Integrated Business Statistics Program (IBSP)

2020 Annual Survey of Research and Development in Canadian Industry

CONFIDENTIAL once completed.

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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. 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 businesses.

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 **1-877-949-9492** or **TTY 1-800-363-7629**.

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Operations and Integration Division
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Ottawa, Ontario K1A 0T6

Visit our website, www.statcan.gc.ca

4201-02.1: 2021-03-08

Reporting instructions

- Please print in ink.
- Report dollar amounts **in thousands of Canadian dollars**.
- **Exclude** 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, provide your best estimates.
- If this business **performs in-house R&D** and **outsources R&D**, complete **all** questions.
- If this business **performs in-house R&D** and **does not outsource R&D**, complete questions 1-5, 8-21.
- If this business **outsources R&D** and **does not perform in-house R&D,** complete questions 1-3, 5-7, 12 & 16-21.
- If this business **does not perform in-house R&D** and **does not outsource R&D**, complete questions 1-3, 5, 12, 16, 17 & 19-21
- Consult the reporting guide at **www.statcan.gc.ca/guides-e** for further information.

Business or organization and contact information

1. **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. **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

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

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

When does this business or organization expect to resume operations?

Date B00218 YYYY MM DD ➔ **Go to question 4**

3b. Ceased operations

When did this business or organization cease operations?

Date B00211 YYYY MM DD

Why did this business or organization cease operations?

B00311

1 ○ Bankruptcy

2 ○ Liquidation

3 ○ Dissolution

4 ○ Other

Specify the other reasons why the operations ceased

B00312

➔ **Go to question 4**

3c. Sold operations

When was this business or organization sold?

B00212

Date YYYY MM DD

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?

B00213

Date YYYY MM DD

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?

B00214

Date YYYY MM DD

When does this business or organization expect to resume operations?

B00215

Date YYYY MM DD

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?

B00216

Date YYYY MM DD

Why did this business or organization cease operations?

B00314

4. **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
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?

B00219 Date YYYY MM DD

Business characteristics

Reporting period

B00206

1. What is the end date of this business's fiscal year? . . . . . YYYY MM DD

Note: For this survey, **this business's** fiscal year end date should fall **on or before March 31, 2021**.

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

May 1, 2019 to **April 30, 2020**
July 1, 2019 to **June 30, 2020**
October 1, 2019 to **September 30, 2020**
January 1, 2020 to **December 31, 2020**
February 1, 2020 to **January 31, 2021**
April 1, 2020 to **March 31, 2021**

*THIS FISCAL YEAR WILL BE REFERRED TO AS **2020** THROUGHOUT THE QUESTIONNAIRE*

Business status

B00419

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

Before you begin

Differences between Scientific Research and Experimental Development (SR&ED) tax incentive program and this survey

Include the following expenditures in this survey:

- capital **R&D** expenditures
- **R&D** expenditures in the social sciences and humanities
- payments for **R&D** performed by other organizations outside Canada.

For this survey

'In-house R&D' refers to

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

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

'Outsourced R&D' refers to

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

- grants
- fellowships
- contracts.

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

3. **In 2020, 2021 and 2022,** did this business 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 in question 6.

1 ○ Yes

2 ○ No ➔ **Go to question 5**

4. **In 2020, 2021 and 2022,** what are this business's actual and 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 2020	Planned in 2021	Planned in 2022
Current in-house R&D expenditures within Canada	**CAN$ '000**	**CAN$ '000**	**CAN$ '000**
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 business's **R&D** projects. **Exclude** contracted out or granted expenditures to other organizations to perform **R&D** (report in question 6)	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	E45050 $,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		
2020 - Total capital in-house R&D expenditures within Canada	E45060 $,000	E45081 $,000	E45083 $,000
2020 - Total in-house R&D expenditures within Canada	E45070 $,000		

Outsourced (contracted out or granted) R&D expenditures

5. **In 2020**, did this business have **outsourced** (contracted out or granted) **R&D expenditures** within Canada or outside Canada?

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

Exclude services of self-employed individuals or contractors who are working on-site on this business's **R&D** projects, which should have been reported earlier as part of in-house **R&D** expenditures in question 4.

