

# 2016 Biennial Environmental Protection Expenditures Survey

**CONFIDENTIAL once completed.**

Selon nos dossiers votre langue de préférence est l'anglais, si vous préférez recevoir ce document en français, veuillez nous appeler au numéro sans frais suivant : 1-877-604-7828 ou ATS 1-855-382-7745

This information is collected under the authority of the *Statistics Act*, Revised Statutes of Canada, 1985, Chapter S-19.  
**COMPLETION OF THIS QUESTIONNAIRE IS A LEGAL REQUIREMENT UNDER THIS ACT.**

## Introduction

### Survey purpose

The purpose of this survey is to obtain information on the expenditures made by industry to protect the environment in Canada. This information serves as an important indicator of Canadian investment in environmental protection.

Data from this survey are used by all levels of government in establishing informed environmental policies. The private sector also uses this information in the corporate decision-making process.

Your information may also be used by Statistics Canada for other statistical and research purposes.

Your participation in this survey is required under the authority of the *Statistics Act*.

### Security of emails and faxes

Statistics Canada advises you that there could be a risk of disclosure during facsimile or email. However upon receipt, Statistics Canada will provide the guaranteed level of protection afforded all information collected under the authority of the *Statistics Act*.

**Note:** Our online questionnaires are secure, there is no risk of data interception when responding to Statistics Canada online surveys.

### Confidentiality

The *Statistics Act* protects the confidentiality of information collected by Statistics Canada.

### Data-sharing agreements

To reduce respondent burden, Statistics Canada has entered into data-sharing agreements with provincial and territorial statistical agencies and other government organizations, which have agreed to keep the data confidential and use them only for statistical purposes.

Information on confidentiality, data-sharing agreements and record linkages can be found on page 21 of this questionnaire.

**Please return the questionnaire within 20 days.**

**Please mail the completed questionnaire in the enclosed envelope or fax it to Statistics Canada at 1-800-755-5514.**

If you are unable to complete within 20 days **OR** if you need help, call us at **1-877-604-7828** or **TTY 1-855-382-7745**.

Statistics Canada  
Operations and Integration Division  
150 Tunney's Pasture Driveway  
Ottawa, Ontario K1A 0T6

**Visit our website, [www.statcan.gc.ca](http://www.statcan.gc.ca)**

## Reporting instructions

- Please print in ink.
- **Report** all dollar amounts in **Canadian dollars (CAN\$)**.
- Percentages should be rounded to whole numbers.
- Do not report in decimals. Round all values to the nearest whole number.
- When precise figures are not available, please provide your best estimates.
- For logging activities: Use question 13 to report additional expenditures for logging caused by environmental regulation or convention. **Include** the extra cost of any practice that would not otherwise be followed in the absence of environmental regulation or convention. **Exclude** the foregone revenues resulting from regulations or conventions that reduce the allowable harvest.
- For mining activities: Use question 4 to report any expenditures that are related to the handling and treatment of mine tailings and that are required by environmental regulation. Even if some of these activities are now considered to be “standard practice”, **include** related expenditures if they are required by regulation or convention. Use question 16 to report imputed interest on funds held in trust against future environmental liabilities. Report only actual expenditures.
- Consult the Guide to Definitions and Classification Details on pages 22 to 25 of this questionnaire for further information.

## Business or organization and contact information

1. Please **verify or provide** the business or organization’s **legal and operating name** and correct where needed.

**Note:** Legal name modifications should only be done to correct a spelling error or typo.

Legal name

Operating name (if applicable)

2. Please **verify or provide the contact information** of the designated business or organization contact person for this questionnaire and correct where needed.

**Note:** The designated contact person is the person who should receive this questionnaire. The designated contact person may not always be the one who actually completes the questionnaire.

First name

Last name

Title

Preferred language of communication

☐

English

☐

French

Mailing address (number and street)

City

Province, territory or state

Postal code or ZIP code

Example: A9A 9A9 or 12345-1234

Country

Email address

Example: user@example.gov.ca

Telephone number (including area code)

Example: 123-123-1234

Extension number  
(if applicable)

Fax number (including area code)

Example: 123-123-1234

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B00323

002 ● Not currently operational

➡ Why is this business or organization not currently operational?

B00309

003 ☐ Ceased operations → Go to question 3b.

005 ☐ Amalgamated with (an) other business(es) or organization(s) → **Go to question 3d.**

007 ☐ No longer operating due to other reason(s) → **Go to question 3f.**

	YYYY				MM		DD	
B00217								

B00218

→ **Go to question 4**

B00211

YYYY				MM		DD	

B00311

004 ☐ Other reasons — specify:

B00312

→ Go to question 4

### 3c. Sold operations

When was this business or organization sold?

YYYY MM DD  
B00212  
Date

What is the legal name of the buyer?

B00406

→ Go to question 4

### 3d. Amalgamated with (an) other business(es) or organization(s)

When did this business or organization amalgamate?

YYYY MM DD  
B00213  
Date

What is the legal name of the resulting or continuing business or organization?

B00407

What is(are) the legal name(s) of the other amalgamated business(es) or organization(s)?

B00408

→ Go to question 4

### 3e. Temporarily inactive but will re-open

When did this business or organization become temporarily inactive?

