

# Monthly Survey of Manufacturing, March 2023

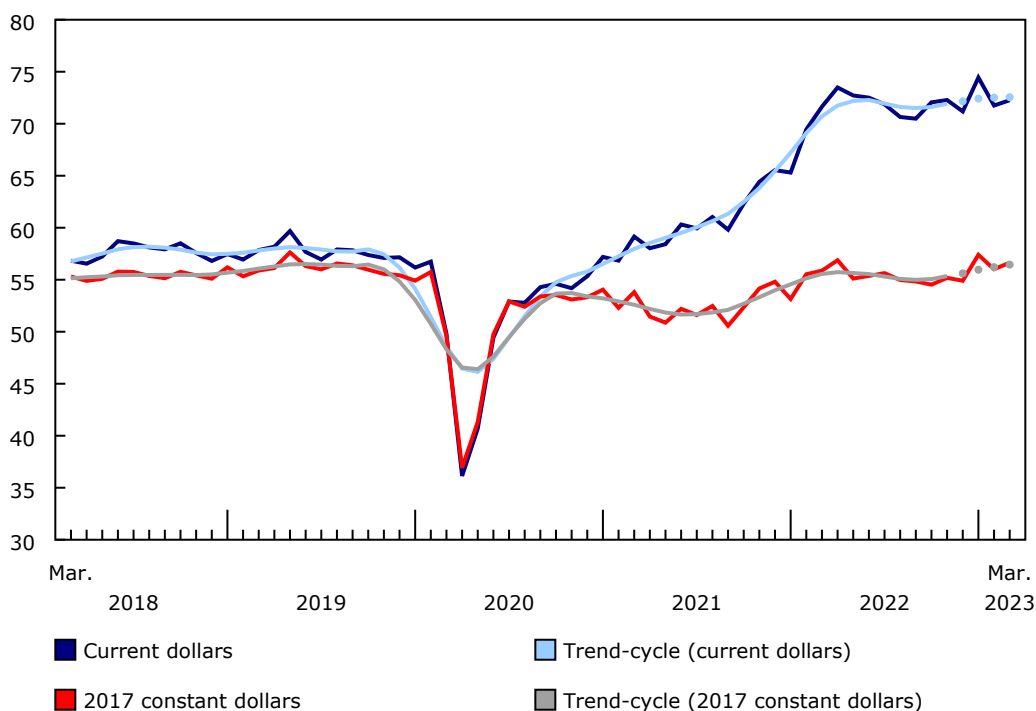
Released at 8:30 a.m. Eastern time in *The Daily*, Tuesday, May 16, 2023

Following a 3.6% decline in February, Canadian manufacturing sales increased 0.7% to \$72.3 billion in March, led by the motor vehicle (+8.6%), aerospace product and parts (+18.8%), and primary metal (+4.6%) industries. Sales in the petroleum and coal product industry (-2.0%) declined the most. On a quarterly basis, sales were up 1.4% in the first quarter of 2023, mostly due to higher sales in the transportation equipment industry.

Sales in constant dollars rose 1.1% in March from the previous month, indicating that a higher volume of goods were sold in March.

**Chart 1**  
**Manufacturing sales**

billions of dollars



**Note(s):** Data are seasonally adjusted. The higher variability associated with the trend-cycle estimates is indicated with a dotted line on the chart for the current reference month and the three previous months. For more information, see the Note to readers.

**Source(s):** Tables [16-10-0047-01](#) and [16-10-0013-01](#).

## Motor vehicle sales post the largest increase

Following an 11.8% decline in February, motor vehicle sales increased 8.6% to \$4.7 billion in March. With the gain in March, sales stood 19.9% higher year over year, while on a quarterly basis sales increased 17.9% in the first quarter of 2023. Canadian auto manufacturers sold nearly 150,000 motor vehicles in March, the most since November 2019. While the industry saw a reduction in supply chain volatility and shortages of semiconductor chips



in the first quarter of 2023 compared with the same quarter a year earlier, higher cost of raw materials and higher interest rates impacted prices and demand for new motor vehicles. The average prices of motor vehicles manufactured in Canada were over 20% higher in March compared with the same month a year earlier.

