

2016 Annual Survey of Research and Development in Canadian Industry Industrial Non-profit Organizations

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 : 1-800-972-9692.

Please verify the business or organization name, contact person and address for this questionnaire and correct where needed.

Legal name

Operating name

First name

Last name

Title

Address (number and street)

City

Province, territory or state Postal code or ZIP code

Country

Business or organization and contact information		
Email address <input type="text"/>	Telephone number (including area code) <input type="text"/>	Extension number <input type="text"/>
Preferred language of communication <input type="radio"/> English <input type="radio"/> French	Fax number (including area code) <input type="text"/>	

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

This survey collects information on scientific activities of Canadian businesses and industrial non-profit organizations. The research and development expenditures and personnel information is used by federal, provincial and territorial governments and agencies, academics, trade associations and international organizations for statistical analyses and policy purposes. These data also contribute to national totals of research and development activities. The payments and receipts information is used by these agencies to monitor knowledge flows across international borders and between Canadian organizations. Your information may also be used by Statistics Canada for other statistical and research purposes.

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 the last page of this questionnaire.

Please return the questionnaire within 21 days.

Please mail the completed questionnaire in the enclosed envelope or fax it to Statistics Canada at 1-888-883-7999.

If you are unable to complete within 21 days **OR** if you need help, call us at **1-800-972-9692.**

Statistics Canada
Operations and Integration Division
150 Tunney's Pasture Driveway
Ottawa, Ontario K1A 0T6
Visit our website, www.statcan.gc.ca

Reporting instructions

- Please print in ink.
- Report all dollar amounts in **thousands of Canadian dollars**.
- Do not include sales tax.
- Percentages should be rounded to whole numbers.
- Do not report dollars in decimals. Round all values to the nearest whole number.
- When precise figures are not available, please provide your best estimates.
- If this organization **performs** in-house **R&D** and **outsources R&D**, complete **all** questions.
- If this organization **performs** in-house **R&D** and **does not outsource R&D**, complete questions 1-6, 9-20.
- If this organization **outsources R&D** and **does not perform** in-house **R&D**, complete questions 1-4, 6-8, 13, 17-20.
- If this organization **does not perform** in-house **R&D** and **does not outsource R&D**, complete questions 1-4, 6, 13, 17-20.
- Consult the reporting guide at www.statcan.gc.ca/guides-e for further information.

Business or organization and contact information

1. Please **provide** the business or organization's **legal and operating name**.

Legal name

Operating name (if applicable)

2. Please **provide the contact information** of the designated business or organization **contact person** for this questionnaire.

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

3. Please provide the current operational status of the business or organization identified by the legal and operating name.

B00323

1 Operational → Go to question 4

2 Not currently operational

e.g., temporarily or permanently closed, change of ownership

Why is this business or organization not currently operational?

B00309

2 Seasonal operations → Go to question 3a.

3 Ceased operations → Go to question 3b.

4 Sold operations → Go to question 3c.

5 Amalgamated with other businesses or organizations → Go to question 3d.

6 Temporarily inactive but will re-open → Go to question 3e.

7 No longer operating due to other reasons → Go to question 3f.

3a. Seasonal operations

When did this business or organization close for the season?

Date B00217

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

When does this business or organization expect to resume operations?

Date B00218

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

 → Go to question 4

3b. Ceased operations

When did this business or organization cease operations?

Date B00211

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

Why did this business or organization cease operations?

B00311

1 Bankruptcy

2 Liquidation

3 Dissolution

4 Other
Specify the other reasons for ceased operations

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 other businesses or organizations

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 are the legal names of the other amalgamated businesses or organizations?

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 reasons

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

1 This is the current main activity. → **Go to next section**

2 This is **not** the current 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



5. Was this business or organization's main activity ever classified as:

B05111

1 **Yes**

2 **No → Go to next section**

6. When did the main activity change?

Date B00219

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

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Organization characteristics

Reporting period

1. What is the end date of this organization's fiscal year?

B00206

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

Note: For this survey, **this organization's** fiscal year end date should fall on or before **March 31, 2017**.

Here are **some examples** of fiscal periods that **fall within the targeted dates**:

- May 1, 2015 to **April 30, 2016**
- July 1, 2015 to **June 30, 2016**
- October 1, 2015 to **September 30, 2016**
- January 1, 2016 to **December 31, 2016**
- February 1, 2016 to **January 31, 2017**
- April 1, 2016 to **March 31, 2017**

*THIS FISCAL YEAR WILL BE REFERRED TO **AS 2016** THROUGHOUT THE QUESTIONNAIRE*

Organization status

2. What is this organization's GST number (9-digit business number)?

B00418

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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3. **In 2016**, what were this organization's **total expenditures** within Canada?
Please report all amounts in **thousands** of Canadian dollars

CAN\$ '000

E40001

\$,000

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Before you begin

For this survey

'In-house R&D' refers to

Expenditures **within Canada** for **R&D** performed **within this organization** by:

- employees (permanent, temporary or casual)
- self-employed individuals or contractors who are **working on-site** on this organization's **R&D** projects.

'Outsourced R&D' refers to

Payments made **within or outside Canada** to other companies, organizations or individuals to fund **R&D** performance:

- grants
- fellowships
- contracts.

In-house research and development (R&D) expenditures

4. In 2016, 2017 or 2018, did this organization have or does it plan to have expenditures for **R&D performed in-house** within Canada?

Exclude payments for outsourced (contracted out or granted) **R&D**, which should be reported at question 7 on Outsourced (contracted out or granted) **R&D**.

B05138 1 Yes

2 No → Go to question 6

5. In 2016, 2017 and 2018, what are this organization's actual or planned expenditures for **R&D performed in-house** within Canada?

Please report all amounts in **thousands** of Canadian dollars.

Report '0' for no R&D expenditures.

