CHINA'S TECHNOLOGICAL DEVELOPMENT AND INNOVATION IN 2022

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EAI Background Brief No. 1695

Date of Publication: 2 March 2023

Executive Summary

- 1. Promoting innovation to support technological development is gaining prominence in China's policy agenda.
- At the 20th Congress of the Communist Party of China in October 2022, President
 Xi Jinping's work report underlines the importance of innovation in increasing
 China's standing in terms of technological development and achieving selfsufficiency.
- 3. With the expansion of the Global Value Chain in China, many Chinese firms have long relied on foreign technologies.
- 4. Since 2018, the growing China-US tension in technology has alerted China to its vulnerability due to its heavy reliance on foreign technology.
- 5. Two major policy targets for promoting innovation are raised in this context. One target is for China's innovation system to support the emergence of an innovation-driven economy. Another is to improve its innovation capacity in order to make breakthroughs in "chokepoint" technologies.
- 6. A state-led innovation system under the "whole-of-nation" approach has been initiated to achieve policy goals such as indigenous innovation and supply chain resilience.
- 7. The "new" whole-of-nation approach is government-led but market-based incentives are also used to leverage resources.
- 8. Under the "new" whole-of-nation approach, the institutions of the innovation system have been changed. Some of these institutional arrangements are made to promote synergy among actors in the innovation ecosystem.

- 9. Firms are encouraged to work with research institutes/universities to acquire new technologies. National Laboratory has been assigned in the national innovation system to make major breakthroughs in "chokepoint" technologies.
- 10. A series of innovation management reforms were also released in 2022. In the work report of the 20th party congress, an integrated reform in education, science and technology, and innovation will be implemented.
- 11. Besides institutional reforms, new policy initiatives have been released to improve innovation capacity. Fiscal inputs for R&D are set to increase. Government guidance funds will be utilised to support breakthrough innovations in emerging industries and industry upgrading.
- 12. How effective the policy instruments and institutional reforms under the "new" whole-of-nation approach is still unknown. There is a need to enhance the accountability of research and industry guidance funds allocation. Other complementary policy reforms such as intellectual property rights reform are also necessary.