# 2020 Annual Survey of Manufacturing Industries

### 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 : 1-800-858-7921 ou ATS 1-800-363-7629



This information is collected under the authority of the *Statistics* 1ct, Pevised Statutes of Canada, 1985, Chapter S-19.

COMPLETION OF THIS QUESTIONNAIRE IS A LEGAL REQUIPEMENT UNDER THIS ACT.

# Introduction

#### Survey purpose

This survey collects the financial and operating data needed to develop national and regional economic policies and programs.

Data from this survey are used by the business community manufacturing associations, federal and provincidepartments, and international organizations to:

- profile the manufacturing and log ing industries
- · undertake market studies
- forecast demand
- develop trade tariff polic

In addition, businesses as othe data to track the performance against industry average evaluate expansion prans, and prepare business plans or investors.

Your information may also be used by Statutics Canada for other statistical and research pur loses.

Your part sipation in this surve, is equired under the authority of the Statis ics Act.

#### Security mails and faxes

Statistics Canada advis s you that there could be a risk of

disclosure ouring facsimile or email. However upon receipt, Statis ics Car ada will provide the guaranteed level of protection forder of 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 ourveys.

#### 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 **1-800-858-7921** or **TTY 1-800-363-7629**.

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

Visit our website, www.statcan.gc.ca

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# Reporting instructions • Please print in ink. • Report dollar amounts in thousands of Canadian dollars. • Exclude sales tax. • Percentages should be rounded to whole numbers. • When precise figures are not available, provide your best estimates. • 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 (in applicable) 2. Verify or provide the contact information of the designated busings of person for this questionnaire and correct where needed. Note: The designated contact person is the person who should receive this que person may not always be the one who actually completes the questionnaire. First name Title Preferred language of communication English French Mailing address (number and stre City Province, territory or state Postal code d Email add Example: user@ ole.gov.ca Telephone number (including area code) Extension number (if applicable) Example: 123-123-1234

Fax number (including area code)

Example: 123-123-1234

3. <b>Verify or provide the current operational status</b> of the business or organization identified by the legal and operating name above.
¹ Operational → Go to question 4
Not currently operational  e.g., temporarily or permanently closed, change of ownership
Why is this business or organization not currently operational?  Seasonal operations  Go to question 3a  Ceased operations  Go to question 3b  Sold operations  Go to question 3c  Amalgamated with other businesses or organizations  Go to question 3d  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 passe?  YYYY MM DD  B00217
Date
When does this business or organization expect to resume operations?
Date → Co to question 4
3b. Ceased operation
When cld this busiless or organization cease operations?
Dale YYYY MM DD
Why did nis business or organization cease operations?
B00311  Bankruptcy
<sup>2</sup> Liquidation
<sup>3</sup> Dissolution → Go to question 4
Other Specify the other reasons why the operations ceased  800312

When was this business or organization sold?  Date  What is the legal name of the buyer?  ### ### ### ### ### ### ### ### ### #	
Date  What is the legal name of the buyer?  800/06  3d. Amalgamated with other businesses or organizations  When did this business or organization amalgamate?  YYYY MM DD  Date  What is the legal name of the resulting or continuing business or organization?  What are the legal names of the other amalgamateta; —iso sees or organization?  What are the legal names of the other amalgamateta; —iso sees or organization?  What are the legal names of the other amalgamateta; —iso sees or organization?  What is the legal names of the other amalgamateta; —iso sees or organization?  What is the legal names of the other amalgamateta; —iso sees or organization?  What are the legal names of the other amalgamateta; —iso sees or organization?  When did this business or organization become tanger by mactive?  YYYY No. DD	
What is the legal name of the buyer?  3d. Amalgamated with other businesses or organizations  When did this business or organization amalgamate?  What is the legal name of the resulting or continuing business or organization?  What are the legal names of the other amalgamate(special) sees or organizations?  What are the legal names of the other amalgamate(special) sees or organizations?  What are the legal names of the other amalgamate(special) sees or organizations?  When did this business or organization become temporally mactive?	
3d. Amalgamated with other businesses or organizations  When did this business or organization amalgamate?  YYYY MM DD  Date  What is the legal name of the resulting or continuing business or organization?  What are the legal names of the other amalgamate(so-size)ses or organization?  What are the legal names of the other amalgamate(so-size)ses or organizations?  ### Go to question 4  3e. Temporarily inactive but will re-open  When did this business or organization become temporarily mactive?  YYYY NAY DD	
3d. Amalgamated with other businesses or organizations  When did this business or organization amalgamate?  Page 1800213  Date  What is the legal name of the resulting or continuing business or organization?  What are the legal names of the other amalgamates as a least set of the set of the other amalgamates as a least set of the set of the other amalgamates as a least set of the other amalgamates as a	
When did this business or organization amalgamate?  Date  What is the legal name of the resulting or continuing business or organization?  What are the legal names of the other amalgamates exclisionses or organizations?  What are the legal names of the other amalgamates exclisionses or organizations?  Go to question 4  3e. Temporarily inactive but will re-open  When did this business or organization become temporarily mactive?	
When did this business or organization amalgamate?  Date  What is the legal name of the resulting or continuing business or organization?  What are the legal names of the other amalgamates exclisionses or organizations?  What are the legal names of the other amalgamates exclisionses or organizations?  Go to question 4  3e. Temporarily inactive but will re-open  When did this business or organization become temporarily mactive?	
Date  What is the legal name of the resulting or continuing business or organization?  What are the legal names of the other amalgamates out increases or organizations?  B00408  Go to question 4  3e. Temporarily inactive but will re-open  When did this business or organization become temporarily mactive?  YYYY NM DD	
What is the legal name of the resulting or continuing business or organization?  What are the legal names of the other amalgamatet set increases or organizations?  B00408  → Go to question 4  3e. Temporarily inactive but will re-open  When did this business or organization become temporarily mactive?  YYYY NM DD	
What are the legal names of the other amalgamates our incress or organizations?  B00408  → Go to question 4  3e. Temporarily inactive but will re-open  When did this business or organization become tampe city mactive?  YYYY MM DD	
3e. Temporarily inactive but will re-open  When did this business or organization become temporarily mactive?  YYYY MM DD	
3e. Temporarily inactive but will re-open  When did this business or organization become temporarily mactive?  YYYY MM DD	
3e. Temporarily inactive but will re-open  When did this business or organization become temporarily mactive?  YYYY MM DD	
3e. Temporarily inactive but will re-open  When did this business or organization become temporarily mactive?  YYYY MM DD	
When did this business or organization become to mpoundly mactive?	
YYYY MY DD	
Date	
When does this basiness or organization expect to resume operations?	
Y YY MM DD	
Date	
Way is this business or organization temporarily inactive?	
→ 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?	