B05152_tp 1 ○ Yes

2 ○ No ➔ **Go to question 7**

6. **In 2020**, what were this business'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. Parent, affiliated and subsidiary companies	E46096_sr14 $,000	E43039_sr14 $,000
b. Other companies	E46096_sr1 $,000	E43039_sr1 $,000
c. Private non-profit organizations	E46096_sr2 $,000	E43039_sr2 $,000
d. Industrial research institutes or associations	E46096_sr3 $,000	E43039_sr3 $,000
e. Hospitals	E46096_sr4 $,000	E43039_sr4 $,000
f. Universities	E46096_sr5 $,000	E43039_sr5 $,000
g. Federal government departments and agencies	E46096_sr6 $,000	
h. Provincial or territorial government departments, ministries and agencies	E46096_sr7 $,000	
i. Provincial or territorial research organizations	E46096_sr8 $,000	
j. Other organizations **e.g.**, individuals, non-university educational institutions, foreign governments.	E46096_sr9 $,000	E43039_sr6 $,000
2020 - Total outsourced (contracted out or granted) R&D expenditures	E46210 $,000	E43030 $,000

7. **In 2021 and 2022**, what are this business's **planned 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
2021 - Total outsourced (contracted out or granted) R&D expenditures	E46097 $,000	E43041 $,000
2022 - Total outsourced (contracted out or granted) R&D expenditures	E46098 $,000	E43042 $,000

Geographic distribution of in-house R&D expenditures within Canada in 2020

8. **In 2020**, how were this business'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 6
• capital depreciation.

Please 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	E45077_g1 $,000	E45078_g1 $,000
b. Prince Edward Island	E45077_g2 $,000	E45078_g2 $,000
c. Nova Scotia	E45077_g3 $,000	E45078_g3 $,000
d. New Brunswick	E45077_g4 $,000	E45078_g4 $,000
e. Quebec	E45077_g5 $,000	E45078_g5 $,000
f. Ontario	E45077_g6 $,000	E45078_g6 $,000
g. Manitoba	E45077_g7 $,000	E45078_g7 $,000
h. Saskatchewan	E45077_g8 $,000	E45078_g8 $,000
i. Alberta	E45077_g9 $,000	E45078_g9 $,000
j. British Columbia	E45077_g10 $,000	E45078_g10 $,000
k. Yukon	E45077_g11 $,000	E45078_g11 $,000
l. Northwest Territories	E45077_g12 $,000	E45078_g12 $,000
m. Nunavut	E45077_g13 $,000	E45078_g13 $,000
2020 - Total current and capital in-house R&D expenditures	E45100 $,000	E45110 $,000
	▲ **Should equal total current in-house R&D expenditures from question 4**	▲ **Should equal total capital in-house R&D expenditures from question 4**

Sources of funds for in-house R&D expenditures in 2020

9. **In 2020**, what were the **sources of funds** for this business's total expenditures for **R&D performed in-house**?

Include Canadian and foreign sources.

Exclude: • payments for outsourced (contracted out or granted) **R&D**, which should be reported in question 6
• capital depreciation.

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

Report '0' for no R&D expenditures.

	From within Canada	From outside Canada
	CAN$ '000	CAN$ '000
a. Funds from this business **Include** interest payments, other income and funding or tax credits from tax incentives.	E64047 $,000	E63037 $,000
b. Funds from parent, affiliated and subsidiary companies	E65337 $,000	E63044 $,000
c. Federal government grants or funding **Include R&D** grants or funding or **R&D** portion only of other grants or funding	E64048 $,000	
d. Federal government contracts **Include R&D** contracts or **R&D** portion only of other contracts	E65049 $,000	