Production of aerospace product and parts increased 18.8% to \$2.1 billion in March, the highest level since March 2020. Production in the first quarter of 2023 was up 8.3% accordingly. Some major aerospace companies reported positive net income along with higher revenues and profit in the first quarter due to delivery of multiple aircrafts and sales of other aerospace products and parts.

Sales of primary metals rose 4.6% to \$6.0 billion in March on higher prices and volume. Sales rose in all the primary metal industries, but increases were more pronounced in the non-ferrous metal (except aluminum) production and processing industry (+44.5%). Sales of primary metals in real terms were up 3.8% in March. Higher demand and [prices for gold \(+4.9%\) and silver \(+1.8%\)](#) due to the concerns over the banking crisis in the United States were partially responsible for higher sales in non-ferrous metal manufacturing. On a quarterly basis, total primary metal sales rose 6.0% in the first quarter of 2023.

### **Sales of petroleum and coal products decline the most**

Sales in the petroleum and coal product industry fell 2.0% to \$8.7 billion in March on lower prices. This was the second consecutive monthly decline and the lowest level since January 2022. Real sales rose 4.2% in March 2023. Prices for refined petroleum energy products (including liquid biofuels) declined 3.2% in March. The recent declines in prices were partially attributable to the uncertainty over world economic conditions and stress in the banking sector. [Exports of refined petroleum energy products \(including liquid biofuels\)](#) decreased 6.7% in March.

### **Sales rise in five provinces, led by Quebec and Alberta**

Manufacturing sales increased in five provinces in March, led by Quebec (+2.5%) and Alberta (+3.9%). Ontario (-0.4%) posted the largest decline.

Sales in Quebec increased 2.5% to 18.3 billion in March, mainly on higher production in the aerospace product and parts industry (+20.9%), followed by higher sales of primary metals (+6.7%). Both industries contributed to higher total sales in Montréal (+8.4%), as sales of primary metals rose 40.5% and production of aerospace product and parts increased 20.1% in March.

In Alberta, sales were up 3.9% to 9.1 billion in March, mainly on a 20.6% growth in sales of petroleum and coal products. The same industry was also responsible for higher total manufacturing sales in Edmonton (+12.5%).

### **Total inventories rise to new record**

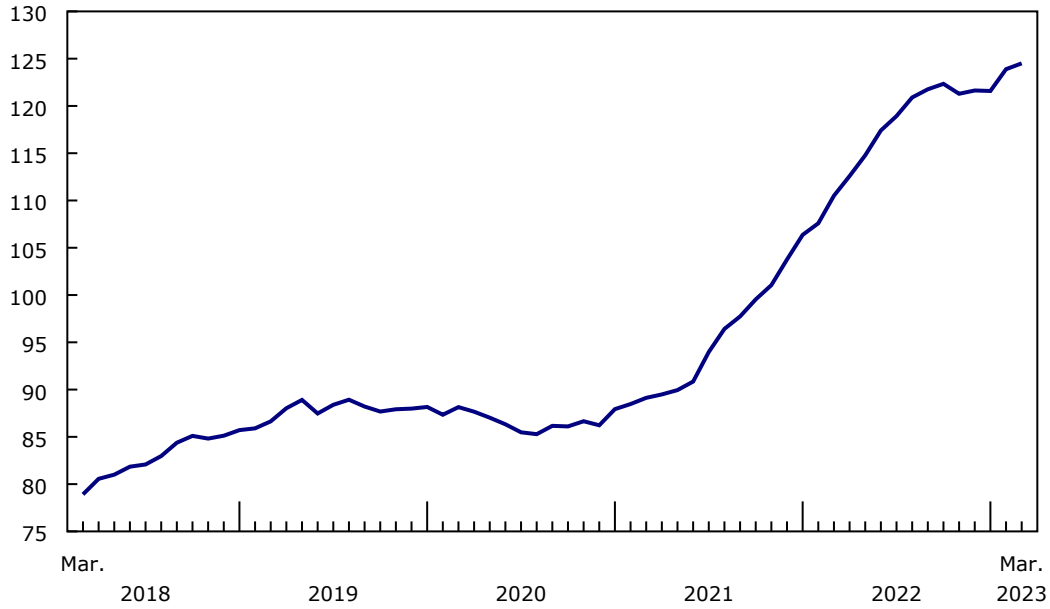
Total inventory levels increased 0.5% to \$124.5 billion in March, on higher goods in process (+1.5%) and raw materials (+0.7%). Many of the inventory gains were attributable to high inventories in the computer and electronic product (+8.6%) and primary metal (+1.5%) industries.