4.	Verify or provide the current main activity of the business or organization identified by the legal and on Note: The described activity was assigned using the North American Industry Classification System (NAICS).	perating name.
	This is the current main activity → Go to question 7  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	
5.	Was this business or organization's main activity ever classified as:	
	B05111  1	
6.	When did the main activity change?  YYYY MM DD  Date	
7.	Are there any other activities that contribute significantly (at least 10%) to this business or organize the second of the secon	zation's revenue?
8.	Provide that precise discription of this business or organization's secondary activity. e.g., brankfast pereal-manufacturida, since store software development	
9.	Approximately what <b>percentage of this business or organization's revenue</b> is generated by each of the fillowing activities?  When precise gures are not available, provide your best estimates.	Percentage of revenue
	a. Main activity	% B05006
	c. All other activities.	B05008
	Total percentage	1 0 0 %

Re	porting period information	
1.	For this survey, please report information for this business or organization most recent <b>12 month fiscal period</b> . <b>Note:</b> For this survey, the <b>End date</b> should fall between April 1, 2020 and March 31, 2021.	
	YYYY MM DD YYYY MM DD	
	Start date End date	
2.	If the reporting period <b>does not cover a full year</b> , please check the reason(s) below (mark all that apply):	
	800301_r1  seasonal operations  ceased operations	
	B00301_r2 B00301_r6	
	new business temporarily i active	
	change of ownership other reason — please specific	
	B00301_r4	
2	change of fiscal year	
3.	Please indicate below, any changes or events that may have affected the reported values for this business or organization compared to the last reporting period (mark all that apply):	
	strike or lockout sold business or business units	
	B00302_t2	
	exchange rate impact expansion  B00302_t12  B00302_t12	
	price changes in goods or sirvings sold new or lost contract	
	B00302_t4  contracting out  plant closures	
	B00302_t14	
	organizational strange acquisition of business or business units  800302_16	
	prize change in labour other change or event — please specify:  on tax materials  other change or event — please specify:	
•	sonatural disposters	
	natural disactor  B0032_t17  no change or event	
	recession	
	change in product line	

# Revenue

#### Notes:

- A detailed breakdown may be requested in other sections.
- These questions are asked of many different industries some questions may not apply to this business.
- Refer to the reporting guide for detailed instructions.
- Please report all amounts in thousands of Canadian dollars.

What was this business's revenue from each of the following sources? **CAN\$ '000** F43008 1. Sales of goods and services Exclude shipping charges, discounts, sales allowances, 2. Commissions ..... Subsidies Include grants, donations and fundraising. . F47201 Royalties, rights, licensing and franchise fees ... F51101 F51201 8. Other revenue - please speci F51301 F40000 Total revenue (sum of quest

# **Expenses**

# Notes:

- A detailed breakdown may be requested in other sections.
- These questions are asked of many different industries some questions may not apply to this business.
- Refer to the reporting guide for detailed instructions.
- Please report all amounts in thousands of Canadian dollars.

Wh	nat were this business's expenses for the following items?	CAN\$ '000	
1.	Purchases Include: raw materials, goods purchased for resale and non-returnable containers and other shipping and packaging materials.  Exclude: change in inventories.	F61306	,000
2.	Employment costs and expenses Include all employees who were issued a T4.	F6150'	
	a. salaries, wages and commissions	\$ 51502	,000,
	b. employee benefits (see reporting guide for additional information)	\$ F62503	,000
3.	Subcontracts  Exclude research and development fees.	\$	,000
	Please provide a percentage breakdown of the amount reported at question 3:  Percentage F62503_sr1		
	a. from Canadian sources		
	b. from sources in other countries %	CAN\$ '000	
4.	Research and development fees  Exclude in-house research and an elopment	F62504 \$	,000
5.	Professional and but ness fees	F62601	
	(e.g., legal, accounting, consulting and technical service fees)	\$	,000,
6.	(e.g., legal, accounting, consulting and technical service fees)	F61801	,
6.	(e.g., legal, accounting, consulting and technical service fees)  Energy and water expenses Inch de la schricity, gas, water, on dieser, propane, fuel wood and sewage.	F61801	,000,
6. 7.	(e.g., legal, accounting, consulting and technical service fees)	F61801 \$ F62505	,
6. 7.	(e.g., legal, accounting, consulting and technical service fees)  Energy and water expenses Incl. de sectricity, gas, water, on dieser, propane, fuel wood and sewage.  Orfice and computer relates expenses	F61801 \$ F62505 \$ F61802	,000
7.	(e.g., legal, accounting, consulting and technical service fees)  Energy and water expenses Include a extricity, gas, water, on diesel, propane, fuel wood and sewage.  Office and computer relates expenses ag., office supplies, portage and computer upgrades)	F61801 \$ F62505 \$ F61802 \$	,000
7. 8. 9.	(e.g., legal, accounting, consulting and technical service fees)  Energy and water expense Inch de sectricity, gas, water, on dieser, propane, fuel wood and sewage.  Office and computer relates expenses (ag., office supplies, portage and computer upgrades)  Telephona, Internet and other telecommunication  Business taxes, licenses and permits	F61801  \$ F62505  \$ F61802  \$ F61901  \$	,000,000
7. 8. 9.	(e.g., legal, acrountility, consulting and technical service fees)  Energy and water expenses Inch de se-ctricity, gas, water, on dieser, propane, fuel wood and sewage.  Office and computer related expenses in g., office supplies, postage and computer upgrades)  Telephonis, Internet and other telecommunication  Business taxes, licenses and permits (e.g., business tax, license fees and property taxes)  Royalties, franchise fees and memberships	F61801  \$ F62505  \$ F61802  \$ F61901  \$ F62001	,000,000,000

