

## MEDIA RELEASE

26 December 2023

### Monthly Manufacturing Performance – November 2023

#### Highlights

- On a year-on-year basis, Singapore's manufacturing output increased 1.0% in November 2023. Excluding biomedical manufacturing, output increased 1.9%.
- On a seasonally adjusted month-on-month basis, manufacturing output decreased 7.8% in November 2023. Excluding biomedical manufacturing, output decreased 9.4%.

#### (I) Total Manufacturing Performance

1. Singapore's manufacturing output increased 1.0% in November 2023 on a year-on-year basis. Excluding biomedical manufacturing, output increased 1.9%. On a three-month moving average basis, manufacturing output increased 2.5% in November 2023, compared to a year ago. On a seasonally adjusted month-on-month basis, manufacturing output decreased 7.8%. Excluding biomedical manufacturing, output decreased 9.4%.

**(II) Performance by cluster**

2. Electronics: Output grew 7.3% in November 2023 compared to a year ago. The infocomms & consumer electronics, semiconductors and other electronics modules and components segments grew 13.9%, 8.2% and 2.4% respectively, while computers peripherals & data storage declined 8.3%. On a year-to-date basis, the electronics cluster contracted 3.7%.
3. Transport engineering: Output increased 7.2% year-on-year in November 2023. The marine & offshore engineering segment expanded 27.9%, supported by a higher level of activity in the shipyards as well as increased production in oil & gas field equipment. Output of the aerospace segment was similar to a year ago while the land segment contracted 15.3%. Overall, the transport engineering cluster grew 16.5% in the first eleven months of 2023 compared to the same period last year.
4. General manufacturing: Output increased 3.2% in November 2023 compared to a year ago. The food, beverages & tobacco segment grew 12.4%, largely led by higher production of beverage products. By contrast, the miscellaneous industries segment contracted 6.2% with lower production of batteries while the printing segment fell 8.5%. On a year-to-date basis, output of the general manufacturing industries cluster decreased 4.8% compared to the same period a year ago.
5. Chemicals: Output increased 2.7% in November 2023 on a year-on-year basis. The other chemicals and specialties segments expanded 17.5% and 14.1% respectively, with the former recording higher production of fragrances. The petroleum segment rose 2.4% on account of higher demand for jet fuel as air travel remained strong. Conversely, the petrochemicals segment declined 10.5% due to weak market demand and some plant maintenance shutdowns. Cumulatively, the chemicals cluster

contracted 7.6% for the period January to November 2023 compared to the same period a year ago.

6. Biomedical manufacturing: Output declined 0.7% in November 2023 compared to a year ago. The medical technology segment increased 7.1% with higher export demand for medical devices. Conversely, output of the pharmaceutical segment declined 6.0% with lower production of biological products and a different mix of active pharmaceutical ingredients being produced. Overall, output for the biomedical manufacturing cluster decreased 5.6% year-on-year in the period January to November 2023.
7. Precision engineering: Output decreased 14.1% year-on-year in November 2023. The precision modules & components segment contracted 12.7%, on account of lower output in plastic and metal precision components, optical instruments as well as dies, moulds, tools, jigs and fixtures. The machinery & systems segment declined 14.5% largely due to lower production of semiconductor-related equipment. On a year-to-date basis, the precision engineering cluster contracted 8.3% compared to the same period a year ago.
8. The next monthly manufacturing performance media release will be issued on 26 January 2024.

- END -

*Editors' Note: Updates on Monthly Manufacturing Output are available on <https://www.gov.sg/resources/sqpc/> and <https://www.edb.gov.sg>*

*For media enquiries, please contact Ms Nicole Tong (Tel: 68326424 / Handphone: 98170398 / Email: [nicole\\_tong@edb.gov.sg](mailto:nicole_tong@edb.gov.sg))*

*For further information, please contact Ms Teo Xinyu (Tel: 68326337 / Handphone: 96163824/ Email: [teo\\_xin\\_yu@edb.gov.sg](mailto:teo_xin_yu@edb.gov.sg))*

## **About the Singapore Economic Development Board**

The Singapore Economic Development Board (EDB), a government agency under the Ministry of Trade and Industry, is responsible for strategies that enhance Singapore's position as a global centre for business, innovation, and talent. We undertake investment promotion and industry development, and work with international businesses, both foreign and local, by providing information, connection to partners and access to government incentives for their investments. Our mission is to create sustainable economic growth, with vibrant business and good job opportunities for Singapore.

