Chemical Co. in 1996. The company was fined \$100,000 and required to post a \$40,000 bond to guarantee that it would achieve ISO 14000 certification within a specified timeframe (which it has done). A second case concerned Coretec Inc. of Mississauga, Ontario, in 1998. The company pled guilty to violating hazardous waste regulations and was given a discharge (alternative conviction) on the condition that an independent third party auditor register the company to the ISO 14000 standard by December 31, 2000.

In summary, the key ENGO and government policy issues around EMS' and ISO 14000 are their lack of transparency and their lack of requirements for setting publicly available environmental performance targets. There is forward movement on the transparency front, with greater efforts being made to include ENGO and other stakeholder involvement. There is also some evidence of movement on linking ISO 14000 to supply-chain pressure, but there is no movement on the issue of independent verification of performance. Both government policy and

legal connections to EMS' and ISO 14000 are being made, and it seems likely that stronger linkages will be made in the future. These linkages may increase ENGO concerns about the possibility of ISO 14000 displacing government inspections and oversight of industry.

The single most useful work that could be done to increase the public credibility of ISO 14000 would be to study the effect it has had on company environmental performance.

Company-specific Initiatives

Many individual companies may participate in Voluntary Initiatives to varying degrees, but for their own reasons set high environmental performance goals. As part of this study, Pollution Probe studied three companies whose environmental experiences are worth profiling: Interface, Inc. (Belleville, Ontario); Husky Injection Molding Systems Ltd. (Bolton, Ontario); and Dow Chemical (Sarnia, Ontario). These company-specific "initiatives" are voluntary, but are also based on business cases that drive and support their environmental programmes. All three companies have developed reinforcing corporate and employee cultures that have resulted in significant environmental performance improvements throughout the 1990s, with even higher levels of performance projected post-2000.

Appendix 'B' contains a description of the environmental approaches and programmes of Interface, Husky and Dow Chemical. Some of the lessons learned from these companies are summarized below.

Interface, Inc.

Interface seeks "to become the first sustainable corporation in the world, and, following that, the first restorative company." Interface is the largest commercial carpet manufacturer in the world, with 6,300 employees world-wide and 1997 sales of \$1.2 billion (U.S.). Recent financial results have been dramatic, with the share price increasing from \$8.50 in 1995 to around \$55.00 in 1998.

The manufacturing plant in Belleville, Ontario, is the smallest in the Interface empire. It is also considered to be a leader in applying sustainability principles and practices. In 1997, the Belleville plant won the company's leadership award, with innovations including: eliminating all discharges of water, except for lawn sprinkling and servicing washrooms; eliminating all heavy metals in its manufacturing processes; reducing wastes going to landfill from 177 to 43 tonnes per year; lowering temperatures used in its manufacturing process by 58 degrees Celsius, with a huge saving in energy consumption; reduced off-gassing from carpets to 6% of what it had been; decreasing air emissions by 38%; lowering total power consumption by 50% and gas consumption by almost 70%; and finding a way to recycle the backing from old carpets by 100%.

Why did Interface take the sustainability pathway? In a nutshell, because it makes business sense. Moving towards sustainability reduces environmental risks and liabilities, fosters good

public relations, boosts employee morale and generates cost reductions. The Interface philosophy is that environmentally sound products will be cheaper in the long run. Zero waste means lower production costs and hence greater competitiveness.

How has Interface achieved its success? The key is public, customer and supplier education. "You must create clients who want you to become sustainable. Careful measurement and reporting are also critical elements. If you don't have good measurement of all sources of emissions, you don't know if an improvement in one place is causing problems in another place. This supports the need for an integrative approach." [Marikkar; Interface, Belleville]

Most of Interface, Belleville's sustainability initiatives started in 1993. The key factor in its success, according to Marikkar, is "out-of-box" thinking. By moving constantly to more innovative approaches, such as product and process re-formulation, Interface kept finding more and more savings in energy use, waste reduction, and so on. In particular, preventative maintenance paid off "big time", in terms of both energy efficiency and productivity. Careful measurement of all process flows and emissions reduced uncertainties (for example, in pump sizes, which tended to be oversized) and created synergies with preventative maintenance.

