

Business

# Singapore can be 'a more digital, more resilient advanced manufacturing base' for the world: DPM Heng

SINGAPORE: Amid disruptions brought about by the COVID-19 pandemic, Singapore can work towards becoming a “more digital and more resilient advanced manufacturing base in Asia for the world”, said Deputy Prime Minister Heng Swee Keat on Tuesday (Oct 20).

The country is committed to developing cutting-edge capabilities in advanced manufacturing, an area that has continued to grow and create new jobs and training opportunities despite pandemic-induced recession, he added.

Speaking at the opening of the Industrial Transformation Asia-Pacific (ITAP) 2020 trade show, Mr Heng said the manufacturing sector in particular is set to see “an increased premium on resilience” as the prolonged coronavirus outbreak prompts companies to rethink their production and supply chains.

There will also be added impetus for the reshoring, regionalisation and diversification of production bases and supply chains.

In addition, the future of manufacturing will be determined by the convergence of digital and other advanced technologies.

He said: “IoT (Internet of Things), artificial intelligence, robotics and additive manufacturing will redefine the nature of manufacturing.

“The pace of change will further accelerate as firms seek to overcome a shortage of workers and to minimise contact between workers during this period.”

Singapore has been a “resilient base” for advanced manufacturers in the region, he added.

“As we emerge from the worst of the crisis, we are strengthening the foundations for manufacturing by increasing digital connectivity, strengthening maritime connectivity, and restoring air connectivity.”

Mr Heng noted that advanced manufacturing will be a core focus of Singapore's research and development efforts. Other efforts to grow related capabilities include commissioning industry-led alliances under the [Emerging Stronger Taskforce](#) to “prototype new ideas in growth areas” such as robotics and the digitalisation of supply chains.

Advanced manufacturing will also see continuous upskilling and re-skilling being a “permanent feature” given the speed of innovation and industry change, he said.

## **NEW MANUFACTURING TRAINING OFFICE**

To that end, Mr Heng announced the launch of a new national programme office in Singapore that will identify emerging skills and knowledge required amid these shifts.

Called the Advanced Manufacturing Training Academy (AMTA), it will evaluate and coordinate training offerings across the country, as well as facilitate the development of new courses to address any gaps in the training ecosystem so as to support the industry’s transformation efforts and workforce upgrading.

The new office is supported by various government agencies such as the Agency for Science, Technology and Research (A\*STAR) and Nanyang Technological University.

To be located within A\*STAR’s facilities at the Jurong Innovation District (JID), it will be governed by a training council comprising institutes of higher learning, public agencies, industry and unions.

“AMTA aspires to collaborate with strategic partners to plan and deliver training to meet industry needs and strengthen Singapore’s manufacturing competitiveness against the backdrop of rapidly changing technology trends,” said Mr Lee Kok Choy, who will lead the new programme office. Mr Lee is also currently the Singapore country manager of Micron Semiconductor Asia.

## **CONTRIBUTE TO REGIONAL GROWTH**

Being a “Global-Asia node for technology, innovation and enterprise”, Mr Heng said Singapore can further contribute to industrial transformation and growth in the region in three ways.

The first is in the setting of standards, which is why the Economic Development Board (EDB) will be partnering the World Economic Forum to establish Singapore’s Smart Industry Readiness Index (SIRI) as an international benchmark for Industry 4.0 transformation.

Launched in end-2017, SIRI comprises a suite of framework and tools to help manufacturers with their transformation journeys.

Mr Heng said the new partnership will train almost 100 assessors across 20 countries over the next 18 months. These assessors will aim to conduct SIRI assessments for 1,000 companies globally.

“Through this collaboration, we hope to increase the sharing of insights and best practices, and create more opportunities for us to learn from one another,” he added.

In the second area of human capital development, the Asian Development Bank and Singapore Polytechnic will form a Global Technology Innovation Village (GTiV) – a platform for Singapore to share its knowledge and expertise in advanced manufacturing with regional government and business leaders.

“This new collaboration will train regional government and business leaders in areas such as advanced manufacturing, 5G, and AI,” said Mr Heng.

“It is a collective effort involving almost 20 industry players and government agencies.”

SkillsFuture Singapore (SSG), which is supporting the initiative, said in a separate press release that an Industry 4.0 consortium will be set up under the GTiV, comprising 19 technology leaders, small and medium-sized enterprises (SMEs), standards organisations, SSG and JTC.

ADB members will be able to tap expertise in applied research and development, startups and innovations through this consortium.

To start, GTiV will roll out six workshops in the domain areas of advanced manufacturing, 5G, artificial intelligence and food technologies in the first half of 2021. More than 100 government and business leaders across Asia are expected to participate in these workshops.

The third area of Singapore’s contribution is to strengthen business linkages across borders, said Mr Heng in his speech, citing the refreshed version of the Germany Singapore Business Forum Connect.

The first edition will be held virtually during ITAP to deepen business and innovation collaboration.

“I hope new partnerships will be formed between participating Singapore companies and German companies with presence in Southeast Asia. By working together and

strengthening regional integration, Southeast Asia can fulfil its potential as a regional manufacturing powerhouse," he said.

### **NEW TRAINING OPPORTUNITIES**

Separately, SSG announced at the trade show that about 2,300 training opportunities in advanced manufacturing will be made available, as part of SGUnited Jobs and Skills initiative to train mid-career job seekers for growth sectors.

In particular, SSG will partner leading companies in Industry 4.0 technology such as Bosch, Siemens and Omron to provide 500 of such opportunities under the SGUnited Mid-Career Pathways Programme.

These companies will “take the lead to groom mid-career talent and facilitate placements in hiring companies” for jobseekers to take on emerging roles such as industrial design engineers, automation engineers, machine learning specialists and product designers.

These train-and-place programmes will commence progressively from next month.

### **NEW INVESTMENTS**

In another announcement, JTC said the Jurong Innovation District, an advanced manufacturing hub that it developed, has attracted about S\$420 million of new investments over the past year despite the pandemic.

This includes South Korean carmaker Hyundai Motor – a “queen bee” company, according to JTC – which announced plans to [build an innovation lab in the JID focusing on future mobility technologies](#).

Other new advanced manufacturing companies include Makino, DMG MORI, Konica Minolta and Fanuc.

Noting that the new AMTA will also be located at the JID, JTC said the new entrants “reinforce JID’s position as Asia’s leading advanced manufacturing hub, and demonstrate the confidence companies have in Singapore’s long-term fundamentals amidst the global pandemic”.

Into its third edition this year, the ITAP is the Asian edition of Germany’s Hannover Messe which is touted as the world’s largest manufacturing trade fair.

Due to the pandemic, the trade event, which spans three days until Thursday, is held in a “hybrid” format with live conferences at the Singapore Expo being livestreamed to virtual audiences.

Apart from insights on industrial transformation under the theme of Industry 4.0, it will also cover topics such as workforce upskilling, organisational transformation and digitalisation for a post-pandemic world.