Monthly Survey of Manufacturing, December 2023

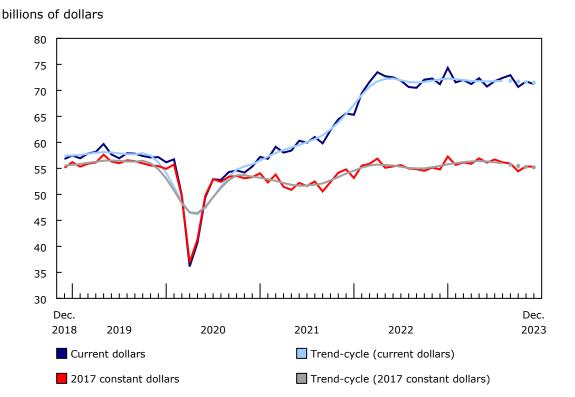
Released at 8:30 a.m. Eastern time in The Daily, Thursday, February 15, 2024

Following a 1.5% increase in November, manufacturing sales fell 0.7% to \$71.2 billion in December, mainly attributable to the motor vehicle industry group (-13.5%) as well as the chemical product subsector (-3.1%). Production of aerospace products and parts marked the largest increase, rising 10.6% to \$2.5 billion in December.

Total sales in constant dollars edged down 0.1% in December, while the Industrial Product Price Index fell 1.5% in December.

On a quarterly basis, sales declined 1.6% to \$213.6 billion in the fourth quarter of 2023, following a 1.3% increase in the third quarter. The transportation equipment (-5.3%) and food (-1.3%) subsectors contributed the most to the decrease.

Chart 1 Manufacturing sales



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 manufacturing leads monthly decline

Sales of motor vehicles fell 13.5% to \$4.4 billion in December, the fifth consecutive monthly decline and the lowest level since December 2022. Production slowdowns for retooling in some auto assembly plants in Ontario were largely responsible for the decline. Exports of motor vehicles and parts fell 7.4% in December 2023. On a quarterly basis, sales of motor vehicles declined 12.9% in the fourth quarter of 2023, following four consecutive quarterly increases.

Following a 6.6% increase in November, sales of chemical products fell 3.1% to \$5.4 billion in December, primarily driven by lower sales of pharmaceutical and medicine products (-19.7%).

Production of aerospace products and parts rose 10.6% to \$2.5 billion in December, the highest level on record. On a quarterly basis, production increased 14.6% in the fourth quarter, also the largest quarterly sales value on record. Strong aircraft deliveries by some major aerospace manufacturers contributed to the gain. Exports of aircraft, aircraft engines and aircraft parts were up 13.8% in December.

Sales decline in four provinces, led by Ontario and Manitoba

In December, four provinces posted lower sales, led by Ontario and Manitoba. Quebec posted the largest increase.

Sales in Ontario declined 2.8% to \$31.0 billion in December, mainly on lower sales of motor vehicles (-13.7%). Sales on a quarterly basis fell 4.7% in the fourth quarter.

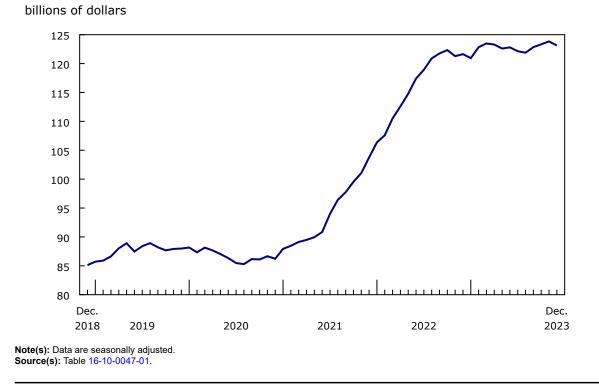
Sales in Manitoba declined 5.2% to \$2.1 billion in December, the third consecutive monthly decline, mainly on lower sales in the transportation equipment (-19.9%) and machinery (-17.8%) subsectors.

In Quebec, sales rose 1.6% to \$18.3 billion in December, on higher production of aerospace products and parts (+13.6%). On a yearly basis, total sales in Quebec increased 1.7% in December.

Total inventories decline

Total inventories fell 0.6% to \$123.1 billion in December, on lower goods in process (-3.0%) and finished product (-0.9%) inventories. Inventories declined the most in the transportation equipment (-3.3%), petroleum and coal (-5.5%) and food (-3.1%) subsectors.





The inventory-to-sales ratio was unchanged at 1.73 in December. This ratio measures the time, in months, that would be required to exhaust inventories if sales were to remain at their current level.