YYYY MM DD  
B00214  
Date

When does this business or organization expect to resume operations?

YYYY MM DD  
B00215  
Date

Why is this business or organization temporarily inactive?

B00313

→ Go to question 4

### 3f. No longer operating due to other reason(s)

When did this business or organization cease operations?

YYYY MM DD  
B00216  
Date

Why did this business or organization cease operations?

B00314

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4. Please **verify or provide the current main activity** of the business or organization identified by the legal and operating name.

**Note:** The described activity was assigned using the North American Industry Classification System (NAICS).

B05002

001



**Go to next section**

002

☐

Other main activity → Please provide a **brief but precise description** of this business or organization's **main activity**.

e.g., breakfast cereal manufacturing, shoe store, software development

B05003

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## Industry characteristics

### Reporting period information

1. What are the start and end dates of this establishment's most recently completed fiscal year that ended any time between April 1, 2016 and March 31, 2017?

#### Fiscal Year Start date

B00205

YYYY	MM	DD
<input type="text"/>	<input type="text"/>	<input type="text"/>

#### Fiscal Year End date

B00206

YYYY	MM	DD
<input type="text"/>	<input type="text"/>	<input type="text"/>

### Reporting period information

2. What is the reason the reporting period does not cover a full year?

Select all that apply.

B00301\_r1

☐

Seasonal operations

B00301\_r2

☐

New business

B00301\_r3

☐

Change of ownership

B00301\_r6

☐

Temporarily inactive

B00301\_r4

☐

Change of fiscal year

B00301\_r5

☐

Ceased operations

B00301\_r8

☐

Other reason the reporting period does not cover a full year – specify:

B00301\_r9

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## Expenditures during the 2016 fiscal year

### 1. During the 2016 fiscal year did this establishment have environmental protection expenditures in any of the following categories?

Please only report expenditures made in response to or in anticipation of Canadian or international environmental regulations, conventions or voluntary agreements.

**Include** operating expenses and capital expenditures.

	Yes	No
a. Waste management and sewage services Expenditures related to the collection, treatment, storage, disposal and recycling of all domestic, industrial, hazardous and non-hazardous waste and sewage. For example, municipal sewage services, municipal garbage and recycling collection. ....	B05203_y1 01 <input type="radio"/>	02 <input type="radio"/>
b. Pollution abatement and control (end-of-pipe) processes Expenditures for end-of-pipe equipment or installations. These end-of-pipe processes treat pollutants after they are produced and are not an integral part of production; their sole purpose is to abate or to control undesirable substances resulting from normal production. ....	B05203_y2 01 <input type="radio"/>	02 <input type="radio"/>
c. Pollution prevention Expenditures for technologies, equipment or processes that reduce or eliminate pollution and/or waste at the source — i.e., before the pollution or waste is created — as opposed to an end-of-pipe process. ....	B05203_y3 01 <input type="radio"/>	02 <input type="radio"/>
d. Environmental monitoring Expenditures for purchase of equipment, supplies, labour and services required to monitor pollutant emissions that would affect air, water or soil quality. ....	B05203_y4 01 <input type="radio"/>	02 <input type="radio"/>
e. Environmental assessment and audits Expenditures made to review the current compliance of operations with regulations and to evaluate the environmental impact of proposed projects. ....	B05203_y5 01 <input type="radio"/>	02 <input type="radio"/>
f. Site reclamation and decommissioning Expenditures for clean-up of environmental damage and for closing a site. ....	B05203_y6 01 <input type="radio"/>	02 <input type="radio"/>
g. Protection and restoration of wildlife and habitat Expenditures made to protect wildlife and habitat from the effects of economic activity and to restore stocks that could have been adversely affected by such activity. ....	B05203_y7 01 <input type="radio"/>	02 <input type="radio"/>
h. Environmental charges Permits, approvals, fees, levies, special assessments and related fees, fines, penalties or damage awards paid to government agencies or to individuals, or any other charges paid to regulating bodies. ....	B05203_y8 01 <input type="radio"/>	02 <input type="radio"/>
i. Other environmental protection expenditures Expenditures for administration of environmental projects, for training, and for other initiatives not elsewhere specified. ....	B05203_y90 01 <input type="radio"/>	02 <input type="radio"/>

### Other environmental protection expenditures

### 2. You indicated that this establishment has other environmental protection expenditures. Please specify the other environmental protection expenditures.

B05203\_y91

## Waste management and sewage services

### 3. Please report this establishment's operating expenses and capital expenditures for **waste management and sewage services**.

**Include** expenditures related to:

- waste collection, treatment, storage and disposal, including the on-site preparation of materials for recycling at an off-site facility done by your establishment's employees and services provided by a private contractor or a federal, provincial or local government body
- the installation of sewage infrastructure and expenditures related to the use, collection, treatment and disposal of sewage
- sewage services provided by a federal, provincial or local government body.

**Exclude** expenditures on:

- on-site recycling
- end-of-pipe wastewater treatment to be reported in question 4.

If the expenditure is zero, please enter 0 in the corresponding box.

CAN\$

F61078\_y1

a. Operating expenses ..... \$  .00

F80132\_y1

b. Capital expenditures ..... \$  .00

E60007\_y1

**Total expenditures for waste management and sewage services** ..... \$  .00

## Pollution abatement and control (end-of-pipe) processes

### 4. Please report this establishment's operating expenses and capital expenditures for **pollution abatement and control**.

