

## MEDIA RELEASE

24 December 2021

### Monthly Manufacturing Performance – November 2021

#### Highlights

- On a year-on-year basis, Singapore's manufacturing output increased 14.6% in November 2021. Excluding biomedical manufacturing, output grew 12.4%.
- On a seasonally adjusted month-on-month basis, manufacturing output increased 2.3% in November 2021. Excluding biomedical manufacturing, output grew 2.7%.

#### (I) Total Manufacturing Performance

1. Singapore's manufacturing output increased 14.6% in November 2021 on a year-on-year basis. Excluding biomedical manufacturing, output grew 12.4%. On a three-month moving average basis, manufacturing output rose 9.1% in November 2021, compared to a year ago. On a seasonally adjusted month-on-month basis, manufacturing output increased 2.3%. Excluding biomedical manufacturing, output grew 2.7%.

**(II) Performance by cluster**

2. Transport engineering: Output increased 31.2% year-on-year in November 2021. The aerospace segment grew 47.1% with higher demand for maintenance, repair and overhaul activities compared to a year ago, when there was widespread grounding of aircraft due to COVID-19 international travel restrictions. The marine & offshore engineering segment rose 34.0% with a higher level of work done in shipbuilding & repairing activities, compared to the low base a year ago. Cumulatively, the transport engineering cluster grew 10.7% in the first eleven months of 2021 compared to the same period last year.
3. Biomedical manufacturing: Output expanded 20.1% in November 2021 compared to a year ago. The pharmaceuticals segment expanded 31.2% with higher production of active pharmaceutical ingredients. In contrast, the medical technology segment decreased 13.1% on the back of lower export demand for medical devices. On a year-to-date basis, output of the biomedical manufacturing cluster grew 6.4%, compared to the same period a year ago.
4. Precision engineering: Output rose 13.7% in November 2021 as compared to the same period a year ago. The machinery & systems segment grew 24.9%, on account of higher production of semiconductor equipment, industrial process equipment and measuring devices. Conversely, the precision modules & components segment declined 8.7% with lower output of optical products. Overall, the precision engineering cluster grew 19.1% on a year-to-date basis.
5. Electronics: Output increased 10.2% in November 2021 on a year-on-year basis. All segments recorded a higher level of production, on the back of strong export demand. In the first eleven months of this year, the electronics cluster grew 16.5% compared to the same period in 2020.

6. General manufacturing: Output grew 8.8% year-on-year in November 2021 with all segments recording an increase in output. The cluster's growth was largely attributed to the miscellaneous industries segment, which grew 19.3% with higher production of construction-related products, jewellery and wearing apparel. Cumulatively, output of the general manufacturing industries cluster grew 6.5% for the period January to November 2021 compared to the same period a year ago.
7. Chemicals: Output increased 8.5% in November 2021 compared to a year ago. The petrochemicals and petroleum segments expanded 18.0% and 17.6% respectively from the low production base a year ago, due to plant maintenance shutdowns and weaker export demand amid the COVID-19 outbreak. On the other hand, the specialties and other chemicals segments declined 0.5% and 2.3% respectively, with the latter recording lower output in fragrances. On a year-to-date basis, the chemicals cluster grew 10.0% compared to the same period a year ago.
8. The next monthly manufacturing performance media release will be issued on 26 January 2022.