R&D contract work for companies

	From within Canada	From outside Canada
	CAN$ '000	CAN$ '000
Business 1 e. **GST** number (9-digit business number (BN) or charitable registration number) B71014_nc1	E65048_nc1 $,000	E63038_nc1 $,000
Legal name B71014_nc2		
Business 2 f. **GST** number (9-digit business number (BN) or charitable registration number) B71014_nc3	E65048_nc2 $,000	E63038_nc2 $,000
Legal name B71014_nc4		
Business 3 g. **GST** number (9-digit business number (BN) or charitable registration number) B71014_nc5	E65048_nc3 $,000	E63038_nc3 $,000
Legal name B71014_nc6		
Business 4 h. **GST** number (9-digit business number (BN) or charitable registration number) B71014_nc7	E65048_nc4 $,000	E63038_nc4 $,000
Legal name B71014_nc8		
i. Other contracts not listed above	E65048_nc5 $,000	E63038_nc5 $,000

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

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

	Provincial or territorial government grants or funding	Provincial or territorial government contracts
	CAN$ '000	CAN$ '000
j. Newfoundland and Labrador	E64049_g1 $,000	E65051_g1 $,000
k. Prince Edward Island	E64049_g2 $,000	E65051_g2 $,000
l. Nova Scotia	E64049_g3 $,000	E65051_g3 $,000
m. New Brunswick	E64049_g4 $,000	E65051_g4 $,000
n. Quebec	E64049_g5 $,000	E65051_g5 $,000
o. Ontario	E64049_g6 $,000	E65051_g6 $,000
p. Manitoba	E64049_g7 $,000	E65051_g7 $,000
q. Saskatchewan	E64049_g8 $,000	E65051_g8 $,000
r. Alberta	E64049_g9 $,000	E65051_g9 $,000
s. British Columbia	E64049_g10 $,000	E65051_g10 $,000
t. Yukon	E64049_g11 $,000	E65051_g11 $,000
u. Northwest Territories	E64049_g12 $,000	E65051_g12 $,000
v. Nunavut	E64049_g13 $,000	E65051_g13 $,000

R&D contract work for private non-profit organizations

	From within Canada CAN$ '000	From outside Canada CAN$ '000
Organization 1		
w. **GST** number (9-digit business number (BN) or charitable registration number) B71013_nc1	E65052_nc1 $,000	E63039_nc1 $,000
Organization name B71013_nc2		
Organization 2		
x. **GST** number (9-digit business number (BN) or charitable registration number) B71013_nc3	E65052_nc2 $,000	E63039_nc2 $,000
Organization name B71013_nc4		
Organization 3		
y. **GST** number (9-digit business number (BN) or charitable registration number) B71013_nc5	E65052_nc3 $,000	E63039_nc3 $,000
Organization name B71013_nc6		
z. Other sources **e.g.**, universities, foreign governments, individuals	E64051 $,000	E63041 $,000
2020 - Total in-house R&D expenditures by sources of funds by origin (sum of questions a. to z.)	E60310 $,000	E60320 $,000
2020 - Total in-house R&D expenditures (Canadian and foreign sources) (should equal total in-house R&D expenditures from question 5)		E60330 $,000

Fields of research and development for in-house R&D expenditures within Canada in 2020

10. **In 2020**, how were this business's **total expenditures** for **R&D performed in-house** within Canada distributed by field(s) of research and development?

Exclude: • payments for outsourced (contracted out or granted) **R&D**, which should be reported in question 6
• capital depreciation.

Please 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	$ E45092_y1 ,000
b.	Physical sciences	$ E45092_y2 ,000
c.	Chemical sciences	$ E45092_y3 ,000
d.	Earth and related environmental sciences	$ E45092_y4 ,000
e.	Biological sciences	$ E45092_y5 ,000
f.	Other natural sciences	$ E45092_y6 ,000
	Total natural and formal sciences	$ E45085 ,000

Engineering and technology

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

		CAN$ '000
g.	Civil engineering	$ E45093_y1 ,000
h.	Electrical engineering, electronic engineering and communications technology	$ E45093_y2 ,000
i.	Mechanical engineering	$ E45093_y3 ,000
j.	Chemical engineering	$ E45093_y4 ,000
k.	Materials engineering	$ E45093_y5 ,000
l.	Medical engineering	$ E45093_y6 ,000
m.	Environmental engineering	$ E45093_y7 ,000
n.	Environmental biotechnology	$ E45093_y8 ,000
o.	Industrial biotechnology	$ E45093_y9 ,000
p.	Nanotechnology	$ E45093_y10 ,000
q.	Other engineering and technologies	$ E45093_y11 ,000
	Total engineering and technology	$ E45086 ,000