---

## Chart 2 Inventory levels rise

---

billions of dollars



**Note(s):** Data are seasonally adjusted.  
**Source(s):** Table [16-10-0047-01](#).

---

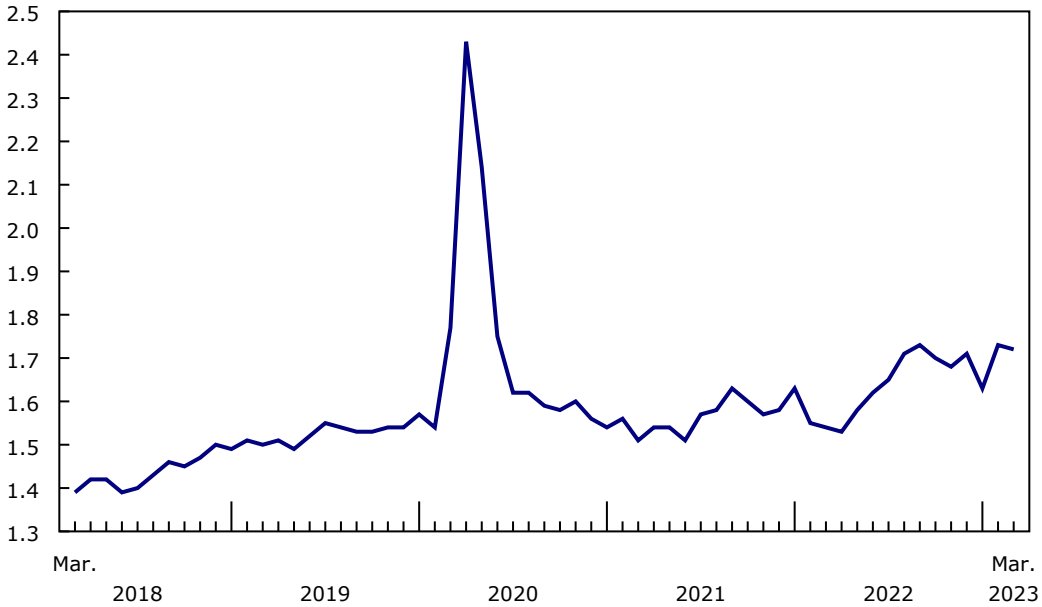
The inventory-to-sales ratio decreased from 1.73 in February to 1.72 in March. This ratio measures the time, in months, that would be required to exhaust inventories if sales were to remain at their current level.

