An engineer from satellite-based communication solutions company AddValue, placing one of their new satellite communication devices into a testing chamber. The testing chamber mimics the environment of space.
Chairman’s Message

In 2022, EDB secured S$22.5 billion in Fixed Asset Investment (FAI) commitments amidst a complex global operating environment. This was driven by the electronics sector, which saw an exceptional influx of large manufacturing projects on the back of a surge in global demand. EDB also secured S$6.2 billion in Total Business Expenditure per annum. These projects, when fully implemented, will create 17,113 new jobs.

While we do not expect to repeat the same level of FAI commitments due to various factors, including global macro-uncertainties, our 2022 results demonstrate Singapore’s reputation as a trusted and innovative hub for global businesses to both tap into Asia’s growth and serve customers worldwide.

Manufacturing remains a key pillar of our economy. The sector’s continued growth is being shaped by the increasing use of Industry 4.0 and sustainability technologies, as well as the upskilling of our workforce. In October, EDB led the multi-agency effort to refresh the Industrial Transformation Maps (ITMs) for the Electronics, Precision Engineering, Energy & Chemicals, Aerospace and Logistics sectors. The new strategies in the ITMs will help our manufacturing sector remain at the heart of changing global supply chains and uplift companies in Singapore through support for R&D, deep tech innovation, digitalisation and environmental sustainability.

Last year, companies across a variety of industries continued to build capabilities in data, digitalisation and automation. We remain confident in the long-term prospects of the digital industry, given opportunities from the growing digital economy in Southeast Asia, including in fintech, cloud, cybersecurity, B2B SaaS and gaming.

We continued to strengthen our position as a global hub for talent with ongoing efforts to develop the Singaporean core to access good jobs. EDB and the Human Capital Leadership Institute launched The Singapore Leaders Network (SGLN) in July, which brings together local leaders from a diverse range of industries and different levels of seniority to support each other. As part of the initiative, the SGLN Mentoring Programme connects Singaporeans looking for guidance in their leadership journey with established corporate leaders.

Singapore’s vibrant innovation ecosystem has attracted companies to establish product innovation activities here, creating new areas of growth. EDB made good progress in working with businesses to build and invest in Singapore-based new ventures. We expanded the Corporate Venture Launchpad programme to support a larger pool of companies, and aim to work on 20 to 30 projects over the next two years.

Amid the growing impetus for sustainability, EDB is working with companies to advance decarbonisation pathways and taking steps to build a supporting ecosystem to help businesses transform and transition to a low-carbon future. This is complemented by efforts to attract companies with promising technologies in emissions-reduction and renewable energy, as well as agrifood, the circular economy and carbon services.

The business outlook for 2023 will be challenging, due to macro-uncertainties and rising competition among countries to attract investments. EDB will harness our comparative advantages to remain attractive to global companies and founders seeking to invest in Asia and those from Asia looking to expand to the world. We will continue to pursue opportunities for globally-leading companies to partner with local businesses to create solutions, and to nurture a competitive workforce by uplifting the Singaporean core and remaining open to complementary global talent.

I thank our longstanding partners for their trust and confidence in us and look forward to working closely with them to create more opportunities for Singapore.

Mr Png Cheong Boon
Chairman
Singapore Economic Development Board

We will continue to pursue opportunities for globally-leading companies to partner with local businesses to create solutions, and to nurture a competitive workforce by uplifting the Singaporean core and remaining open to complementary global talent.

Mr Png Cheong Boon
Chairman
Singapore Economic Development Board
2022 Investment Commitments

- **Fixed Asset Investment (FAI)** refers to a company’s incremental capital investment in facilities, equipment and machinery.
- **Total Business Expenditure (TBE)** refers to a company’s incremental annual operating expenditure in Singapore (excluding depreciation). The major components include wages and rental.
- **Value Added (VA)** measures the direct contribution a company makes to Singapore's Gross Domestic Product, excluding multiplier effects. The major components include wages and profit.
- **Jobs** is defined as the sum of all incremental jobs created when the investments are fully implemented.

*Note: The investment commitment classification by industry for 2022 is based on the latest Singapore Standard Industrial Classification (SSIC 2020).*

<table>
<thead>
<tr>
<th>FAI (S$ billion)</th>
<th>TBE (S$ billion)</th>
<th>Expected VA per Annum (S$ billion)</th>
<th>Expected Jobs Created</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.5</td>
<td>6.2</td>
<td>20.6</td>
<td>17,113</td>
</tr>
</tbody>
</table>
## 2022 Investment Commitments by Industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>FAI (S$ million)</th>
<th>TBE (S$ million)</th>
<th>Expected VA per Annum (S$ million)</th>
<th>Expected Jobs Created</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomedical Manufacturing</td>
<td>844</td>
<td>318</td>
<td>671</td>
<td>1,047</td>
</tr>
<tr>
<td>Chemicals</td>
<td>862</td>
<td>58</td>
<td>225</td>
<td>293</td>
</tr>
<tr>
<td>Electronics</td>
<td>14,994</td>
<td>533</td>
<td>3,451</td>
<td>2,785</td>
</tr>
<tr>
<td>Engineering &amp; Environmental Services</td>
<td>68</td>
<td>85</td>
<td>1,020</td>
<td>279</td>
</tr>
<tr>
<td>General Manufacturing Industries</td>
<td>437</td>
<td>83</td>
<td>327</td>
<td>143</td>
</tr>
<tr>
<td>Headquarters &amp; Professional Services</td>
<td>1,372</td>
<td>2,895</td>
<td>6,595</td>
<td>8,114</td>
</tr>
<tr>
<td>Research &amp; Development</td>
<td>1,410</td>
<td>628</td>
<td>2,719</td>
<td>2,059</td>
</tr>
<tr>
<td>Infocommunications &amp; Media</td>
<td>2,223</td>
<td>1,380</td>
<td>5,357</td>
<td>1,973</td>
</tr>
<tr>
<td>Logistics</td>
<td>45</td>
<td>20</td>
<td>6</td>
<td>50</td>
</tr>
<tr>
<td>Precision Engineering</td>
<td>68</td>
<td>16</td>
<td>21</td>
<td>32</td>
</tr>
<tr>
<td>Transport Engineering</td>
<td>166</td>
<td>193</td>
<td>170</td>
<td>338</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22,490</strong>*</td>
<td><strong>6,209</strong></td>
<td><strong>20,561</strong>*</td>
<td><strong>17,113</strong></td>
</tr>
</tbody>
</table>