CAN$ '000

Software-related sciences and technology

r.	Software engineering and technology	E45094_y1	$,000
s.	Computer sciences	E45094_y2	$,000
t.	Information technology and bioinformatics	E45094_y3	$,000
	Total software-related sciences and technology	E45087	$,000

Medical and health sciences

u.	Basic medicine	E45084_y1	$,000
v.	Clinical medicine	E45084_y2	$,000
w.	Health sciences	E45084_y3	$,000
x.	Medical biotechnology	E45084_y4	$,000
y.	Other medical sciences	E45084_y5	$,000
	Total medical and health sciences	E45120	$,000

Agricultural sciences

z.	Agriculture, forestry and fisheries sciences	E45095_y1	$,000
aa.	Animal and dairy sciences	E45095_y2	$,000
ab.	Veterinary sciences	E45095_y3	$,000
ac.	Agricultural biotechnology	E45095_y4	$,000
ad.	Other agricultural sciences	E45095_y5	$,000
	Total agricultural sciences	E45088	$,000

Social sciences and humanities

ae.	Psychology	E45096_y1	$,000
af.	Educational sciences	E45096_y2	$,000
ag.	Economics and business	E45096_y3	$,000
ah.	Other social sciences	E45096_y4	$,000
ai.	Humanities	E45096_y5	$,000
	Total social sciences and humanities	E45089	$,000

2020 - Total in-house R&D expenditures within Canada by field of research and development
(should equal total in-house R&D expenditures from question 4) (sum of questions a. to ai.) E45130 $,000

Nature of R&D for in-house R&D expenditures within Canada in 2020

11. **In 2020**, how were this business'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.

(**OECD.** Frascati Manual: Proposed Standard for Surveys on Research and Exerimental Developement, 2015)

	Percentage of total in-house R&D expenditures
a. Basic research	E45091_y1 ☐☐☐ %
b. Applied research	E45091_y2 ☐☐☐ %
c. Experimental development	E45091_y3 ☐☐☐ %
Total percentage	E45140 1 0 0 %

Results of R&D expenditures from 2018 to 2020

12. During the three (3) years **2018, 2019 and 2020,** did this business'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 ○	2 ○
b. Services **Include** on-going knowledge transfer to physicians, first responders, patients and the general public.	B10034 1 ○	2 ○
c. Methods of manufacturing or producing goods and services	B10035 1 ○	2 ○
d. Logistics, delivery or distribution methods for this business's inputs, goods or services	B10036 1 ○	2 ○
e. Supporting activities for this business's processes, such as maintenance systems or operations for purchasing, accounting or computing.	B10037 1 ○	2 ○

In-house R&D personnel in 2020

13. **In 2020**, how many **in-house R&D personnel** within Canada did this business 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**.

Full-time equivalent (FTE) = 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.

	Number of full-time equivalents (FTE)
Researchers and research managers	
a. Scientists, social scientists, engineers and researchers **Include** software developers and programmers	B20045_y1 .
b. Senior research managers	B20045_y2 .
Total researchers and research managers	B20045_y3 .
R&D technical, administrative and support staff	
c. Technicians, technologists and research assistants **Include** software technicians	B20045_y4 .
d. Other **R&D** technical, administrative and support staff	B20045_y5 .
Total R&D technical, administrative and support staff	B20045_y6 .
Other R&D occupations	
e. On-site **R&D** consultants and contractors	B20045_y7 .
Total in-house R&D personnel within Canada (sum of questions a. to e.)	B20040 .

	Percentage of software-related activities
14. Of this business's **total in-house R&D personnel** reported above, what percentage performed software-related activities?	B20046 %

15. **In 2020**, 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
	▲ **Should equal total researchers and research managers from question 13**	▲ **Should equal total R&D technical, administrative and support staff from question 13**	▲ **Should equal total on-site consultants and contractors from question 13**

Technology and technical assistance payments in 2020

16. **In 2020**, how much did this business **pay to other organizations** for technology and technical assistance?
Please report all amounts in **thousands** of Canadian dollars.
Report '**1**' for payments made **between $1 and $999**.