---

### Chart 3 The inventory-to-sales ratio decreases

---

ratio



**Note(s):** Data are seasonally adjusted.  
**Source(s):** Table [16-10-0047-01](#).

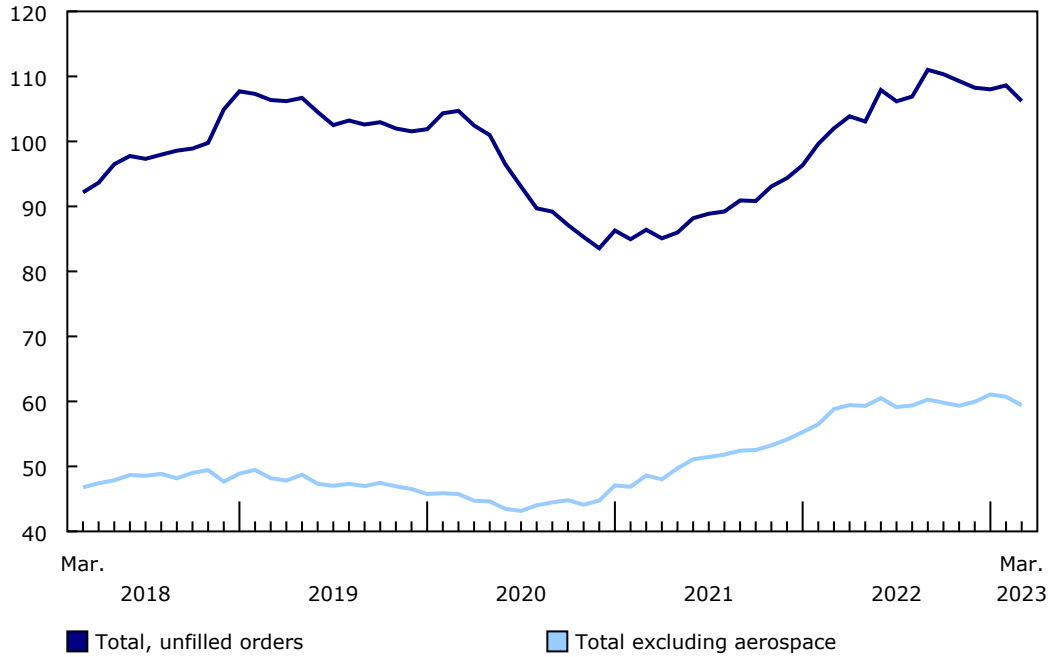
---

### Unfilled orders decline

Total value of unfilled orders declined 2.2% to \$106.2 billion in March, primarily driven by lower unfilled orders in the aerospace product and parts (-2.3%) and machinery (-3.6%) industries.