**Include** expenditures for equipment or facilities that are separately identifiable and that have been installed exclusively to reduce or eliminate pollutants resulting from production.

**Exclude** expenditures on:

- workers' health and safety
- waste management and sewage services already reported in question 3.

If the expenditure is zero, please enter 0 in the corresponding box.

CAN\$

F61078\_y2

a. Operating expenses ..... \$  .00

F80132\_y2

b. Capital expenditures ..... \$  .00

F60007\_y2

**Total expenditures for pollution abatement and control** ..... \$  .00

## Pollution abatement and control (end-of-pipe) processes

5. What proportion of operating expenses reported in question 4 was spent on **reducing** or **abating** each of the following?

### Percentage

F61078\_y2\_md1

a. Substances released to air .....

%

F61078\_y2\_md2

b. Substances released to surface waters .....

%

F61078\_y2\_md3

c. On-site releases to soil and groundwater and underground injection .....

%

F61078\_y2\_md4

d. Noise, vibration or radiation .....

%

**Total percentage (should equal 100%)**

**100%**

6. What proportion of capital expenditures reported in question 4 was spent on **reducing** or **abating** each of the following?

### Percentage

F80132\_y2\_md1

a. Substances released to air .....

%

F80132\_y2\_md2

b. Substances released to surface waters .....

%

F80132\_y2\_md3

c. On-site releases to soil and groundwater and underground injection .....

%

F80132\_y2\_md4

d. Noise, vibration or radiation .....

%

**Total percentage (should equal 100%)**

**100%**

## Pollution prevention

### 7. Please report this establishment's operating expenses and capital expenditures for **pollution prevention**.

**Include** expenditures for equipment or facilities related to:

- production processes that avoid or minimize the production of pollutants and waste
- leak and spill prevention (e.g., spill containments, dyke extensions, and accessories)
- conserving energy or water
- recirculation, recovery, reuse and on-site recycling of materials or substances
- operational or process changes aimed at pollution prevention (e.g., product redesign, staff training).

**Exclude** expenditures related to:

- workers' health and safety
- waste management and sewage services already reported in question 3.

If the expenditure is zero, please enter 0 in the corresponding box.

**CAN\$**

		F61078_y3	
a. Operating expenses .....	\$	<input type="text"/>	.00
		F80132_y3	
b. Capital expenditures .....	\$	<input type="text"/>	.00
		F60007_y3	
<b>Total expenditures for pollution prevention</b>	\$	<input type="text"/>	.00

### 8. What proportion of operating expenses reported in question 7 was spent on **preventing** or **minimizing** each of the following?

**Percentage**

		F61078_y3_md1	
a. Substances released to air .....		<input type="text"/>	%
		F61078_y3_md2	
b. Substances released to surface waters .....		<input type="text"/>	%
		F61078_y3_md3	
c. On-site releases to soil and groundwater and underground injection .....		<input type="text"/>	%
		F61078_y3_md4	
d. Noise, vibration or radiation .....		<input type="text"/>	%
		F61078_y3_md90	
e. Other .....		<input type="text"/>	%

**Total percentage (should equal 100%)**

**100%**

9. What proportion of capital expenditures reported in question 7 was spent on **preventing** or **minimizing** each of the following?

**Percentage**

- a. Substances released to air .....
- b. Substances released to surface waters .....
- c. On-site releases to soil and groundwater and underground injection .....
- d. Noise, vibration or radiation .....
- e. Other .....

F80132\_y3\_md1

%

F80132\_y3\_md2

%

F80132\_y3\_md3

%

F80132\_y3\_md4

%

F80132\_y3\_md90

%

**Total percentage (should equal 100%)**

**100%**

**Environmental monitoring**

10. Please report this establishment's operating expenses and capital expenditures for **environmental monitoring**.

**Include** expenditures related to:

- equipment, supplies, labour and purchased services required for monitoring pollutants emitted by this establishment
- participation in the National Pollutant Release Inventory (NPRI) and other similar programs.

If the expenditure is zero, please enter 0 in the corresponding box.

**CAN\$**

F61078\_y4

- a. Operating expenses .....

\$  .00

F80132\_y4

- b. Capital expenditures .....

\$  .00

F60007\_y4

**Total expenditures for environmental monitoring**

\$  .00

## Environmental assessment and audits

### 11. Please report this establishment's operating expenses and capital expenditures for **environmental assessment and audits**.

**Include** expenditures related to:

- reviews of current operations for compliance with regulations (audits)
- evaluating the environmental impact of proposed programs or projects (assessments)
- associated legal and consulting costs.

If the expenditure is zero, please enter 0 in the corresponding box.

CAN\$

F61078\_y5

a. Operating expenses ..... \$  .00

F80132\_y5

b. Capital expenditures ..... \$  .00

F60007\_y5

**Total expenditures for environmental assessment and audits** ..... \$  .00

## Site reclamation and decommissioning

### 12. Please report operating expenses and capital expenditures for **site reclamation and decommissioning** for any active or inactive site belonging to this establishment.