		CAN\$ '000	
12.	Rental and leasing Include land, buildings, equipment and vehicles. \$	F62101	,000
13.	Repair and maintenance Include buildings, equipment and vehicles	F62201	,000
14.	Amortization and depreciation\$	F61601	,000
	Insurance	F62301	,000
		62507	
16.	Advertising, marketing, promotion, meals and entertainment	F 2508	,000
	Travel, meetings and conventions	F62401	,000
10.	(e.g., bank charges and transaction fees)	F69101	,000
19.	Interest expense \$	F62509	,000
20.	Bad debt, loan losses, donations, political contributions and inventory writedown		,000
	All other costs and expenses — please specify:  Include intracompany expenses.  F62512	F62511	
	\$	F60000	,000
22.	Total expenses (sum of questions 14 to 21)		,000
	Total expenses (sum of questions to xt)		
•	$\mathcal{L}_{i} \sim \mathcal{L}_{i}$		
	<b>1</b>		

ln	ndustry characteristics			
Sa	ales			
1.	Is this business a cost center?  A cost center is a subdivision of an organization with which costs are identified for purposes of managerial contractions.  Yes  No	ol.		
2.	The next questions are about the value of goods produced.  Are the goods valued at:  F43001_y  Final selling price  Transfer price  Other method of valuation – specify:  F43001_y4		<u> </u>	
3.	What were this business's sales for the following items? Report the sales net of shipping charges, discounts, sales allowances, returned sales, sales taxes and excise duties and taxes. Please report all amounts in thousands of Canadian dollars.  a. sales of goods manufactured Include sales of goods manufactured from own materials whether at this Jusiness units or affiliates of your firm, or at any other sub-contracted manufacturing plants located within Canada or		<b>CAN\$ '000</b>	
	abroad, also includé by-products from your manufacturing process.  (a detailed breakdown by product will be requested in a subsequent section)	\$	F43003	,000
	c. revenue from repair work  Include only repair revenue from billing labour as the mater is and products are owned by clients, or by other business units of this company.  d. revenue from manufacturing service fees and/or custom work	\$	F45901	,000
	Include only revenues from manufactuling work undertaken to the specification of a client, another business unit or an affiliate of your it. Your business unit has only provided a manufacturing service to a client, whether Canadian or from as road, and your business unit does not own the raw materials	\$	F45001	,000
	reported at question 6.  from Sanadian clients			
	from clients in other sountries		F43005	
		\$	1.1000	,000
	Total sales of goods and services (sum of questions a. to f.)	\$	F43000	,000

Ex	penses		
4.	What were this business's expenses for the following items?		O4N(0.1000
	Please report all amounts in thousands of Canadian dollars.		CAN\$ '000 F61301
	a. purchases of raw materials and components		101301
	(a detailed product breakdown will be requested in a subsequent section)		\$,000
			F61302
	b. purchases of non-returnable containers and other shipping and pack	caging materials	\$ ,000
	or paronabos or non rotarnable containers and other empping and past	aging materials	F61303
	c. purchases of goods for resale, as is		\$ ,000
	d. vehicle fuel expense		
	<b>Include</b> fuel used to operate any type of vehicle such as sales representative and lift trucks.	es' cars, delivery trucks,	61701
	Exclude any fuel purchased for power/heat generation		,000
_			
5.	Did this business <b>purchase goods</b> (raw materials, semi-finished, or finished, or finished the massis" in foreign markets (including the U.S.) without alternative the colors.	ished goods) "off the shall be the goods, and without the	e goods entering Canada
	before the sale?		
	B05192		
	Yes		
	No Death Imper		
	Don't know		
	Please provide comments if desired.		
	B05193		
Sa	laries, wages and commissions	During the repo	orting period
		Direct labour	Indirect labour
		(manufacturing	(administrative and
		or logging)	selling/operating)
	9, 6	CAN\$ '000	CAN\$ '000
6.	for the reporting period, what were this business's expenses	F61503	F61504
0.	for salaries, wildes and commissions?	,000	\$ ,000
		Number	Number
		B20061	B20062
7.	For the repowing period, what was the average number of people employed?		
	people employed?		