Business interests and environmental performance go hand-in-hand at Interface. During the past three years, Interface, Belleville has experienced the fastest growth in sales volume of any Interface plant world-wide. At the same time, Interface, Belleville, has set a goal of 100% recycling of materials and 100% use of green energy by the year 2002.

Interface achieves its success through customer/client education, a facilitative corporate culture, employee empowerment and developing commitment at all levels. Top executives sign a declaration of commitment to environmental goals, and employee's and executive's year-end bonuses are tied to money saved on waste reduction.

The factors leading to Interface's environmental success are not all replicable in other companies, but there are important lessons learned that can be transferred. These include: careful measurement of all process flows and emissions, customer/client education, employee training, tying bonuses to environmental goals, and top level executive commitment. These are all elements that exemplary Voluntary Initiatives should encompass.

Husky Injection Molding Systems Ltd.

Husky Injection Molding Systems Ltd. is one of the world's largest and fastest growing suppliers of injection molding equipment and services, with sales in 1998 of more than \$760 million (U.S.). Husky employs 2,500 people and has 33 service and sales offices in 70 countries. The Bolton, Ontario, manufacturing facility is one of Husky's three "campuses" in the world (see Appendix 'B' for a more complete write-up on Husky).

Husky's vision and purpose is "to be a role model of lasting business success." The company's core values include pro-active environmental responsibility. As with Interface, Husky's focus on suppliers, customers, employees and environmental leadership is not portrayed as corporate altruism; rather, these things make good business sense. A shared set of values is viewed as a necessary condition for successful business relationship with all of Husky's clients. According to Husky's founder, Robert Schad, "The future belongs to companies that take a long-term view and have a vision and purpose beyond money."

Some examples of Husky's recent environmental achievements include:

- In 1997, 85% of Husky's waste was diverted from landfill, generating more than \$307,000 in revenue and avoiding \$127,000 in disposal fees.
- On an individual level, waste minimization initiatives have reduced the amount of recyclable and non-recyclable material generated per person by 12.5%.
- In 1996 and 1997, the use of chlorinated solvents and toluene was eliminated through the use of water-based alternatives.
- In July, 1998, the use of solvent-based paints was discontinued in favour of low-VOC, non-hazardous and water-based paints.
- In 1996, Husky decided to only use refrigerants that are not ozone-depleters (with the exception of HVAC equipment). In all new construction, ammonia-based chillers are used to meet refrigeration needs.
- Husky is currently working to replace all naphtha-based cleaners.

Husky also supports and recognizes the environmental work of other companies. From 1993 to 1996, Husky awarded \$250,000 to companies showing environmental leadership. Husky also donates 5% of its annual pre-tax profits to charitable groups concerned about the environment, wellness and education.

How has Husky's philosophy and practices affected its "bottom line?" From 1985 to 1995, sales grew by 25% per year, growing from \$72 million (U.S.) To \$609 million (U.S.). By 1998, sales had reached \$700 million (U.S.). The company has a sales goal of \$1 billion (U.S.) by the year 2001.

Husky estimates that its investment in its philosophy has paid off in terms of low employee absenteeism rates (i.e.; 2.4 days per year per employee versus 6.5 days elsewhere in the manufacturing sector); lower expenses on prescription drugs for employees (i.e.; \$153.70 per year per employee versus the industry sectoral average of \$495.02); lower Workers'

Compensation Board claims and more accident-free days. According to Husky, its investment in environment, health and safety programmes generates annual savings of \$8.5 million.

While Husky welcomes government regulation of such things as hazardous wastes, the company's self-imposed standards significantly exceed all regulatory limits. According to Valerie Chort of Husky, "When you don't put anything down the drain, you don't have to worry about regulations."