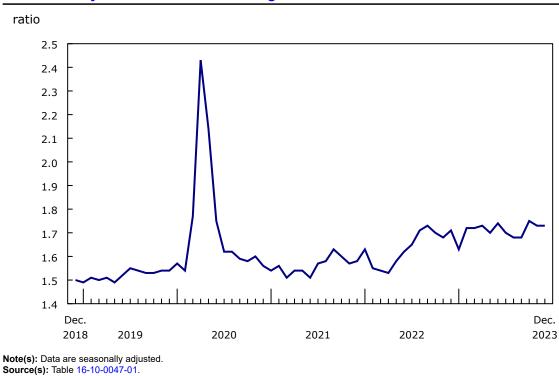
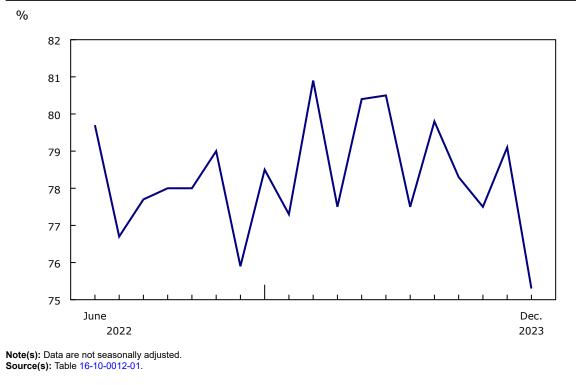


Chart 3 The inventory-to-sales ratio is unchanged

Capacity utilization rate declines

The capacity utilization rate (not seasonally adjusted) for the total manufacturing sector decreased from 79.1% in November to 75.3% in December. The declines were more noticeable in the transportation equipment (-7.0 percentage points) and food (-5.3 percentage points) subsectors. The capacity utilization rate of petroleum and coal manufacturing increased 6.7 percentage points in December.





Manufacturing: Year in review, 2023

Canadian manufacturing sales and inventories posted moderate increases in 2023 compared with 2021 and 2022. The deceleration in growth was partially influenced by various factors including international political tensions, extreme weather conditions causing wildfires and drought, and labour strikes. Despite the persistent supply chain issues in 2023, the average industrial product prices decreased 1.8% from 2022 to 2023, mainly driven by lower prices for energy and petroleum products (-14.5%). Meanwhile, certain industries, notably transportation, benefited from the global economy's gradual recovery.

In current dollars, total manufacturing sales increased 1.1% to \$862.8 billion in 2023, following a 17.9% increase in 2021 and an 18.1% gain in 2022. Sales rose in 9 of 21 subsectors in 2023, led by the transportation equipment (+27.0%) and food (+5.9%) subsectors. In contrast, the petroleum and coal subsector (-14.3%) posted the largest decrease.

Following a 3.9% increase in 2021 and a 4.9% gain in 2022, total manufacturing sales in constant dollars rose 1.5% to \$671.9 billion in 2023, mainly on higher sales of transportation equipment and machinery.

Year-end inventory levels increased 1.2% to \$123.1 billion in current dollars in 2023. The gain stemmed from higher inventories of durable goods (+2.3%), while inventories of non-durable goods edged down 0.4%.

Transportation equipment drives up manufacturing sales

Sales in the transportation equipment subsector marked a new record, rising 27.0% to \$139.1 billion in 2023. The gains were mainly attributable to the auto industry, followed by aerospace product and parts manufacturing.

The motor vehicle industry group was the primary contributor to the growth in transportation equipment, as its sales rose 37.1% from 2022 to \$62.1 billion in 2023. Sales of motor vehicle parts increased 17.4% in the same period. While the easing of semiconductor supply chain shortages helped auto manufacturers ramp up production in 2023, the industry was temporarily impacted by a labour union strike in October. Exports of motor vehicles and parts rose 29.4% in 2023.

Production of aerospace products and parts increased 29.7% from 2022 to \$24.9 billion in 2023, the second highest total on record. The growth was mainly driven by sustained demand for aircrafts and aircraft parts throughout the year. Exports of aircraft, aircraft engines and aircraft parts increased 24.2% in 2023.

Sales of food products marked a record high, rising 5.9% from 2022 to \$150.0 billion in 2023. The gain was largely attributable to higher prices, as sales in volume terms increased by 0.6%. The increase in current dollars in 2023 was widespread across seven of nine industry groups, led by the meat product (+6.6%) and bakeries and tortilla (+11.5%) industry groups.

Although prices of some intermediate food products including grains declined in 2023, higher feed costs due to droughts in North America and the conflict in Ukraine contributed to higher prices of meat products. In bakery manufacturing, average prices of sugar and sugar mill by-products increased 24.7% in 2023.

Sales of petroleum and coal products post the largest decline

Sales of petroleum and coal products fell 14.3% to \$101.6 billion in 2023, following two consecutive yearly increases. On a constant dollar basis, sales were up 2.5% as average prices of refined petroleum energy products (including liquid biofuels) fell 15.6% in 2023.