**Chart 4**  
**Unfilled orders decline**

billions of dollars

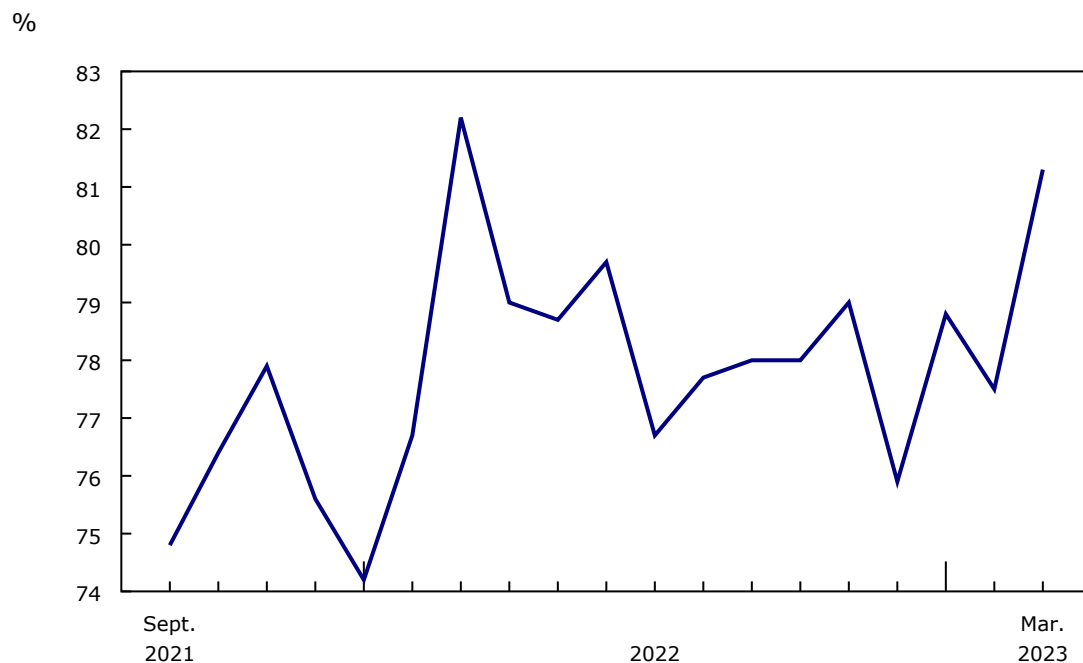


**Note(s):** Data are seasonally adjusted.  
**Source(s):** Table 16-10-0047-01.

**Capacity utilization rate increases**

The capacity utilization rate (not seasonally adjusted) for the manufacturing sector rose from 77.5% in February to 81.3% in March, on higher production. The growth in capacity utilization rates was noticeable in the transportation equipment (+8.5 percentage points) and primary metal (+3.5 percentage points) industries.

**Chart 5**  
The capacity utilization rate increases



Note(s): Data are not seasonally adjusted.  
Source(s): Table 16-10-0012-01.

**Table 1**  
Manufacturing: Principal statistics – Seasonally adjusted

	March 2022	February 2023 <sup>r</sup>	March 2023 <sup>p</sup>	February to March 2023	March 2022 to March 2023
	millions of dollars			% change <sup>1</sup>	
Manufacturing sales (current dollars)	71,638	71,750	72,262	0.7	0.9
Manufacturing sales (2017 constant dollars)	55,873	56,010	56,639	1.1	1.4
Manufacturing sales (current dollars) excluding motor vehicles, parts and accessories	65,148	64,492	64,594	0.2	-0.9
Inventories	110,504	123,888	124,503	0.5	12.7
Unfilled orders	102,015	108,615	106,207	-2.2	4.1
New orders	74,039 <sup>E</sup>	72,357 <sup>E</sup>	69,853 <sup>E</sup>	-3.5	-5.7
Inventory-to-sales ratio <sup>2</sup>	1.54	1.73	1.72	...	...

<sup>r</sup> revised  
<sup>p</sup> preliminary  
... not applicable  
<sup>E</sup> use with caution

1. Percentage change calculated at thousands of dollars for current dollars and millions of dollars for constant dollars.  
2. The inventory-to-sales ratio measures the time in months that it would take to exhaust inventories if sales were to remain at the current rate.  
Source(s): Tables 16-10-0047-01 and 16-10-0013-01.

**Table 2**  
**Manufacturing sales by industry – Seasonally adjusted**

	March 2022	February 2023 <sup>r</sup>	March 2023 <sup>p</sup>	February to March 2023	March 2022 to March 2023
	millions of dollars			% change <sup>1</sup>	
Food manufacturing	11,558	12,609	12,631	0.2	9.3
Beverage and tobacco product	1,386	1,444	1,458	1.0	5.2
Textile mills	160	169	172	1.4	7.2
Textile product mills	150	155	156	0.6	3.9
Apparel manufacturing	257	270	275	1.6	6.8
Leather and allied product	34	30	30	-0.8	-11.2
Wood product	4,896	3,098	3,107	0.3	-36.5
Paper manufacturing	2,791	2,921	2,841	-2.7	1.8
Printing and related support activities	740	817	813	-0.5	9.8
Petroleum and coal product	9,891	8,859	8,684	-2.0	-12.2
Chemical	6,140	5,493	5,402	-1.7	-12.0
Plastics and rubber products	3,726	3,383	3,287	-2.9	-11.8
Non-metallic mineral product	1,646	1,809	1,804	-0.3	9.6
Primary metal	6,133	5,776	6,044	4.6	-1.4
Fabricated metal product	4,279	4,595	4,497	-2.1	5.1
Machinery	3,630	4,577	4,521	-1.2	24.5
Computer and electronic product	1,501	1,566	1,543	-1.5	2.7
Electrical equipment, appliance and component	1,104	1,345	1,324	-1.5	20.0
Transportation equipment	8,876	10,222	11,011	7.7	24.1
Motor vehicle	3,895	4,303	4,672	8.6	19.9
Motor vehicle body and trailer	358	509	470	-7.6	31.2
Motor vehicle parts	2,594	2,955	2,995	1.4	15.4
Aerospace product and parts	1,330	1,804	2,144	18.8	61.2
Railroad rolling stock	226	x	x	x	x
Ship and boat building	229	254	201	-20.8	-12.1
Furniture and related product	1,285	1,245	1,274	2.4	-0.8
Miscellaneous manufacturing	1,454	1,367	1,385	1.4	-4.7
Non-durable goods industries	36,833	36,151	35,749	-1.1	-2.9
Durable goods industries	34,805	35,599	36,512	2.6	4.9