	Made in 2016	Planned in 2017	Planned in 2018
	CAN\$ '000	CAN\$ '000	CAN\$ '000
Current in-house R&D expenditures within Canada			
a. Wages, salaries of permanent, temporary and casual R&D employees Include fringe benefits	E45077_sr1 \$ [] ,000		
b. Services to support R&D Include services of self-employed individuals or contractors who are working on-site on this organization's R&D projects. Exclude contracted out or granted expenditures to other organizations to perform R&D (report in question 7)	E45077_sr2 \$ [] ,000		
c. R&D materials	E45077_sr3 \$ [] ,000		
d. All other current R&D costs Include overhead costs	E45077_sr4 \$ [] ,000		
Total current in-house R&D expenditures within Canada	E45080 \$ [] ,000	E45079 \$ [] ,000	E45082 \$ [] ,000
Capital in-house R&D expenditures within Canada			
e. Software Exclude capital depreciation	E45078_sr1 \$ [] ,000		
f. Land Exclude capital depreciation	E45078_sr2 \$ [] ,000		
g. Buildings and structures Exclude capital depreciation	E45078_sr3 \$ [] ,000		
h. Equipment, machinery and all other capital Exclude capital depreciation	E45078_sr4 \$ [] ,000		
Total capital in-house R&D expenditures within Canada	E45060 \$ [] ,000	E45081 \$ [] ,000	E45083 \$ [] ,000
2016 - Total in-house R&D expenditures within Canada	E45070 \$ [] ,000		

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Outsourced (contracted out or granted) R&D expenditures

6. In 2016, did this organization have **outsourced** (contracted out or granted) **R&D expenditures** within Canada or outside Canada?

- Include:**
- contracted out expenditures for **R&D**
 - funding or grants provided to other organizations to perform **R&D**.

Exclude services of self-employed individuals or contractors who are working on-site on this organization's **R&D** projects, which should have been reported earlier as part of in-house **R&D** expenditures in question 5.

B05152_tp 1 Yes

2 No → **Go to question 8**

7. In 2016, what were this organization's **outsourced** (contracted out or granted) **R&D expenditures** within Canada or outside Canada?

Please report all amounts in **thousands** of Canadian dollars.

Report '0' for no R&D expenditures.

	Within Canada CAN\$ '000	Outside Canada CAN\$ '000
a. Companies	\$ <input type="text"/> ,000	\$ <input type="text"/> ,000
b. Private non-profit organizations	\$ <input type="text"/> ,000	\$ <input type="text"/> ,000
c. Industrial research institutes or associations	\$ <input type="text"/> ,000	\$ <input type="text"/> ,000
d. Hospitals	\$ <input type="text"/> ,000	\$ <input type="text"/> ,000
e. Universities	\$ <input type="text"/> ,000	\$ <input type="text"/> ,000
f. Federal government departments and agencies	\$ <input type="text"/> ,000	
g. Provincial or territorial government departments, ministries and agencies	\$ <input type="text"/> ,000	
h. Provincial or territorial research organizations	\$ <input type="text"/> ,000	
i. Other organizations e.g., individuals, non-university educational institutions, foreign governments.	\$ <input type="text"/> ,000	\$ <input type="text"/> ,000
2016 - Total outsourced (contracted out or granted) R&D expenditures	\$ <input type="text"/> ,000	\$ <input type="text"/> ,000

8. In 2017 or 2018, what are this organization's **planned outsourced** (contracted out or granted) **R&D expenditures** within Canada or outside Canada?

Report '0' for no R&D expenditures.

	Within Canada	Outside Canada
2017 - Total outsourced (contracted out or granted) R&D expenditures	\$ <input type="text"/> ,000	\$ <input type="text"/> ,000
2018 - Total outsourced (contracted out or granted) R&D expenditures	\$ <input type="text"/> ,000	\$ <input type="text"/> ,000

Geographic distribution of in-house R&D expenditures within Canada in 2016

9. In 2016, how were this organization's total expenditures for R&D performed in-house distributed by province or territory?

- Exclude:**
- payments for outsourced (contracted out or granted) R&D, which should be reported in question 7 on Outsourced (contracted out or granted) R&D
 - capital depreciation.

Report all amounts in **thousands** of Canadian dollars.

Current in-house R&D expenditures	Capital in-house R&D expenditures
-----------------------------------	-----------------------------------

	CAN\$ '000	CAN\$ '000
a. Newfoundland and Labrador	\$ <input type="text" value="E45077_g1"/> ,000	\$ <input type="text" value="E45078_g1"/> ,000
b. Prince Edward Island	\$ <input type="text" value="E45077_g2"/> ,000	\$ <input type="text" value="E45078_g2"/> ,000
c. Nova Scotia	\$ <input type="text" value="E45077_g3"/> ,000	\$ <input type="text" value="E45078_g3"/> ,000
d. New Brunswick	\$ <input type="text" value="E45077_g4"/> ,000	\$ <input type="text" value="E45078_g4"/> ,000
e. Quebec	\$ <input type="text" value="E45077_g5"/> ,000	\$ <input type="text" value="E45078_g5"/> ,000
f. Ontario	\$ <input type="text" value="E45077_g6"/> ,000	\$ <input type="text" value="E45078_g6"/> ,000
g. Manitoba	\$ <input type="text" value="E45077_g7"/> ,000	\$ <input type="text" value="E45078_g7"/> ,000
h. Saskatchewan	\$ <input type="text" value="E45077_g8"/> ,000	\$ <input type="text" value="E45078_g8"/> ,000
i. Alberta	\$ <input type="text" value="E45077_g9"/> ,000	\$ <input type="text" value="E45078_g9"/> ,000
j. British Columbia	\$ <input type="text" value="E45077_g10"/> ,000	\$ <input type="text" value="E45078_g10"/> ,000
k. Yukon	\$ <input type="text" value="E45077_g11"/> ,000	\$ <input type="text" value="E45078_g11"/> ,000
l. Northwest Territories	\$ <input type="text" value="E45077_g12"/> ,000	\$ <input type="text" value="E45078_g12"/> ,000
m. Nunavut	\$ <input type="text" value="E45077_g13"/> ,000	\$ <input type="text" value="E45078_g13"/> ,000
2016 - Total current and capital in-house R&D expenditures	\$ <input type="text" value="E45100"/> ,000	\$ <input type="text" value="E45110"/> ,000

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▲
Should equal total current in-house R&D expenditures from question 5

▲
Should equal total capital in-house R&D expenditures from question 5

Sources of funds for in-house R&D expenditures in 2016

10. In 2016, what were the **sources of funds** for this organization's total expenditures for **R&D performed in-house**?

