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The new era of industrial policy in Latin America and the Caribbean: from SDG assessment to policy solutions

João Carlos Ferraz & Wilson Peres

Universidade Federal do Rio Janeiro (UFRJ)

Alejandro Lavopa & Cecilia Seri

UNIDO

Abstract

Latin America and the Caribbean (LAC) countries have shown mixed results in their performance towards achieving the Sustainable Development Goals (SDGs) most closely related to industrial development. Significant progress is observed in energy-related SDGs targets, where the region outperforms other developing regions, particularly in clean energy and energy efficiency. However, large gaps are registered in the targets related to employment, economic growth, industrial development and innovation. Megatrends such as climate change, energy transition, rapid technological change in digital, health and food technologies, and the reconfiguration of global value chains (GVC) are both exacerbating existing challenges and creating new development opportunities. This brief presents specific case studies from the region to illustrate how targeted policies can foster industrial development to address current gaps while leveraging on existing opportunities tied to these megatrends. An important conclusion from the analysis is that to overcome implementation challenges, it is of strategic importance to invest in policymaking capabilities and secure policy continuity.¹

Key Messages

1. LAC is making significant progress in energy-related SDGs but is lagging behind in targets related to employment, economic growth, industrial development and innovation.
2. Modern industrial policy can revert these trends by leveraging on emerging opportunities in the energy transition, food processing and high-tech health industries.
3. Investments in policymaking capabilities and policy continuity are key to overcome implementation challenges that have hindered industrial policy success in the past.

How far is LAC from achieving industry-related SDGs?

Recent research shows that industrial development (contained in SDG9) plays a fundamental role in achieving the UN 2030 Agenda. The industrialization-growth nexus is well known, and new evidence shows that manufacturing plays a key role in allowing higher and more sustained growth in economies.² But besides direct impacts, the industrial sector also has important indirect effects on other dimensions of sustainable development. These effects impact economic growth and job creation (SDG 8), and green technologies and the energy transition (SDG 7).³ Informality rates are lower in the manufacturing sector, and growth in manufacturing output fosters more employment in other sectors compared to other activities through indirect input-output linkages. Moreover, manufacturing plays a prime role in creating and diffusing green technologies that are crucial to achieving SDG 7 and other SDGs related to environmental sustainability. In fact, of all the green patents produced worldwide, almost 60 per cent are owned by industrial firms.⁴

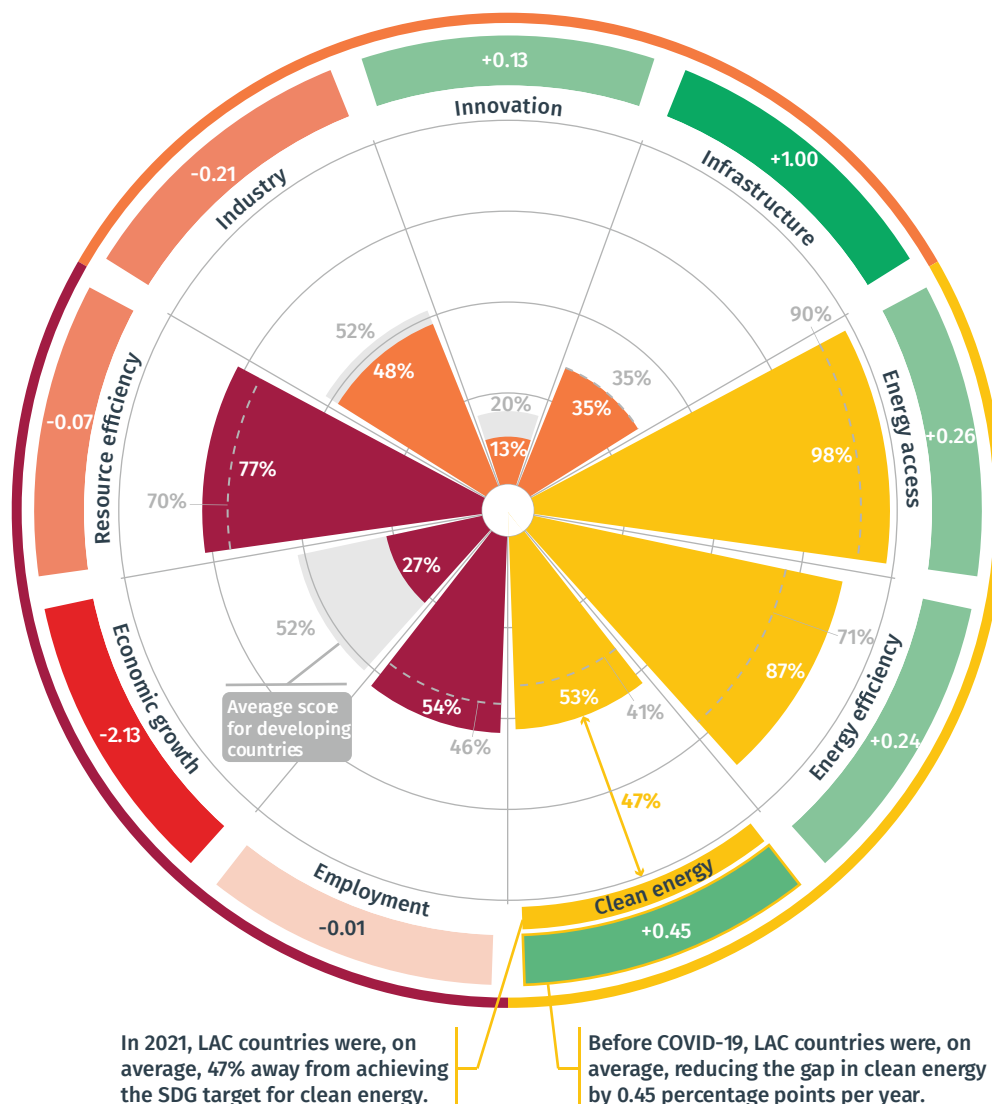
Where does LAC stand in the achievement of these crucial SDGs? Evidence from UNIDO's 2024 Industrial Development Report (IDR 2024)⁵ reveals that progress towards achieving SDGs 7, 8 and 9 in LAC is mixed, and significant challenges lie ahead (see Figure 1) for the region.