The key driving force behind Husky's business and environmental success is its value system. In the words of Robert Schad, "Having values is a strategy." As with Interface, Husky pays special attention to measuring process flows and emissions, educating suppliers and customers, training employees, and ensuring company-wide commitment to the company's core values, which include being pro-active environmentally.

Dow Chemical

The Dow Chemical company is the fifth largest chemical company in the world, with annual sales in excess of US \$20 billion. It has customers in 164 countries, operates 114 manufacturing sites in 33 countries and employs close to 43,000 people. Dow produces chemicals, plastics, agricultural products, consumer goods and environmental services. The company is widely recognized as a leader in the chemical industry and has received awards for its world-class environmental management system.

Although some progressive chemical industry environmental initiatives can be traced back to the mid-to-late 1970s, a series of shocking international and domestic events shook the industry into action (e.g.; Seveso, Italy (1976); Love Canal (late 1970s); Mississauga train derailment (1979); Bhopal (1984); St. Clair River "blob" (1985)). By the mid-1980s, Responsible Care was developed and individual companies, such as Dow Chemical, underwent major cultural shifts in the way they understood and responded to environmental concerns.

Following the St. Clair River blob incident, Dow Chemical made a major commitment to environmental improvement. In 1992, the company introduced ten principles that were intended to "guide the company toward sustainability" (see Appendix 'B') and set a goal of reducing its global emissions of priority compounds (i.e.; human carcinogens, ozone depleters, and persistent, toxic and bioaccumulative compounds) by 50 per cent, based on 1988 levels. Dow achieved this target in 1994. In 1996, Dow announced new performance goals and targets to be achieved by the year 2005, including: reducing air and water emissions of priority compounds by 75 per cent and other chemical compounds by 50 per cent; reducing waste and wastewater generated per pound of production by 50 per cent; and, reducing energy use per pound of production by 20 per cent.

In addition to specific environmental targets and timetables, Dow has made the following

corporate commitment, "We pledge to be a responsible corporate citizen, to be open and responsive to ideas and concerns. We will integrate environmental considerations into our business decisions, and we will design or modify our products and processes to minimize their environmental, health and safety impacts. We will help foster partnerships among key stakeholders to find practical solutions to challenges. We will manage our lands to protect and enhance wildlife and ecosystems."

Dow Chemical strongly supports Voluntary Initiatives as an effective way to improve environmental, health and safety performance. Dow participates in several Voluntary Initiative programmes around the world, including the following initiatives in Canada: Responsible Care; ARET; and the National Action Programme on Climate Change (i.e.; the VCR). Internationally, Dow is working to broaden the reach of the Responsible Care programme. In North America, Dow serves as the chair of the Supplier Panel for the National Association of Chemical Distributors. In 1995, Dow began using only chemical distributors in North America that commit to Responsible Care or to the Responsible Distribution Process.

Dow Chemical's experience with voluntary projects is that they are often more cost-effective in the long term than projects required by regulations and legislation.

[Note: Still waiting for update/comments from Dow Chemical and other stakeholders.]

New Directions Group Criteria and Principles

The policy analysis so far has provided a number of insights into critical success factors that underlie high quality, publicly credible Voluntary Initiatives. It is useful to add these insights to the criteria and principles developed by the New Directions Group (NDG) and released on November 4, 1997 (see Appendix 'A' for the complete NDG document).

The following *Criteria and Principles for the Use of Voluntary or Non-Regulatory Initiatives to Achieve Environmental Policy Objectives* were agreed to by 19 out of 21 organizations that participated in the NDG:

Criteria for the Utilization of VNRI's to Achieve Environmental Policy Objectives:

- VNRI's should be positioned within a supportive public policy framework that includes appropriate legislative and regulatory tools.
- Interested and affected parties should agree that a VNRI is an appropriate, credible and effective method of achieving the desired environmental protection objective.
- There should be a reasonable expectation of sufficient participation in the VNRI over the long term to ensure its success in meeting its environmental protection objectives.