Please report all amounts in **thousands** of Canadian dollars.

Include Canadian and foreign sources.

- Exclude:**
- payments for outsourced (contracted out or granted) **R&D**, which should be reported in question 7 on Outsourced (contracted out or granted) **R&D**
 - capital depreciation.

	From within Canada	From outside Canada
	CAN\$ '000	CAN\$ '000
a. Funds from this organization	E64047	E63037
Include interest payments and other income	\$ [] ,000	\$ [] ,000
b. Funds from member companies or affiliates	E65337	E63044
Include annual fees and sustaining grants	\$ [] ,000	\$ [] ,000
c. Federal grants	E64048	
Include R&D grants or R&D portion only of other grants	\$ [] ,000	
d. Federal contracts	E65049	
Include R&D contracts or R&D portion only of other contracts	\$ [] ,000	

R&D contract work for companies

	From within Canada	From outside Canada
	CAN\$ '000	CAN\$ '000
e. GST number (9-digit business number (BN) or charitable registration number)	E65048_nc1	E63038_nc1
B71014_nc1	\$ [] ,000	\$ [] ,000
Legal name		
B71014_nc2		
f. GST number (9-digit business number (BN) or charitable registration number)	E65048_nc2	E63038_nc2
B71014_nc3	\$ [] ,000	\$ [] ,000
Legal name		
B71014_nc4		
g. GST number (9-digit business number (BN) or charitable registration number)	E65048_nc3	E63038_nc3
B71014_nc5	\$ [] ,000	\$ [] ,000
Legal name		
B71014_nc6		
h. GST number (9-digit business number (BN) or charitable registration number)	E65048_nc4	E63038_nc4
B71014_nc7	\$ [] ,000	\$ [] ,000
Legal name		
B71014_nc8		
i. Other contracts not listed above	E65048_nc5	E63038_nc5
	\$ [] ,000	\$ [] ,000

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Geographic distribution of provincial or territorial grants or funding and provincial or territorial contracts

Include R&D grants/contracts or R&D portion only of other grants/contracts.

Provincial or territorial grants or funding

Provincial or territorial contracts

CAN\$ '000

CAN\$ '000

	E64049_g1	E65051_g1:
j. Newfoundland and Labrador	\$ [] ,000	\$ [] ,000
	E64049_g2	E65051_g2
k. Prince Edward Island	\$ [] ,000	\$ [] ,000
	E64049_g3:	E65051_g3
l. Nova Scotia	\$ [] ,000	\$ [] ,000
	E64049_g4	E65051_g4
m. New Brunswick	\$ [] ,000	\$ [] ,000
	E64049_g5	E65051_g5
n. Quebec	\$ [] ,000	\$ [] ,000
	E64049_g6	E65051_g6
o. Ontario	\$ [] ,000	\$ [] ,000
	E64049_g7	E65051_g7
p. Manitoba	\$ [] ,000	\$ [] ,000
	E64049_g8:	E65051_g8
q. Saskatchewan	\$ [] ,000	\$ [] ,000
	E64049_g9	E65051_g9
r. Alberta	\$ [] ,000	\$ [] ,000
	E64049_g10	E65051_g10
s. British Columbia	\$ [] ,000	\$ [] ,000
	E64049_g11	E65051_g11
t. Yukon	\$ [] ,000	\$ [] ,000
	E64049_g12	E65051_g12
u. Northwest Territories	\$ [] ,000	\$ [] ,000
	E64049_g13	E65051_g13
v. Nunavut	\$ [] ,000	\$ [] ,000

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R&D contract work for private non-profit organizations

	From within Canada CAN\$ '000	From outside Canada CAN\$ '000
aj. GST number (9-digit business number (BN) or charitable registration number) <small>B71013_nc1</small>	<small>E65052_nc1</small> \$ [] ,000	<small>E63039_nc1</small> \$ [] ,000
Legal name <small>B71013_nc2</small>		
ak. GST number (9-digit business number (BN) or charitable registration number) <small>B71013_nc3</small>	<small>E65052_nc2</small> \$ [] ,000	<small>E63039_nc2</small> \$ [] ,000
Legal name <small>B71013_nc4</small>		
al. GST number (9-digit business number (BN) or charitable registration number) <small>B71013_nc5</small>	<small>E65052_nc3</small> \$ [] ,000	<small>E63039_nc3</small> \$ [] ,000
Legal name <small>B71013_nc6</small>		
am. Other sources e.g., Universities, foreign governments, individuals	<small>E64051</small> \$ [] ,000	<small>E63041</small> \$ [] ,000
2016 - Total in-house R&D expenditures by sources of funds by origin (Sum of questions a. to am.)	<small>E60310</small> \$ [] ,000	<small>E60320</small> \$ [] ,000
2016 - Total in-house R&D expenditures (Canadian and foreign sources) (should equal total in-house R&D expenditures from question 5)		<small>E60330</small> \$ [] ,000

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Fields of research and development for in-house R&D expenditures within Canada in 2016

11. In 2016, how were this organization's **total expenditures** for R&D performed in-house within Canada distributed by fields of research and development?

- Exclude:**
- payments for outsourced (contracted out or granted) R&D which should be reported in question 7 on Outsourced (contracted out or granted) R&D
 - capital depreciation.

Report all amounts in **thousands** of Canadian dollars.

Report '0' for no R&D expenditures.

Natural and formal sciences

Exclude computer sciences, information technology and bioinformatics (to be reported at lines s and t).

	CAN\$ '000
a. Mathematics	\$ <input type="text"/> ,000
b. Physical sciences	\$ <input type="text"/> ,000
c. Chemical sciences	\$ <input type="text"/> ,000
d. Earth and related environmental sciences	\$ <input type="text"/> ,000
e. Biological sciences	\$ <input type="text"/> ,000
f. Other natural sciences	\$ <input type="text"/> ,000
Total natural and formal sciences	\$ <input type="text"/> ,000

Engineering and technology

Exclude software engineering and technology (to be reported at line r).