**Include** expenditures incurred in the 2016 fiscal year on site decommissioning even if the site closed before 2016.

**Exclude:**

- fines or compensation for environmental damage to be reported in question 14
- provisions for future environmental liability.

If the expenditure is zero, please enter 0 in the corresponding box.

CAN\$

F61078\_y6

a. Operating expenses ..... \$  .00

F80132\_y6

b. Capital expenditures ..... \$  .00

F60007\_y6

**Total expenditures for site reclamation and decommissioning** ..... \$  .00

## Protection and restoration of wildlife and habitat

### 13. Please report this establishment's operating expenses and capital expenditures for **protection and restoration of wildlife and habitat**.

**Include** expenditures made to protect or restore wildlife and habitat that could be or have been adversely affected by this establishment's operations.

**Exclude** expenditures for:

- reclamation and decommissioning which are already reported in question 12
- aesthetic purposes (e.g., landscaping for decorative purposes).

If the expenditure is zero, please enter 0 in the corresponding box.

CAN\$

F61078\_y7

a. Operating expenses ..... \$  .00

F80132\_y7

b. Capital expenditures ..... \$  .00

F60007\_y7

**Total expenditures for protection and restoration of wildlife and habitat**

\$  .00

## Environmental charges

### 14. Please report this establishment's operating expenses for **environmental charges**.

**Include:**

- permits, approvals, fees, levies, special assessments and related fees
- any fines, penalties, or damage awards paid to government agencies or to individuals
- other charges paid to regulating bodies in order to allow operations to take place at this establishment.

If the expenditure is zero, please enter 0 in the corresponding box.

CAN\$

F61078\_y8

\$  .00

### 15. What proportion of the operating expenses reported in question 14 was spent on each of the following?

Percentage

F61078\_y8\_sr1

a. Permits, approvals, fees, levies, special assessments and related fees .....  %

F61078\_y8\_sr2

b. Any fines, penalties or damage awards paid to government agencies or individuals, or other charges paid to regulating bodies in order to allow operations to take place at this establishment .....  %

**Total percentage (should equal 100%)**

**100%**

## Other environmental protection expenditures

16. Please report this establishment's operating expenses and capital expenditures for **other environmental protection expenditures**.

**Include:**

- the operating costs of administering your environmental program not included elsewhere
- environmental training and information programs not included elsewhere
- any other additional expenditures not included elsewhere that are required to comply with environmental regulations, conventions or voluntary agreements.

**Exclude** research and development expenditures.

If the expenditure is zero, please enter 0 in the corresponding box.

CAN\$

F61078\_y90

a. Operating expenses ..... \$  .00

F80132\_y90

b. Capital expenditures ..... \$  .00

F60007\_y90

**Total other environmental protection expenditures** ..... \$  .00

## Pollution prevention

17. During the 2016 fiscal year, did this establishment use any of the following **pollution prevention methods** to conserve resources or prevent or reduce waste?

Yes

No

a. Product design or reformulation  
(i.e., reformulating or redesigning end products to be non-toxic or less polluting upon use, release or disposal) ..... B05202\_y3\_m1  
01 ☐ 02 ☐

b. Equipment or process modifications (integrated process)  
(i.e., upgrading or replacing production unit equipment or methods) ..... B05202\_y3\_m2  
01 ☐ 02 ☐

c. Recirculation, on-site recycling or reuse or recovery of materials or substances .. B05202\_y3\_m3  
01 ☐ 02 ☐

d. Materials or feedstock substitution, solvent reduction, elimination or substitution  
(i.e., changing the raw materials of products to use non-toxic or less polluting raw materials) ..... B05202\_y3\_m4  
01 ☐ 02 ☐

e. Improved inventory management or purchasing techniques  
(i.e., integrating environmental considerations into existing and new purchasing practices, as well as into inventory management systems) ..... B05202\_y3\_m5  
01 ☐ 02 ☐

f. Prevention of leaks and spills ..... B05202\_y3\_m6  
01 ☐ 02 ☐

g. Good operating practices or pollution prevention training  
(i.e., modifying existing equipment or methods by such steps as improved housekeeping, system adjustments, or process/product inspections) ..... B05202\_y3\_m7  
01 ☐ 02 ☐

h. Other pollution prevention method(s) used ..... B05202\_y3\_m90  
01 ☐ 02 ☐

### Other pollution prevention methods

18. You indicated that this establishment used **other pollution prevention methods**. Please specify the other pollution prevention methods.

B05202\_y3\_m91

### Reporting changes and events that affected the business

19. Describe any reason(s) that may have affected the reported values for this establishment compared to the last reporting period.

(e.g., We installed low-NOx burners in 2016 – question 7).

B00302

### Renewable energy technologies

20. During the 2016 fiscal year, did this establishment have capital expenditures for **renewable energy technologies**?

**Renewable energy** is energy obtained from natural resources that can be naturally replenished or renewed within a human lifespan, that is, the resource is a sustainable source of energy.

When reporting on renewable energy technologies please report all expenditures whether they were made in response to or in anticipation of Canadian or international environmental regulations, conventions or voluntary agreements or for another reason.

**Include** all capital expenditures on renewable energy technologies whether they were reported earlier in the questionnaire or not.