For more information on EDB, please visit [www.edb.gov.sg](http://www.edb.gov.sg)

**TABLE 1 : MANUFACTURING SECTOR GROWTH**

Period		NSA INDEX Total Mfg ( 2019 = 100 )	YOY Growth (%) Total Mfg	SA INDEX Total Mfg	SA MOM GROWTH (%) Total Mfg	SA INDEX Total Mfg excl Biomedical Mfg	SA MOM GROWTH (%) Total Mfg excl Biomedical Mfg
2021	Nov	121.9	14.2	127.8	0.8	123.3	2.4
	Dec	133.7	16.7	131.2	2.7	120.2	-2.5
2022	Jan	122.9	1.2	118.4	-9.7	119.9	-0.3
	Feb	117.3	13.9	132.1	11.5	129.4	7.9
	Mar	134.2	4.4	124.8	-5.6	123.5	-4.6
	Apr	127.5	5.4	124.0	-0.6	123.4	-0.1
	May	125.9	11.1	129.6	4.6	130.9	6.1
	Jun	131.0	3.3	125.9	-2.9	123.5	-5.6
	Jul	122.5	1.8	123.3	-2.0	123.7	0.2
	Aug	123.6	1.0	124.6	1.0	120.4	-2.7
	Sep	126.6	1.1	124.3	-0.2	122.0	1.4
	Oct	123.6	-0.6	125.9	1.3	123.2	0.9
	Nov	117.3	-3.7	123.4	-2.0	116.7	-5.2
2023	Dec	129.0	-3.5	125.4	1.6	120.1	2.9
	Jan	119.6	-2.7	125.4	0.0	122.1	1.6
	Feb	106.4	-9.3	109.8	-12.5	111.1	-9.0
	Mar	129.2	-3.8	120.1	9.4	117.3	5.6
	Apr	119.6	-6.2	118.5	-1.3	120.0	2.2
	May	112.8	-10.4	114.2	-3.6	110.3	-8.0
	Jun	123.0	-6.1	118.3	3.6	117.8	6.8
	Jul	122.0	-0.4	123.2	4.1	125.9	6.8
	Aug	107.8	-12.8	108.6	-11.8	103.4	-17.8
	Sep	125.3	-1.0	123.2	13.4	125.4	21.3
	Oct	132.9	7.6	135.3	9.9	131.0	4.5
Nov*	118.5	1.0	124.7	-7.8	118.7	-9.4	

Note:

- \* - Preliminary
- NSA Index - Non seasonally adjusted index
- MOM - Month-on-month
- YOY - Year-on-year

Singapore Economic Development Board  
 250 North Bridge Road #28-00 Raffles City Tower Singapore 179101  
 Tel 65 6832 6832 Fax 65 6832 6566