*Figures have been updated to reflect rounding adjustments.**

Note: Due to rounding, figures may not add up.
FAI Investment Commitments (2013 – 2022)
FAI Investment Commitments by Industry

2021

- Biomedical Manufacturing: 15.0%
- Chemicals: 8.3%
- Education/ Healthcare Services: 0.03%
- Electronics: 42.3%
- Engineering & Environmental Services: 1.6%
- General Manufacturing Industries: 2.7%
- Headquarters & Professional Services: 2.4%
- Infocommunications & Media: 11.3%
- Logistics: 0.4%
- Precision Engineering: 0.6%
- Research & Development: 12.3%
- Transport Engineering: 3.1%

Total: $11.8 billion

2022

- Biomedical Manufacturing: 3.8%
- Chemicals: 3.8%
- Education/ Healthcare Services: 0.0%
- Electronics: 66.7%
- Engineering & Environmental Services: 0.3%
- General Manufacturing Industries: 1.9%
- Headquarters & Professional Services: 6.1%
- Infocommunications & Media: 9.9%
- Logistics: 0.2%
- Precision Engineering: 0.3%
- Research & Development: 6.3%
- Transport Engineering: 0.7%

Total: $22.5 billion
FAI Investment Commitments by Region

**2021**

Total: $11.8 billion

- United States: 67.1%
- Europe: 13.1%
- Singapore: 6.2%
- Japan: 1.7%
- China: 1.1%
- India: 0.1%
- Others: 10.8%

**2022**

Total: $22.5 billion

- United States: 50.6%
- Europe: 21.2%
- Singapore: 8.8%
- Japan: 0.3%
- China: 8.5%
- India: 0.1%
- Others: 10.6%
TBE Investment Commitments (2013 – 2022)
TBE Investment Commitments by Industry

2021

Total: $5.2 billion

- Biomedical Manufacturing: 6.4%
- Chemicals: 2.2%
- Education/ Healthcare Services: 0.0%
- Electronics: 10.2%
- Engineering & Environmental Services: 4.9%
- General Manufacturing Industries: 2.1%
- Headquarters & Professional Services: 27.2%
- Infocommunications & Media: 20.0%
- Logistics: 3.0%
- Precision Engineering: 1.8%
- Research & Development: 18.9%
- Transport Engineering: 3.3%

2022

Total: $6.2 billion

- Biomedical Manufacturing: 5.1%
- Chemicals: 0.9%
- Education/ Healthcare Services: 0.0%
- Electronics: 8.6%
- Engineering & Environmental Services: 1.4%
- General Manufacturing Industries: 1.3%
- Headquarters & Professional Services: 46.6%
- Infocommunications & Media: 22.2%
- Logistics: 0.3%
- Precision Engineering: 0.3%
- Research & Development: 10.1%
- Transport Engineering: 3.1%
### TBE Investment Commitments by Region

**2021**

- **United States**: 40.9%
- **Europe**: 14.3%
- **Singapore**: 18.8%
- **Japan**: 4.5%
- **China**: 10.1%
- **India**: 3.3%
- **Others**: 8.1%

**Total**: $5.2 billion

**2022**

- **United States**: 27.0%
- **Europe**: 17.1%
- **Singapore**: 8.9%
- **Japan**: 2.9%
- **China**: 37.0%
- **India**: 0.4%
- **Others**: 6.7%

**Total**: $6.2 billion
VA Expected to be Generated (2013 – 2022)
Expected Jobs Created (2013 – 2022)

2013: 25,301
2014: 18,559
2015: 16,775
2016: 20,075
2017: 22,481
2018: 17,417
2019: 32,814
2020: 19,352
2021: 17,376
2022: 17,113
**Jobs by Project type (2022)**

<table>
<thead>
<tr>
<th>Project Types</th>
<th>Examples of Job Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hub and Business Services</strong></td>
<td>UI/UX Designers, Cybersecurity Engineers, Digital Supply Chain Analysts</td>
</tr>
<tr>
<td><strong>Advanced Manufacturing</strong></td>
<td>Process Engineers and Technicians, Manufacturing Data Engineers, Additive Manufacturing Engineers</td>
</tr>
<tr>
<td><strong>Innovation</strong></td>
<td>Material Researcher/Engineers, Carbon Capture, Utilisation and Storage (CCUS) Specialists, Product Designers</td>
</tr>
</tbody>
</table>

**Jobs:** 17,113

- 61% Hub and Business Services
- 27% Advanced Manufacturing
- 12% Innovation

Hub and Business Services projects include Headquarters and Centres of Excellence, with roles driven by data, digitalisation, and automation.

Advanced Manufacturing projects include those from key sectors such as Electronics and Healthcare.

Innovation projects are those that anchor research and development (R&D) capabilities in Singapore. About 60% of jobs created by Innovation projects are Research Scientist and Engineer roles. An increasing number of projects are also seen in sustainability-related fields.
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 and Singaporeans. For more information on EDB, please visit www.edb.gov.sg.

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