

**CHINA'S LONG MARCH TO GLOBAL
INNOVATION LEADERSHIP (I):
THE *KEJIAO XINGGUO* STRATEGY**

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Executive Summary

1. Twenty years ago, China launched a landmark strategic plan called *Kejiao Xingguo* (科教兴国, Strategy of Invigorating the Country through Science and Education). The plan had singled out science and technology (S&T) as the “No. 1 productive force” for China’s national development in the 21st century.
2. It has also initiated a series of programmes to promote S&T research, facilitate industrialisation and commercialisation of research achievements, and ramp up higher education. Since 2005, the strategy has been reinforced by a long-term programme for S&T development (2006-2020), which places greater emphasis on indigenous innovation and industrial upgrade.
3. The *Kejiao Xingguo* strategy has substantially enhanced China’s research and development (R&D) capacity. Since 1995, annual national R&D spending rose by 20 times in real terms. China’s R&D spending now exceeds 2% of its GDP, close to the average R&D intensity of OECD countries. By total amount, China already overtook Japan as the world’s second-largest spender on R&D in 2013.
4. China now boasts the world’s largest pool of R&D personnel: its total number of full-time equivalent R&D personnel has increased five times since 1995. In recent years, China’s universities have produced more than 1.2 million engineers annually, more than the next five countries combined.
5. The explosive growth of patent applications and patent grants as well as remarkable rise in quantity and quality of publications in scientific and technical journals shows that Chinese scientists and engineers have made tremendous progress in basic and applied S&T research.
6. These developments have significantly enhanced China’s status in the global ranking of scientific research and technological innovation, paving the way for its shift from a “world factory” to a global R&D hub.

7. The rise of R&D capacity may cast far-reaching impact on China's industrial competitiveness and become a powerful engine of growth. To realise that potential, reforms are needed to develop a business environment conducive for entrepreneurial innovation.