**TABLE 2 : PERFORMANCE BY CLUSTERS**

Industry Cluster	Weights	% change over corresponding period of previous year				% change of 3-month moving average over corresponding period of previous year		
		Sep 23	Oct 23	Nov 23*	Cum Jan – Nov 23	Sep 23	Oct 23	Nov 23*
<b>Electronics</b>	<b>45.3</b>	<b>12.9</b>	<b>15.1</b>	<b>7.3</b>	<b>-3.7</b>	<b>-0.8</b>	<b>2.1</b>	<b>11.9</b>
Semiconductors	38.3	17.1	18.5	8.2	-3.1	-0.5	3.1	14.9
Computer Peripherals & Data Storage	2.7	-24.5	-15.3	-8.3	-15.7	-20.5	-19.3	-16.2
Infocomms & Consumer Electronics	2.8	19.3	0.0	13.9	-2.2	11.0	10.3	11.6
Other Electronic Modules & Components	1.4	4.7	-2.4	2.4	-9.6	-1.4	-0.9	1.6
<b>Biomedical Manufacturing</b>	<b>12.3</b>	<b>-19.0</b>	<b>5.3</b>	<b>-0.7</b>	<b>-5.6</b>	<b>-13.4</b>	<b>-5.6</b>	<b>-5.0</b>
Pharmaceuticals	7.2	-41.5	3.4	-6.0	-12.6	-27.9	-14.6	-14.6
Medical Technology	5.1	9.0	8.5	7.1	4.3	6.0	6.7	8.2
<b>Chemicals</b>	<b>16.9</b>	<b>-12.9</b>	<b>-0.8</b>	<b>2.7</b>	<b>-7.6</b>	<b>-6.3</b>	<b>-6.5</b>	<b>-3.9</b>
Petroleum	4.5	-14.5	0.3	2.4	-1.8	-9.3	-7.5	-4.2
Petrochemicals	6.8	-13.3	-9.3	-10.5	-15.5	-11.5	-9.4	-11.1
Specialties	3.1	-12.6	7.3	14.1	-3.7	-5.7	-8.9	2.2
Others	2.5	-11.6	2.2	17.5	-0.5	-0.3	-2.3	2.2

\* Preliminary

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**TABLE 2 : PERFORMANCE BY CLUSTERS (Continued)**

Industry Cluster	Weights	% change over corresponding period of previous year				% change of 3-month moving average over corresponding period of previous year		
		Sep 23	Oct 23	Nov 23*	Cum Jan – Nov 23	Sep 23	Oct 23	Nov 23*
<b>Precision Engineering</b>	<b>13.1</b>	<b>-11.3</b>	<b>-2.8</b>	<b>-14.1</b>	<b>-8.3</b>	<b>-11.0</b>	<b>-9.1</b>	<b>-9.0</b>
Machinery & Systems	9.5	-8.6	2.6	-14.5	-4.5	-8.6	-5.3	-6.1
Precision Modules & Components	3.6	-20.1	-20.5	-12.7	-18.1	-17.7	-19.6	-18.0
<b>Transport Engineering</b>	<b>5.8</b>	<b>13.6</b>	<b>13.2</b>	<b>7.2</b>	<b>16.5</b>	<b>16.8</b>	<b>14.4</b>	<b>11.3</b>
Marine & Offshore Engineering	1.9	25.6	21.0	27.9	29.1	28.2	25.8	25.0
Aerospace	3.0	14.8	17.1	-0.1	17.1	18.5	15.5	10.4
Land	0.9	-17.0	-17.1	-15.3	-13.1	-13.9	-14.1	-16.5
<b>General Manufacturing Industries</b>	<b>6.6</b>	<b>-9.6</b>	<b>4.4</b>	<b>3.2</b>	<b>-4.8</b>	<b>-7.8</b>	<b>-3.9</b>	<b>-1.0</b>
Printing	0.5	-12.1	-9.3	-8.5	-10.4	-10.4	-11.2	-9.9
Food, Beverages & Tobacco	3.5	-2.6	6.4	12.4	0.2	-2.2	0.3	5.0
Miscellaneous Industries	2.6	-18.7	5.5	-6.2	-10.7	-14.9	-7.9	-7.1
<b>Total Manufacturing</b>	<b>100.0</b>	<b>-1.0</b>	<b>7.6</b>	<b>1.0</b>	<b>-4.0</b>	<b>-4.7</b>	<b>-2.1</b>	<b>2.5</b>
<b>Manufacturing excluding Biomedical Manufacturing</b>	<b>87.7</b>	<b>1.4</b>	<b>7.4</b>	<b>1.9</b>	<b>-3.8</b>	<b>-3.4</b>	<b>-1.6</b>	<b>3.6</b>

\* Preliminary

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**TABLE 3 : MONTHLY INDEX OF INDUSTRIAL PRODUCTION BY INDUSTRY CLUSTER, NOVEMBER 2021 TO NOVEMBER 2023**