<sup>r</sup> revised

<sup>p</sup> preliminary

<sup>x</sup> suppressed to meet the confidentiality requirements of the *Statistics Act*

1. Percentage change calculated at thousands of dollars.

Source(s): Table 16-10-0047-01.

**Table 3**  
**Manufacturing sales: Provinces and territories – Seasonally adjusted**

	March 2022	February 2023 <sup>r</sup>	March 2023 <sup>p</sup>	February to March 2023	March 2022 to March 2023
	millions of dollars			% change <sup>1</sup>	
<b>Canada</b>	<b>71,638</b>	<b>71,750</b>	<b>72,262</b>	<b>0.7</b>	<b>0.9</b>
Newfoundland and Labrador	354	318	320	0.5	-9.6
Prince Edward Island	266	278	302	8.8	13.7
Nova Scotia	926	856	860	0.5	-7.1
New Brunswick	2,312	2,085	2,034	-2.4	-12.0
Quebec	17,550	17,892	18,348	2.5	4.5
Ontario	30,834	31,823	31,681	-0.4	2.7
Manitoba	2,087	2,242	2,182	-2.7	4.6
Saskatchewan	2,128	2,019	1,992	-1.3	-6.4
Alberta	9,082	8,749	9,094	3.9	0.1
British Columbia	6,092	5,485	5,444	-0.7	-10.6
Yukon	3	4	3	-1.6	12.3
Northwest Territories and Nunavut	4	2	2	27.0	-40.6

<sup>r</sup> revised

<sup>p</sup> preliminary

1. Percentage change calculated at thousands of dollars.

Source(s): Tables 16-10-0047-01 and 16-10-0048-01.

**Table 4**  
**Manufacturing sales by selected census metropolitan area – Seasonally adjusted**

	March 2022	February 2023 <sup>r</sup>	March 2023 <sup>p</sup>	February to March 2023	March 2022 to March 2023
	millions of dollars			% change <sup>1</sup>	
Halifax	279	270	289	6.7	3.5
Québec	2,228	1,912	1,985	3.8	-10.9
Sherbrooke	259	273	290	6.4	12.2
Montréal	7,744	8,166	8,850	8.4	14.3
Ottawa–Gatineau, Ontario and Quebec	889	828	953	15.0	7.2
Toronto	11,876	12,808	13,075	2.1	10.1
Hamilton	2,265	1,918	1,965	2.5	-13.2
Kitchener–Cambridge–Waterloo	2,151	2,530	2,643	4.5	22.8
Windsor	1,602	1,566	1,997	27.5	24.6
Winnipeg	984	1,087	1,064	-2.1	8.1
Regina	893	775	749	-3.3	-16.1
Saskatoon	494	564	607	7.5	22.7
Calgary	1,175	1,279	1,281	0.2	9.0
Edmonton	4,436	4,086	4,596	12.5	3.6
Vancouver	3,027	2,871	2,831	-1.4	-6.5

<sup>r</sup> revised

<sup>p</sup> preliminary

1. Percentage change calculated at thousands of dollars.

Note(s): Data in this table are seasonally adjusted.

Source(s): Table 16-10-0011-01.