- All participants in the design and implementation of the VNRI must have clearly defined roles and responsibilities.
- Mechanisms should exist to provide all those involved in the development, implementation and monitoring of a VNRI with the capability to fulfill their respective roles and responsibilities.

Principles Governing the Design of VNRIs:

Credible and effective VNRIs:

- Are developed and implemented in a participatory manner that enable the interested and affected parties to contribute equitably.
- Are transparent in their design and operation.
- Are performance-based, with specified goals, measurable objectives and milestones.
- Clearly specify the rewards for good performance and the consequences of not meeting performance objectives.
- Encourage flexibility and innovation in meeting specified goals and objectives.
- Have prescribed monitoring and reporting requirements, including timetables.
- Include mechanisms for verifying the performance of all participants.
- Encourage continual improvement of both participants and the programmes themselves.

It is important to note that the NDG criteria and principles are meant to apply to VNRIs that are “employed instead of, or as a complement to, regulations to achieve environmental policy objectives.” The criteria and principles are also promoted, however, as useful guides for the development of a wide range of VNRIs in which quality, credibility and effectiveness are paramount. In particular, the NDG criteria and principles lend themselves well to partnerships among industry, governments, communities and public interest groups.

Key government roles that the NDG sees in the promotion of VNRIs are: to help set objectives, establish a supportive policy and regulatory framework, stipulate minimum design requirements, promote participation, track performance, and intervene if necessary. The bottom line is that “the public needs to be confident that the VNRI will result in the same or a better environmental protection outcome than would be achieved through a regulatory approach.”

The NDG *criteria* mainly focus on the ways in which interested and affected parties should interact to make VNRIs credible. The NDG *principles* lay out key design features of VNRIs that are oriented towards making them effective (i.e.; good performance). The details of the “supportive public policy” framework are not specified, other than the potential need to underpin VNRIs by regulations or other policy instruments that address concerns about the treatment of non-participants or non-performers. Section 9.0 of this report proposes elements of a supportive government policy framework.

8.3 Comparison of Conservation and Environmental Voluntary Initiatives

There appear to be more differences than similarities between *conservation* and *environmental* Voluntary Initiatives in Canada. The following table summarizes some of the differences.

Table 5 - Differences Between Conservation and Environmental Voluntary Initiatives

<u>Conservation Initiatives</u>	<u>Environmental Initiatives</u>
Have a long history and tradition and are prolific across Canada.	Have a short history and are not very numerous, but are growing rapidly.
Draw upon a strong stewardship ethic.	Have a weaker environmental ethic.
Deal with multiple use and jurisdictional complexity.	Less jurisdictional overlap, but still complex. Federal-provincial cooperation is a problem.
Frequently deal with private landowners.	Deal mostly with private sector corporations.
Build on a tradition of voluntarism.	No strong tradition of voluntarism exists.
Large, relatively well funded conservation groups.	Smaller, poorly funded environmental groups.
Initiatives start as voluntary, but often end in land securement or legal protection.	Initiatives start as voluntary and tend to stay that way.

The differences between conservation and environmental Voluntary Initiatives explain to a large extent the generally cooperative approach of conservation initiatives versus the conflict that is encountered with many environmental initiatives. Proponents of environmental Voluntary Initiatives want to achieve the support of local communities and ENGOs, but do not have the same assets to draw upon to build trust and cooperation. The exclusion of ENGOs and other stakeholders from government-industry negotiations on Voluntary Initiatives (in particular, Voluntary Agreements) is at least in part a function of the lack of trust that exists on environmental issues, but also serves to exacerbate an already difficult situation.

