

POLICY BRIEF



G20 SOUTH AFRICA 2025

Principles for Cooperation and Competition in a World of Industrial Policy

2025

Tim Sahay, Praveena Bandara, Jonas Nahm, Renato H de Gaspi, Ishana Ratan, Bentley Allan, Net Zero Industrial Policy Lab, Johns Hopkins University (US)
João Carlos Ferraz, Carlos Frederico Leão Rocha, Marta Castilho, Wilson Peres, Institute of Economics, Federal University of Rio de Janeiro (Brazil)
Alvaro Ons, Red Sudamericana de Economía Aplicada-Red Sur and Centro de Investigaciones Económicas-Cinve (Uruguay)
Nimrod Zalk, Nelson Mandela School of Public Governance, University of Cape Town (South Africa)



01

Trade and
Investment

Abstract

There has been a resurgence in the use of industrial policies (IPs) due to the acceleration of technological revolutions, a trend towards regionalisation and an increasing interconnectedness between energy security, basic industries, national defence and other non-economic objectives. In a context of rapid weakening of the principles of developmental multilateralism, this surge in IP and a more recent surge in unilateral trade measures have challenged the rules and institutions of the global trade and investment order. The use of IP has been contentious for several reasons. Some countries argue that IP is improperly used to create overcapacity or strategically manipulate markets. Developing countries argue that it is simply another tool that excludes them from developed country markets. There is also the risk that competitive IP could create a subsidy race that reduces global welfare. Workable solutions to these challenges require a set of international guiding principles acceptable to all states. We propose seven principles that include 1) IP as a win-win for all, 2) universal opportunity, 3) value addition, 4) competitiveness, 5) strong state capabilities, 6) time-limitation and benchmarking, and 7) non-discrimination, that would balance competition and cooperation and provide the basis for initiating diplomatic discussions on high-consensus principles to guide IP. This process should begin by creating soft law in key fora such as the G20, G7 and G77. It can then proceed to international policy arenas around implementation in specific issue areas such as ongoing discussions about carbon border adjustments, green clubs, technology transfer and tariffs justified on national security grounds.

Keywords: Industrial Policy, Global Governance And Cooperation, Guiding Principles

Diagnosis

The contest over the scope and governance of industrial policy

Industrial policies (IPs) allocate resources to influence the structure, conduct and performance of economic agents by reorienting incentives, designing regulatory frameworks and creating technical assistance instruments. There has been a resurgence in the utilisation of IPs due to the acceleration of technological innovation driven by the digital and sustainable energy revolution, a trend of de-globalisation that prefers regionalisation and near-shoring and an increasing interconnectedness between energy security, basic industries, national defence and other non-economic objectives.¹ Furthermore, this resurgence and a more recent surge in unilateral trade measures have challenged fundamental rules and institutions of the global trade and investment order,² all of which have exacerbated uncertainty and interstate tension.

These disruptions have sparked protests over at least three concerns. First, some countries argue that others improperly use IP to create overcapacity or strategically manipulate markets.³ Second, developing countries argue that IP is another tool that excludes them from developed country markets. Particularly in the climate domain, green standards could be used to restrict market access and

¹ Ha-Joon Chang and Antonio Andreoni, "Industrial Policy in the 21st Century," *Development and Change* 51, no. 2 (March 2020), <https://doi.org/10.1111/dech.12570>; Ioanna Kastelli et al., "New Perspectives and Issues in Industrial Policy for Sustainable Development: From Developmental and Entrepreneurial to Environmental State," *Review of Evolutionary Political Economy* 4 (2023): 1–25, <https://doi.org/10.1007/s43253-023-00100-2>; Réka Juhász, Nathan Lane, and Dani Rodrik, "The New Economics of Industrial Policy," *Annual Review of Economics* (2024); Simon Evenett, Adam Jakubik, and Fernando Martín, *The Return of Industrial Policy in Data*, IMF Working Paper no. 2024/001 (2024), <https://doi.org/10.5089/9798400260964.001>; João Carlos Ferraz et al., "The New Era of Industrial Policy in Latin America and the Caribbean: From SDG Assessment to Policy Solutions," UNIDO Policy Brief Series: Insights on Industrial Development, Issue 16 (2024).