Payments made to parent, affiliated or subsidiary companies	**Payments made within Canada** CAN$ '000	**Payments made outside Canada** CAN$ '000
a. Patents	$ E46099_pc1 ,000	$ E43043_pc1 ,000
b. Copyrights	$ E46099_pc2 ,000	$ E43043_pc2 ,000
c. Trademarks	$ E46099_pc3 ,000	$ E43043_pc3 ,000
d. Industrial designs	$ E46099_pc4 ,000	$ E43043_pc4 ,000
e. Integrated circuit topography	$ E46099_pc5 ,000	$ E43043_pc5 ,000
f. Original software	$ E46099_pc6 ,000	$ E43043_pc6 ,000
g. Packaged or off-the-shelf software	$ E46099_pc7 ,000	$ E43043_pc7 ,000
h. Databases (useful life exceeding one year)	$ E46099_pc8 ,000	$ E43043_pc8 ,000
i. Other technology and technical assistance **Include** technical assistance, industrial processes and know-how	$ E46099_pc9 ,000	$ E43043_pc9 ,000
Total payments made to parent, affiliated or subsidiary companies (sum of questions a. to i.)	$ E46220 ,000	$ E43040 ,000
Payments made to other companies, organizations or individuals		
j. Patents	$ E46101_pc1 ,000	$ E43044_pc1 ,000
k. Copyrights	$ E46101_pc2 ,000	$ E43044_pc2 ,000
l. Trademarks	$ E46101_pc3 ,000	$ E43044_pc3 ,000
m. Industrial designs	$ E46101_pc4 ,000	$ E43044_pc4 ,000
n. Integrated circuit topography	$ E46101_pc5 ,000	$ E43044_pc5 ,000
o. Original software	$ E46101_pc6 ,000	$ E43044_pc6 ,000
p. Packaged or off-the-shelf software	$ E46101_pc7 ,000	$ E43044_pc7 ,000
q. Databases (useful life exceeding one year)	$ E46101_pc8 ,000	$ E43044_pc8 ,000
r. Other technology and technical assistance **Include** technical assistance, industrial processes and know-how	$ E46101_pc9 ,000	$ E43044_pc9 ,000
Total payments made to other companies, organizations 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

17. **In 2020**, how much did this business **receive from other organizations** for technology and technical assistance?

Please report all amounts in **thousands** of Canadian dollars.
Report '**1**' for payments received **between $1 and $999**.

	Payments received from within Canada	Payments received from outside Canada
Payments received from parent, affiliated or subsidiary companies	**CAN$ '000**	**CAN$ '000**
a. Patents	E46102_pc1 $,000	E63042_pc1 $,000
b. Copyrights	E46102_pc2 $,000	E63042_pc2 $,000
c. Trademarks	E46102_pc3 $,000	E63042_pc3 $,000
d. Industrial designs	E46102_pc4 $,000	E63042_pc4 $,000
e. Integrated circuit topography	E46102_pc5 $,000	E63042_pc5 $,000
f. Original software	E46102_pc6 $,000	E63042_pc6 $,000
g. Packaged or off-the-shelf software	E46102_pc7 $,000	E63042_pc7 $,000
h. Databases (useful life exceeding one year)	E46102_pc8 $,000	E63042_pc8 $,000
i. Other technology and technical assistance **Include** technical assistance, industrial processes and know-how	E46102_pc9 $,000	E63042_pc9 $,000
Total payments received from parent, affiliated or subsidiary companies (sum of questions a. to i.)	E46240 $,000	E63030 $,000
Payments received from other companies, organizations or individuals		
j. Patents	E46103_pc1 $,000	E63043_pc1 $,000
k. Copyrights	E46103_pc2 $,000	E63043_pc2 $,000
l. Trademarks	E46103_pc3 $,000	E63043_pc3 $,000
m. Industrial designs	E46103_pc4 $,000	E63043_pc4 $,000
n. Integrated circuit topography	E46103_pc5 $,000	E63043_pc5 $,000
o. Original software	E46103_pc6 $,000	E63043_pc6 $,000
p. Packaged or off-the-shelf software	E46103_pc7 $,000	E63043_pc7 $,000
q. Databases (useful life exceeding one year)	E46103_pc8 $,000	E63043_pc8 $,000
r. Other technology and technical assistance **Include** technical assistance, industrial processes and know-how	E46103_pc9 $,000	E63043_pc9 $,000
Total payments received from other companies, organizations 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