Period	Electronics					Biomedical Manufacturing			Chemicals					
	Total	Semi-conductors	Computer Peripherals & Data Storage	Infocomms & Consumer Electronics	Other Electronic Modules & Components	Total	Pharmaceuticals	Medical Technology	Total	Petroleum	Petrochemicals	Specialties	Others	
<b>2019=100</b>														
2021	Nov	131.0	135.9	101.0	105.6	114.1	128.5	127.5	116.7	105.7	84.2	115.1	107.8	93.4
	Dec	131.9	128.8	107.9	175.6	129.7	161.4	172.2	136.7	110.5	88.2	122.1	111.4	95.8
2022	Jan	132.4	136.7	109.4	96.5	138.4	115.3	111.6	110.8	110.3	86.8	120.6	121.0	87.1
	Feb	134.0	142.9	104.2	77.1	129.2	131.4	146.1	103.3	101.4	85.6	105.2	111.8	84.8
	Mar	144.8	145.6	136.7	117.0	156.6	134.2	128.1	131.4	115.4	88.7	105.9	124.5	132.6
	Apr	135.9	139.9	133.5	91.9	127.9	138.7	144.4	121.0	106.6	86.7	103.3	121.6	100.3
	May	143.8	155.8	119.8	69.5	114.3	132.5	137.7	115.9	105.1	90.4	102.0	124.1	89.9
	Jun	133.5	126.1	125.2	164.7	136.3	144.9	123.2	160.4	104.5	92.2	104.1	119.0	87.5
	Jul	125.7	130.9	100.4	89.6	124.4	122.2	112.8	124.2	98.7	101.8	106.4	81.9	92.8
	Aug	130.2	135.3	121.4	85.1	120.3	145.4	145.2	134.3	92.1	97.7	88.6	91.9	85.1
	Sep	127.6	124.9	120.2	131.2	120.7	131.0	119.9	134.5	100.8	99.1	93.8	110.6	93.1
	Oct	129.3	132.3	114.7	103.9	114.2	118.8	107.7	123.3	96.2	96.7	90.7	103.1	88.3
	Nov	114.8	115.9	110.7	92.0	114.4	140.1	147.8	119.7	93.8	90.7	95.3	93.8	84.3
	Dec	133.1	120.7	111.2	204.4	139.2	135.7	139.2	120.9	99.2	93.7	94.8	100.6	100.2
2023	Jan	127.0	132.1	116.3	73.2	105.9	144.3	155.8	117.2	96.1	95.9	89.9	109.3	77.9
	Feb	119.5	125.1	109.4	65.6	86.5	87.0	59.2	118.0	86.6	87.3	70.8	103.7	89.5
	Mar	134.7	137.2	108.9	112.2	135.4	140.7	121.5	155.7	101.7	99.7	84.6	114.9	113.9
	Apr	124.2	130.5	92.9	78.6	97.0	124.7	125.6	113.5	100.1	91.3	94.5	112.2	96.6
	May	110.2	112.9	94.6	82.9	103.5	142.1	153.2	115.5	95.5	76.2	90.8	124.1	92.5
	Jun	130.6	130.8	99.6	132.8	145.3	124.9	107.2	139.0	95.0	87.1	88.8	108.6	91.1
	Jul	134.0	141.2	81.6	90.0	119.8	97.1	65.7	132.1	98.4	96.3	90.4	100.4	99.9
	Aug	102.3	101.8	99.5	93.0	114.0	142.1	136.8	138.1	86.9	89.9	83.9	71.0	87.9
	Sep	144.1	146.3	90.7	156.6	126.4	106.0	70.1	146.6	87.8	84.7	81.3	96.7	82.3
	Oct	148.8	156.8	97.2	103.9	111.4	125.1	111.3	133.9	95.4	96.9	82.2	110.6	90.2
	Nov*	123.2	125.5	101.5	104.8	117.2	139.1	138.9	128.2	96.3	92.9	85.3	107.0	99.1

\* Preliminary

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**TABLE 3 : MONTHLY INDEX OF INDUSTRIAL PRODUCTION BY INDUSTRY CLUSTER, NOVEMBER 2021 TO NOVEMBER 2023 (Continued)**