B05201

- 1 ☐ Yes (Go to question 21)
- 2 ☐ No (Go to question 22)

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## Renewable energy technologies

21. Please report this establishment's capital expenditures for the following **renewable energy sources**.

### Capital expenditures in CAN\$

a. Small, mini- and micro-hydroelectric facility .....	F80131_e1	\$	<input type="text"/>	.00
b. Solar energy systems or equipment .....	F80131_e2	\$	<input type="text"/>	.00
c. Wind energy systems or equipment .....	F80131_e3	\$	<input type="text"/>	.00
d. Biomass energy (e.g., energy crops) .....	F80131_e4	\$	<input type="text"/>	.00
e. Geothermal .....	F80131_e5	\$	<input type="text"/>	.00
f. Other renewable energy systems or equipment 1 – specify: F80131_e92 <input type="text"/>	F80131_e93	\$	<input type="text"/>	.00
g. Other renewable energy systems or equipment 2 – specify: F80131_e94 <input type="text"/>	F80131_e95	\$	<input type="text"/>	.00
h. Other renewable energy systems or equipment 3 – specify: F80131_e96 <input type="text"/>	F80131_e97	\$	<input type="text"/>	.00
i. Other renewable energy systems or equipment 4 – specify: F80131_e98 <input type="text"/>	F80131_e99	\$	<input type="text"/>	.00
<b>Total capital expenditures for renewable energy sources</b>	F80131_e100	\$	<input type="text"/>	.00

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## Environmental management practices

### Environmental management practices

The following questions ask about the environmental management practices adopted or utilized by this establishment to avoid or minimize pollution or to conserve resources during the 2016 fiscal year.

22. Did this establishment use an **environmental management system**?

B05202\_p1

1 ☐ Yes

2 ☐ No

23. Did this establishment use **Life Cycle Management, Life Cycle Assessment** or **Design for Environment** for decision making?

B05202\_p2

1 ☐ Yes

2 ☐ No

24. Is this establishment certified under the **ISO 14000 family** of environmental management standards?

B05202\_p3

1 ☐ Yes

2 ☐ No

25. Did this establishment develop and implement a **pollution prevention plan**?

B05202\_p4

1 ☐ Yes

2 ☐ No

26. Did this establishment implement any **environmental voluntary agreements**, or did it participate in any **voluntary environmental programs**?

**For example**, Environmental Performance Agreements (EPAs), Canadian GHG Reductions Registry© or Canadian Industry Program for Energy Conservation.

B05202\_p5

1 ☐ Yes

**Please specify the programs, accords or agreements.**

Program, accord or agreement 1:

B05202\_p6

Program, accord or agreement 2:

B05202\_p7

Program, accord or agreement 3:

B05202\_p8

2 ☐ No

## Environmental management practices

27. Did this establishment have a **“green” procurement policy**?

B05202\_p9

1 ☐ Yes

2 ☐ No

28. Were any of the goods produced by this establishment **certified by an environmental program**, such as the “Environmental Choice Program” or Ecologo?

B05202\_p10

1 ☐ Yes

2 ☐ No

29. Did this establishment have an **environmental supply chain management policy**?

B05202\_p11

1 ☐ Yes

2 ☐ No

30. Was this establishment impacted by the **environmental supply chain management policy** in place at a supplier or client business?

B05202\_p12

1 ☐ Yes

2 ☐ No

31. Did this establishment use an **energy management or monitoring system(s)** to improve efficiency?

B05202\_p13

1 ☐ Yes

2 ☐ No

32. Did this establishment perform an **energy audit** in the last three years (from 2014 to 2016)?

B05202\_p14

1 ☐ Yes

2 ☐ No

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33. Did this establishment take advantage of any Canadian federal or provincial and territorial government **environmental incentive programs, grants, loans, or tax credits** during the 2016 fiscal year?  
For example, ecoENERGY Initiatives, or Accelerated Capital Cost Allowance for energy efficiency and renewable energy sources.

B05202\_p15

1 ☐ Yes

**Please specify the incentive programs, grants or loans.**

Incentive program, grant or loan 1:

B05202\_p16

Incentive program, grant or loan 2:

B05202\_p17

Incentive program, grant or loan 3:

B05202\_p18

2 ☐ No

34. Did this establishment perform a **greenhouse gas emissions inventory** in the 2016 fiscal year?

B05202\_p19

1 ☐ Yes

2 ☐ No

35. Did this establishment participate in any form of **carbon-trading or purchase or sell carbon-offset credits** in the 2016 fiscal year?

B05202\_p20

1 ☐ Yes

2 ☐ No

36. Did this establishment participate in **any other** environmental management practices during the 2016 fiscal year?

Please specify any other environmental management practices not included in questions 22 to 35.

B05202\_p90

1 ☐ Yes

**Please specify the other environmental management practices.**

Other practice 1:

B05202\_p91

Other practice 2:

B05202\_p92

Other practice 3:

B05202\_p93

2 ☐ No

## Contact person

1. Statistics Canada may need to contact the person who completed this questionnaire for further information.

If the contact person is the same as on cover page, please check ☐ → **Go to "Feedback"**

**Otherwise, who is the best person to contact about this questionnaire?**

First name

Last name

Title

Email address (example: user@example.gov.ca)

100

Telephone number (including area code)

Example: 123-123-1234

Extension number  
(if applicable)

Fax number (including area code)

Example: 123-123-1234

COSE

## Feedback

Hours Minutes

1. How long did it take to complete this questionnaire?

**Include** the time spent gathering the necessary information. ....

2. We invite your comments about this questionnaire.

B00002

## General information

### Confidentiality

#### Your answers are confidential.

Statistics Canada is prohibited by law from releasing any information it collects which could identify any person, business, or organization, unless consent has been given by the respondent or as permitted by the *Statistics Act*. Statistics Canada will use the information from this survey for statistical purposes.