- END -

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

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## **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
2019	Nov	89.4	-12.3	91.3	-12.4	95.8	-12.7
	Dec	97.8	-3.7	95.2	4.2	96.0	0.1
2020	Jan	110.8	3.7	110.6	16.2	105.0	9.4
	Feb	88.1	-0.5	94.7	-14.4	96.7	-7.9
	Mar	117.7	21.5	115.0	21.5	101.2	4.6
	Apr	117.7	12.0	113.0	-1.7	99.0	-2.2
	May	89.0	-7.9	94.3	-16.5	91.7	-7.4
	Jun	98.8	-6.1	99.5	5.5	97.2	6.0
	Jul	103.3	-7.1	98.7	-0.8	103.4	6.4
	Aug	109.9	16.4	113.0	14.5	108.7	5.1
	Sep	127.7	25.9	124.8	10.4	106.9	-1.7
	Oct	106.2	-0.4	104.5	-16.3	107.9	1.0
	Nov	106.7	19.4	109.0	4.3	109.9	1.9
	Dec	114.5	17.1	111.5	2.3	117.5	6.9
2021	Jan	121.5	9.6	116.8	4.7	115.9	-1.4
	Feb	103.0	17.0	118.8	1.7	116.6	0.6
	Mar	128.6	9.3	118.1	-0.6	115.4	-1.1
	Apr	121.0	2.8	118.1	0.0	112.6	-2.4
	May	113.3	27.3	123.4	4.5	120.0	6.6
	Jun	126.8	28.4	120.2	-2.5	121.2	1.0
	Jul	120.3	16.5	117.0	-2.7	112.4	-7.3
	Aug	122.3	11.3	123.6	5.7	122.3	8.8
	Sep	125.0	-2.1	121.4	-1.8	117.5	-4.0
	Oct	124.2	17.0	124.2	2.4	119.1	1.4
	Nov*	122.2	14.6	127.1	2.3	122.3	2.7

Note:

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

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**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 21	Oct 21	Nov 21*	Cum Jan – Nov 21	Sep 21	Oct 21	Nov 21*
<b>Electronics</b>	<b>43.5</b>	<b>7.3</b>	<b>6.7</b>	<b>10.2</b>	<b>16.5</b>	<b>8.8</b>	<b>9.9</b>	<b>8.0</b>
Semiconductors	35.9	6.9	4.0	9.2	16.9	8.2	9.2	6.7
Computer Peripherals & Data Storage	3.6	2.3	28.2	5.6	19.2	9.1	11.5	11.5
Infocomms & Consumer Electronics	2.8	5.3	22.0	43.6	7.4	17.8	17.1	22.3
Other Electronic Modules & Components	1.3	33.5	17.9	16.1	20.9	33.2	25.5	22.8
<b>Biomedical Manufacturing</b>	<b>13.6</b>	<b>-35.9</b>	<b>56.8</b>	<b>20.1</b>	<b>6.4</b>	<b>-4.3</b>	<b>-5.9</b>	<b>-0.5</b>
Pharmaceuticals	6.8	-46.2	93.6	31.2	4.4	-8.6	-9.6	-1.5
Medical Technology	6.8	2.5	-2.4	-13.1	12.8	8.6	2.6	-4.7
<b>Chemicals</b>	<b>12.2</b>	<b>12.4</b>	<b>15.3</b>	<b>8.5</b>	<b>10.0</b>	<b>2.4</b>	<b>9.2</b>	<b>12.0</b>
Petroleum	0.9	26.1	15.7	17.6	2.0	25.5	21.3	19.7
Petrochemicals	4.9	18.7	17.0	18.0	14.9	7.6	11.0	17.9
Specialties	4.1	-1.7	9.2	-0.5	8.8	-7.8	2.4	2.2
Others	2.4	9.8	11.6	-2.3	5.0	1.5	6.5	6.4

\* 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 21	Oct 21	Nov 21*	Cum Jan – Nov 21	Sep 21	Oct 21	Nov 21*
<b>Precision Engineering</b>	<b>13.2</b>	<b>31.3</b>	<b>8.5</b>	<b>13.7</b>	<b>19.1</b>	<b>24.7</b>	<b>20.0</b>	<b>17.4</b>
Machinery & Systems	8.7	39.9	19.2	24.9	25.9	32.6	29.6	27.6
Precision Modules & Components	4.5	14.0	-12.0	-8.7	6.0	8.6	0.9	-2.8
<b>Transport Engineering</b>	<b>9.0</b>	<b>13.8</b>	<b>35.3</b>	<b>31.2</b>	<b>10.7</b>	<b>23.1</b>	<b>24.4</b>	<b>26.6</b>
Marine & Offshore Engineering	3.0	11.1	77.8	34.0	16.4	31.1	41.5	39.8
Aerospace	5.1	23.0	26.8	47.1	5.4	23.5	24.4	31.8
Land	0.9	-3.9	-10.1	-15.2	19.5	7.8	-2.1	-9.6
<b>General Manufacturing Industries</b>	<b>8.5</b>	<b>-1.3</b>	<b>0.4</b>	<b>8.8</b>	<b>6.5</b>	<b>5.5</b>	<b>1.8</b>	<b>2.6</b>
Printing	0.9	-14.5	-9.4	0.1	-9.8	-15.2	-13.3	-7.8
Food, Beverages & Tobacco	4.7	-15.8	-11.0	3.8	-5.8	-9.7	-10.7	-8.0
Miscellaneous Industries	2.9	24.5	20.3	19.3	31.2	37.6	25.6	21.3
<b>Total Manufacturing</b>	<b>100.0</b>	<b>-2.1</b>	<b>17.0</b>	<b>14.6</b>	<b>13.0</b>	<b>7.9</b>	<b>8.1</b>	<b>9.1</b>
<b>Manufacturing excluding Biomedical Manufacturing</b>	<b>86.4</b>	<b>11.1</b>	<b>9.7</b>	<b>12.4</b>	<b>14.5</b>	<b>10.6</b>	<b>11.5</b>	<b>11.0</b>