Inv	rentories		
8.	What was the value of this business's inventory at the beginning and the end of the reporting period?  Please report all amounts in thousands of Canadian dollars.	Opening CAN\$ '000	Closing CAN\$ '000
	a. raw materials and components  Include non-returnable containers and other shipping and packaging materials	F61201 ,000	F61401 \$ ,000 F61402
	b. goods and work in process	,000 F61203	\$ ,000
	c. finished goods manufactured	,000 F61204	\$ ,000
	d. goods purchased for resale, as is\$	,000	\$ ,000
	e. other inventories — specify:	R8 105	<b>F61405</b> \$ ,000
	Total inventories (sum of questions a. to e.)	F61200 ,000	<b>F61400</b> \$ ,000
9.	On the last day of the fiscal year, did this husness hold inventor as about to Canada?  Include: raw materials, work in process, and finished goods recorded in this but located outside of Canada. Also include goods ourchased abroad for resale "as No Don't know  Provide comments in desired.  B05195		
10.	What was the approximate value of inventories <b>held abroad</b> at the end Please report amounts in thousands of Canadian dollars.		<b>F61409</b> \$ ,000
11.	Is the value reported above <b>included</b> in the closing inventories previous in question 8 from the <b>Inventories</b> section?	sly reported	B00517 Yes No

# Sales by consumer location What was the percentage breakdown of this business's sales by consumer location? Consumer location is the location where the goods or services will ultimately be used. If ultimate consumer location is not shipping destination known, the following are acceptable client's billing address substitutes: location of this business's retail customers location of this business's warehouses/distribution centres. Percentage 43008 g1 % Newfoundland and Labrador ..... % Prince Edward Island ..... F43008 g3 % Nova Scotia ..... F43008\_g4 % New Brunswick ..... F43008\_g5 % F43008\_g6 % F43008\_g7 % Manitoba F43008\_g8 % Saskatchewan F43008\_g9 % Alberta F43008\_g10 % F43008 g11 % F43008\_g12 % 12. Northwest Terri F43008\_g13 % F43008 g14 % 14. United States ..... F43008\_g15 % 15. All other countries ...... 100%

# **Advanced Manufacturing**

1.	•	your Business unit use or produce any products or processes in the following list?	
	B05359_p20		
		olymer and composites	
	80535	High-volume, high performance composites Include fibre reinforced thermoplastic and thermoset systems with superior properties; reduction of cycle times for stan of thermoplastic composites, infusion and resin transfer moulding-based manufacturing technologies; process mapping manufacturing guidelines, process modeling, part integration/complex parts and efficient multi-material assembly.	
	B0535	5359_p22	
		Bio-refineries and sustainable manufacturing Include transformation of non-food grade biomass (wood, straw, industrial vegetable oils, etc.) into raw materials for the production of bioresins, biofibres and bioadditives; formulation, efficient processing and performance evaluation of biocomposites; recycling of plastics and composites to minimize environmental impact.	e elastics and
	B0535	5359_p23	
	B053£	Advanced composites manufacturing efficiency Include thermoplastic composites with ease of processing and good ecycl bility; composite performance evaluation, of testing and prediction; nano-reinforced polymer composites and adhes use, multifunctional male enable and coatings; out-autoclave processes, automation and part integration; formulation or using and optimization of processing to maximize performance and quality.  Value-added processing and polymer products Include lightweighting (plastic glazing, structural foams, composites, analogous posites, environmentally-friendly process materials (low-toxicity components, solvent-less processes, recyclability, the rmo are replacement); part/component into (overmoulding processes, combining thermoplastic composites with high-stre. (the polymers, polymer 3D printing).	-of- composite
	D05050 -05		
	B05359_p25		
		letal manufacturing	
	B0538	High-performance, high integrity product forming include reduce(d) weight with row alloys, hot superplicate forming, thin and variable wall extrusion, casting of hollow-co-components, etc.; die-less sheet roming, rapid/low-cost die manufacturing; hybrid manufacturing (extrusions, forgings, intelligent tooling to improve efficiently and life of teoling.  Assembling of complex multi-material products include joining solutions for specific/complex applications; advanced joining techniques for high-integrity application; material joining solutions as the live bonding, friction sur welding and laser welding.	castings);
	B0535	5359_p28	
	B052	Advanced surface engineering and corrosion protection nelude complete level icrostructures and relation to corrosion; corrosion-assisted fatigue of multi-materials structures	s; coatings
•	805355 n30	to improve harsh environment durability; control of corrosion on multi-material assembly; design best practices and star improvement.	ndards
	B0535		
		Flexible manufacturing cells and adaptive manufacturing It stude autonomous and semi-autonomous robots; collaborative and human-assisted robots; mobile and reconfigurable manufacturing systems.	le
	B0535	5359_p32	
	B0535	Metrology and sensing Include sensing technologies and sensing systems; in-line measurement; non-destructive testing; quality assurance; ad sensing, measurement, and process control.	lvanced
	P0	Robotics and mechatronic systems Include future robotic platforms for assembly, finishing and joining; future robotic platforms for part manufacturing; ada robots.	ptive
	B0535	3359_p34	
		Additive manufacturing Include cold spray; electron beam deposition system; laser deposition system; material characterization; formulation of performance polymers and composites for additive manufacturing.  Continued on ne	_

805359_p35
Digital manufacturing
B05359_p36
Design to manufacture and performance evaluation Include crash worthiness; manufacturing data object; computer-aided design; computer-aided manufacturing; computer-aided engineering; finite element analysis; computational fluid dynamics; product life-cycle management; bills of materials.
B05359_p37
Digital manufacturing and Internet of things Include smart factories; Industry 4.0; industrial Internet of things; artificial intelligence; sensor integration; high-performance material formulations, nanocomposites.  805359_038
Machine vision
Include processing and analysis software; geometric modeling and dimensional inspection; big data analytics; 20 vision systems; imaging sensors.  B05359_p39
Modelling and process simulation Include blow and injection moulding; forming; machining; additive and surface t eatment; composites parametering; assembly processes.
B05359_p40
Photonics manufacturing  B05359_p41
Canadian photonics fabrication centre
Include tier 3 and 4 capability enabling higher value-added tier 2 and original exclipment manufacturer activity; telecommunications; data centres; defence; aerospace; liean energy.
B05359_p42
Component fabrication Include full product life cycle management from technology readiness level 3 in 9; light generation, delivery and detection; lasers; sensors; multi-spectral imaging; photonic integrated a suits.
Advanced materials
Include materials for environmental serving; materials for mani-spectrum maging (machine vision); advanced material growth for communications; enabling supply and growth a commercial volumes for compound semiconductors.
B05359_p44
Design test verification Include modeling of next generation photonic partitions technologies; simulation of complex photonic machines; integrated design for manufacturing; inclustricly ingagement for the climbox items of enabling photonic technologies.
B05359_p45
Life sciences an numerturing
B05359_946  Pic Scale Host using a involvative products
Big -manufa sturing - innovative products In lude the rapeutics are valuable generation; bio-manufacturing; advanced analytics and characterization for biologics and
vad sines; proprietary cell line development; preclinical development.
Rio-manufacturing process improvement
Include: Industria process development for upstream and downstream optimization; Advanced analytical; De-risked tech transfer to industrial partners.  B05359_p48
Include medical photonics, radio frequency and microwave antennas; computer simulations; novel material architectures for implantable devices; microfluidics and biosensors.
B05359_p49
Pilot plant of the future – next generation Include improved productivity and speed; reduced safety concerns and cross contamination; state-of-the-art equipment in-line with industry standards.