### Data-sharing agreements

To reduce respondent burden, Statistics Canada has entered into data-sharing agreements with provincial and territorial statistical agencies and other government organizations, which have agreed to keep the data confidential and use them only for statistical purposes. Statistics Canada will only share data from this survey with those organizations that have demonstrated a requirement to use the data.

**Section 11** of the *Statistics Act* provides for the sharing of information with provincial and territorial statistical agencies that meet certain conditions. These agencies must have the legislative authority to collect the same information, on a mandatory basis, and the legislation must provide substantially the same provisions for confidentiality and penalties for disclosure of confidential information as the *Statistics Act*. Because these agencies have the legal authority to compel businesses to provide the same information, consent is not requested and businesses may not object to the sharing of the data.

For this survey, there are **Section 11** agreements with the provincial and territorial statistical agencies of Newfoundland and Labrador, Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia and the Yukon. The shared data will be limited to information pertaining to business establishments located within the jurisdiction of the respective province or territory.

**Section 12** of the *Statistics Act* provides for the sharing of information with federal, provincial or territorial government organizations. Under **Section 12**, you may refuse to share your information with any of these organizations by writing a letter of objection to the Chief Statistician, specifying the organizations with which you do not want Statistics Canada to share your data and mailing it to the following address:

Chief Statistician of Canada  
Statistics Canada  
Attention of Director, Enterprise Statistics Division  
150 Tunney's Pasture Driveway  
Ottawa, Ontario  
K1A 0T6

You may also contact us by email at [statcan.esd-helpdesk-dse-bureaudepannage.statcan@canada.ca](mailto:statcan.esd-helpdesk-dse-bureaudepannage.statcan@canada.ca) or by fax at 613-951-6583.

For this survey, there are **Section 12** agreements with the statistical agencies of Prince Edward Island, the Northwest Territories and Nunavut.

For agreements with provincial and territorial government organizations, the shared data will be limited to information pertaining to business establishments located within the jurisdiction of the respective province or territory.

### Record linkages

To enhance the data from this survey and to minimize the reporting burden, Statistics Canada may combine it with information from other surveys or from administrative sources.

**Thank you for completing this questionnaire.**

**Please retain a copy for your records.**

**Visit our website, [www.statcan.gc.ca](http://www.statcan.gc.ca)**

## Guide to Definitions and Classification Details

### Establishment:

An establishment is defined as the most homogeneous unit of production for which a business maintains accounting records. From these accounting records, it is possible to assemble all the data elements required to compile the total sales or shipments, inventories, cost of materials and services, labour and capital used in production.

### Environmental protection expenditures

Environmental protection expenditures are defined as all operating expenses and capital and repair expenditures that are incurred in order to anticipate or to comply with Canadian or international environmental regulations, conventions or voluntary agreements. They consist of expenditures for pollution prevention, 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. **Environmental protection expenditures incurred that are not in response to current or anticipated Canadian or international regulations, conventions or voluntary agreements should be excluded. In addition, expenditures to improve employee health, workplace safety and site beautification should also be excluded.**

Expenditures to produce pollution prevention, abatement and control equipment for sale are also 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.

### Environmental conventions or voluntary agreements

Environmental conventions or voluntary agreements refer to any formal, multi-party commitment by an industry or an industry association for instance, 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. **For example**, the Canada-United States Air Quality Agreement; the "Responsible Care" program from the Chemistry Industry Association of Canada; the Canadian GHG Reductions Registry®.

### Environmental regulations

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.

### To report operating expenses

**Include** all expenses related to environmental protection incurred for labour, materials and supplies, maintenance and repair, and purchased services (**include** fuel and electricity expenses for machinery and equipment whose sole purpose is to protect the environment).

**Exclude** depreciation on machinery and equipment.

### To report capital expenditures

**Include** all relevant outlays for machinery and equipment and their installation and repair that have been capitalized, as well as for the construction of non-residential facilities (contractors or own employees). For construction, **include** all costs associated with demolition, planning and design (such as engineering and consulting fees), any materials supplied to construction contractors for installation and any costs associated with the purchase of land that are neither amortized nor depreciated.

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

### Question 3

#### What is waste?

Waste is a material that is unwanted by its producer. The unwanted materials may be by-products of a production process - fly ash from a furnace, **for example**. Alternatively they might be products, the inherent value of which has been consumed from the perspective of the current holder — **for example**, a newspaper that has been read, a package that has been opened and emptied of its contents or an apple eaten to the core are all similar insofar as they have lost their original inherent value from the consumer's perspective.

### Hazardous waste

**Includes** all materials that may be hazardous to human health or the environment, due to their nature or quantity, and which require special handling techniques as specified by the *Transportation of Dangerous Goods Regulations* (2001), the *Canadian Environmental Protection Act* (1999), The Basel Convention (1989), or the *Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations* (2005).

