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**SPEECH BY MS SIM ANN, SENIOR MINISTER OF STATE, MINISTRY OF
TRADE AND INDUSTRY, AT THE OPENING CEREMONY OF
MANUFACTURING TECHNOLOGY ASIA, ON 4 APRIL 2017, 09:45AM,
SINGAPORE EXPO**

Your Excellency, Mr. Mohamed Ahmed Fathi Abulkheir, Ambassador of the Arab Republic of Egypt

Your Excellency, Mr. Nimal Weeraratne, High Commissioner for Sri Lanka

Distinguished guests,

Ladies and Gentlemen,

Good morning.

Introduction

1. I am pleased to join you today for the opening ceremony of Manufacturing Technology Asia (“MTA”) 2017. This year marks a significant milestone for MTA, as it will launch the inaugural Smart Manufacturing Pavilion showcasing advanced technologies that manufacturers can adopt.

Manufacturing is entering a new stage of development driven by advanced manufacturing technologies.

2. The advent of advanced manufacturing technologies, such as additive manufacturing, the Industrial Internet-of-Things and robotics, is changing the way products are created, supply chains are managed and how value chains are defined globally. For instance, the manufacturing workflow, from receiving an order to production at the factory floor, can now be digitalised and automated. This will enable companies, both large and small, to benefit from significant productivity gains.

The Government is committed to prepare our manufacturing sector for the future.

3. Manufacturing, which accounted for around 20 percent of our GDP and 14 percent of total employment in 2016, is an important pillar of Singapore’s

economy. Hence, it is critical that we position our manufacturing sector for these technology developments.

4. The Committee on the Future Economy (CFE) has also identified advanced manufacturing as one of the key growth areas for Singapore. We are committed to CFE's recommendation to build a globally competitive manufacturing sector, at around 20% of GDP over the medium term.

5. To do so, we will strengthen our ecosystem for advanced manufacturing with leading manufacturers and technology providers, invest in advanced manufacturing technologies, and equip our people with the relevant skillsets.

Strengthen our ecosystem with leading manufacturers and technology providers.

6. We will continue to partner leading manufacturers across different industries to undertake advanced manufacturing activities in Singapore. A number of manufacturers have also decided to conduct first-of-its-kind advanced manufacturing initiatives from here. For example, Seagate has embarked on its "Dream Factory" project in Singapore, which is the first initiative in the hard disk drive industry to explore full automation in manufacturing.

7. Technology providers also form an important part of our ecosystem, as they can support our manufacturers in developing and implementing advanced manufacturing technologies. For instance, Chevron Oronite, a global fuel and lubricants additive company, has partnered technology provider Emerson to install a pervasive sensing infrastructure on its Jurong Island facility to improve energy efficiency, labour productivity and site safety. Siemens has also launched its digital manufacturing design consultancy in Singapore, and will be supporting Dorma+Kaba, a security systems company, to design a greenfield advanced manufacturing facility in Singapore.

8. I am encouraged to see that a number of the leading manufacturers and their technology partners are with us today at this event.

Invest in advanced manufacturing technologies.

9. The government is committed to invest in advanced manufacturing technologies, and support its adoption by our companies.

10. Under the Research, Innovation and Enterprise (RIE) 2020 plan, we have set aside S\$3.2 billion for Advanced Manufacturing and Engineering. This will include investing in cross-cutting technologies such as additive manufacturing, digital manufacturing, robotics and automation as well as advanced materials.

11. In addition, A*STAR will be setting up two model factories at the Singapore Institute for Manufacturing Technology (SIMTech) and the Advanced Remanufacturing and Technology Centre (ARTC) to help our SMEs with technology adoption. While SMEs recognise the need to incorporate new technologies, many may not know where to begin, and are uncertain if the benefits outweigh the costs. These model factories provide a learning environment, where SMEs can first experience and better understand advanced manufacturing technologies. This approach will help reduce the risks and uncertainties for SMEs to adopt such technologies in their operations.

12. Companies, both large and small, can reap the benefits from advanced manufacturing technologies. For example, PBA, a local SME specialising in high performance bearing solutions, is building a 5,000 square feet smart factory for high mix low volume manufacturing. Through the utilisation of robotics, automated vision inspection, factory automation and data analytics, PBA expects its production cost per unit in Singapore to be more competitive than its factory in China.

Equip our people with the skills for advanced manufacturing.

13. Advanced manufacturing also presents new and exciting job opportunities, including industrial data analysts, robot coordinators and industrial solution architects.

14. By equipping our people with the relevant skills, they can benefit from these job opportunities. To do so, we have identified emerging skillsets through Skills Frameworks, and accelerated reskilling efforts through the Professional Conversion Programme, various SkillsFuture initiatives, as well as company-led programmes. We will continue to partner our institutes of higher learning to update their curricula, and build a strong talent pipeline for advanced manufacturing.

15. Mr. Ng Chuah Fatt is a good example of an individual who took advantage of SkillsFuture courses to upskill himself. Mr. Ng currently works as a Technical Programme Manager at a contract electronics manufacturing firm. He observed that more of his clients are supplying products made through additive manufacturing processes, and took an Advanced Manufacturing course in additive manufacturing under SkillsFuture. Mr. Ng is now able to better understand the needs of his clients, and work with them more effectively in designing their products.

Conclusion

16. In closing, advanced manufacturing presents significant opportunities for our economy, companies and people. The Government will work closely with key stakeholders, including the industry, institutes of higher learning and industry associations, to build and sustain a globally competitive manufacturing sector for Singapore.

17. Events, such as the MTA, serve as useful and important platforms for key stakeholders to exchange ideas, and discuss how we can work together to drive the industry's push towards advanced manufacturing. I wish everyone a productive and enjoyable event. Thank you.

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