Continued on next page

B05359_p50 <b>Key</b> B05359	
	and the male Manus Andrews Indian
B05359	y enabling platform technologies
	Artificial intelligence Include computer vision and image understanding; adaptive robots; future robotic platforms for part manufacturing; understanding human emotions from language; speech recognition; next generation information extraction using deep learning; artificial intelligence to optimize talent management for human resources.
B05359	<u></u>
	<b>Big data analytics Include</b> predictive equipment maintenance; energy management; artificial intelligence for optimizing energy storage and distribution; understanding and tracking of hazardous chemical elements; process and design optimization.
B05359	1 153
	Nanomaterials Include nanoelectronics; nanosensing; smart materials; nanocomposites; self-assembled nanostructures annoimplint; nanoplasmonic; nanoclay; nanocoating.
B05359	Printed electrics for Internet of things Include inks and materials; printing technologies; large area, flexible, gretchable, printed electronics components;
B05359_p55	applications: sensors for Internet of things, wearables, antenna, radio-necessary identification, ages smart surfaces, packaging, security, signage.
Oth	ner
Plea 805359	ase specify:
OR	
B05359_p57	
	n't know
Doi	II t know
\\/a_ii	
	your comments pertaining to the advanced nanufacturing question.
Commer	nts
B00026	
4	
4	
N	
N	
1	
N	

# Sales of goods manufactured, logs and wood residue 1. Please provide your sales of goods manufactured, logs and wood residue by product in thousands of Canadian dollars. For each product, report sales net of shipping charges by common or contract carriers, discounts, sales allowances, returned sales, sales taxes, and excise duties and taxes. The total net sales for all products should equal the amount reported in question 3a. of the Industry characteristics section. **Product description** Product code Was this product sold during this reporting period? **Quantity sold** Unit of measure AN\$ '000 Yes — No **Product descrip** Product code Was this product sold during this reporting period' Value of sales **Quantity sold CAN\$ '000** F43006\_p Yes — \$ No description **Product code** Was this product so s reporting p Value of sales B40232 p Quantity sold Unit of measure **CAN\$ '000** \$ **Product description** Product code as this pr duct s Id during this reporting period? Value of sales **Quantity sold** Unit of measure CAN\$ '000 F43006\_p B40004 p **Product description** Product code Was this product sold during this reporting period? Value of sales **Quantity sold** Unit of measure **CAN\$ '000** Yes -B40004\_p F43006\_p \$ No

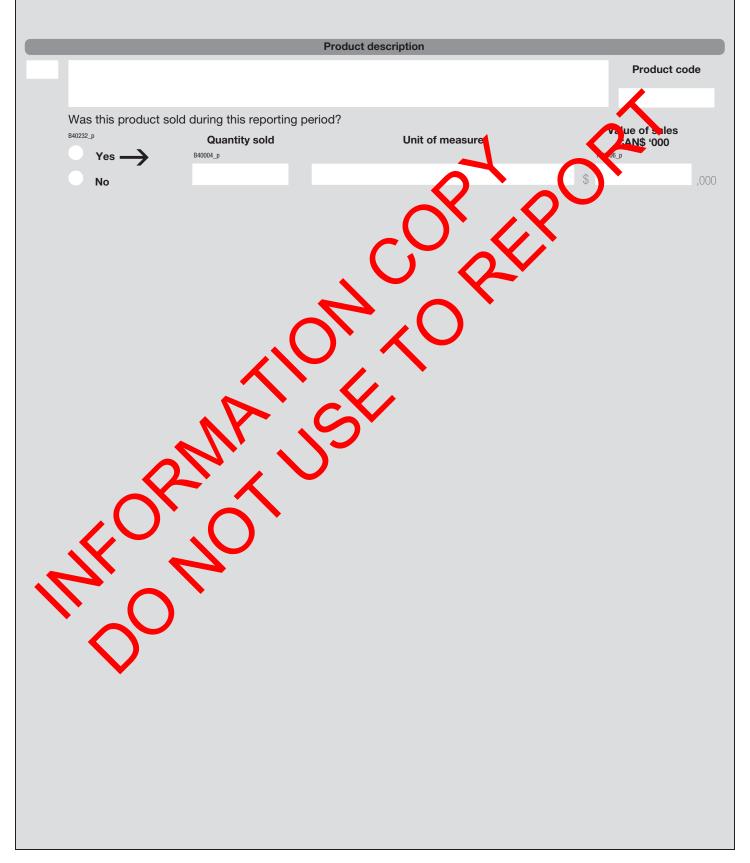
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# Sales of goods manufactured, logs and wood residue