Inventories accumulate at slower pace

The year-end total inventory levels in current dollars continued to grow, rising 1.2% from 2022 to \$123.1 billion in 2023, although at a slower pace compared with 2021 (+17.2%) and 2022 (+20.3%). Finished products (+3.9%) and goods in process (+1.7%) rose among the inventory components, while raw materials declined 1.0% in 2023. In constant dollars, all three components posted increases.

In the durable goods industries, total inventories rose 2.3% in current dollars and 2.1% in constant dollars in 2023. The increase in current dollar terms was primarily driven by higher inventories of primary metal (+7.9%) and transportation equipment (+5.2%).

In the non-durable industries, total inventories in current dollars declined 0.4% in 2023, mainly on lower prices. The largest contributor to the decline was the plastics and rubber subsector (-21.6%).

Table 1 Manufacturing: Principal statistics – Seasonally adjusted

	December 2022	November 2023 ^r	December 2023 ^p	November to December 2023	December 2022 to December 2023
	m	illions of dollars	% change ¹		
Manufacturing sales (current dollars)	71,179	71,714	71,218	-0.7	0.1
Manufacturing sales (2017 constant dollars) Manufacturing sales (current dollars) excluding motor vehicles,	54,794	55,382	55,303	-0.1	0.9
parts and accessories	64,025	63,567	63,852	0.4	-0.3
Inventories	121,634	123,837	123,137	-0.6	1.2
Unfilled orders	108,258	102,495	103,677	1.2	-4.2
New orders	70,149 ^E	70,747 ^E	72,400 ^E	2.3	3.2
Inventory-to-sales ratio ²	1.71	1.73	1.73		

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Percentage change calculated at thousands of dollars for current dollars and millions of dollars for constant dollars.
 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

	December 2022	November 2023 ^r	December 2023 ^p	November to December 2023	December 2022 to December 2023	
	m	nillions of dollars		% change ¹		
Food manufacturing	12,048	12,557	12,442	-0.9	3.3	
Beverage and tobacco product	1,402	1,394	1,439	3.3	2.7	
Textile mills	161	151	155	2.3	-4.0	
Textile product mills	145	144	135	-6.4	-6.8	
Apparel manufacturing	246	258	238	-8.0	-3.3	
Leather and allied product	36	26	28	6.8	-21.4	
Wood product	3,305	3,244	3,213	-1.0	-2.8	
Paper manufacturing	2,942	2,531	2,666	5.3	-9.4	
Printing and related support activities	760	759	706	-6.9	-7.1	
Petroleum and coal product	9,382	8,234	8,459	2.7	-9.8	
Chemical	5,784	5,559	5,386	-3.1	-6.9	
Plastics and rubber products	3,358	3,271	3,230	-1.3	-3.8	
Non-metallic mineral product	1,711	1,759	1,912	8.7	11.7	
Primary metal	5,600	5,633	5,517	-2.1	-1.5	
Fabricated metal product	4,495	4,549	4,719	3.7	5.0	
Machinery	4,240	4,620	4,697	1.7	10.8	
Computer and electronic product	1,526	1,523	1,531	0.5	0.3	
Electrical equipment, appliance and component	1,179	1,259	1,280	1.7	8.6	
Transportation equipment	10,253	11,762	11,046	-6.1	7.7	
Motor vehicle	4,239	5,099	4,410	-13.5	4.0	
Motor vehicle body and trailer	472	532	524	-1.6	10.9	
Motor vehicle parts	2,915	3,048	2,957	-3.0	1.4	
Aerospace product and parts	1,910	2,244	2,481	10.6	29.9	
Railroad rolling stock	101	233	166	-28.5	64.6	
Ship and boat building	259	286	250	-12.3	-3.3	
Furniture and related product	1,288	1,282	1,275	-0.5	-1.0	
Miscellaneous manufacturing	1,317	1,198	1,145	-4.4	-13.1	
Non-durable goods industries	36,263	34,885	34,883	-0.0	-3.8	
Durable goods industries	34,916	36,829	36,335	-1.3	4.1	

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Percentage change calculated at thousands of dollars.
Source(s): Table 16-10-0047-01.