Resource constraints are a serious problem for ENGOs when it comes to participating in Voluntary Initiatives. Out-of-pocket expenses are sometimes provided for by governments, but per diems and other funds to cover salaries and overhead costs are rare. There are very few, if any, sources of funds available to cover the full costs ENGOs bear in becoming involved in Voluntary Initiatives. There are, however, other barriers to cooperation that will take a long time to overcome. It is noteworthy that conservation Voluntary Initiatives often end in legal protection of the land in question. There is a reasonable chance that ENGOs would participate in environmental Voluntary Initiatives that start as voluntary in order to allow for education and awareness-building and that give flexibility to industry leaders to innovate and "show the way", as long as the initiatives ended by benchmarking a regulatory standard that all companies in a given sector had to abide by, thus eliminating potential free rider problems and ensuring a level playing field. It is unlikely that ENGOs would widely support purely Voluntary Initiatives that have no ultimate accountability for performance or that allow large numbers of free riders to take advantage of the initiatives.

It is also noteworthy that strict targets, timelines and verification procedures are not usually part of the goodwill approach that characterizes most voluntary programmes in conservation. Nor are the economic rewards or consequences of performing apparent to many conservation initiative partners. The trust and cooperation among conservation stakeholders lessen the need for accountability measures and instead emphasize mutual support and recognition as motivating factors. Nevertheless, conservation initiatives could still benefit from access to increased economic incentives and by having legislative protection for endangered species and habitats in a way that does not disrupt the equity built up through cooperative partnerships. In turn, environmental Voluntary Initiatives could also benefit from incentives and a properly designed legal and regulatory framework. Without these policy and legal supports, both conservation and environmental Voluntary Initiatives will continue to be vulnerable to changing economic circumstances for landowners and private companies.

8.4 Lessons Learned

A number of important "lessons learned" about how to make Voluntary Initiatives more credible and effective can be drawn from the research done for this study.

The study has reinforced the need for more rigour in Canadian Voluntary Initiatives, along the lines of the criteria and principles developed by the New Directions Group. In particular, the importance of building trust cannot be overemphasized. The benefits of working cooperatively in an atmosphere of trust are evident from the experiences gained with conservation Voluntary Initiatives. More work is clearly required in this area for environmental Voluntary Initiatives.

The need for a strong environmental regulatory base is undeniable, as it is often the principal motivator for Voluntary Initiatives. Voluntary Initiatives risk losing credibility when they are negotiated without public input in the goal-setting stage, and are especially vulnerable later on if

they cannot account for their emissions and their claimed emission reductions to the satisfaction of governments and ENGOs. A policy framework supporting Voluntary Initiatives will have to pay special attention to both the initial goal-setting stage and to the development of adequate measurement and monitoring systems. Independent verification and/or evaluation mechanisms will also be required to gain public credibility.

This study has identified things that industry can do to help ensure the success of Voluntary Initiatives. These include the development of recruitment obligations when industry associations are involved (e.g.; Responsible Care; ForestCare), and the formal commitment of senior management to Voluntary Initiative goals, targets and timetables. Community group and/or ENGO participation in audits/verifications should be sought for Voluntary Initiatives in which public credibility is important. The most essential requirement of all, however, is the visible demonstration of improved environmental performance.

The lessons learned from exemplary environmental companies are that careful measurement of process flows and emissions is essential to continuous improvement. In addition, combining business success with environmental performance requires the education of suppliers and customers, the training of employees, the development of company-wide commitments to core values that include being pro-active on environmental matters, and the tying of recognition and rewards to environmental performance, including the performance of corporate executives. The existence of a high quality Environmental Management System (EMS) is also a key element that increases the likelihood of environmental performance. Finally, corporate environmental reports (CERs) are another mechanism for communications and accountability that is an important part part of a responsible company's environmental portfolio.