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2.	All c	other products of own manufacture sold — please specify below:		Value of sales CAN\$ '000	
	a)	B40005_ist_1	\$	F43005_p_1	,000
	b)	B40005_lst_2		F43005_p_2	,000
	ŕ	B40005_ist_3	\$	F43005_p_3	,000
	c)		\$		,000
	d)	B40005_lst_4	\$	F43005_p_4	,000
				F43007	,000
3.	Tot	tal sales of goods manufactured and logging	\$	Q-`-	,000
4.	disc	ne amount at line 3, above, includes shipping charges by common or contract carriers, counts, sales allowances, returned sales, sales taxes, and excise duties and taxes, ase report that amount here.	•	62502	,000
5.	Tota	al sales of goods manufactured and logging (line 3 minus).	Φ	F43010	000
	Note	e: This amount should equal question 3a. in the Industry characteristics section.	\$		,000
		20°.0°			
	•				

Pu	rchases of raw n	naterials and compone	nts to be used in manufactu	ring or logging process
1.		es for all raw materials and compor	rials and components used in the manuf nents should match the amount reported in q	
	_	Description o	f raw material or component	
				Product code
	Was this raw mater	rial or component purchased th	is reporting period?	
	B40235_p	Quantity purchased	Unit of measure	Cost of purchase CAN\$ '000
	Yes —	B40009_p		F61304_p
	No			\$ ,000
	110			, , , , , , , , , , , , , , , , , , , ,
		Description o	f raw material or component	
			Q \ C	Product code
	Maa thia row mata	rial or component purchased th	is report to period?	
	B40235_p			Cost of purchase
	Yes —	Quantity purchased	Unit of measure	CAN\$ '000 F61304_p
				\$ .000
	No			\$ ,000
		Description	f n.w materia? or component	
				Due divert and a
				Product code
	Was this raw mater	rial or comportent purchase ath	is reputing period?	
	B40235_p	Quantity surchased	Unit of measure	Cost of purchase
	Yes —	guillety purchased	Unit of measure	CAN\$ '000 F61304_p
	No			\$ ,000
		escription o	f raw material or component	
				<b>.</b>
				Product code
		$\sim$		
	Was this raw law	rial or component purchased th	is reporting period?	
	840235_p	Quantity purchased	Unit of measure	Cost of purchase
	V <sub>S</sub>	B40009_p	Onit of measure	CAN\$ '000 F61304_p
				\$ .000
	N			\$ ,000
		Description of	f raw material or component	
				Product code
				Floduct code
	Was this raw mate	rial or component purchased th	is reporting period?	
	B40235_p	Quantity purchased	Unit of measure	Cost of purchase CAN\$ '000
	Yes —	B40009_p	e.iit or modouro	F61304_p
	_			\$,000
	No			,000

Pu	rcl	hases of raw m	aterials and compo	nents to be used in manufacturing	g or l	ogging proc	ess
1.	The			aterials and components used in the manufacture ponents should match the amount reported in quest			
			Descriptio	n of raw material or component			
						Product co	de
			al or component purchased	d this reporting period?	c	Cost of purchase	
		B40235_p	Quantity purchased	Unit of measure		CAN\$ '000	
		Yes —	p40003_b				000
		No			\$		,000
	۰	_	Descriptio	n of raw material or component			
				8,0	J	Product co	ode
		Was this raw materi	al or component purchased	d this reporting period?			
		B40235_p	Quantity purchased	Unit of measure	С	Cost of purchase CAN\$ '000	
		Yes —	B40009_p		F61	1304_p	
		No		$\Theta$ $\circ$ ,	\$		,000
			Descriptio	n of row materia? or component			
						Product co	nde
						11000000	, ac
		Was this raw materi	al or comporent purchase		C	Cost of purchase	
		Yes —	Quantity urchased	Unit of measure	F61	CAN\$ '000	
				)	\$		000
		No			Ψ		,000
			escriptio	n of raw material or component			
			( )			Product co	de
		X .					
	7						
		Was this raw maleri	al or component purchased		C	Cost of purchase	
		B40250_p	Quantity purchased	Unit of measure	F61	CAN\$ '000	
			2.4442_		\$		000
		N			φ		,000

Pur	rch	nases of raw ma	terials and comp	oonents to b	e used in mai	nufacturing or	logging pro	cess
	The		your purchases of raw for all raw materials and c					
			Descrip	otion of raw mate	rial or component			
							Product	code
		Was this raw material	or component purcha	sed this reportin	_ ·		Cost of purchase	a
		Yes —	Quantity purchased  B40009_p		Unit of measure		CAN\$ '000 F61304_p	
			5 10000_р			\$		000
		No	Dosorie	otion of row moto	rial or component	\$	2	,000,
	7		Descrip	puon or raw mate	rial of component			
					R		Product	code
		Was this raw material	or component purcha	sed this report	period?			
		B40235_p	Quantity purchased		Unit of measure		Cost of purchase CAN\$ '000	Ð
		Yes —	B40009_p				F61304_p	
		No		4		\$		,000
			Descrip	ption of it w mate	riz or composient		_	
				<i></i>			Product	code
					•			
					•			
		Was this raw material B40235_p	Or component purchased Quantity jurchased 3-909	se this reportin	g period?  Unit of measure		Cost of purchase CAN\$ '000	Э
		Yes —	P 209				F61304_p	
		No				\$		,000
	7							

# Purchases of raw materials and components to be used in manufacturing or logging process Please provide details of your purchases of raw materials and components used in the manufacturing process. The total cost of purchases for all raw materials and components should match the amount reported in question 4a. of the Industry characteristics section. Description of raw material or component **Product code** Was this raw material or component purchased this reporting period? Cost of purchase CAN\$ '000 B40235\_p Quantity purchased Unit of measure B40009\_p Yes -No Description of raw material or component Product code Was this raw material or component purchased this report Cost of purchase CAN\$ '000 B40235\_p Quantity purchased B40009\_p F61304\_p No