\* Preliminary

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**TABLE 3 : MONTHLY INDEX OF INDUSTRIAL PRODUCTION BY INDUSTRY CLUSTER, NOVEMBER 2019 TO NOVEMBER 2021**

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
2019=100														
2019	Nov	88.0	87.4	90.9	90.0	95.8	72.2	62.9	97.7	88.7	104.8	78.0	100.6	97.4
	Dec	92.6	88.8	97.2	139.4	124.2	90.6	84.1	108.5	97.0	109.8	95.4	97.9	94.1
2020	Jan	111.2	114.6	89.6	90.2	91.9	135.1	149.4	95.9	104.0	109.0	107.1	104.2	91.5
	Feb	83.2	82.9	90.4	67.6	98.6	85.6	83.6	91.1	101.5	99.8	102.2	103.9	97.0
	Mar	93.8	92.3	93.5	110.0	114.2	181.3	206.3	112.4	104.7	102.7	104.3	112.8	96.0
	Apr	117.7	123.4	81.9	85.6	83.3	176.9	206.3	95.8	96.6	92.2	91.8	103.6	104.6
	May	93.2	93.8	96.7	80.2	86.6	102.1	111.6	75.9	93.9	91.0	99.5	95.3	76.2
	Jun	100.3	99.8	84.7	133.0	105.8	110.2	114.9	97.2	89.1	71.4	101.7	74.2	79.3
	Jul	126.4	133.2	89.8	78.5	86.8	77.5	70.8	95.8	99.0	70.8	106.8	90.5	101.0
	Aug	120.2	124.0	111.6	73.9	98.0	131.9	141.7	104.9	103.4	74.0	107.5	107.3	100.6
	Sep	126.7	128.9	123.7	100.5	108.2	209.0	240.8	121.4	96.6	70.1	92.7	115.6	96.6
	Oct	120.9	125.0	102.2	83.1	100.2	91.1	80.0	121.9	92.0	72.9	88.5	105.1	95.3
	Nov	119.9	124.5	95.6	82.2	98.4	107.2	97.2	134.8	97.4	71.6	97.6	108.4	95.7
	Dec	135.5	138.4	106.6	131.3	124.8	84.7	65.6	137.3	109.0	76.9	112.7	113.8	107.4
2021	Jan	135.5	144.2	108.5	73.9	100.8	125.7	127.9	111.6	113.0	76.7	117.6	116.9	113.0
	Feb	109.0	113.2	97.0	69.7	96.1	104.4	97.7	99.8	104.1	74.5	108.6	112.7	93.8
	Mar	130.2	131.2	131.9	103.1	122.0	162.7	173.9	137.6	114.9	85.3	127.0	125.6	86.6
	Apr	127.3	131.3	117.8	87.7	110.0	136.3	155.1	107.5	110.5	83.5	118.3	119.3	92.9
	May	115.7	118.0	110.0	87.0	105.7	138.3	153.7	112.0	108.9	91.4	119.3	118.5	81.0
	Jun	129.2	130.1	111.6	118.5	138.8	158.2	163.0	138.8	116.6	94.4	123.4	114.5	116.2
	Jul	130.8	135.0	109.3	98.0	123.8	136.9	151.3	111.7	93.5	91.0	113.3	67.7	97.3
	Aug	139.3	144.8	118.8	94.3	122.0	129.7	133.6	113.8	104.1	90.4	106.9	107.6	99.2
	Sep	135.9	137.7	126.5	105.8	144.6	133.9	129.4	124.4	108.5	88.4	110.0	113.6	106.1
	Oct	128.9	130.1	131.0	101.4	118.2	142.8	154.9	119.0	106.1	84.3	103.6	114.8	106.4
	Nov*	132.0	136.0	101.0	118.0	114.2	128.7	127.6	117.1	105.8	84.2	115.1	107.9	93.5

