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**Comments on *Environmental Industry Strategy for Canada:*
*Draft Consultation Paper***

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Comments on *Environmental Industry Strategy for Canada: Draft Consultation Paper*

Introduction

The Canadian Institute for Environmental Law and Policy (CIELAP) welcomed the opportunity to comment on Industry Canada and Environment Canada's *Environmental Industry Strategy for Canada: Draft Consultation Paper*, although the very short time-frame provided seriously limited the depth of analysis of the *Paper* which could be provided. Environment Canada and Industry Canada's joint efforts in this area have the potential to make an important contribution to Canada's transition to an environmentally sustainable economy. Unfortunately, in this context, the *Draft Consultation Paper* is a disappointment in a number of important ways.

In particular, the *Paper* fails to make strong linkages between the development of an environmental industry strategy for Canada and the two fundamental paradigm shifts which have been taking place in environmental and economic policy over the past decade. At the macro-level, the 1986 report of the World Commission on Environment and Development, Our Common Future introduced the concept of sustainable development as a central goal of environmental and macro-economic policy. Secondly, at the micro-level, the focus of specific environmental protection policies is moving from an emphasis on pollution abatement and control, to one which stresses pollution prevention. These two shifts are closely related, as micro-level efforts to reduce waste, eliminate toxics and use energy more efficiently are central to the achievement of environmentally and economically sustainable patterns of development.

The incorporation of these two developments into the Canadian governments' environmental industry strategies is essential to the establishment of environmentally sustainable patterns of economic activity in Canada and the rest of the world. It is important that public investments in the development of the environmental industry sector not reinforce poor technological decisions of the past.

Unhappily, the *Draft Consultation Paper* focusses on the development of the Canadian environmental industry sector as it presently exists. There is no clear strategic vision of the potential role of the sector in the development and diffusion of the skills and technologies to prevent pollution, reduce, reuse or recycle wastes, and use energy and water more efficiently throughout the wider economy. The development and diffusion of such technologies will be essential to the emergence of an environmentally sustainable economy in Canada. This central flaw in the *Paper* manifests itself in a number of ways.

1. Definition of the Sector

The definition of the environmental industry sector provided in the *Paper* is simultaneously too narrow and too broad. In particular, the inclusion of end-of-pipe pollution control activities in the definition of the sector is problematic in the context of the overall shift away from such technologies noted elsewhere in the paper. The primary focus of the government's strategy should be on the development of skills and technologies in the areas of monitoring and assessment, pollution prevention, and clean-up and restoration.

In addition, the definition presented in the *Paper* fails to include any reference at all to skills and technologies in the area of energy efficiency in industrial, commercial and residential settings. Furthermore, there is no reference to the potential for environmental services and technologies targeted at the residential sector in general. These might include energy efficient lighting and appliances, water conservation technologies, and more efficient heating and cooling technologies. In sum, the residential retrofitting could constitute a significant market for environmental services.

2. The Shift to Pollution Prevention

The *Paper* notes the strategic shift from end-of-process pollution control technologies to pollution prevention approaches which is occurring throughout the industrialized world on a number of occasions¹. However, the *Paper* fails to provide any clear indication of how this shift is to be reflected in Canada's environmental industry strategy.

The development of pollution prevention, as opposed to pollution control, skills and technologies should be identified as a key focus of the new government research and development expenditures proposed in the *Paper*² and the *Environmental Industry Strategy's* human resources development efforts³. This orientation of government efforts in the areas of technology research and development and human resources development is critically important, given that it is generally held that a high proportion skills and technologies within the existing Canadian environmental industries sector are concentrated on end-of-process approaches.⁴

3. Linkages to the Broader Economy

One of the most important strategic functions of the environmental industry sector is its ability provide for the development and transfer of new skills and technologies to other industrial sectors.⁵ Indeed, this process will be essential to placing these other sectors of the Canadian economy on an environmentally sustainable basis. This is especially true in sectors dominated by small- and medium-sized firms, which may lack

the research and development capacity and capital resources to develop new, environmentally sound process technologies themselves.

Unfortunately, this critical linkage between the environmental industry sector and the broader economy is only dealt with briefly in the *Environmental Industry Strategy* document.⁶ The potential role of the Environmental sector in the overall restructuring of the Canadian economy for environmental sustainability should play a central role in the federal government's approach to the development of its environmental industry strategy. The *Paper's* failure to adequately address this question is a fundamental flaw in the proposed strategy which must be rectified.

