

**Environment Accounts and Statistics Division** 

# Survey of Environmental Protection Expenditures, 2000

Confidential when completed

Collected under the authority of the Statistics Act, Revised Statutes of Canada, 1985, Chapter S19.

Français au verso

			Establishment name
М			Operating name
M			
М			C10
М			Address
M			
М			City
M			Province/Territory Postal code
M	M	M	

## Please read before completing

#### **PURPOSE OF SURVEY**

This survey provides a measure of the cost imposed on industry by environmental protection in Canada through Canadian and international environmental regulations, conventions and voluntary agreements. The survey also aims at identifying environmental management practices and technologies used in Canadian industry for the purpose of preventing or abating pollution.

The results of this survey will be published in the Statistics Canada publication *Environmental Protection Expenditures* in the Business Sector, 2000, Catalogue No. 16F0006XIE.

#### CONFIDENTIALITY

Statistics Canada is prohibited by law from publishing any statistics which would divulge information obtained from this survey that relates to any identifiable respondent, without the previous written consent of that respondent. The data reported will be treated in strict confidence, used for statistical purposes and published in aggregate form only. The confidentiality provisions of the Statistics Act are not affected by either the Access to Information Act or any other legislation.

#### AUTHORITY

This survey is conducted under the authority of the Statistics Act., Revised Statutes of Canada, 1985, Chapter S19. COMPLETION OF THIS QUESTIONNAIRE IS A LEGAL REQUIREMENT UNDER THE STATISTICS ACT.

#### INQUIRIES

Correct as required

If you require assistance in completing this questionnaire or if you have any questions or comments regarding this survey, please contact:

Operations and Integration Division Statistics Canada Ottawa, ON, Canada, K1A 0T6

Telephone (toll-free): 1-800-255-7726 (within Canada)
Fax: 1-800-755-5514 (within Canada)
E-mail address: enviro.oid.exp@statcan.ca

The questionnaire is available in an electronic spreadsheet format. Please contact the Operations and Integration Division if you prefer to use this reporting option.

In all correspondence concerning this questionnaire, please quote the identification number that appears on the address label.

Important: Please read the Definitions and concepts on page 6 before answering. If your response for an item is zero, please write "0" in the corresponding box rather than leaving the cell blank.

Please return this questionnaire within 30 days of receipt.

If you are unable to do so, kindly inform the Operations and Integration Division of the expected completion date.

Statis	tics Can	ada use	only												
	Rec.			Ed.	Ed.		Kyd.	Kyd.			Bat.			FSC	
	D	М	Υ	D	M	Y	D	М	Y						

4-2300-58: 2001-07-16 STC/NAD-475-04244







### 1. Reporting period

Report must cover your fiscal year ending between April 1, 2000 and March 31, 2001.

	Day	Month	Year	
	010	020	030	
From				to

Day	Month	Year
040	050	060

## Please report in thousands of Canadian dollars

2. Pollution prevention, abatement and control expenditures. If the expenditure is zero, please write "0" in the corresponding box.

#### Include

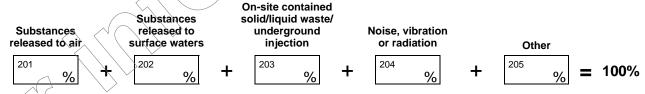
- Expenditures for end-of-pipe pollution abatement and control facilities and equipment
- ♦ Expenditures for pollution prevention equipment or facilities integrated to a production process, that prevent or minimise the production of pollutants and waste
- Expenditures for equipment or facilities related to leak and spill prevention. They may include expenditures on the following: spill containments, dyke extension, accessories (valves, pumps) or emission detection equipment
- Expenditures for equipment or facilities used for conserving energy or water
- ◆ Expenditures for equipment or facilities associated with recirculation, recovery, reuse and recycling of materials or substances
- ◆ Pollution monitoring expenditures
- Expenditures for waste collection, disposal treatment and recycling done by your employees
- ♦ Purchases of waste and sewerage management services or any other purchase of services reported in Question 6

#### **Exclude**

- ◆ Expenditures specific to workers' health and safety
- ◆ Site reclamation and decommissioning expenditures (Question 4)
- Research and development expenditures associated with pollution prevention, abatement and control



3. From the amount of capital expenditures reported in cell 102, what percentage was spent on preventing or abating each of the following?