# Purchases of raw materials and components to be used in manufacturing or logging process 1. Please provide details of your purchases of raw materials and components used in the manufacturing process. The total cost of purchases for all raw materials and components should match the amount reported in question 4a. of the Industry characteristics section. Description of raw material or component **Product code** Was this raw material or component purchased this reporting period? Cost of purchase CAN\$ '000 B40235\_p Quantity purchased Unit of measure B40009\_p Yes = No

2.	All o	ther raw materials and components purchased — please specify below:		Cost of purchase
۲.		B40011_lst_1		CAN\$ '000 F61305_p_1
	a)		\$	,000
	b)	B40011_ist_2		F61305_p_2
		Depart Int a	\$	,000
	c)	B40011_lst_3	Ф	F61305_p_3
		B40011_ist_4	\$	,000 F61305_p_4
	d)		\$	,000
3.	log	al purchases of raw materials and components to be used in manufacturing or ging process.  e: Total should agree with the amount reported at question 4a. in the Industry characteristics section.	<b>\$</b>	F61300 ,000
		At OR ANTION TO SERVICE AND TO SERVI		

Details on this business's locations	
<ol> <li>Complete for all business locations operating during this re</li> <li>If necessary, add all locations not listed on this questionnai</li> </ol>	
Please verify the location address and correct where needed.	
Location ID	
Operating name	
Address (number and street)	Province or territory
City	Postal code  CAN\$ '000
	F47001_I
What was this location's total operating revenue?	
What were this location's expenses for direct labour?	F61503_I
(for manufacturing or logging only)  Exclude: benefits	000 \$
What were this location's expenses for indirect labour?	F61504_I
(for administrative and selling or operating only)  Exclude: benefits.	000 \$
Was this business location operational for the full year.	
B00305_b_I	
Yes <b>⇒</b> Go to next location No	
What were the reasons for part-year operation (mark all that apply	)?
seasonal operation change of fiscal year	B00301_r5_l1  ceased operations  moved
800301_r2_l1 800301_r4_l2	B00301_r6_l1
new locatio	temporarily inactive
B00301_r8_l	
other reuson — please specify	
B0030142-1	
What were this is attached operational start and end dates?  YYYY MM DD	YYYY MM DD
Start date End da	B00202_J
Statistics Canada reviews all comments.	
We invite your comments pertaining to this business location.	
B00001_I	

Details on additional locations	
<ol> <li>Complete for all business locations operating during this re</li> <li>Add all locations not listed in the previous section.</li> </ol>	porting period.
Please verify the location address and correct where needed.  Location ID	
Operating name	
Address (number and street)	Province or territory
City	Postal code
	CAN\$ '000
What was this location's <b>total operating revenue</b> ?	
What were this location's expenses for <b>direct labour</b> ? (for manufacturing or logging only)	F61512_I
Exclude: benefits.	
What were this location's expenses for <b>indirect labour</b> : (for administrative and selling or operating only) <b>Exclude:</b> benefits	F61513_I
Was this business location operational for the followard	
Yes <b>⇒</b> Go to next location No	
What were the reasons for part-year op eration (mark all that ap ly	))?
seasonal operation change of fiscal year	b00307_r5_l1 b00307_r7_l1 ceased operations moved
800307_r2_l1	B00307_r6_l1
new locatio	temporarily inactive
B00307_r8_l	
other reason — please specify:	
What were this location operational start and end dates?	
YYYY MM DD	YYYY MM DD
Start date End da	ate B00209
Statistics Canada reviews all comments. We invite your comments pertaining to this business location.	

De	Detailed information on energy and water costs or expenses				
Wha	What were this business's energy and water expenses for each of the following items?				
Plea	Please report all amounts in thousands of Canadian dollars.  CAN\$ '000  F61702				
1.	Electricity		\$	F61703	,000
2.	Gasoline		\$	F61704	,000
3.	Light fuel oil		\$	5,705	,000
4.	Heavy fuel oil			1706	,000
5.	Diesel fuel	······		F61707	,000
6.	Liquefied petroleum gas (e.g., propane and butane)		\$		,000
7.	Natural gas	4	\$	F61709	,000
8.	Coal		\$	F61803	,000
9. 10.	Water utilities		\$		,000
	F61712	7	\$	F61711	,000
11.	Total energy and water expenses (sum of questions 1 to 10)	<b>.</b>	\$		,000
12.	If you have ent, are any of the to lowing extended in at apply)	xpenses included in the rent (and not alrea	dy reported above	e)?	
	electricity	water	heat		
13.	Did this basiness goverate any energy us	eed as a replacement for purchased energy  B05001_c  No → Go to next section	/?		
14.	If yes, please indicate the type of energy				
	bo5001_e1  heat  bo5001_e4	electricity	steam		
	other type of energy — please speci	fy:			

# COVID-19 In response to the COVID-19 pandemic, did this business experience additional expenses to comply with public health and safety guidelines or corporate guidelines to be allowed to operate? Additional expenses could include: purchases of cleaning supplies, sanitation measures, protective equipment for employees or customers and costs to retrofit business operations (e.g., Plexiglass barriers, new equipment that facilitates physical distancing, additional labour costs). Public health and safety guidelines refer to guidelines from a federal, provincial or municipal health agency. B05140\_t41 Yes What were the total additional expenses in fiscal year 2020? Report dollar amounts in thousands of Canadian dollars. For expenses less than \$500, enter "0". When precise figures are not available, provide your best estimates. **Additional labour** Other additional costs, if applicable expenses (CAN\$ '000) (CAN\$ '000) ,000 F60102\_t41\_sr69 F60102\_t41\_sr19 As a result of the additional expenses or business cond less delay plans to expand operating capacity or undertake investments? B05140 t41 y64 Yes No No In response to the Ca ndemic, in which of the following ways did this business change operating methods? Include both tempor d ongoing char Mark all that appl nd upon a contact less business model commerce sales thro gh, delivery, curbside pickup, offer virtual services ofit the workspa commerce platforms Invest in ousings intelligence technologies based computing systems and big data analytic tools e.g., cl Develop new supply chains Ask some or all employees to work from home Introduce or accelerate the introduction of new goods and services B00381 t41 v47