² Praveena Bandara et al., "Climate-related Industrial Policies: Opportunities and Obstacles from the Global Trade and Investment Regime," (forthcoming). See Appendix for an illustrative list of trade rules that may be in contention with industrial; Alicia Bárcena et al., *The Climate Emergency in Latin America and the Caribbean: The Path Ahead – Resignation or Action?* (ECLAC, 2020). Amir Lebdioui, *Survival of the Greenest: Economic Transformation in a Climate-Conscious World* (Cambridge: Cambridge University Press, 2024). Wilson Peres et al., "Green Industrial Policy: Wherefrom, Where to?" Institute of Economics, Federal University of Rio de Janeiro, Policy Brief 02/2024, <https://www.ie.ufrj.br/images/IE/PUBLICA%C3%87%C3%95ES/ARTIGOS/2024/Peres%20et%20al,%202024.pdf>.

³ Seth Schindler et al., "The Second Cold War: US-China Competition for Centrality in Infrastructure, Digital, Production, and Finance Networks," *Geopolitics* 29, no. 4 (2024): 1083–1120.

disadvantage countries in their pursuit of development.⁴ Third, there is a risk that competitive IPs could create a subsidy race that reduces global welfare.

Workable solutions to these challenges require a set of international guiding principles acceptable to all states.⁵ However, these principles must work within the context of principles for international governance, acknowledging the importance of sovereignty and the right to development.⁶ In this vein, we propose seven principles that would balance competition and cooperation to provide the basis for initiating diplomatic discussions on high-consensus guiding principles for IP.

Recommendations

Policy principles

1. Win-win industrial policy

IP can be a positive-sum game if it increases global productivity, access to resources, and wellbeing. Strategic policy and investments can bolster employment and industrialisation, expand economic output, increase fiscal space for social spending, and create opportunities for stable long-term growth. If all countries could do this, then overall welfare would increase. Since significant investment is needed to generate cost-cutting efficiency-improving green innovations, ensure equitable access to sustainable energy and avoid the worst consequences of the climate crisis, there is room for all countries to participate in IP.

⁴ African Climate Foundation and The London School of Economics and Political Science, Implications for African Countries of a Carbon Border Adjustment Mechanism in the EU (2023), <https://www.lse.ac.uk/africa/assets/Documents/AFC-and-LSE-Report-Implications-for-Africa-of-a-CBAM-in-the-EU.pdf>.

⁵ Mariana Mazzucato and Vera Songwe, A Green and Just Planet: The 1.5 Degree Agenda for Governing Global Industrial and Financial Policies in the G20, Independent Report of the G20 TF-CLIMA Group of Experts (2024); Rabah Cherif et al., Industrial Policy for Growth and Diversification: A Conceptual Framework, IMF Departmental Paper 22/17 (2022); G20, Issue Note: Trade and Investment Working Group, G20 South Africa (2024)

⁶ "Declaration on the Right to Development," General Assembly Resolution 41/128, U.N. GAOR, 41st sess., Supp. No. 53, U.N. Doc. A/RES/41/128 (December 4, 1986), <https://www.ohchr.org/en/instruments-mechanisms/instruments/declaration-right-development>.

2. Universal opportunity

All countries must have the opportunity to pursue IP in line with their stage of development.⁷ Currently, other development priorities, and to a lesser degree, international institutions and rules often constrain the fiscal space that many states need to conduct IP. Yet since the creation of new and more efficient production capacity and quality upgrading of goods and services are potential outcomes of IP, countries must advocate for policy space and build strategic capabilities to design and implement IP.⁸

3. Value addition

No country should be permanently reduced to exporting primary commodities or specialising in low-skill, low-value-added activities. This exposes countries to commodity price volatility, the Dutch disease, and a secondary role in the international division of labour. Value addition is a central element of successful IP aimed at strengthening domestic production capacity. The choice of whether the intended market for the resulting output is domestic or global will be at the discretion of the country. Regardless, value addition creates opportunities for transitioning to a knowledge-based economy and broader spillovers for economic diversification. Therefore, the rules of trade and investment should allow countries to pursue strategies focused on value addition, upgrading and technology transfer.⁹

