## **MANUFACTURING**

## **OVERVIEW** $\circ$

The manufacturing sector contracted by 2.6 per cent year-on-year in the fourth quarter of 2022, reversing the 1.1 per cent expansion in the preceding quarter. All clusters saw a fall in output during the quarter, except for the transport engineering and precision engineering clusters.

For the whole of 2022, the manufacturing sector grew by 2.5 per cent, slower than the 13.3 per cent growth in 2021. All clusters, except for the biomedical manufacturing and chemicals clusters, recorded output growth for the year.

## OVERALL MANUFACTURING PERFORMANCE

Manufacturing output decreased by 2.6 per cent year-onyear in the fourth quarter on account of output contractions in all clusters, except for the transport engineering and precision engineering clusters (Exhibit 6.1).

For the whole of 2022, the manufacturing sector expanded by 2.5 per cent, slower than the 13.3 per cent growth in 2021. Growth of the sector was supported by output expansions in all clusters except for the biomedical manufacturing and chemicals clusters (Exhibit 6.2).

**Exhibit 6.1: Manufacturing Growth Rates** 

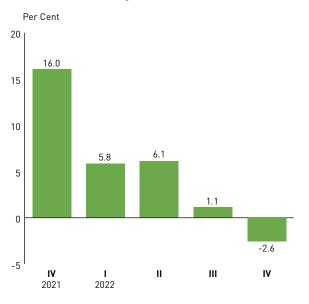
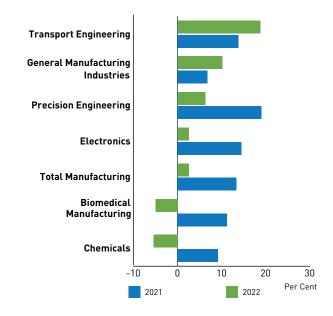


Exhibit 6.2: Manufacturing Clusters' Growth



## PERFORMANCE OF CLUSTERS

Output in the transport engineering cluster rose by 11.5 per cent year-on-year in the fourth quarter, supported by expansions in the aerospace and marine & offshore engineering (M&OE) segments. In particular, output in the aerospace segment surged by 24.4 per cent due to higher demand for maintenance, repair and overhaul (MRO) jobs from commercial airlines as global air traffic continued to recover. Likewise, the M&OE segment expanded by 4.1 per cent, supported by a step-up in activity in offshore conversion projects, as well as an increase in production of oilfield and gasfield equipment. By contrast, the land segment contracted by 11.0 per cent. For the whole of 2022, the transport engineering cluster expanded by 18.8 per cent.

The precision engineering cluster grew by 6.1 per cent yearon-year in the fourth quarter, bolstered by the machinery & systems segment, which expanded by 11.2 per cent on the back of a rise in the production of semiconductor foundry equipment. On the other hand, output in the precision modules & components segment declined by 4.6 per cent, weighed down by a lower level of production of electronic connectors and bonding wire. For the full year, the precision engineering cluster expanded by 6.3 per cent.

The general manufacturing cluster contracted by 1.4 per cent year-on-year in the fourth quarter, led by a 7.8 per cent decline in the output of the miscellaneous industries segment. The latter was in turn due to a lower level of output of batteries and structural metal products. By contrast, the food, beverages & tobacco and printing segments recorded output expansions of 3.8 per cent and 0.5 per cent respectively, with the former recording an increase in output of dairy products. For the whole of 2022, the general manufacturing cluster grew by 10.1 per cent, with output expansions across all segments.

The electronics cluster contracted by 2.8 per cent year-onyear in the fourth quarter, driven by output contractions across most segments. Output in the other electronic modules & components (-19.3 per cent), semiconductors (-4.5 per cent) and computer peripherals & data storage (-1.8 per cent) segments declined on the back of softening external demand. By contrast, output in the infocomms & consumer electronics segment grew by 5.5 per cent. For the whole of 2022, the electronics cluster expanded by 2.6 per cent, with output expansions across all segments, except for the other electronic modules & components segment.

Output in the chemicals cluster fell by 10.1 per cent year-on-year in the fourth quarter, driven by output declines in the petrochemicals (-17.6 per cent), specialty chemicals (-10.1 per cent) and other chemicals (-7.8 per cent) segments. The petrochemicals segment recorded a lower level of output amidst plant maintenance shutdowns and weak market demand, while the specialties segment saw a fall in output due to lower levels of production of industrial gases and food additives. Meanwhile, the other chemicals segment contracted due to a drop in the output of fragrances. Conversely, the output of the petroleum segment grew by 9.5 per cent on account of higher demand for jet fuel, which was driven in turn by the continued recovery in global air travel. For the whole of 2022, the output of the chemicals cluster declined by 5.5 per cent.

The biomedical manufacturing cluster shrank by 10.5 per cent year-on-year in the fourth quarter due to output contractions across all segments. The output of the pharmaceuticals segment declined by 15.3 per cent because of a different mix of active pharmaceutical ingredients produced. Meanwhile, output in the medical technology segment fell by 3.4 per cent due to lower export demand for medical devices. For the whole of 2022, output in the biomedical manufacturing cluster declined by 5.0 per cent.