	CAN\$ '000
g. Civil engineering	\$ <input type="text"/> ,000
h. Electrical engineering, electronic engineering and communications technology	\$ <input type="text"/> ,000
i. Mechanical engineering	\$ <input type="text"/> ,000
i. Chemical engineering	\$ <input type="text"/> ,000
k. Materials engineering	\$ <input type="text"/> ,000
l. Medical engineering	\$ <input type="text"/> ,000
m. Environmental engineering	\$ <input type="text"/> ,000
n. Environmental biotechnology	\$ <input type="text"/> ,000
o. Industrial biotechnology	\$ <input type="text"/> ,000
p. Nanotechnology	\$ <input type="text"/> ,000
q. Other engineering and technologies	\$ <input type="text"/> ,000
Total engineering and technology	\$ <input type="text"/> ,000

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Software-related sciences and technology

CAN\$ '000

r. Software engineering and technology	\$	<input type="text"/>	,000
		E45094_y1	
s. Computer sciences	\$	<input type="text"/>	,000
		E45094_y2	
t. Information technology and bioinformatics	\$	<input type="text"/>	,000
		E45094_y3	
Total software-related sciences and technology	\$	<input type="text"/>	,000
		E45087	

Medical and health sciences

u. Basic medicine	\$	<input type="text"/>	,000
		E45084_y1	
v. Clinical medicine	\$	<input type="text"/>	,000
		E45084_y2	
w. Health sciences	\$	<input type="text"/>	,000
		E45084_y3	
x. Medical biotechnology	\$	<input type="text"/>	,000
		E45084_y4	
y. Other medical sciences	\$	<input type="text"/>	,000
		E45084_y5	
Total medical and health sciences	\$	<input type="text"/>	,000
		E45120	

Agricultural sciences

z. Agriculture, forestry and fisheries sciences	\$	<input type="text"/>	,000
		E45095_y1	
aa. Animal and dairy sciences	\$	<input type="text"/>	,000
		E45095_y2	
ab. Veterinary sciences	\$	<input type="text"/>	,000
		E45095_y3	
ac. Agricultural biotechnology	\$	<input type="text"/>	,000
		E45095_y4	
ad. Other agricultural sciences	\$	<input type="text"/>	,000
		E45095_y5	
Total agricultural sciences	\$	<input type="text"/>	,000
		E45088	

Social sciences and humanities

ae. Psychology	\$	<input type="text"/>	,000
		E45096_y1	
af. Educational sciences	\$	<input type="text"/>	,000
		E45096_y2	
ag. Economics and business	\$	<input type="text"/>	,000
		E45096_y3	
ah. Other social sciences	\$	<input type="text"/>	,000
		E45096_y4	
ai. Humanities	\$	<input type="text"/>	,000
		E45096_y5	
Total social sciences and humanities	\$	<input type="text"/>	,000
		E45089	

2016 - Total in-house R&D expenditures within Canada by field of research and development (should equal total in-house R&D expenditures from question 5) (sum of questions a. to ai.)

\$	<input type="text"/>	,000
	E45130	

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Nature of R&D for in-house expenditures within Canada in 2016

12. In 2016, how were this organization's **total expenditures** for R&D performed in-house within Canada distributed by nature of R&D?

Basic research is experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundation of phenomena and observable facts, without any particular application or use in view.

Applied research is original investigation undertaken in order to acquire new knowledge. It is, however, directed primarily towards a specific, practical aim or objective.

Experimental development is systematic work, drawing on knowledge gained from research and practical experience and producing additional knowledge, which is directed to producing new products or processes or to improving existing products or processes.

Percentage of total in-house R&D expenditures

a. Basic research	E45091_y1	<input type="text"/>	<input type="text"/>	<input type="text"/>	%
b. Applied research	E45091_y2	<input type="text"/>	<input type="text"/>	<input type="text"/>	%
c. Experimental development	E45091_y3	<input type="text"/>	<input type="text"/>	<input type="text"/>	%
Total percentage	E45140	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	%

Results of R&D expenditures from 2014 to 2016

13. During the three (3) years **2014, 2015 and 2016**, did this organization's **total expenditures** for R&D performed in-house and outsourced (contracted out or granted) within Canada or outside Canada lead to new or significant improvements to the following?

		Yes	No
a. Goods Include goods developed through new knowledge from research discoveries.	B10033 1	<input type="radio"/>	2 <input type="radio"/>
b. Services Include on-going knowledge transfer to physicians, first responders, patients and the general public.	B10034 1	<input type="radio"/>	2 <input type="radio"/>
c. Methods of manufacturing or producing goods and services	B10035 1	<input type="radio"/>	2 <input type="radio"/>
d. Logistics, delivery or distribution methods for this organization's inputs, goods or services . . .	B10036 1	<input type="radio"/>	2 <input type="radio"/>
e. Supporting activities for this organization's processes, such as maintenance systems or operations for purchasing, accounting or computing.	B10037 1	<input type="radio"/>	2 <input type="radio"/>

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In-house R&D personnel in 2016

14. In 2016, how many in-house R&D personnel within Canada did this organization have in the following R&D occupations?

Please report in full-time equivalents (FTE).

Include on-site consultants and contractors in line e.

Full-time equivalent (FTE)

R&D may be carried out by persons who work solely on R&D projects or by persons who devote only part of their time to R&D, and the balance to other activities such as testing, quality control and production engineering. To arrive at the total effort devoted to R&D in terms of personnel, it is necessary to estimate the full-time equivalent of these persons working only part-time in R&D.

FTE (full-time equivalent) = Number of persons who work solely on R&D projects + the time of persons working only part of their time on R&D.

Example calculation: If out of four scientists engaged in R&D work, one works solely on R&D projects and the remaining three devote only one quarter of their working time to R&D, then: FTE = 1 + 1/4 + 1/4 + 1/4 = 1.75 scientists.

Researchers and research managers

a. Scientists, social scientists, engineers and researchers

Include software developers and programmers.

Number of full-time equivalents (FTE)

B20045_y1

 .

B20045_y2

 .

b. Senior research managers

B20045_y3

 .

Total researchers and research managers

R&D technical, administrative and support staff

c. Technicians, technologists and research assistants

Include software technicians.

B20045_y4

 .

B20045_y5

 .

d. Other R&D technical, administrative and support staff

B20045_y6

 .

Total R&D technical, administrative and support staff

Other R&D occupations

e. On-site R&D consultants and contractors

B20045_y7

 .