There are a number of precedents for successful environmental auditing and advice programs which are intended to assist firms with environmental problems in identifying potential solutions. Examples of such programs include the Ontario Waste Management Corporation's Direct Assistance Program, and the Ontario Ministry of the Environment and Energy's industrial Energy Services Program. In addition, a number of U.S. States offer technical assistance programs for the purposes of promoting pollution prevention⁷ and industrial solid waste reduction, reuse and recycling.⁸ Similar programs, to connect Canadian environmental services firms with other enterprises which require their skills and technologies, should be developed and implemented as major components of federal and provincial environmental industry strategies.

4. Approaches to Export Development

The *Consultation Paper* provides an extensive discussion of the potential for the development international markets for the Canadian environmental industry sector.⁹ However, the possibility of a conflict between the goal of developing markets for Canadian environmental sector firms as a component of Canada's international development programs, and the broader development goal of establishing technological self-sufficiency in developing countries, should be recognized. It is critical that the activities of Canadian governments and firms build domestic capabilities within developing countries. In addition, given the strength of the existing Canadian environmental sector in end-of-process technologies, steps are required to ensure that developing countries are not encouraged to invest in technologies and approaches which are in the process of being phased out in Canada.¹⁰

5. Financing

The *Consultation Paper* raises a number of concerns regarding government practices which affect the environmental services sector.¹¹ With respect to the role of government laboratories, the central role of these laboratories in government regulatory functions should be recognized. Consequently, even proponents of privatization have

argued that their functions should not be privatized in any way.¹² Regarding the application of a "market test" by governments to their support for technologies which are intended for commercialization, the ability of firms to establish a relationship with some sources of private capital seems a reasonable approach to ensuring the value of investments of taxpayers' money.

CIELAP strongly supports the *Paper's* references to the importance of vigorous and consistent enforcement of environmental regulations. Action of this nature on the part of the responsible federal departments would be a welcome development.

With respect to the question of environmental liability, CIELAP is strongly of the view that parties responsible for environment degradation must not be permitted to escape liability for the costs of repairing such damages. It is essential that environmental risks not be socialized through a weakening of the principle of polluter pays in Canadian environmental legislation.

6. Program Diversity

CIELAP documented the wide range of environmental technology support programs introduced by Canadian governments since 1990 in its May 1993 publication Environmental Technology Support Programs in Canada: A Survey. As is the case with the proposed *Environmental Industry Strategy for Canada*, many of the larger existing general support programs identified by CIELAP in its survey make little apparent effort to shift technology development in the direction of pollution prevention, waste reduction, reuse, and recycling, or energy and water conservation and away from end-of-process solutions. For the reasons outlined at the outset of this submission, we regard this as a serious flaw, which has the potential to reinforced poor technological choices which have been made in the past.

In addition, it has been argued that some existing environmental technology support programs may actually be counterproductive in terms of facilitating and encouraging a shift from pollution control to pollution prevention. The Accelerated Capital Cost Allowances (ACCA's) for pollution control equipment offered by the federal government and the provinces of Alberta, Ontario and Quebec, are of particular concern in this sense. As presently structured, these programs, which constitute Canadian governments' largest expenditures on environmental technologies, provide positive incentives to adopt end-of-pipe pollution control technologies over process change, pollution prevention technologies.¹³ The federal and provincial ACCA programs should be restructured to ensure that they provide incentives to firms to adopt pollution prevention approaches to resolving pollution problems.

7. Strategic Environmental Standards, Policies and Programs

The *Consultation Paper* contains the statement that "the current and planned environmental standards, policies and programs of the federal government, and hopefully those of other levels of government, will be reviewed, rationalized, and revised to be supportive of the Canadian environmental industry sector."¹⁴ This statement is seriously problematic. It should be removed from the *Paper*.

As drafted, the statement suggests that the purposes and contents of environmental policies ought to be subordinated to the goal of promoting the interests of the Canadian environmental industry sector. This is a complete reversal of the appropriate relationship between these goals. The purpose behind the development of the environmental industry sector is to ensure that Canada can achieve the goals of its the national and international environmental policies. The development of an environmental industry sector should be seen as a means to an end, environmentally sustainable development, not as a end in itself, and certainly as a end which trumps to goals of environmental policy as a whole.