### Sewage

Sewage is wastewater discharged from residences, commercial and industrial establishments and conveyed in a plumbing collection system.

#### Question 4

##### **Pollution abatement and control (end-of-pipe) processes**

Pollution abatement and control (end-of-pipe) processes can be described as equipment and processes that treat pollution and wastes after they have been created. Examples of these types of equipment or processes **include** scrubbers at the end of emission stacks, biological and chemical systems for treating water (such as a water treatment plant), filtration systems, cyclones or other barrier systems. These end-of-pipe processes are not an integral part of production; their sole purpose is to abate or to control undesirable substances resulting from normal production.

#### Question 5 and 6

**Substances released to air:** emissions of pollutants (including greenhouse gases) to the atmosphere.

**Substances released to surface waters:** releases of pollutants to water bodies.

**On-site releases to soil and groundwater and underground injection:** releases of pollutants to soil and groundwater and / or injected into the ground within the boundaries of your establishment.

**Noise, vibration or radiation:** control of noise, vibration or radiation.

#### Question 7

##### **Pollution prevention**

Pollution prevention is the use of technologies, equipment or processes that reduce or eliminate pollution and waste at the source instead of at the end-of-pipe or stack before the pollution or waste is created. Examples, **include** the installation of more efficient processes that consume less energy or inputs, the redesign or reformulation of the production process to reduce pollution or emissions, reuse, recirculation or recycling of materials on-site (does not include materials sent off-site for recycling).

#### Question 8 and 9

**Substances released to air:** emissions of pollutants (including greenhouse gases) to the atmosphere.

**Substances released to surface waters:** releases of pollutants to water bodies.

**On-site releases to soil and groundwater and underground injection:** releases of pollutants to soil and groundwater and / or injected into the ground within the boundaries of your establishment.

**Noise, vibration or radiation:** control of noise, vibration or radiation.

#### Question 10

##### **Environmental monitoring**

Environmental monitoring is the periodic or continuous surveillance or testing, according to a pre-determined schedule, of one or more environmental components. Monitoring is usually conducted to determine the level of compliance with stated requirements, or to observe the status and trends of a particular environmental component over time.

#### Question 11

##### **Environmental assessment**

An environmental assessment is a process to predict environmental effects of proposed initiatives before they are carried out.

##### **An environmental assessment:**

- identifies potential adverse environmental effects
- proposes measures to mitigate adverse environmental effects
- predicts whether there will be significant adverse environmental effects, after mitigation measures are implemented
- **includes** a follow-up program to verify the accuracy of the environmental assessment and the effectiveness of the mitigation measures.

##### **Environmental audit**

An environmental audit is a systematic approach to defining environmental risk and / or determining the conformance of an operation with respect to prescribed criteria. An environmental audit typically involves a methodical examination that may **include** interviews, site visits, sampling, testing, analysis and verification of the practices and procedures of an existing operation.

#### Question 12

##### **Reclamation**

Reclamation is returning disturbed land to a stable, biologically-productive state.

##### **Decommissioning**

Decommissioning is the permanent closure of all or part of an industrial facility followed by removal of process equipment, buildings and other structures, and the decontamination of the surface and subsurface.

#### Question 17

##### **Pollution prevention methods**

Examples are listed for each category of pollution prevention.

**Note:** lists are not exhaustive.

**Product design or reformulation:** changing product specifications to reduce or eliminate the use of toxic substances; modifying product design or composition to make them more environmentally friendly; modify packaging.

**Equipment or process modifications (integrated process):** instituting recycling within a process; switching from the use of solvents to mechanical paint-stripping devices; modified or installed rinse systems; improved rinse equipment design; improved rinse equipment operation; modifying equipment, layout or piping; use of a different process catalyst; institute better controls on operating bulk containers or changing from small volume containers to bulk containers to minimize discarding of empty containers.

**Recirculation, on-site recycling or reuse or recovery of materials or substances:** such as using a small distillation unit to reclaim solvents on-site; vapour recovery; recovery of sludge; water recirculation; reuse of water for refrigeration condenser operation. **Excludes** materials transferred or recycled off-site.

**Materials or feedstock substitution, solvent reduction, elimination or substitution:** the use of aqueous-based rather than solvent-based cleaners; increased purity of raw materials; substituted raw materials; other raw material modifications.

**Improved inventory management or purchasing techniques:** avoiding the unnecessary generation of waste by ensuring that materials do not stay in inventory beyond shelf life; eliminate shelf-life requirements for stable materials; instituting better labelling procedures; instituting a clearinghouse to exchange materials that would otherwise be discarded.

**Prevention of leaks and spills:** taking measures to prevent releases such as installing splash guards and drip trays around equipment; modified containment procedures for cleaning units; improved draining procedures; improved storage or stacking procedures; improved procedures for loading, unloading and transfer operations; installed overflow alarms or automatic shut-off valves; installed vapour recovery systems; implemented inspection or monitoring program of potential spill or leak sources.

**Good operating practices or pollution prevention training:** changing production schedules to minimize equipment and feedstock changeovers; improved maintenance scheduling, record keeping or procedures; training staff to recognize and implement pollution prevention opportunities.