B20040

Total in-house R&D personnel within Canada (sum of questions a. to e.)

 .

Percentage of software-related activities

B20046

 %

15. Of this organization's total in-house R&D personnel reported above, what percentage performed software-related activities?

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16. In 2016, how were the total in-house R&D personnel distributed by province or territory?
Please report in full time equivalents (FTE).

	Number of researchers and research managers	Number of R&D technical, administrative and support staff	Number of on-site R&D consultants and contractors
a. Newfoundland and Labrador	B20047_g1	B20048_g1	B20049_g1
b. Prince Edward Island	B20047_g2	B20048_g2	B20049_g2
c. Nova Scotia	B20047_g3	B20048_g3	B20049_g3
d. New Brunswick	B20047_g4	B20048_g4	B20049_g4
e. Quebec	B20047_g5	B20048_g5	B20049_g5
f. Ontario	B20047_g6	B20048_g6	B20049_g6
g. Manitoba	B20047_g7	B20048_g7	B20049_g7
h. Saskatchewan	B20047_g8	B20048_g8	B20049_g8
i. Alberta	B20047_g9	B20048_g9	B20049_g9
j. British Columbia	B20047_g10	B20048_g10	B20049_g10
k. Yukon	B20047_g11	B20048_g11	B20049_g11
l. Northwest Territories	B20047_g12	B20048_g12	B20049_g12
m. Nunavut	B20047_g13	B20048_g13	B20049_g13
Total in-house R&D personnel within Canada	B20050	B20060	B20070

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▲
Should equal total researchers and research managers from question 14

▲
Should equal total R&D technical, administrative and support staff from question 14

▲
Should equal total on-site consultants and contractors from question 14

Technology and technical assistance payments in 2016

17. In 2016, how much did this organization pay to other organizations for technology and technical assistance?

Report all amounts in **thousands** of Canadian dollars.

Report '1' for expenditures between \$1 and \$999.

Report '0' for no R&D expenditures.

Payments to members, affiliated companies or organizations

- a. Patents
- b. Copyrights
- c. Trademarks
- d. Industrial designs
- e. Integrated circuit topography
- f. Original software
- g. Packaged or off-the-shelf software
- h. Databases (useful life exceeding one year)
- i. Other technology and technical assistance
Include technical assistance, industrial processes and know-how

Payments made within Canada

CAN\$ '000

E46099_pc1 \$,000

E46099_pc2 \$,000

E46099_pc3 \$,000

E46099_pc4 \$,000

E46099_pc5 \$,000

E46099_pc6 \$,000

E46099_pc7 \$,000

E46099_pc8 \$,000

E46099_pc9 \$,000

Payments made outside Canada

CAN\$ '000

E43043_pc1 \$,000

E43043_pc2 \$,000

E43043_pc3 \$,000

E43043_pc4 \$,000

E43043_pc5 \$,000

E43043_pc6 \$,000

E43043_pc7 \$,000

E43043_pc8 \$,000

E43043_pc9 \$,000

Total payments made to members, affiliated companies or organizations (sum of questions a. to i.)

E46220 \$,000

E43040 \$,000

Payments to other organizations, companies or individuals

- j. Patents
- k. Copyrights
- l. Trademarks
- m. Industrial designs
- n. Integrated circuit topography
- o. Original software
- p. Packaged or off-the-shelf software
- q. Databases (useful life exceeding one year)
- r. Other technology and technical assistance
Include technical assistance, industrial processes and know-how

E46101_pc1 \$,000

E46101_pc2 \$,000

E46101_pc3 \$,000

E46101_pc4 \$,000

E46101_pc5 \$,000

E46101_pc6 \$,000

E46101_pc7 \$,000

E46101_pc8 \$,000

E46101_pc9 \$,000

E43044_pc1 \$,000

E43044_pc2 \$,000

E43044_pc3 \$,000

E43044_pc4 \$,000

E43044_pc5 \$,000

E43044_pc6 \$,000

E43044_pc7 \$,000

E43044_pc8 \$,000

E43044_pc9 \$,000

Total payments made to other organizations, companies or individuals (sum of questions j. to r.)

E46230 \$,000

E43050 \$,000

Total payments made to other organizations for technology and technical assistance (sum of questions a. to r.)

E46260 \$,000

E43060 \$,000

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18. In 2016, how much did this organization receive from other organizations for technology and technical assistance?

Report all amounts in thousands of Canadian dollars.
Report '1' for expenditures between \$1 and \$999.
Report '0' for no R&D expenditures.

Payments received from members, affiliated companies or organizations

- a. Patents
- b. Copyrights
- c. Trademarks
- d. Industrial designs
- e. Integrated circuit topography
- f. Original software
- g. Packaged or off-the-shelf software
- h. Databases (useful life exceeding one year)
- i. Other technology and technical assistance
Include technical assistance, industrial processes and know-how

Payments received from within Canada

CAN\$ '000

E46102_pc1 \$,000

E46102_pc2 \$,000

E46102_pc3 \$,000

E46102_pc4 \$,000

E46102_pc5 \$,000

E46102_pc6 \$,000

E46102_pc7 \$,000

E46102_pc8 \$,000

E46102_pc9 \$,000

Payments received from outside Canada

CAN\$ '000

E63042_pc1 \$,000

E63042_pc2 \$,000

E63042_pc3 \$,000

E63042_pc4 \$,000

E63042_pc5 \$,000

E63042_pc6 \$,000

E63042_pc7 \$,000

E63042_pc8 \$,000

E63042_pc9 \$,000

Total payments received from members, affiliated companies or organizations (sum of questions a. to i.)

E46240 \$,000

E63030 \$,000

Payments received from other organizations, companies or individuals

- j. Patents
- k. Copyrights
- l. Trademarks
- m. Industrial designs
- n. Integrated circuit topography
- o. Original software
- p. Packaged or off-the-shelf software
- q. Databases (useful life exceeding one year)
- r. Other technology and technical assistance
Include technical assistance, industrial processes and know-how

E46103_pc1 \$,000

E46103_pc2 \$,000

E46103_pc3 \$,000

E46103_pc4 \$,000

E46103_pc5 \$,000

E46103_pc6 \$,000

E46103_pc7 \$,000

E46103_pc8 \$,000

E46103_pc9 \$,000

E63043_pc1 \$,000

E63043_pc2 \$,000

E63043_pc3 \$,000

E63043_pc4 \$,000

E63043_pc5 \$,000

E63043_pc6 \$,000

E63043_pc7 \$,000

E63043_pc8 \$,000

E63043_pc9 \$,000

Total payments received from other organizations, companies or individuals (sum of questions j. to r.)