Table 3
Manufacturing sales: Provinces and territories – Seasonally adjusted

	December	November	December	November to	December 2022
	2022	2023 ^r	2023 ^p	December 2023	to December
					2023
	millions of dollars		% change ¹		
Canada	71,179	71,714	71,218	-0.7	0.1
Newfoundland and Labrador	372	274	223	-18.7	-40.1
Prince Edward Island	266	279	291	4.1	9.4
Nova Scotia	880	893	894	0.1	1.6
New Brunswick	2,084	1,811	1,978	9.3	-5.1
Quebec	17,965	17,986	18,275	1.6	1.7
Ontario	31,072	31,834	30,955	-2.8	-0.4
Manitoba	2,056	2,218	2,104	-5.2	2.3
Saskatchewan	2,363	2,134	2,040	-4.4	-13.7
Alberta	8,618	8,740	8,870	1.5	2.9
British Columbia	5,497	5,536	5,580	0.8	1.5
Yukon	4	4 ^E	5 ^E	14.6	43.4
Northwest Territories and Nunavut	4	3	4	19.2	-2.7

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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

	December 2022	November 2023 ^r	December 2023 ^p	November to December 2023	December 2022 to December 2023		
	millions of dollars			% change ¹			
Halifax	262	253	240	-5.3	-8.3		
Québec	2,158	1,911	1,830	-4.2	-15.2		
Sherbrooke	255	273	267	-2.3	4.5		
Montréal	8,080	8,348	8,381	0.4	3.7		
Ottawa–Gatineau, Ontario and Quebec	817	676	619	-8.4	-24.2		
Toronto	12,328	13,296	12,632	-5.0	2.5		
Hamilton	2,002	1,911	1,973	3.3	-1.5		
Kitchener–Cambridge–Waterloo	2,325	2,567	2,599	1.3	11.8		
Windsor	1,578	1,234	1,127	-8.6	-28.6		
Winnipeg	1,007	1,113	1,007	-9.6	-0.0		
Regina	1,179	941	892	-5.2	-24.3		
Saskatoon	524	546	479	-12.3	-8.6		
Calgary	1,252	1,328	1,243	-6.4	-0.7		
Edmonton	4,243	4,077	3,996	-2.0	-5.8		
Vancouver	2,865	3,021	2,937	-2.8	2.5		

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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

	December 2022	November 2023 ^r	December 2023 ^p	November to December 2023	December 2022 to December 2023	
		%		percentage point change		
Manufacturing	75.9	79.1	75.3 ^E	-3.8	-0.6	
Non-durable goods industries	76.6	77.6	75.1 ^E	-2.5	-1.5	
Food manufacturing	77.8 ^E	81.3 ^E	76.0 ^E	-5.3	-1.8	
Beverage and tobacco product manufacturing	69.0	64.1	63.4	-0.7	-5.6	
Beverage manufacturing	70.9	65.9	64.9	-1.0	-6.0	
Tobacco manufacturing	57.7	53.8	56.5	2.7	-1.2	
Textile mills	78.8	70.6	78.1	7.5	-0.7	
Textile product mills	62.5 ^E	71.4 ^E	63.4 ^E	-8.0	0.9	
Apparel manufacturing	78.0 ^E	79.7 ^E	76.4 ^E	-3.3	-1.6	
Leather and allied product manufacturing	79.3 ^E	72.4	75.5	3.1	-3.8	
Paper manufacturing	79.4	82.9	80.6	-2.3	1.2	
Printing and related support activities	76.3 ^E	73.5 ^E	68.6 ^E	-4.9	-7.7	
Petroleum and coal products manufacturing	84.5	79.6	86.3	6.7	1.8	
Chemical manufacturing	72.8 ^E	73.5	68.8 ^E	-4.7	-4.0	
Plastics and rubber products manufacturing	61.1	72.0 ^E	62.8 ^E	-9.2	1.7	
Plastic product manufacturing	59.6 ^E	70.3 ^E	61.6 ^E	-8.7	2.0	
Rubber product manufacturing	70.4	83.1 ^E	70.0	-13.1	-0.4	
Durable goods industries	75.1	80.5	75.4	-5.1	0.3	
Wood product manufacturing	69.4	77.6	69.4 ^E	-8.2	0.0	
Non-metallic mineral product manufacturing	63.1 ^E	74.5 ^E	65.4 ^E	-9.1	2.3	
Primary metal manufacturing	73.2	77.0	76.9	-0.1	3.7	
Fabricated metal product manufacturing	72.3 ^E	78.1 ^E	71.3 ^E	-6.8	-1.0	
Machinery manufacturing	78.5 ^E	81.2 ^E	76.9 ^E	-4.3	-1.6	
Computer and electronic product manufacturing	78.6	77.3 ^E	82.3 ^E	5.0	3.7	
Electrical equipment, appliance and component manufacturing	82.3 ^E	85.5 ^E	80.6 ^E	-4.9	-1.7	
Transportation equipment manufacturing	78.5	85.4 ^E	78.4	-7.0	-0.1	
Furniture and related product manufacturing	78.1 ^E	78.5 ^E	69.1 ^E	-9.4	-9.0	
Miscellaneous manufacturing	72.5	77.5 ^E	74.6 ^E	-2.9	2.1	

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 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:



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Note to readers

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 industry groups, 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 February 22.

Next release

Data from the Monthly Survey of Manufacturing for January will be released on March 14.

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) or Media Relations (statcan.mediahotline-ligneinfomedias.statcan@statcan.gc.ca).