The *Draft Consultation Paper* makes extensive references to the need for the harmonization of Canadian environmental standards.¹⁵ The question of regulatory harmonization should be addressed with care. It is important both from an environmental perspective and from the viewpoint of prompting the development of new technologies and techniques that individual jurisdictions not be blocked from going to environmental standards higher than the "harmonized" level if they choose to do so. Harmonization efforts should seek to establish a floor level of protection below which no jurisdiction is allowed to fall, rather than placing a ceiling or cap on how high standards can be set.

Conclusions

The *Draft Environmental Industry Strategy for Canada Consultation Paper* represents an significant step in the government of Canada's efforts to integrate environmental and economic policy. The *Paper* contains a number of important recommendations regarding the development of the environmental industry sector in Canada. However, the proposed strategy fails to effectively place the role of the environmental sector into the broader context ensuring environmentally sustainable patterns of economic activities both within Canada and throughout the world.

The establishment of more substantial linkages between the environmental industry sector and the broader economy should be a central element of the federal strategy. In addition, the strategy must establish a strategic direction for the sector in terms of the development and diffusion of pollution prevention, waste reduction and water and energy efficient skills and technologies. The development and adoption of such capabilities is

essential to placing the Canadian and global economies on an environmentally sustainable foundation.

CIELAP looks forward to further opportunities to contribute to the development of the federal government's Environmental Industry Strategy for Canada.

Endnotes

1. See, for example, Environmental Industry Strategy for Canada: Draft Consultation Paper (Ottawa: Industry Canada and Environment Canada, January 1994), pp. 5, 14, and 17.
2. Ibid., pg. 19, pts. 3.1.1, 3.1.2
3. Ibid., chap. 5.
4. See, for example, Ernst and Young, Study of the Ontario Environmental Protection Industry (Toronto: Ontario Ministry of the Environment 1992).
5. See, for example, M. Porter, "America's Green Strategy," Scientific American, April 1991.
6. Consultation Paper, pt. 3.5.1.
7. See, for example, Paul Muldoon and Marcia Valiante, Zero Discharge: A Strategy for the Regulation of Toxic Substances in the Great Lakes Ecosystem (Toronto: Canadian Environmental Law Research Foundation, 1988), Table 5.1.
8. See Winfield, M., et. al., Looking Back and Looking Ahead: Municipal Solid Waste Management in Ontario from the 1983 Blueprint to 50% Diversion in 2000 - Conference Background Paper (Toronto: Canadian Institute for Environmental Law and Policy, 1992), chap. 2.
9. Consultation Paper, chap. 2.
10. For broader discussion of this question see Janet Bell and Alexander Bush, "Technology Transfer that is Environmentally Sound," Network 92, No. 3. See also H. Windsor, "External pressures take toll on CIDA," The Globe and Mail, January 21, 1994.
11. Consultation Paper, p. 26, pt. 4.4.
12. See, for example, P. Lush, "Harcourt gains unlikely ally over reversal of lab privatization," The Globe and Mail, December 23, 1993.
13. For detailed discussions of the problems related to the ACCA programs see, for example, K. Webb, "Between Rocks and Hard Places: Bureaucrats, Law and Pollution Control," in R. Paehlke and D. Torgerson, Environmental Politics and the Administrative State (Peterborough: Broadview Press, 1990), pp. 207-211, N. Bonsor,

"Water Pollution and the Canadian Pulp and Paper Industry," in G.B. Doern, ed., Getting It Green: Case Studies in Canadian Environmental Regulation (Toronto: C.D. Howe Institute, 1990), pp. 155-185. See also Marie-Marthe Gagnon, "A L'aube de l'ecofiscalite canadienne - Premier partie," Canadian Tax Journal, Vol. 40, No. 3, 1990, and Marie-Marthe Gagnon "A L'aube de l'ecofiscalite canadienne - deuxieme partie," Canadian Tax Journal, Vol. 40, No. 4, 1990.

14. Consultation Paper, p. 33, pt. 6.2.1.

15. Consultation Paper, p. 9, pt. 1.4.