E46250 \$,000

E63040 \$,000

Total payments received from other organizations for technology and technical assistance (sum of questions a. to r.)

E46270 \$,000

E63050 \$,000

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ENERGY-RELATED R&D BY AREA OF TECHNOLOGY

19. In 2016, did this organization's **total in-house and outsourced** (contracted out or granted) **R&D expenditures include energy-related R&D** in the following categories?

- | | |
|-------------------------------|--------------------------------------|
| 1. Fossil fuels | 5. Hydrogen and fuel cells |
| 2. Renewable energy resources | 6. Energy efficiency |
| 3. Nuclear fission and fusion | 7. Other energy-related technologies |
| 4. Electric power | |

Yes → Please provide details below

No → Go to question 20

2016 in-house energy-related R&D expenditures

Energy-related **R&D** by area of technology
(consult the reporting guide at www.statcan.gc.ca/guides-e for further information and definitions)

A
Funds from this
organization

B
Funds from federal,
provincial or territorial
government(s)

C
All other Canadian
sources of funds

CAN\$ '000

1. Fossil fuels

a) Crude oils and natural gas exploration	E64052_e1_y4 \$,000	E64053_e1_y4 \$,000	E64054_e1_y4 \$,000
b) Crude oils and natural gas production and storage Include enhanced recovery natural gas production.	E64052_e1_y2 \$,000	E64053_e1_y2 \$,000	E64054_e1_y2 \$,000
c) Oil sands and heavy crude oil surface and sub-surface production and separation of bitumen, tailings management	E64052_e1_y3 \$,000	E64053_e1_y3 \$,000	E64054_e1_y3 \$,000
d) Refining, processing and upgrading of fossil fuels	E64052_e1_y4 \$,000	E64053_e1_y4 \$,000	E64054_e1_y4 \$,000
e) Coal production, separation and processing	E64052_e1_y5 \$,000	E64053_e1_y5 \$,000	E64054_e1_y5 \$,000
f) Transportation of fossil fuels	E64052_e1_y6 \$,000	E64053_e1_y6 \$,000	E64054_e1_y6 \$,000

2. Renewable energy resources

a) Solar photovoltaics (PV)	E64052_e2_y1 \$,000	E64053_e2_y1 \$,000	E64054_e2_y1 \$,000
b) Solar thermal-power and high-temperature applications	E64052_e2_y2 \$,000	E64053_e2_y2 \$,000	E64054_e2_y2 \$,000
c) Solar heating and cooling	E64052_e2_y3 \$,000	E64053_e2_y3 \$,000	E64054_e2_y3 \$,000
d) Wind energy	E64052_e2_y4 \$,000	E64053_e2_y4 \$,000	E64054_e2_y4 \$,000
e) Bio-energy – biomass production and transport	E64052_e2_y5 \$,000	E64053_e2_y5 \$,000	E64054_e2_y5 \$,000
f) Bio-energy – biomass conversion to transportation fuel	E64052_e2_y6 \$,000	E64053_e2_y6 \$,000	E64054_e2_y6 \$,000
g) Bio-energy – biomass conversion to heat and electricity	E64052_e2_y7 \$,000	E64053_e2_y7 \$,000	E64054_e2_y7 \$,000
h) Other bio-energy	E64052_e2_y8 \$,000	E64053_e2_y8 \$,000	E64054_e2_y8 \$,000
i) Small-Hydro (less than 10 MW)	E64052_e2_y9 \$,000	E64053_e2_y9 \$,000	E64054_e2_y9 \$,000
j) Large-Hydro (greater than or equal to 10 MW)	E64052_e2_y10 \$,000	E64053_e2_y10 \$,000	E64054_e2_y10 \$,000
k) Other renewable energy Include ocean and geothermal.	E64052_e2_y11 \$,000	E64053_e2_y11 \$,000	E64054_e2_y11 \$,000

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2016 in-house energy-related R&D expenditures		2016 outsourced (contracted out or granted) energy-related R&D expenditures		
D All foreign sources of funds	Total in-house R&D (= A+B+C+D)	E Outsourced (contracted out or granted) in Canada	F Outsourced (contracted out or granted) outside Canada	Total outsourced R&D (= E+F)
CAN\$ '000		CAN\$ '000		
1. Fossil fuels				
E63045_e1_y1 \$,000	E45097_e1_y1 \$,000	E46104_e1_y1 \$,000	E43045_e1_y1 \$,000	E40430_e1_y1 \$,000
E63045_e1_y2 \$,000	E45097_e1_y2 \$,000	E46104_e1_y2 \$,000	E43045_e1_y2 \$,000	E40430_e1_y2 \$,000
E63045_e1_y3 \$,000	E45097_e1_y3 \$,000	E46104_e1_y3 \$,000	E43045_e1_y3 \$,000	E40430_e1_y3 \$,000
E63045_e1_y4 \$,000	E45097_e1_y4 \$,000	E46104_e1_y4 \$,000	E43045_e1_y4 \$,000	E40430_e1_y4 \$,000
E63045_e1_y5 \$,000	E45097_e1_y5 \$,000	E46104_e1_y5 \$,000	E43045_e1_y5 \$,000	E40430_e1_y5 \$,000
E63045_e1_y6 \$,000	E45097_e1_y6 \$,000	E46104_e1_y6 \$,000	E43045_e1_y6 \$,000	E40430_e1_y6 \$,000
2. Renewable energy resources				
E63045_e2_y1 \$,000	E45097_e2_y1 \$,000	E46104_e2_y1 \$,000	E43045_e2_y1 \$,000	E40430_e2_y1 \$,000
E63045_e2_y2 \$,000	E45097_e2_y2 \$,000	E46104_e2_y2 \$,000	E43045_e2_y2 \$,000	E40430_e2_y2 \$,000
E63045_e2_y3 \$,000	E45097_e2_y3 \$,000	E46104_e2_y3 \$,000	E43045_e2_y3 \$,000	E40430_e2_y3 \$,000
E63045_e2_y4 \$,000	E45097_e2_y4 \$,000	E46104_e2_y4 \$,000	E43045_e2_y4 \$,000	E40430_e2_y4 \$,000
E63045_e2_y5 \$,000	E45097_e2_y5 \$,000	E46104_e2_y5 \$,000	E43045_e2_y5 \$,000	E40430_e2_y5 \$,000
E63045_e2_y6 \$,000	E45097_e2_y6 \$,000	E46104_e2_y6 \$,000	E43045_e2_y6 \$,000	E40430_e2_y6 \$,000
E63045_e2_y7 \$,000	E45097_e2_y7 \$,000	E46104_e2_y7 \$,000	E43045_e2_y7 \$,000	E40430_e2_y7 \$,000
E63045_e2_y8 \$,000	E45097_e2_y8 \$,000	E46104_e2_y8 \$,000	E43045_e2_y8 \$,000	E40430_e2_y8 \$,000
E63045_e2_y9 \$,000	E45097_e2_y9 \$,000	E46104_e2_y9 \$,000	E43045_e2_y9 \$,000	E40430_e2_y9 \$,000
E63045_e2_y10 \$,000	E45097_e2_y10 \$,000	E46104_e2_y10 \$,000	E43045_e2_y10 \$,000	E40430_e2_y10 \$,000
E63045_e2_y11 \$,000	E45097_e2_y11 \$,000	E46104_e2_y11 \$,000	E43045_e2_y11 \$,000	E40430_e2_y11 \$,000

