

**CHINA'S TECHNOLOGICAL
ADVANCEMENTS AND
INNOVATION IN 2023:
WHOLE-OF-NATION APPROACH
IN STRATEGIC SECTORS**

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Executive Summary

1. China's policy focus is increasingly on enhancing innovation for technological advancement. The Central Economic Work Conference in December 2023 highlighted the critical role of technological innovation in driving economic growth, especially in some strategic sectors.
2. The conference emphasised the pivotal role of the Whole-of-Nation approach in advancing China's technology. The state is a critical coordinator in this approach which promotes synergy among key actors in innovation. The innovation policy is poised to remain a significant focus on the agenda of the upcoming National People's Congress in March 2024.
3. As of 2023, China's innovation system had achieved notable milestones. The country's research and development (R&D) investment intensity had surpassed 2.6% in 2023, close to the OECD average of 2.72% in 2021. Several innovative firms like BYD are now global market leaders.
4. The Whole-of-Nation approach seeks to boost indigenous innovation by mobilising resources and fostering collaboration among actors in the innovation system. The government has significantly augmented funding for R&D in recent years and introduced government guidance funds to support innovative enterprises.
5. The central Science and Technology Commission established in 2023 coordinates various actors in the innovation system. Its primary role is to oversee and harmonise science-related policymaking, particularly in the formulation of strategic policies for science and technological advancement.
6. Policy initiatives under the Whole-of-Nation approach have been implemented in a few strategic sectors in particular including semiconductors, Artificial Intelligence and Aerospace.

7. In these sectors, the government increases support for R&D, collaborates with actors in the innovation system and fosters enterprise growth through government guidance funds using the market mechanism.
8. To foster China's technological innovation, there is a need to address the lack of synergy among key players, including research institutes, companies and universities, which have their own agenda. This is on top of the reliance on foreign firms for critical technologies in sectors such as semiconductors.
9. China's innovation strategy could also be hampered by reduced interactions with international researchers due to geopolitical tensions. The Whole-of-Nation approach may likewise elicit stronger responses from major nations in critical strategic sectors.