⁷ G20, G20 Initiative on Supporting Industrialization in Africa and Least Developed Countries, G20 China (2016); UNIDO, Industrialization in Africa and Least Developed Countries: Boosting Growth, Creating Jobs, Promoting Inclusiveness and Sustainability (Vienna: UNIDO, 2016); UNIDO, The G20 Initiative on "Supporting Industrialization in Africa and LDCs: Review of Progress" (Vienna: UNIDO, 2019); Wilson Peres and Annalisa Primi, "Industrial Policy in Latin America," in The New Palgrave Dictionary of Economics, ed. Matías Vernengo, Esteban Pérez Caldentey, and J. Barkley Rosser Jr. (London: Palgrave Macmillan, 2024), https://doi.org/10.1057/978-1-349-95121-5_3156-1

⁸ In the context of climate change, even though some advanced countries have acknowledged the principle that as historical emitters, they should support the energy transition in developing countries, current efforts to mobilise loss and damage are meagre compared to the investment needed in the industrial base for the energy transition and reducing deforestation. Therefore, more efficient tools to create fiscal space are also necessary.

⁹ The case of Indonesia provides an example of an economy exercising its right to the principle of universal opportunity while operationalising the value-addition principle, which could ultimately lead to a win-win outcome for all. Indonesia enacted a total raw nickel ore export ban in 2020 with the aim of attracting investment into the nickel supply chain to spur job creation and economic development. This action further aligned with Indonesia's goal of developing a

4. Competitiveness

The goal of IP should not be to restrain competition through permanent protection measures but to achieve structural transformation through industrial upgrading. IP must direct investments to the infrastructural and technological base of sectors and strengthen the capacity of firms and industries to generate more and better jobs. This will lead to more high-quality goods and services for the local economy, increasing domestic competitiveness and opportunities to explore foreign markets. This is particularly relevant for micro and small firms, which may play a crucial role in absorbing the high levels of informal employment prevalent in many developing countries.

5. Strong state capabilities

The design, negotiation, implementation and monitoring of IPs require strong institutional capabilities. All countries should invest in organisational design, human resources and information technology infrastructure to enable state action. States must promote coordination between policy and executive agencies and develop relationships with stakeholders to balance autonomy and embeddedness.¹⁰ Strategic collaboration between the public and private sectors is crucial but challenging to public sector structures that lack a culture of coordination and already struggle with scarce resources and considerable risks of capture. International cooperation must play a significant role in developing capabilities by sharing good practices, technology transfer and human resource training.

domestic EV and battery industry. Not only will value addition contribute to positive economic outcomes in Indonesia, the lower costs for processing and shipping means lower prices for countries that either use processed nickel as inputs and, eventually, end products such as batteries. However, export bans are currently prohibited under WTO rules, and in 2020 the EU (and many G20 countries named as third parties) filed a complaint against Indonesia at the WTO. This highlights the limitations that resource-rich countries face when adopting IP aligned with their stage of development and resource endowment, as well as the need to revisit certain international trade and investment rules.

¹⁰ Peter B. Evans, *Embedded autonomy: states and industrial transformation* (Princeton, NJ: Princeton University Press, 1995).

6. Time-limitation and benchmarking

Incentives, trade measures and regulatory policy instruments should be time-limited and benchmarked to ensure the efficiency of public resource use, monitoring and proactive adjustments if necessary. Such instruments must be recognised as making positive contributions to production, employment and development, if industries and firms are making progress toward publicly stated benchmarks. Time-limitation and benchmarking create a competitive business environment in which firms must direct resources effectively and avoid complacency.

7. Non-discrimination

Countries should not restrict market access on arbitrary grounds, such as labelling some economies as market or non-market, while respecting sovereignty and the principle of universal opportunity. States create and shape markets to some degree since most engage in various forms of protectionism. The distinction between market and non-market is challenging to operationalise and should not be grounds for discrimination. Relatedly, IP measures designed to promote domestic investments should not exclude certain countries when such investments support domestic economic goals.