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2016 in-house energy-related R&D expenditures

Energy-related **R&D** by area of technology
(consult the reporting guide at www.statcan.gc.ca/guides-e for further information and definitions)

A
Funds from
this organization

B
Funds from federal,
provincial or territorial
government(s)

C
All other Canadian
sources of funds

CAN\$ '000

3. Nuclear fission and fusion

a) Nuclear materials exploration, mining and preparation, tailings management	E64052_e4_y2 \$,000	E64053_e4_y2 \$,000	E64054_e4_y2 \$,000
b) Nuclear reactors	E64052_e3_y2 \$,000	E64053_e3_y2 \$,000	E64054_e3_y2 \$,000
c) Other fission	E64052_e3_y3 \$,000	E64053_e3_y3 \$,000	E64054_e3_y3 \$,000
d) Fusion	E64052_e3_y4 \$,000	E64053_e3_y4 \$,000	E64054_e3_y4 \$,000

4. Electric power

a) Electric power generation in utility sector	E64052_e4_y1 \$,000	E64053_e4_y1 \$,000	E64054_e4_y1 \$,000
b) Electric power - combine heat and power in industry, buildings	E64052_e4_y2 \$,000	E64053_e4_y2 \$,000	E64054_e4_y2 \$,000
c) Electricity transmission, distribution and storage	E64052_e4_y3 \$,000	E64053_e4_y3 \$,000	E64054_e4_y3 \$,000

5. Hydrogen and fuel cells

a) Hydrogen production for process applications	E64052_e5_y1 \$,000	E64053_e5_y1 \$,000	E64054_e5_y1 \$,000
b) Hydrogen production for transportation applications	E64052_e5_y2 \$,000	E64053_e5_y2 \$,000	E64054_e5_y2 \$,000
c) Hydrogen transport and storage	E64052_e5_y3 \$,000	E64053_e5_y3 \$,000	E64054_e5_y3 \$,000
d) Other hydrogen	E64052_e5_y4 \$,000	E64053_e5_y4 \$,000	E64054_e5_y4 \$,000
e) Stationary fuel cells	E64052_e5_y5 \$,000	E64053_e5_y5 \$,000	E64054_e5_y5 \$,000
f) Mobile fuel cells	E64052_e5_y6 \$,000	E64053_e5_y6 \$,000	E64054_e5_y6 \$,000

6. Energy efficiency

a) Energy efficiency applications for industry	E64052_e6_y1 \$,000	E64053_e6_y1 \$,000	E64054_e6_y1 \$,000
b) Energy efficiency for residential, institutional and commercial sectors	E64052_e6_y2 \$,000	E64053_e6_y2 \$,000	E64054_e6_y2 \$,000
c) Energy efficiency for transportation	E64052_e6_y3 \$,000	E64053_e6_y3 \$,000	E64054_e6_y3 \$,000
d) Other energy efficiency	E64052_e6_y4 \$,000	E64053_e6_y4 \$,000	E64054_e6_y4 \$,000

7. Other energy-related technologies

a) Carbon capture, transport and storage related to fossil fuel production and processing	E64052_e7_y1 \$,000	E64053_e7_y1 \$,000	E64054_e7_y1 \$,000
b) Carbon capture, transport and storage related to electric power production	E64052_e7_y2 \$,000	E64053_e7_y2 \$,000	E64054_e7_y2 \$,000
c) Carbon capture, transport and storage related to industry in end-use sector	E64052_e7_y3 \$,000	E64053_e7_y3 \$,000	E64054_e7_y3 \$,000
d) Energy system analysis	E64052_e7_y4 \$,000	E64053_e7_y4 \$,000	E64054_e7_y4 \$,000
e) All other energy-related technologies	E64052_e7_y5 \$,000	E64053_e7_y5 \$,000	E64054_e7_y5 \$,000