4. Other environmental protection expenditures. If the expenditure is zero, please write "0" in the corresponding box.

#### Include

- Expenditures for site reclamation and decommissioning
- Expenditures for protection and restoration of wildlife and habitat
- Expenditures for environmental audits and assessments
- Expenditures for training on environmental matters
- Administration costs directly associated with environmental protection projects
- Other expenditures required to comply with environmental regulations, conventions, or voluntary agreements

#### **Exclude**

◆ Environment-related research and development expenditures

Operating expenses		Capital expenditures	Total				
\$ 000		\$ 000		\$ 000			
401	+	402	=	403			

Pl	easc	e report in thous	ands	of Canadian doll	ars				
5.	Tota	al expenditures on en	vironme	ental protection. If the e	expend	diture is	zero, please write '	'0" in the corresponding box.	
	This	question is the sum of Qu	estions 2	2 and 4.					
		Operating expenses	;	Capital expenditures			Total		
		\$ 000 410	$\neg$	\$ 000 411		412	\$ 000		
		410	+		=	412			
					•				
6.	Pur	chase of environment	al servi	<b>ces</b> If the expenditure is z	ero. p	lease w	vrite "0" in the corres	spondina box.	
	Fron	n the total environmenta	l protect	tion expenditures reporte vices purchased from a p	ed in (	Questic	on 5, what were the	e expenditures by your	
		/aste management servi y contractors or a gover		ewerage services perfori	med		\$ 000 301		
	In	nclude							
	•	Expenditures related to provided by a private co	the use ontractor	of a waste collection, dispo or federal, provincial or loc	osal or cal gov	treatm ernme	ent service, or an of nt body	f-site recycling service	
	•	Expenditures related to	the use	of a sewerage service prov	vided l	by a fed	leral, provincial or lo	cal government body	
	E	xclude					~ / /		
	•	<ul><li>Expenditures for waste (own-account work)</li></ul>	managei	ment activities performed b	oy you	r establ	lishment's or compa	ny's employees	
	•	Expenditures for recyc	ing on-si	te	^				
	-				$\rightarrow$	$\rightarrow$	<b>#</b> 000		
					_/^		\$ 000		
	b) E	nvironment-related cons	struction	performed by contracto	rs		002		
	In	nclude				/			
	•	Installation of new and	used env	ironment-related construct	tion as	sets tha	at have been capital	ized	
	•	Renovation, retrofit, ref	urbishing	, overhauling and rehabilita	ation t	hat hav	e been capitalized		
	Environment-related machinery and equipment that have been capitalized								
	E	xclude	3 (						
	•	Expenditures for own-a	ccount ei	nvironmental construction	work				
	•	Non-capital repair and	naintena	ntal ass	ets				
		$\rightarrow$							
	c) N	on-capital repair and many many many many many many many many	intenan	ce expenditures on			\$ 000		
	C	iiviioiiiieiitai assets pei	ioinieu i	by contractors			512		
						\$ 000			
$\langle \rangle$	d) O	ther environmental serve ported	ices per	formed by contractors no	ot alre	eady	501		
	$\rangle \setminus$								
` <	E			es for environmental moni nmental assessment and	_	ervices	3		
	>			es for site reclamation and					
v		<ul><li>Purchase</li></ul>	of servic	es associated with wildlife	and h	abitat p	rotection and restor	ation	
	e) T	otal environmental serv	ces perf	ormed by contractors			\$ 000		
	•		-	-			503		
		nclude	-10 - '	504					
		Sum of cells 301, 502,	o1∠, and	501					
	E	xclude							

4-2300-58 Page 3

• Expenditures for environmental services provided by the employees of your establishment or your company