ENERGY-RELATED R&D BY AREA OF TECHNOLOGY

18. **In 2020**, did this business'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
2. Renewable energy resources
3. Nuclear fission and fusion
4. Electric power
5. Hydrogen and fuel cells
6. Energy efficiency
7. Other energy-related technologies

○ **Yes ➔ Please provide details below**

○ **No ➔** Go to question 19

Energy-related **R&D** by area of technology (consult the reporting guide at www.statcan.gc.ca/guides-e for further information and definitions)	**2020 in-house energy-related R&D expenditures**		
	A Funds from this business	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_y1 $,000	E64053_e1_y1 $,000	E64054_e1_y1 $,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 transportation	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

2020 in-house energy-related R&D expenditures		2020 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) within 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

Energy-related **R&D** by area of technology (consult the reporting guide at www.statcan.gc.ca/guides-e for further information and definitions)	2020 in-house energy-related R&D expenditures		
	A Funds from this business	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_e3_y1 $,000	E64053_e3_y1 $,000	E64054_e3_y1 $,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 - combined 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

2020 in-house energy-related R&D expenditures		2020 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) within 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	E45097_e3_y1	E46104_e3_y1	E43045_e3_y1	E40430_e3_y1
E63045_e3_y2	E45097_e3_y2	E46104_e3_y2	E43045_e3_y2	E40430_e3_y2
E63045_e3_y3	E45097_e3_y3	E46104_e3_y3	E43045_e3_y3	E40430_e3_y3
E63045_e3_y4	E45097_e3_y4	E46104_e3_y4	E43045_e3_y4	E40430_e3_y4
4. Electric power				
E63045_e4_y1	E45097_e4_y1	E46104_e4_y1	E43045_e4_y1	E40430_e4_y1
E63045_e4_y2	E45097_e4_y2	E46104_e4_y2	E43045_e4_y2	E40430_e4_y2
E63045_e4_y3	E45097_e4_y3	E46104_e4_y3	E43045_e4_y3	E40430_e4_y3
5. Hydrogen and fuel cells				
E63045_e5_y1	E45097_e5_y1	E46104_e5_y1	E43045_e5_y1	E40430_e5_y1
E63045_e5_y2	E45097_e5_y2	E46104_e5_y2	E43045_e5_y2	E40430_e5_y2
E63045_e5_y3	E45097_e5_y3	E46104_e5_y3	E43045_e5_y3	E40430_e5_y3
E63045_e5_y4	E45097_e5_y4	E46104_e5_y4	E43045_e5_y4	E40430_e5_y4
E63045_e5_y5	E45097_e5_y5	E46104_e5_y5	E43045_e5_y5	E40430_e5_y5
E63045_e5_y6	E45097_e5_y6	E46104_e5_y6	E43045_e5_y6	E40430_e5_y6
6. Energy efficiency				
E63045_e6_y1	E45097_e6_y1	E46104_e6_y1	E43045_e6_y1	E40430_e6_y1
E63045_e6_y2	E45097_e6_y2	E46104_e6_y2	E43045_e6_y2	E40430_e6_y2
E63045_e6_y3	E45097_e6_y3	E46104_e6_y3	E43045_e6_y3	E40430_e6_y3
E63045_e6_y4	E45097_e6_y4	E46104_e6_y4	E43045_e6_y4	E40430_e6_y4
7. Other energy-related technologies				
E63045_e7_y1	E45097_e7_y1	E46104_e7_y1	E43045_e7_y1	E40430_e7_y1
E63045_e7_y2	E45097_e7_y2	E46104_e7_y2	E43045_e7_y2	E40430_e7_y2
E63045_e7_y3	E45097_e7_y3	E46104_e7_y3	E43045_e7_y3	E40430_e7_y3
E63045_e7_y4	E45097_e7_y4	E46104_e7_y4	E43045_e7_y4	E40430_e7_y4
E63045_e7_y5	E45097_e7_y5	E46104_e7_y5	E43045_e7_y5	E40430_e7_y5

Environmental and clean technology R&D expenditures in 2020

19. **In 2020**, what percentage of this business's **total expenditures** for **R&D performed in-house** within Canada was related to **research and development of environmental and clean technologies**?