Conclusion

The way forward

These principles align with the priorities set out by the Task Force on Inclusive Economic Growth, Industrialisation, Employment, and Reducing Inequality under the South African presidency. Specifically, they situate themselves under Work Stream Two within this priority that aims to lay out G20 high-level principles on

green industrial policy. Acknowledgement of IP as a tool for inclusive growth, job creation and the promotion of equality gained momentum within the G20 dialogue following the September 2020 meeting on IP for medical equipment procurement and vaccine development in response to the COVID-19 pandemic.¹¹ Core concepts, such as value addition, monitoring and accountability, and international cooperation, were a focus in the 2023 Voluntary High-Level Principles for Collaboration on Critical Minerals for the Energy Transition (Indian presidency). Commitments to technology transfer and WTO reform were highlighted in a report by the G20 Independent Group of Experts convened by the Brazilian presidency in the following year (See Figure A1 in Appendix).

To operationalise the current set of principles within the G20 framework, the initial step is to include them in the final communiqué. However, strengthening the multilateral framework, specifically the capability to act by international and regional organisations, is paramount for its successful implementation. These organisations include technical assistance organisations such as the UN Industrial Development Organization, the UN Conference on Trade and Development and the International Labour Organization, as well as regulatory and normative agencies like the WTO, the International Organization for Standardization and the World Intellectual Property Organization and finally, development finance-related international and regional agencies such as the World Bank, the Inter-American Development Bank, the Asian Development Bank, the African Development Bank and the Islamic Development Bank, among others. We also suggest the creation of a subgroup or secretariat within the G20 to organise subject-specific ministerial meetings to stocktake ongoing industrial policy actions, assess their alignment with the principles, identify differences and develop subsequent G20 proposals to promote convergence and address divergences.

¹¹ Before this, the 2016 G20 Initiative on supporting Industrialization in Africa and LDCs and the 2017 G20 Compact with Africa had laid out broad commitments and frameworks to guide industrialisation.

The proposed policy principles are based on the understanding that no country is better suited than another to conduct IP. Every country may choose to pursue IP to grow sustainably, depending on its resource endowment and stage of development. Looking to the future, countries are bound to make significant progress in applying these principles. Therefore, the principles must be formalised, reinforcing an internationally supported, nation-specific, proactive approach to conducting IPs, with the G20 guiding the inclusion of previously excluded countries.