Pollution prevention methods  If you have prevented or reduced waste, pollutants or conserved resources in	fiscal year 200	00, please
indicate how it was achieved by checking the appropriate box(es). Please incl regardless of whether they are required by regulation, convention or voluntary	ude all projec	ts
Pollution prevention method	Yes	No
Product design or reformulation	810	
Equipment or process modifications (integrated process)	830	
Recirculation, on-site recycling, reuse or recovery of materials or substances <sup>1</sup>	850	
Energy conservation	860	
Materials or feedstock substitution, solvent reduction, elimination or substitution	870	
Improved inventory management or purchasing techniques	875	
Prevention of leaks and spills	880	
Good operating practices or training	885	
Other (please specify)	890	
		•
1. Recirculation, recovery, reuse or recycling: recirculation, reuse, recovery or recycling of water, materials generated during production, excluding materials transferred or recycled off-site.  Examples: vapour recovery, recovery of sludge, water recirculation, reuse of water for refrigeration concentration.		
generated during production, excluding materials transferred or recycled off-site.		
generated during production, excluding materials transferred or recycled off-site.  Examples: vapour recovery, recovery of sludge, water recirculation, reuse of water for refrigeration concentrations.  Environmental management practices  Please indicate the environmental management practices adopted by this	lenser operation.	
generated during production, excluding materials transferred or recycled off-site.  Examples: vapour recovery, recovery of sludge, water recirculation, reuse of water for refrigeration concentrations.  Environmental management practices		No
generated during production, excluding materials transferred or recycled off-site.  Examples: vapour recovery, recovery of sludge, water recirculation, reuse of water for refrigeration concentration.  Environmental management practices  Please indicate the environmental management practices adopted by this establishment in fiscal year 2000 to avoid or minimise pollution, or to	lenser operation.	No
generated during production, excluding materials transferred or recycled off-site.  Examples: vapour recovery, recovery of sludge, water recirculation, reuse of water for refrigeration concentrations.  Environmental management practices  Please indicate the environmental management practices adopted by this establishment in fiscal year 2000 to avoid or minimise pollution, or to conserve resources.	lenser operation.  Yes	No
generated during production, excluding materials transferred or recycled off-site.  Examples: vapour recovery, recovery of sludge, water recirculation, reuse of water for refrigeration concentration.  Environmental management practices  Please indicate the environmental management practices adopted by this establishment in fiscal year 2000 to avoid or minimise pollution, or to conserve resources.  a) Did this establishment use an environmental management system?  b) Did this establishment use. Life Cycle Management, Life Cycle Assessment or Design for	Yes	No
generated during production, excluding materials transferred or recycled off-site.  Examples: vapour recovery, recovery of sludge, water recirculation, reuse of water for refrigeration concentration.  Environmental management practices  Please indicate the environmental management practices adopted by this establishment in fiscal year 2000 to avoid or minimise pollution, or to conserve resources.  a) Did this establishment use an environmental management system?  b) Did this establishment use Life Cycle Management, Life Cycle Assessment or Design for Environment (DfE) for decision making?	Yes 951 965 9	No
generated during production, excluding materials transferred or recycled off-site.  Examples: vapour recovery, recovery of sludge, water recirculation, reuse of water for refrigeration concentration.  Environmental management practices  Please indicate the environmental management practices adopted by this establishment in fiscal year 2000 to avoid or minimise pollution, or to conserve resources.  a) Did this establishment use an environmental management system?  b) Did this establishment use Life Cycle Management, Life Cycle Assessment or Design for Environment (DfE) for decision making?  c) Was this establishment ISO 14000 certified?  d) Did this establishment have a "green" procurement policy?  e) Did this establishment implement any environmental voluntary agreement, or did it participate in any voluntary environmental program?  Examples include ARET (Accelerated Reduction/Elimination of Toxics)	Yes  951	No
generated during production, excluding materials transferred or recycled off-site.  Examples: vapour recovery, recovery of sludge, water recirculation, reuse of water for refrigeration concerns.  Environmental management practices  Please indicate the environmental management practices adopted by this establishment in fiscal year 2000 to avoid or minimise pollution, or to conserve resources.  a) Did this establishment use an environmental management system?  b) Did this establishment use Life Cycle Management, Life Cycle Assessment or Design for Environment (DfE) for decision making?  c) Was this establishment ISO 14000 certified?  d) Did this establishment have a "green" procurement policy?  e) Did this establishment implement any environmental voluntary agreement, or did it participate in any voluntary environmental program?	Yes 951	No
generated during production, excluding materials transferred or recycled off-site.  Examples: vapour recovery, recovery of sludge, water recirculation, reuse of water for refrigeration concerns to the concerns of sludge, water recirculation, reuse of water for refrigeration concerns of sludge, water recirculation, reuse of water for refrigeration concerns of sludge, water recirculation, reuse of water for refrigeration concerns of sludge, water recirculation, reuse of water for refrigeration concerns of sludge, water recirculation, reuse of water for refrigeration concerns of sludge, water recirculation, reuse of water for refrigeration concerns of water for refrigerati	Yes 951	No

Page 4 4-2300-58

	Environmental management practic	es - conciuu	eu						
						١	<b>′</b> es	No	
	f) Were any of the goods produced by this esta program, such as the "Enviro Choice Progra	ablishment certifi	ed by a Terrach	n environmenta	ıl	959			
	g) Did this establishment publish or contribute to performance or sustainable development?				mental	963			
	h) Did this establishment experience any cost senvironmental management practices outline	of the	969						
i) Other (please specify)									$\sim$
									<i>&gt;</i>
							<u>)</u>		
C	ertification								
	tify that, to the best of my knowledge, th	o information	provid	dod in this au	poctionn	niro			
is co	orrect and complete.	ie iiiioiiiialioii	provid		ESHUITI	aii e			
900	Signature X	Date (D / M / Y)	910	Title					
905	Name of person completing this questionnaire (Type of	or print)	915	Telephone No.		920	Fax I	No.	
			10,						
925	E-mail address		930	Web Site Addre	ess				
Hov	w long did it take to collect the data and to co	mplete this form	m?		935			hours	
		$\rightarrow$							
Co	omments								
que	ase provide any comments you may have about the format). Also,								
you	ir environmental protection activities.								
-									
-									
	>								
Tel Fax	ou have any questions, please contact u ephone (toll free) 1-800-255-7726 (within k: 1-800-755-5514 (within Canada) hail: enviro.oid.exp@statcan.ca			QUEST	SE RET TONNA LOPE F	IRE	N TI	HE	
	Thank yo	ou for ve	ur c	oonera	tion_				