**Other pollution prevention method(s) used:** please specify your pollution prevention activities if they are not listed in the preceding categories.

#### Question 20

##### **Renewable energy technologies**

When reporting on renewable energy technologies please report all expenditures whether they were made in response to or in anticipation of Canadian or international environmental regulations, conventions or voluntary agreements or for another reason.

**Include** all capital expenditures on renewable energy technologies whether they were reported earlier in the questionnaire or not. Do not include the purchase of equipment to switch energy sources (**for example**, replacing a gas-powered motor with an electrical motor).

#### Question 21

Description of the systems and equipment listed in question 21.

##### **Small, mini- or micro-hydroelectric facility:**

Micro-hydro = less than 100 kW; Mini-hydro = 100 kW to 1 000 kW (1MW); Small hydro = 1 MW to 25 MW (50 MW in British Columbia).

**Solar energy systems or equipment:** active and passive solar systems; photovoltaics; solar thermal generators; solar water and space heating systems.

**Wind energy systems or equipment:** horizontal and vertical axis turbines; towers and other types of equipment used to generate energy and electricity.

**Biomass energy:** systems and equipment (turbines, boilers, process equipment) that use organic matter such as forest and agricultural residues to produce electricity, steam, or heat.

**Geothermal:** hot water or steam extracted from the Earth's interior and used for geothermal heat pumps, water heating or electricity generation.

**Other renewable energy systems or equipment:** please specify your renewable energy systems and equipment if they are not listed in the preceding categories (**for example**, systems and equipment for energy production from wave, tidal, and ocean thermal energy conversion systems).

#### Question 22

**An environmental management system** is a management structure that allows an establishment to assess and control the environmental impact of its activities.

#### Question 23

**Life Cycle Management, Life Cycle Assessment** refer to tools that identify and measure direct and indirect environmental, energy and resource impacts associated with a product, process or service through its design, production, usage and final disposal. **Design for Environment** is the integration of environmental considerations into the design, production, distribution, use and end-of-life of products.

#### Question 24

The **ISO 14000 family** (ISO 14001 to ISO 14064 inclusive) of environmental management standards are an internationally recognized set of standards and guidelines primarily concerned with environmental management systems developed by the International Organization for Standardization.

### Question 25

A **pollution prevention plan** establishes a plan to meet or exceed compliance and improve the efficiency and environmental performance of an establishment, a specific operation or a particular product.

### Question 26

Voluntary actions **include** codes of environmental practice, guidelines, emission and waste reduction targets, as well as agreements with governments.

An Environmental Performance Agreement (EPA) is an agreement with core design criteria negotiated among parties to achieve specified environmental results. Performance agreements are voluntary, non-statutory instruments that allow parties with common objectives to address a particular environmental issue.

The Canadian GHG Reductions Registry© accepts projects that quantify reduction or removal efforts, if properly documented and verified, that can include projects that are not limited to just the six GHGs as listed in the Kyoto Protocol and the ISO 14064 standards. **For example**, projects in the Reductions Registry can **include** projects which target ozone depleting substances.

The Canadian Industry Program for Energy Conservation is a partnership between private industry and the federal Government that aims to promote and improve Canada's industrial energy efficiency and reduce greenhouse gas emissions from energy use in the industrial sector.

### Question 27

Green procurement describes the procurement of goods and services that minimize environmental impacts compared with goods and services with similar performance requirements. The costs and environmental impacts of a product at various stages of its life cycle are taken into consideration, such as the process used to manufacture the product (**including** raw materials), transport, store, handle, operate or dispose of the product.

### Question 28

Eco-labelling programs such as Environmental Choice (operated by TerraChoice Environmental Services Inc. for Environment Canada) are designed to encourage manufacturers and suppliers to develop environmentally preferable products and services. These eco-labelling programs are meant to help consumers identify products and services that are less harmful to the environment.

### Question 29 and 30

Environmental supply chain management refers to the **inclusion** of environmental standards in the planning and management of activities involved in sourcing and procurement, conversion, and all logistics management activities. It also **includes** the coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers. Environmental supply chain management integrates supply and demand environmental management within and across companies.

### Question 31

**Use of energy management or monitoring system(s) to improve efficiency:** an energy conservation feature that uses computers, instrumentation, control equipment and software to manage a building's energy use for heating, ventilation, air-conditioning, lighting and for business-related processes.

### Question 32

**Performed energy audit in the last three years:** an analysis of the energy consuming systems within an establishment and the identification of potential areas for reducing energy consumption.

### Question 33

The ecoEnergy Initiatives are a set of focused measures to help Canadians use energy more efficiently, boost renewable energy supplies and develop cleaner energy technologies.

Certain capital costs of systems that produce energy by using renewable energy sources or fuels from waste, or conserve energy by using fuel more efficiently, are eligible for accelerated capital cost allowance.

### Question 34

**Greenhouse gas emissions inventory:** an estimate of the amount of greenhouse gas produced by the establishment over a given unit of time, measured in tonnes.

### Question 35

**Carbon-trading or purchase or sell carbon-offset credits:** a market-based system in which an establishment that produced less than their allowable carbon emissions can trade or sell the unused portion of their allowance to another establishment.