**Table 5**  
**Manufacturing capacity utilization rates by industry – Unadjusted**

	March 2022	February 2023 <sup>r</sup>	March 2023 <sup>p</sup>	February to March 2023	March 2022 to March 2023
	%			percentage point change	
Manufacturing	82.2	77.5	81.3	3.8	-0.9
Non-durable goods industries	83.7	78.9	80.6	1.7	-3.1
Food manufacturing	81.3 <sup>E</sup>	78.1 <sup>E</sup>	80.6 <sup>E</sup>	2.5	-0.7
Beverage and tobacco product manufacturing	77.8	74.5	73.0	-1.5	-4.8
Beverage manufacturing	78.1	75.2	75.0	-0.2	-3.1
Tobacco manufacturing	75.9	69.1	64.0	-5.1	-11.9
Textile mills	81.4	80.1	86.3	6.2	4.9
Textile product mills	76.0 <sup>E</sup>	65.3 <sup>E</sup>	78.3 <sup>E</sup>	13.0	2.3
Apparel manufacturing	78.2 <sup>E</sup>	86.4 <sup>E</sup>	80.1 <sup>E</sup>	-6.3	1.9
Leather and allied product manufacturing	80.2	74.3 <sup>E</sup>	83.7 <sup>E</sup>	9.4	3.5
Paper manufacturing	87.1	81.4	84.3 <sup>E</sup>	2.9	-2.8
Printing and related support activities	76.6 <sup>E</sup>	73.0 <sup>E</sup>	80.1 <sup>E</sup>	7.1	3.5
Petroleum and coal products manufacturing	91.6	87.3	87.2	-0.1	-4.4
Chemical manufacturing	82.4 <sup>E</sup>	75.4 <sup>E</sup>	80.4	5.0	-2.0
Plastics and rubber products manufacturing	77.2 <sup>E</sup>	68.5 <sup>E</sup>	68.3 <sup>E</sup>	-0.2	-8.9
Plastic product manufacturing	77.1 <sup>E</sup>	67.8 <sup>E</sup>	68.7 <sup>E</sup>	0.9	-8.4
Rubber product manufacturing	77.6	73.0	65.8 <sup>E</sup>	-7.2	-11.8
Durable goods industries	80.8	76.1	82.0	5.9	1.2
Wood product manufacturing	85.6	76.8	80.8 <sup>E</sup>	4.0	-4.8
Non-metallic mineral product manufacturing	73.3 <sup>E</sup>	57.5 <sup>E</sup>	67.7 <sup>E</sup>	10.2	-5.6
Primary metal manufacturing	76.9	72.9	76.4	3.5	-0.5
Fabricated metal product manufacturing	79.9 <sup>E</sup>	74.8 <sup>E</sup>	80.2 <sup>E</sup>	5.4	0.3
Machinery manufacturing	79.2 <sup>E</sup>	80.4 <sup>E</sup>	82.9 <sup>E</sup>	2.5	3.7
Computer and electronic product manufacturing	83.5	76.3	84.0 <sup>E</sup>	7.7	0.5
Electrical equipment, appliance and component manufacturing	85.2 <sup>E</sup>	84.6	89.6 <sup>E</sup>	5.0	4.4
Transportation equipment manufacturing	81.6	79.2	87.7 <sup>E</sup>	8.5	6.1
Furniture and related product manufacturing	86.4 <sup>E</sup>	74.7 <sup>E</sup>	81.9 <sup>E</sup>	7.2	-4.5
Miscellaneous manufacturing	82.5 <sup>E</sup>	76.1	77.5	1.4	-5.0

<sup>r</sup> revised

<sup>p</sup> preliminary

<sup>E</sup> use with caution

**Note(s):** Data in this table are not seasonally adjusted.

**Source(s):** Table 16-10-0012-01.

## **Sustainable development goals**

On January 1, 2016, the world officially began implementing the [2030 Agenda for Sustainable Development](#)—the United Nations' transformative plan of action that addresses urgent global challenges over the following 15 years. The plan is based on 17 specific sustainable development goals.

The Monthly Survey of Manufacturing is an example of how Statistics Canada supports the reporting on the global sustainable development goals. This release will be used to help measure the following goal:



## Note to readers

Starting with the May 2023 release of March data, estimates of sales of goods manufactured, inventories and orders in tables 16-10-0047-01, 16-10-0048-01 and 16-10-0011-01 have been revised back to January 2020 for unadjusted data, and back to January 2018 for seasonally adjusted data.