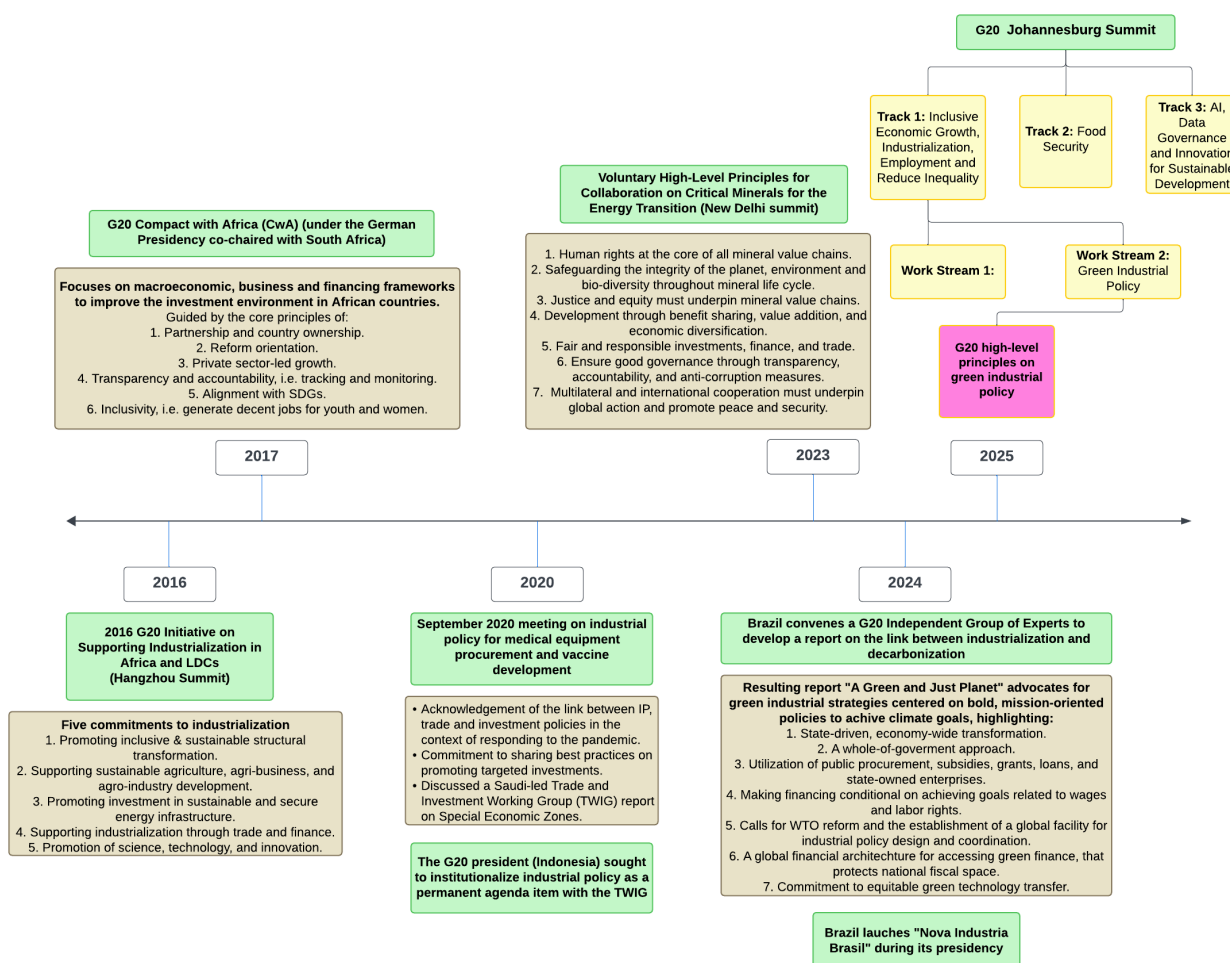
Appendix

Table A1: Trade rules versus IP actions

Policy Type	WTO rules	FTA rules (e.g.,)
Trade policy instruments (export & import policies)	GATT Arts. I:1, III:2, XI; TBT Arts. 2.9, 5.6	USMCA Art. 2.3, 2.10 CPTPP Art. 2.3
Foreign investment measures	TRIMs Art. 2, Annex	USMCA art. 14.6, 14.8 Angola-China BIT Art. 7, 9 EU-Chile ITA Art. 10.9 EU-Chile AFA Art. 17.19 CPTPP art. 9.6, 9.8
Localization policies	GATT Art. III:4, TRIMs Art. 2, Annex; SCM Art. 3	USMCA Arts. Angola-China Arts. 9.1(b), 9.2(a) EU-Chile ITA Arts. 10.9.1(b), 10.9.2(a) CPTPP Art. 9.10
Subsidies, state aid	SCM Art. 5 and others	EU-Chile ITA Ch. 24 (hortatory) CPTPP Art. 9.12.6 (exception)
Public procurement policies	GPA Art. IV;	EU-Chile ITA Ch. 21 CPTPP Ch. 5
Public procurement as exception to other standards	GATT Art. III:8 (as an exception to NT standard)	USMCA Art. 14.12(5) Angola-China BIT Art. 13.4 EU-Chile ITA Arts. 10.3, 10.7 CPTPP Art. 9.10
Trade defense instruments	ADA Art. 1, SCM Part V, SA Art. 2	EU-Chile ITA Ch. 5 USMCA Ch. 10 CPTPP Ch. 6

Source: Rachel Thrasher et al., Climate-related Industrial Policies: Opportunities and Obstacles in the Global Trade and Investment Regime. Global Economic Governance Initiative Working Paper. Boston: Boston University Global Development Policy Center (forthcoming).

Figure A1: The way forward



Source: Author compilation using Ilias Alami, Jack Taggart, and Tom Chodor, "Rebuilding the Ladder? Contemporary Contests over Industrial Policy" (forthcoming) and various G20 publications.

T20 South Africa Convenors



The Institute for Global Dialogue (IGD)



The South African Institute of International Affairs (SAIIA)



The Institute for Pan-African Thought and Conversation (IPATC)

© T20 South Africa and the original authors

This publication is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License (CC BY-NC-ND 4.0).



This license enables reusers to copy and distribute the material in any medium or format in unadapted form only, for noncommercial purposes only, and only so long as attribution is given to the creator.

To view a copy of this license, visit <https://creativecommons.org/licenses/by-nc-nd/4.0/>

For publication enquiries, please contact t20@t20southafrica.org

Website: www.t20southafrica.org