In Pollution Probe's opinion, the following measures will lead to improved performance and public credibility of Voluntary Initiatives:

- Voluntary Initiatives should shift from informal to more formal agreements, with quantified performance targets preferred over "best efforts" clauses.
- Sectoral performance targets should be set outside of company-specific agreements, and full public input should be ensured in the target-setting process. These targets and related timelines should then be incorporated into company-specific agreements which include public reporting and accountability provisions.
- "Recruitment initiatives" that emphasize early and extensive participation with less formal or non-existent targets and timelines should be clearly identified as education and awareness raising initiatives, with the understanding that these initiatives will be strengthened over time, including the setting of formal performance targets and timelines.
- Sectoral Voluntary Initiatives should only be developed if there is a majority of

- companies participating from a given sector (i.e.; 50 per cent or greater). The agreements should be understood to lead to regulatory benchmarking if full participation of the companies in the sector is not achieved within a three to five year timeframe.
- Governments should provide incentives for participation in Voluntary Initiatives, rewards for the achievement of results that go significantly beyond regulated limits, and public recognition for outstanding achievements, in turn for the acceptance by industry of binding targets and timelines, public reporting of progress and independent verification of results.
 - Governments, industry and ENGOs should engage in a constructive dialogue about the design of Voluntary Initiatives, with the objective of building greater trust and a commitment to shared responsibility for achieving results, as is observed for conservation Voluntary Initiatives.
 - The federal government, in consultation with provinces, industry and NGOs from a range of interests, should commit to expanding and improving the mandatory reporting of pollutant emissions and relevant pollution prevention information through the National Pollutant Release Inventory (NPRI). NPRI should become the common reference database for use by all stakeholders to access to appropriate company-specific, sectoral and overall pollutant information based on established measurement, estimation and reporting protocols.
 - Every Voluntary Initiative should contain review and evaluation provisions based on independent assessment and verification of results. A range of acceptable verification methodologies should be established that are matched to the needs and characteristics of different types of Voluntary Initiative.

9.0 Proposed Policy Framework

Performance, flexibility and transparency lie at the heart of more credible and effective Voluntary Initiatives in Canada. Since Voluntary Initiatives lack some of the procedural safeguards and statutory accountability mechanisms of regulations, building and maintaining public trust will at a minimum require transparency of process, extensive information sharing and the independent or external verification of results achieved. While there are may be benefits to industry in implementing these requirements, there are also costs that factor into the "business case" that company officials must make to ensure that Voluntary Initiatives gain the approval and internal support needed to sustain Voluntary Initiatives in times of economic stress.

To make Voluntary Initiatives more effective, governments will have to do two fundamental things: (1) maintain a strong regulatory base; and (2) accept obligations and provide incentives in return for binding commitments by industry to performance targets and timelines.

Maintaining a strong regulatory base

The focus of this study is on proposing a policy framework that will support more credible and effective Voluntary Initiatives. It is clear, however, that Voluntary Initiatives and the regulatory system are interlinked, and that without a strong regulatory base, Voluntary Initiatives will not meet their full potential and may even weaken the regulatory system. Critics of regulations tend to focus on concerns related to the command and control type of regulations that were put in place in the 1970s and early 1980s. Recent regulatory measures, however, tend to be more performance-based than technology-prescriptive, giving industry greater flexibility than command and control regulations.

While this study supports the use of Voluntary Initiatives as complements to regulations and other policy measures, Pollution Probe notes that the combination of command and control regulations and the more recent performance-based regulations has contributed greatly over the past three decades to achieving significant environmental gains. The following information received from the Ontario Ministry of the Environment illustrates some of the gains that have been made largely through or in response to regulations over the past three decades:

“Effluent limits for nine industrial sector regulations under the Municipal-Industrial Strategy for Abatement are now enforceable. These Clean Water Regulations provide for significant reductions in the discharges of industrial toxic chemical substances from about 190 facilities. The pulp and paper regulation has resulted in a 74 per cent reduction in discharges of chlorinated toxic substances, and the elimination of dioxin and furan emissions to the lakes. Copper, lead, nickel, zinc, cyanide and arsenic discharges from Ontario mining facilities have been reduced by 40 per cent. Discharges of toxic substances from chemical plants ... have been reduced by approximately 50 per cent over the last seven years. Similarly, discharges of harmful substances from iron and steel plants in Ontario have been reduced by 80 per cent since 1991. ... The effort to decrease discharges of toxic industrial compounds has paid off. Contamination of fish has gone down - a sure sign that the lakes are improving. Monitoring of sport fish since the 1970s shows that in areas where toxic chemicals have been reduced or eliminated, contamination of fish has also gone down. For instance, after the province took action to halt industrial discharges of mercury to Lake St. Clair, much lower levels of mercury were found in sport fish. Contaminant levels remain low in most Lake Erie fish. PCB levels in salmon and trout from Lake Huron and Lake Ontario have declined over the past 20 years, resulting in less restrictive consumption advisories. As a signal of the recovery of Lake Ontario, four species of fish previously thought to be lost from the lake are making a comeback. These include sturgeon, lake trout, lake herring and deep water sculpin.”