Environmental and clean technology product is defined as any process, product, or service that reduces environmental impacts: through environmental protection activities that prevent, reduce or eliminate pollution or any other degradation of the environment, resource management activities that result in the more efficient use of natural resources, thus safeguarding against their depletion; or the use of goods that have been adapted to be significantly less energy or resource intensive than the industry standard.

Report '0' for no environmental and clean technology R&D expenditures.

If precise figures are not available, please provide your best estimate.

Percentage of environmental and clean technology R&D
E45238 ☐☐☐ %

20. **In 2020**, in which of the following categories of **environmental and clean technology** did this business perform **R&D** activities?

Mark all that apply.

B05203_y11

- [ ] Air pollution management
  e.g., greenhouse gas control technologies or management services, physical or chemical treatment technologies, air pollution modeling and mapping services

B05203_y9

- [ ] Solid waste management
  e.g., collection of waste, recycling and organics, compaction-related technologies, landfill leachate collection and containment **technologies**

B05203_y10

- [ ] Wastewater management
  e.g., physical or chemical treatments of industrial wastewater, mine tailing handling and treatment, biological treatments of sewage

B05203_y12

- [ ] Protection and remediation of soil, groundwater and surface water
  e.g., in situ and ex situ biological, physical, chemical, thermal treatments, containment

B05203_y13

- [ ] Protection of biodiversity and habitat

B05203_y14

- [ ] Noise and vibration abatement
  Exclude R&D related to workers' health and safety.

B05203_y15

- [ ] Protection against radiation
  Exclude R&D related to workers' health and safety.

B05203_y16

- [ ] Heat and energy savings and management
  e.g., efficient equipment (advance insulation, high efficiency pumps or burner (Energy Star)), energy storage technologies (flywheels, fuel cells), lighting upgrades, smart grid services and associated technologies

B05203_y17

- [ ] Fuel efficient vehicles and transportation goods or technologies
  e.g., electric and hybrid vehicles, vehicles using alternative fuels, alternative fuel retrofits on existing vehicles, low-rolling resistance tires

B05203_y18

- [ ] Production of energy from renewable sources
  e.g., equipment, services, and technologies used to produce electricity or heat from renewable sources

B05203_y20

- [ ] Production of nuclear energy
  e.g., equipment, services, and technologies used to produce electricity or heat from nuclear energy
  Exclude the **R&D** on feedstock used to produce energy such as uranium

B05203_y90

- [ ] Other environmental protection or resource management activities

Specify the other environmental protection or resource management activities

B05203_y91

Changes or events

21. 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

B00302_t15

☐ Other changes or events — specify:

B00302_t16

OR

B00316_t17

☐ No changes or events

Contact person

22. 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

23. How long did it take to complete this questionnaire?
Include the time spent gathering the necessary information. . . . . Hours Minutes

24. We invite your comments about this questionnaire.

B00002

General information

Confidentiality

Your answers are confidential.

By law, Statistics Canada is prohibited from releasing any information it collects that 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 only.

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 8) and in-house research and development personnel (Question 15) 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 8) and in-house research and development personnel (Question 15) pertaining to business establishments located within the jurisdiction of the respective province or territory.

Innovation, Science and Economic Development Canada

For this survey, Statistics Canada will share survey data with Innovation, Science and Economic Development Canada. The shared data will be limited to information on research and development expenditures (Questions 4 to 12) and in-house research and development personnel (Questions 13 to 15).

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 18).

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 reduce the reporting burden, Statistics Canada may combine the acquired data 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