\* Preliminary

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**TABLE 3 : MONTHLY INDEX OF INDUSTRIAL PRODUCTION BY INDUSTRY CLUSTER, NOVEMBER 2019 TO NOVEMBER 2021 (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		
2019=100														
2019	Nov	100.7	98.1	106.9	100.6	101.8	100.4	97.4	104.6	111.4	100.6	107.9	89.4	93.1
	Dec	119.5	125.5	105.1	109.5	121.8	96.9	128.1	91.4	103.1	78.7	104.9	97.8	99.4
2020	Jan	107.4	110.9	99.1	86.8	78.7	94.5	77.7	96.4	89.4	94.8	100.5	110.8	105.5
	Feb	85.5	81.2	96.0	94.9	88.5	100.5	90.4	93.4	94.3	93.1	93.5	88.1	88.6
	Mar	130.0	144.0	96.6	108.1	101.9	109.7	122.2	101.7	90.2	104.1	101.8	117.7	103.8
	Apr	113.3	123.0	89.9	68.0	71.9	66.8	59.8	78.0	75.3	87.1	66.9	117.7	104.8
	May	86.0	90.5	75.2	53.6	43.6	59.8	57.8	73.0	62.4	87.6	56.6	89.0	86.2
	Jun	118.4	130.3	89.8	64.3	52.0	68.4	87.9	82.3	69.6	94.7	69.5	98.8	96.3
	Jul	111.8	119.7	93.1	60.9	44.2	69.6	76.8	82.5	81.2	93.7	68.1	103.3	108.9
	Aug	99.8	98.4	103.1	62.5	50.4	62.1	106.4	86.6	82.5	91.8	81.0	109.9	105.1
2021	Sep	108.2	111.5	100.4	73.5	62.4	69.6	131.7	90.3	85.8	90.8	90.8	127.7	110.0
	Oct	125.1	130.1	113.2	70.5	57.9	68.0	126.7	94.9	87.6	94.7	97.3	106.2	109.5
	Nov	107.2	105.9	110.2	72.5	71.6	62.2	126.3	89.6	91.1	82.9	98.1	106.7	106.6
	Dec	133.5	142.2	112.7	75.0	83.8	56.7	133.4	95.2	104.5	84.5	106.8	114.5	121.0
	Jan	127.0	135.9	107.9	69.4	65.2	66.0	105.1	97.4	83.6	95.5	105.0	121.5	119.3
	Feb	101.0	103.5	93.2	74.4	74.6	68.3	109.3	86.8	65.9	86.6	93.9	103.0	101.5
	Mar	142.1	162.1	104.5	86.6	82.4	80.6	139.3	101.5	82.3	96.2	115.8	128.6	122.3
	Apr	135.9	154.9	100.1	80.1	66.0	82.3	120.2	91.3	74.1	84.4	107.1	121.0	117.3
	May	114.8	121.6	99.5	78.1	77.4	72.5	112.4	92.1	67.2	82.6	114.4	113.3	108.5
	Jun	143.8	166.1	102.5	81.1	71.8	79.9	123.9	96.0	65.2	91.5	112.4	126.8	120.9
	Jul	134.7	151.6	102.3	80.9	67.2	86.3	96.0	92.3	69.0	86.0	109.3	120.3	116.5
	Aug	122.0	129.6	105.4	77.9	69.4	76.7	116.7	92.3	69.0	86.9	107.8	122.3	119.7
	Sep	142.1	155.9	114.5	83.6	69.3	85.6	126.6	89.1	73.4	76.4	113.1	125.0	122.2
	Oct	135.8	155.1	99.6	95.3	103.0	86.2	114.0	95.3	79.4	84.3	117.0	124.2	120.1
	Nov*	121.9	132.3	100.7	95.1	95.9	91.4	107.1	97.5	91.1	86.1	117.0	122.2	119.7

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