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2016 in-house energy-related R&D expenditures		2016 outsourced (contracted out or granted) energy-related R&D expenditures		
D All foreign sources of funds	Total in-house R&D (= A+B+C+D)	E Outsourced (contracted out or granted) in Canada	F Outsourced (contracted out or granted) outside Canada	Total outsourced R&D (= E+F)
CAN\$ '000		CAN\$ '000		
3. Nuclear fission and fusion				
E63045_e3_y1 \$,000	E45097_e3_y1 \$,000	E46104_e3_y1 \$,000	E43045_e3_y1 \$,000	E40430_e3_y1 \$,000
E63045_e3_y2 \$,000	E45097_e3_y2 \$,000	E46104_e3_y2 \$,000	E43045_e3_y2 \$,000	E40430_e3_y2 \$,000
E63045_e3_y3 \$,000	E45097_e3_y3 \$,000	E46104_e3_y3 \$,000	E43045_e3_y3 \$,000	E40430_e3_y3 \$,000
E63045_e3_y4 \$,000	E45097_e3_y4 \$,000	E46104_e3_y4 \$,000	E43045_e3_y4 \$,000	E40430_e3_y4 \$,000
4. Electric power				
E63045_e4_y1 \$,000	E45097_e4_y1 \$,000	E46104_e4_y1 \$,000	E43045_e4_y1 \$,000	E40430_e4_y1 \$,000
E63045_e4_y2 \$,000	E45097_e4_y2 \$,000	E46104_e4_y2 \$,000	E43045_e4_y2 \$,000	E40430_e4_y2 \$,000
E63045_e4_y3 \$,000	E45097_e4_y3 \$,000	E46104_e4_y3 \$,000	E43045_e4_y3 \$,000	E40430_e4_y3 \$,000
5. Hydrogen and fuel cells				
E63045_e5_y1 \$,000	E45097_e5_y1 \$,000	E46104_e5_y1 \$,000	E43045_e5_y1 \$,000	E40430_e5_y1 \$,000
E63045_e5_y2 \$,000	E45097_e5_y2 \$,000	E46104_e5_y2 \$,000	E43045_e5_y2 \$,000	E40430_e5_y2 \$,000
E63045_e5_y3 \$,000	E45097_e5_y3 \$,000	E46104_e5_y3 \$,000	E43045_e5_y3 \$,000	E40430_e5_y3 \$,000
E63045_e5_y4 \$,000	E45097_e5_y4 \$,000	E46104_e5_y4 \$,000	E43045_e5_y4 \$,000	E40430_e5_y4 \$,000
E63045_e5_y5 \$,000	E45097_e5_y5 \$,000	E46104_e5_y5 \$,000	E43045_e5_y5 \$,000	E40430_e5_y5 \$,000
E63045_e5_y6 \$,000	E45097_e5_y6 \$,000	E46104_e5_y6 \$,000	E43045_e5_y6 \$,000	E40430_e5_y6 \$,000
6. Energy efficiency				
E63045_e6_y1 \$,000	E45097_e6_y1 \$,000	E46104_e6_y1 \$,000	E43045_e6_y1 \$,000	E40430_e6_y1 \$,000
E63045_e6_y2 \$,000	E45097_e6_y2 \$,000	E46104_e6_y2 \$,000	E43045_e6_y2 \$,000	E40430_e6_y2 \$,000
E63045_e6_y3 \$,000	E45097_e6_y3 \$,000	E46104_e6_y3 \$,000	E43045_e6_y3 \$,000	E40430_e6_y3 \$,000
E63045_e6_y4 \$,000	E45097_e6_y4 \$,000	E46104_e6_y4 \$,000	E43045_e6_y4 \$,000	E40430_e6_y4 \$,000
7. Other energy-related technologies				
E63045_e7_y1 \$,000	E45097_e7_y1 \$,000	E46104_e7_y1 \$,000	E43045_e7_y1 \$,000	E40430_e7_y1 \$,000
E63045_e7_y2 \$,000	E45097_e7_y2 \$,000	E46104_e7_y2 \$,000	E43045_e7_y2 \$,000	E40430_e7_y2 \$,000
E63045_e7_y3 \$,000	E45097_e7_y3 \$,000	E46104_e7_y3 \$,000	E43045_e7_y3 \$,000	E40430_e7_y3 \$,000
E63045_e7_y4 \$,000	E45097_e7_y4 \$,000	E46104_e7_y4 \$,000	E43045_e7_y4 \$,000	E40430_e7_y4 \$,000
E63045_e7_y5 \$,000	E45097_e7_y5 \$,000	E46104_e7_y5 \$,000	E43045_e7_y5 \$,000	E40430_e7_y5 \$,000

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Changes or events

20. Indicate any changes or events that affected the reported values for this business or organization, compared with the last reporting period.

Mark all that apply.

B00316_r1

Outsourcing of **R&D** project(s)

B00316_r2

Initiation of new **R&D** project(s)

B00316_r3

Completion of existing **R&D** project(s)

B00316_r4

Major change in funding of **R&D** project(s) (loss of funding)

B00316_r5

Major change in funding of **R&D** project(s) (increase in funding)

B00316_r6

Organizational change that affected **R&D** activities (expansion, reduction, restructuring)

B00316_r7

Economic change that affected **R&D** activities

B00316_r11

Lack of availability of qualified **R&D** personnel

B00316_r8

Other reason — specify:

B00316_r9

OR

B00316_r10

No changes or events

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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)

Telephone number (including area code)

Example: 123-123-1234

Extension number
(if applicable)

Fax number (including area code)

Example: 123-123-1234

Feedback

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

Include the time spent gathering the necessary information.

Hours Minutes

2. We invite your comments about this questionnaire.

B00002

Thank you for completing this questionnaire.

Please retain a copy for your records.

Visit our website, www.statcan.gc.ca

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.

Provincial and territorial statistical agencies

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 on in-house research and development expenditures (Question 9) and in-house research and development personnel (Question 16) 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 and returning it with the completed questionnaire. Please specify the organizations with which you do not want to share your data.

For this survey, there are **Section 12** agreements with the statistical agencies of Prince Edward Island, the Northwest Territories and Nunavut. The shared data will be limited to information on in-house research and development expenditures (Question 9) and in-house research and development personnel (Question 16) pertaining to business establishments located within the jurisdiction of the respective province or territory.

Natural Resources Canada

For respondents with expenditures on energy-related research and development in technology (fossil fuels, renewable energy resources, nuclear fission and fusion, electric power, hydrogen and fuel cells, energy efficiency, other energy-related technologies), Statistics Canada will also share survey data with the Office of Energy Research and Development (OERD) of Natural Resources Canada. The shared data will be limited to information on Energy Research and Development Expenditures by Area of Technology (Question 19).

You may refuse to share your information with this organization by writing a letter of objection to the Chief Statistician and returning it with the completed questionnaire.

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.

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