

Manufacturing

Smart Manufacturing accelerates decarbonisation, digitalisation, and value chain upgradation for sustainable industrial growth.

Manufacturing is the foundation for industrial development, economic growth, and employment generation. By fostering innovation and strengthening industrial resilience, the sector plays a crucial role in shaping a sustainable and future-ready economy. The Industry and Trade Ministerial Tracks of BRICS cover manufacturing, especially the areas like industrial production systems such as industrial and technology parks and development of smart and green infrastructure through digitalisation and decarbonisation.

BRICS has undertaken several initiatives related to the manufacturing sector including *the BRICS Trade and Investment Cooperation Framework*¹, *BRICS Information Sharing and Exchange Platform for Trade and Investment*², *BRICS Network of Science Parks, Technology Incubators and SMEs*³, and *BRICS SME Working Group*⁴. BRICS considers the New Industrial Revolution as a key driver of economic growth and transformation. Initiatives such as the *BRICS Partnership on New Industrial Revolution (PartNIR)*⁵, *the BRICS Center for Industrial Competences in Cooperation with the United Nations Industrial Development Organization*, and *the China Centre for BRICS Industrial Competences*, are critical to fostering industrial cooperation among the BRICS member states.

These initiatives aim at promoting cooperation in industrial capacity, smart and green manufacturing, intelligent manufacturing, robotics, technology development, and new industrial infrastructure, while also strengthening trade and investment linkages (BRICS China, 2017; BRICS Brazil 2014a; BRICS Brazil, 2025c; BRICS Brazil, 2025d; BRICS Brazil, 2025e; BRICS South Africa, 2013). In addition, they facilitate coordination of industrial policies for modernisation, enhance intra-BRICS trade, promote a transparent investment environment, improve trade facilitation, and support sustainable industrial development (BRICS China, 2017;

¹ BRICS Russia (2015)

² BRICS Brazil (2014b)

³ BRICS South Africa (2018)

⁴ BRICS Russia (2024)

⁵ BRICS Brazil (2019)

BRICS Brazil 2014a; BRICS Brazil, 2025c; BRICS Brazil, 2025d; BRICS Brazil, 2025e; BRICS South Africa, 2013).

BRICS underscores the importance of the development of micro, small, and medium enterprises (MSMEs), which contribute to inclusive economic growth and better integration of BRICS SMEs into global industrial chains, supply chains, and value chains (BRICS Brazil, 2025a; BRICS Brazil 2025c). Towards that end, efforts include information exchange, business cooperation, capacity building, and research collaboration, supported by institutional mechanisms such as working groups under BRICS PartNIR and the BRICS SME cooperation platforms (BRICS China, 2017; BRICS Brazil, 2025a; BRICS Brazil 2025c).

Therefore BRICS, through initiatives and working groups are providing thrust to manufacturing as a driver of growth and resilience.

In the context of the New Industrial Revolution, inclusive and sustainable manufacturing remains a key driver of socioeconomic progress and economic resilience, contributing to job creation and strengthening food security, and helping countries move up industrial value chains. In particular, investments in manufacturing activities and enabling infrastructure that promote food security, domestic value addition, and export competitiveness, including industrial parks or science and technology parks, are expected to play an important role in NDB's operations. NDB recognises the importance of manufacturing and envisions investing in green and smart manufacturing for sustainable development through decarbonisation and digitalisation.

References

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