4-2300-58 Page 5

## **Definition and concepts**

Environmental protection expenditures are defined in this survey as all operating expenses and capital and repair expenditures that are incurred in order to comply with Canadian or international actual or anticipated environmental regulations, conventions and voluntary agreements. They consist of expenditures for pollution prevention, and abatement and control expenditures for protecting and restoring wildlife and habitat, expenditures for environmental monitoring, environmental assessments and audits, and expenditures for reclamation and decommissioning of sites. Expenditures to improve employee health, workplace safety and site beautification are excluded.

Environmental conventions or voluntary aggreements refer to any formal, multi-party commitment by an industry, an industry association or other body, to meet specific targets in terms of habitat protection, waste reduction, or the elimination or reduction of specific materials that are considered to be harmful or toxic to the natural environment in Canada, Examples include the following: the National Packaging Protocol (reduction of packaging by 50 percent by the year 2000); the Montreal Protocol (elimination of CFCs by 1998); the Canada-U.S. Air Quality Agreement; the "Responsible Care" program from the Canadian Chemical Producers Association. The Accelerated Reduction/Elimination of Toxics (ARET) Program; The Voluntary Challenge and Registry (VCR) Program on climate change, etc.

**Environmental regulations** refer to any current Canadian federal, provincial, or municipal law or international legislation that is intended to protect or to restore the environment in Canada. Expenditures related to anticipated legislation may be included as long as its provisions are known.

Pollution prevention, abatement and control (PPAC) expenditures include all outlays for the primary purpose of preventing, abating or controlling the release of pollutants and generation of waste resulting from the operations of this establishment. Expenditures to produce PPAC equipment for sale are excluded as they would appear twice in the

expenditure data produced by Statistics Canada. Expenditures for environment - related research and development are also excluded since they are collected elsewhere in Statistics Canada.

Pollution abatement and control (end-of-pipe) expenditures relate to expenditures on an equipment or a facility not integrated to production. Their sole purpose is to abate or control undesirable substances emitted during normal production activities. These expenditures also include waste management expenditures.

**Pollution prevention expenditures** include all expenditures for new or significantly modified integrated production processes that prevent or minimise emissions of pollutants and the amount of waste generated.

Environmental monitoring expenditures include all costs related to equipment, supplies, labour and purchased services that are required for the monitoring of pollutants emitted by this establishment (e.g. under the National Pollutant Release Inventory).

Environmental assessments and audits expenditures include expenditures for reviews of current operations for compliance with regulations (audits); expenditures to evaluate the environmental impact of proposed programs or projects (assessments); associated legal and consulting costs.

Site reclamation and decommissioning expenditures include expenditures to clean up environmental damage resulting from this establishment's operations; decommissioning expenditures made during the year that are associated with the closing down of an establishment or site (even if closing occurred before 2000).

Expenditures for protection and restoration of wildlife and habitat include expenditures made to protect wildlife and habitat from the effects of this establishment's operations or to restore stocks that have been adversely affected by such operations. They exclude expenditures for aesthetic purposes.

## How to report

Please report expenditures in thousands of Canadian dollars. If, for certain categories, no expenditures have been incurred, please write "0" in the corresponding box.

Where precise data are not available, your best estimate is acceptable. If additional information is available in an annual report or an environmental performance report, **please include a copy** when you return the questionnaire.

#### **TO REPORT CAPITAL EXPENDITURES**

Include all relevant outlays in 2000 (fiscal year) for machinery and equipment and their installation and repair, as well as for the construction of non-residential facilities

(by contractors or own employees). For construction, include all costs associated with demolition, planning and design (such as engineering and construction fees), any materials supplied to construction contractors for installation and any costs associated with the purchase of land that are neither amortised nor depreciated.

**Exclude** any provisions for future environmental liability.

#### **TO REPORT OPERATING EXPENSES**

**Include** all cash expenses, rather than accruals, incurred during your 2000 fiscal year for labour, fuel and electricity, materials and supplies, maintenance and repair and purchased services.

Page 6 4-2300-58