Nothing in this report and its promotion of a policy framework supporting Voluntary Initiatives should be construed as favouring the use of Voluntary Initiatives over regulations or other valid policy instruments. Voluntary Initiatives are complements to necessary and essential regulations that benchmark performance for everyone, thus providing a level playing field and dealing with

concerns about free riders.

On the other hand, the regulatory system has its own limits and implementation problems. The most significant limit is the need to set standards that require the initial inclusion of all companies in a given sector. For economic and other reasons this often means that the standard is not set high enough to challenge industry leaders and thus does not become an effective tool to foster innovation. The regulatory system also does not establish the positive motivators that reinforce the driving forces of vision, pride and ownership that have helped some companies achieve exemplary environmental performance. Thus, there is scope for a policy framework in support of Voluntary Initiatives to accomplish three positive results:

- Set new performance benchmarks or standards that can be transferred into the regulatory system to ensure that all companies improve (not much used in Canada yet, but this is a potential developmental area for Voluntary Initiatives);
- Stimulate environmental performance beyond existing and anticipated regulatory limits (this is where most of the government-industry Voluntary Initiatives have been developed to date);
- Encourage and reward exemplary environmental performance by highly motivated companies (this may mean focusing both on removing barriers to performance as well as providing incentives).

Accepting obligations and providing incentives

In pursuing Voluntary Initiatives, governments are seeking environmental performance beyond regulatory limits and often well beyond a given company's or industry sector's "business case." The sustainability of a Voluntary Initiative that does not rest on a sound business case is suspect. When the marginal costs to industry of achieving improved environmental performance exceed the benefits that can be gained, the enthusiasm for the initiative may wane and the corporate support for environmental leadership can disappear, especially if government attention shifts to other priorities.

As Canada heads into the renewal of key Voluntary Initiatives, such as ARET, the importance of having a policy framework that includes the provision for incentives will increase. The main incentive that has motivated U.S. voluntary agreements is regulatory relief. This has not been the case so far in Canada, although Ontario is moving in this direction with its proposed new programme called REVA/Performance Plus. The U.S. agreements, however, are based on a more rigorous environmental regulatory system than exists in Canada; thus, regulatory relief is a more substantive incentive there than here. It will be necessary to ensure that the public fully understands the obligations that governments are accepting with Voluntary Initiatives and the trade-offs that are being made.

There is nothing inherently wrong with providing incentives for improved environmental performance in return for binding commitments by industry, as long as appropriate legal principles are observed and as long as the social benefits of the initiatives exceed the costs of the incentives provided. As noted earlier, Voluntary Initiatives should not compromise the regulatory system and, in fact, should be used selectively to strengthen the regulatory system by setting new performance benchmarks and standards. It has to be recognized, however, that these gains do not come without a price and will impose obligations upon all parties to an initiative. In this sense, the term "Voluntary Initiative" should probably be replaced with the term "Voluntary Agreement", as is happening in Europe, since the initiatives may begin as voluntary negotiations, but end in binding agreements.

Proposed policy framework for Voluntary Initiatives

The following elements of a policy framework are proposed to support more credible and effective Voluntary Initiatives. Policy statements for these elements should be articulated by federal and provincial governments and supported by guidelines on Voluntary Initiatives issued by the Canadian Council of Ministers of the Environment.