Period		Precision Engineering			Transport Engineering				General Manufacturing Industries				Total Manu- facturing	Manufacturing excluding Biomedical Manufacturing
		Total	Machinery & Systems	Precision Modules & Components	Total	Marine & Offshore Engineering	Aerospace	Land	Total	Printing	Food, Beverages & Tobacco	Miscella- neous Industries		
<b>2019=100</b>														
2021	Nov	122.6	133.4	100.6	95.6	97.1	91.4	108.0	97.0	93.2	84.9	116.8	121.9	119.3
	Dec	156.3	180.2	112.0	110.5	128.3	90.3	159.4	103.9	94.2	90.8	127.1	133.7	128.3
2022	Jan	141.2	162.5	102.3	79.4	70.8	82.4	96.5	114.5	87.9	110.3	127.2	122.9	123.3
	Feb	102.1	110.9	83.6	78.0	75.9	76.0	98.3	96.8	65.8	98.3	100.6	117.3	114.0
	Mar	144.0	166.1	103.9	106.3	91.2	114.2	123.1	113.3	84.0	109.5	126.4	134.2	133.2
	Apr	142.6	163.1	104.9	93.3	83.1	102.2	87.2	102.1	79.3	96.5	117.0	127.5	124.6
	May	119.8	131.7	95.9	88.5	84.2	92.5	86.1	102.6	71.8	97.9	118.3	125.9	123.7
	Jun	155.6	182.6	107.5	107.8	104.0	106.7	130.7	106.1	73.8	100.1	124.8	131.0	127.5
	Jul	153.5	185.8	97.8	96.6	93.9	100.5	89.5	107.9	74.5	103.4	123.9	122.5	121.6
	Aug	126.3	136.7	104.4	103.4	99.2	109.1	92.5	107.9	77.0	106.8	116.4	123.6	118.9
	Sep	152.3	181.4	101.3	114.8	112.5	116.6	117.3	108.6	81.5	104.9	121.0	126.6	124.8
	Oct	163.4	196.7	105.9	101.7	100.4	103.5	99.9	95.1	82.6	91.6	102.5	123.6	123.4
	Nov	127.6	146.5	93.0	113.3	113.2	114.8	109.7	96.8	92.0	88.6	110.8	117.3	112.5
	Dec	150.5	178.8	100.8	121.0	127.6	115.1	131.7	103.8	97.1	92.4	124.3	129.0	126.9
2023	Jan	124.2	151.1	76.8	83.6	93.2	80.2	75.9	98.5	68.3	108.2	90.3	119.6	115.1
	Feb	107.0	122.3	79.2	95.8	105.8	96.3	73.2	96.1	68.9	100.2	96.2	106.4	107.8
	Mar	134.7	163.5	83.8	133.1	138.3	140.6	99.5	108.7	75.8	107.3	118.9	129.2	126.4
	Apr	137.3	169.0	81.5	107.4	104.8	118.6	78.9	91.5	65.6	87.6	104.0	119.6	117.7
	May	107.8	118.5	87.4	116.0	113.3	125.7	93.3	103.8	71.6	101.5	115.3	112.8	107.8
	Jun	137.8	172.0	77.9	121.4	114.0	125.8	128.6	99.3	61.7	100.4	107.1	123.0	121.5
	Jul	141.7	174.9	83.4	116.7	120.6	127.4	74.7	98.9	69.6	101.3	102.4	122.0	124.0
	Aug	107.8	119.8	85.5	120.4	129.8	125.2	85.8	102.1	67.5	104.7	106.5	107.8	102.2
	Sep	135.1	165.8	81.0	130.4	141.3	133.8	97.3	98.2	71.6	102.1	98.4	125.3	126.5
	Oct	158.9	201.8	84.1	115.1	121.5	121.2	82.9	99.3	74.9	97.5	108.1	132.9	132.6
	Nov*	109.6	125.2	81.2	121.4	144.8	114.7	92.8	99.9	84.2	99.6	104.0	118.5	114.6

\* Preliminary