B00381\_t41\_y48

Increase prices charged to customers of certain goods and services as a result of the COVID-19 pandemic

...continues on next page

continued from previous page
Decrease prices charged to customers of certain goods and services as a result of the COVID-19 pandemic B00381_t41_y49
Change marketing strategy Include re-allocating marketing budget.  B00381_t41_y50
Increase marketing budget  B00381_t41_y51
Decrease marketing budget  B00381_t41_y52
Expand to new markets  B00381_t41_y53
Substitute capital for labour  e.g., automation, robots for use in producing goods and services  B00381_t41_y54
Provided extra staff training  e.g., job specific training, managerial training, training in new technology, training in new business practices, digital skills training, data literacy skills, other training and development
Downsize business activities e.g., reduce goods and services offered  B00381_t41_y56
Reduce labour costs  e.g., lay off employees, furlough employees, request employees take variation, reduce hours of employees, offer early retirement package, outson se won.  B00381_t41_y58
Reduce costs other than labout costs  B00381_t41_y59
Take other actions  B00381_t41_y60
Specify the additional altions taken.  B00381_M1_y64
OR No changes to operating methods in response to the COVID-19 pandemic  Bit 81_141, 62
3. Due to Cov.N-12 and this business receive public financial relief to avoid layoffs through the Canada Emergency Wage Subside or Temporary 10% Wage Subsidy programs?  805150_141
Yes
How much did your business obtain through these means?  Financial relief received (CAN\$ '000)
\$ ,000 F47123_141
No No

# Notification of intent to extract web data

1. Does this business have a website?

B00024

Yes

4

Specify the business website address

e.g., www.example.ca

F62512

2

No



Statistics Canada is piloting a web data extraction initiative, also known as w b scraping, which uses oftware to search and compile publicly available data from business websites. As a result, we may visit the website for this business to search for, and compile, additional information. This initiative should allow us to reduce the reporting burden on businesses, as well as produce additional statistical indicators to ensure that out data remain accurate and relevant.

We will do our utmost to ensure the data are collected in a manner that will not affect the functionality of the website. Any data collected will be used by Statistics Canada for statistical and research surposes only, in accordance with the agency's mandate.

For more information regarding Statistics Canada's web straping initiative place visit http://www.statcan.gc.ca/eng/our-data/where/web-craping.

To learn more about Statistics Canada's transparency and accountability please visit http://www.statcan.gc.ca/eng/transparency-accountability.

If you have any questions or concerns, please contact **Statistic Canada Client Services**, toll-free at 1-877-949-9492 (TTY: 1-800-363-629) or by email at infostats@canada.ca.



Co	ontact 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 <b>best person to contact</b> about this questionnaire?
	First name
	Last name
	Title
	Email address (Example: user@example.gov.ca)
	Telephone number (including area code) Extension number Example: 123-123-1234  Extension number Fax number (including area code) Example: 123-123-1234
Fe	edback
2.	Hours Minutes How long did it take to complete his questionnaire.  Include the time spent gathering the nocessary information
3.	We invite your comment, 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.

**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 mandative basis, and the legislation must provide substantially the same provisions for confidentiality and penalties for disclosure of confidential information at the *Statistics Act*. Because these agencies have the legal authority to compel businesses to provide the same information, consent is not request of and husinesses may not object to the sharing of the data.

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

**Section .2** of the *Statistics Act* provides for the sharing of information with federal, provincial or territorial government organizations. Inder **Section 12**, you not refuse to share your information with any of these organizations by artiting a letter of objection to the Chief Statistici in and returning it with the completed questionnaire. Please specify the organizations with which you do not want to share your data.

For all manufacturing industries — there are **Section 12** agreements with the statistical agencies of Prince Edward Island, Northwest Territories and Nunavut, as well as with the New Brunswick Department of Environment and Local Government, the Quebec Forest Industry Council, the ministère de l'Énergie et des Ressources naturelles du Québec, the ministère des Forêts, de la Faune et des Parcs du Québec, the Ontario Ministry of Northern Development and Mines, the Ontario Ministry of Natural Resources and Forestry, Manitoba Department of Sustainable Development, Manitoba Agriculture, the Saskatchewan Ministry of Department of Agriculture and Forestry, the British Columbia Ministry of Forestry, La Ids and Natural Resource Operations, Agriculture and Agri-Food Canada, Environment and Climate (mange Canada, Natural Resources Canada and the Canada Energy Regulator.

For esta dishments in hon-rerrous metal (and aliminum) smelting and crining, clay building material and refractory manufacturing, cement manufacturing and time manufacturing — there are **Section 12** agreements with the Newfoundland and Labrador Department of Natural Resources, the Manitoba Department of Growth, Enterprise and Trade and the Entist Columbia Ministry of Energy, Mines and Petr leum Resources.

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

# **Authorized disclosure**

**Section 17** of the federal *Statistics Act* allows for the disclosure of a list of individual establishments, firms or businesses showing information including the establishments' names and locations (province, territory and municipality) and North American Industrial Classification System (NAICS) codes. The disclosure of these lists may be authorized in order to aid analysts in the interpretation of the data from the Annual Survey of Manufacturing and Logging industries.

#### 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.qc.ca