Real manufacturing sales, orders, inventory owned and inventory-to-sales ratio estimates in table 16-10-0013-01 have been revised back to January 2002, reflecting a change in the base year from 2012 to 2017.

Unadjusted estimates of capacity utilization rates, in table 16-10-0012-01, have been revised back to January 2020.

Monthly data in this release are seasonally adjusted and are expressed in current dollars, unless otherwise specified.

Seasonally adjusted data are data that have been modified to eliminate the effect of seasonal and calendar influences to allow for more meaningful comparisons of economic conditions from period to period. For more information on seasonal adjustment, see [Seasonally adjusted data – Frequently asked questions](#).

Trend-cycle estimates are included in selected charts as a complement to the seasonally adjusted series. These data represent a smoothed version of the seasonally adjusted time series and provide information on longer-term movements, including changes in direction underlying the series. For information on trend-cycle data, see [Trend-cycle estimates – Frequently asked questions](#).

Both seasonally adjusted data and trend-cycle estimates are subject to revision as additional observations become available. These revisions could be large and could even lead to a reversal of movement, especially for reference months near the end of the series or during periods of economic disruption.

**Non-durable goods industries** include food; beverage and tobacco products; textile mills; textile product mills; apparel; leather and allied products; paper; printing and related support activities; petroleum and coal products; chemicals; and plastics and rubber products.

**Durable goods industries** include wood products; non-metallic mineral products; primary metals; fabricated metal products; machinery; computer and electronic products; electrical equipment, appliances and components; transportation equipment; furniture and related products; and miscellaneous manufacturing.

### Production-based industries

For the aerospace and shipbuilding industries, the value of production is used instead of the value of sales of goods manufactured. The value of production is calculated by adjusting monthly sales of goods manufactured by the monthly change in inventories of goods in process and finished products manufactured. The value of production is used because of the extended period of time that it normally takes to manufacture products in these industries.

**Unfilled orders** are a stock of orders that will contribute to future sales, assuming that the orders are not cancelled.

**New orders** are those received, whether sold in the current month or not. New orders are measured as the sum of sales for the current month plus the change in unfilled orders from the previous month to the current month.

### Manufacturers reporting sales, inventories and unfilled orders in US dollars

Some Canadian manufacturers report sales, inventories and unfilled orders in US dollars. These data are then converted to Canadian dollars as part of the data production cycle.

For sales, based on the assumption that they occur throughout the month, the average monthly exchange rate for the reference month established by the Bank of Canada is used for the conversion. The monthly average exchange rate is available in table 33-10-0163-01. Inventories and unfilled orders are reported at the end of the reference period. For most respondents, the daily average exchange rate on the last working day of the month is used for the conversion of these variables.

However, some manufacturers choose to report their data as of a day other than the last working day of the month. In these instances, the daily average exchange rate on the day selected by the respondent is used. Note that because of exchange rate fluctuations, the daily average exchange rate on the day selected by the respondent can differ from both the exchange rate on the last working day of the month and the monthly average exchange rate. Daily average exchange rate data are available in table 33-10-0036-01.

### Revision policy

Each month, the Monthly Survey of Manufacturing releases preliminary data for the reference month and revised data for the previous three months. Revisions are made to reflect new information provided by respondents and updates to administrative data.

Once a year, a revision project is undertaken to revise multiple years of data.

### Real-time data tables

---

Real-time data tables 16-10-0118-01, 16-10-0119-01, 16-10-0014-01 and 16-10-0015-01 will be updated on May 23.

**Next release**

Data from the Monthly Survey of Manufacturing for April will be released on June 15.

**Available tables:** [16-10-0011-01](#) to [16-10-0013-01](#) , [16-10-0047-01](#) and [16-10-0048-01](#).

**Definitions, data sources and methods:** survey number [2101](#).

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; [infostats@statcan.gc.ca](mailto:infostats@statcan.gc.ca)) or Media Relations ([statcan.mediahotline-ligneinfomedias.statcan@statcan.gc.ca](mailto:statcan.mediahotline-ligneinfomedias.statcan@statcan.gc.ca)).