Appropriateness:

Voluntary Initiatives are appropriate when they go beyond existing regulatory limits and when they do not compromise the ongoing development of the regulatory system. Regulatory compliance should be a pre-requisite for acceptance into a Voluntary Initiative.

Voluntary Initiatives should be entered into with industries that demonstrate sufficient organizational structure and capacity to be able to share information, report publicly on results achieved and exert peer pressure within the industry sector. Individual companies participating in Voluntary Initiatives should have acceptable Environmental Management Systems and other means of ensuring adequate oversight of the initiative.

Goal-setting:

The goals and related performance targets and timelines of Voluntary Initiatives should be publicly debated to ensure that all relevant stakeholders have been provided with an adequate opportunity for input. Company-specific agreements should accept the externally-set goals and targets and should focus on how to achieve them.

Measurement and Reporting:

Measurement and reporting protocols should be established and included within an expanded and enhanced National Pollutant Release Inventory (NPRI). To ensure public credibility and accountability, Voluntary Initiatives need to demonstrate adequate pollutant baseline information

concerns about free riders.

On the other hand, the regulatory system has its own limits and implementation problems. The most significant limit is the need to set standards that require the initial inclusion of all companies in a given sector. For economic and other reasons this often means that the standard is not set high enough to challenge industry leaders and thus does not become an effective tool to foster innovation. The regulatory system also does not establish the positive motivators that reinforce the driving forces of vision, pride and ownership that have helped some companies achieve exemplary environmental performance. Thus, there is scope for a policy framework in support of Voluntary Initiatives to accomplish three positive results:

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Measurement and Reporting:

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and ongoing monitoring in ways that allow progress to be measured and compared with other companies and industry sectors. Proper measurement and monitoring data are required for the future verification and evaluation of Voluntary Initiatives and are an essential input to continuous environmental improvement within companies and sectors.

Incentives:

The trade-offs and incentives included in Voluntary Initiatives should be explicitly stated and subjected to public debate. Parties to Voluntary Initiatives should understand their responsibilities and obligations and be prepared to explain them to the public. A variety of incentives should be identified and subjected to public debate before their inclusion in the policy framework. Incentives might include: regulatory relief; financial incentives; public recognition; information sharing; technical assistance; limited liability; and so on.

Level of Participation:

Sectoral Voluntary Initiatives should only be developed if there is a majority of companies participating from a given sector (i.e.; 50 per cent or greater) or if the companies in the initiatives represent greater than 50 per cent of total emissions from the sector. Non-participants should be advised that regulatory benchmarks and standards may result if full industry participation is not achieved within a set period of time (e.g.; five years).

Public Participation:

Governments should provide sufficient financial and technical assistance to ensure the equitable participation of community and public interest groups in Voluntary Initiatives.

Verification:

The policy framework should identify a range of verification mechanisms matched to the type of Voluntary Initiative and the need for varying levels of internal and external verification. In general, the greater the obligations and trade-offs accepted by governments, the greater the need to specify independent verification mechanisms with input from community and ENGO stakeholders.

Evaluation:

All Voluntary Initiatives should have mandatory evaluation requirements and a sunset/renewal clauses linked to the evaluation (e.g.; every 3-5 years).

Registry of Voluntary Initiatives:

Governments should maintain comprehensive registries of all approved Voluntary Agreements, including their goals, targets and timelines, terms and conditions, parties to the agreements, public reports, and verification and evaluation reports. Reasons for changing or terminating Voluntary Agreements should be documented for future research purposes.

The “ideal” Voluntary Initiative

The ideal Voluntary Initiative has clearly stated and publicly supported goals, targets and timelines. Progress is measured and reported at regular intervals, with problems addressed openly and expeditiously. The initiative is evaluated and adjusted, as necessary, with the full participation of stakeholders. Independent verification of results demonstrates that the goals and targets are being achieved in a cost-effective way, and the company or sector is publicly recognized for exemplary environmental performance. The process used and the results of the Voluntary Initiative are shared with other companies and sectors and serve to stimulate similar approaches and initiatives.