LAC shows good performance in achieving SDG 7 (for affordable and clean energy) targets and outperforms other developing countries in the three dimensions of this goal. The difference is particularly significant in clean energy (41 per cent for developing countries vs 53 per cent for LAC's achievement) and energy efficiency (71 per cent for developing countries vs 87 per cent for LAC). Moreover, by 2021, LAC almost achieved universal access to energy, with South America positioning itself as the region's leader in clean energy. Nonetheless, more vigorous initiatives are still needed to bridge the remaining gap concerning the SDG 7 target on clean energy.

The performance regarding SDG 8 (for decent work and economic growth) targets in LAC countries is less favourable and indicates deeper underlying challenges in the region. Economic growth has been particularly low, with only 27 per cent of the SDG target achieved by 2021, compared to developing countries' average of 52 per cent. To reverse this trend (already negative before COVID-19), urgent and targeted actions are required to create quality jobs and foster sustained and inclusive growth.

The largest gap in the region's performance is observed in SDG 9 (for industry and innovation)

Figure 1. Distance to SDG targets: LAC in 2021



Note: The values represent the average level of SDG target achievement for each dimension in 2021, aggregated at the regional level using population weights. The grey areas represent the performance of all developing countries. The shaded rectangles on the outer side of the figure reflect the average annual convergence speed towards the target in the decade before the COVID-19 pandemic. This is calculated by subtracting the index values in 2019 from those in 2009, and then dividing the result by ten years. Green rectangles indicate convergence to the target (i.e., the region was reducing the gap), whereas the red colours indicate increasing gaps.

Source: UNIDO Industrial Development Report 2024, Figure 8.1, page 160.

targets. UNIDO’s analysis shows that the pre-COVID-19 trends concerning industry-related targets were negative, suggesting a process of premature deindustrialization. Given the strategic role industry has in also achieving other SDGs, urgent actions to reverse deindustrialization trends are essential. The performance in the

innovation indicators is also behind the average of other developing countries. This negatively impacts the region’s capacity to adapt to rapidly evolving global technology, and could hinder long-term economic competitiveness and growth. Therefore, LAC needs to intensify its focus on fostering innovation and supporting industrialization.

Industrial policy landscape

In LAC, a market-oriented approach has prevailed for more than 30 years, yet some countries continued to design industrial policies. The renewed global consensus around the importance of industrial policy in recent years has also impacted LAC, as several industrial policy initiatives were launched in the region after the COVID-19 pandemic (see Table 1). The plans repeatedly target the energy transition, digitalization, agro-industrialization and the health sector.

Subregion and country-specific priorities emerge from these plans and are related to their salient characteristics.⁶ Given the importance of natural resources in South America, connecting industry

and primary sectors is a key industrial policy priority. Strong emphasis is observed in areas with expected competitive advantages such as lithium refining, green hydrogen, food chains and biofuels.

Central American and Caribbean countries specialize in assembly industries for the United States of America (USA) market, and special policy attention is placed on export promotion and value addition. The need to upgrade, move towards more technologically intensive activities, and leverage opportunities provided by the digital transition is also emphasized. Moreover, potential trends towards nearshoring from the USA may provide opportunities in this area.

Table 1. Examples of announced industrial strategies and industrial policy plans in LAC, 2021-2024

Country	Industrial strategy	Priority areas
Brazil	New Industry Brazil (NIB) (Jan. 2024)	The plan is based on six missions: (i) sustainable agroindustry and food security; (ii) resilience of health-related industries; (iii) sustainable mobility, sanitation and housing; (iv) digital transformation of industry; (v) decarbonization, energy security and bioeconomy; and (vi) strategic autonomy for national sovereignty and defence.
Chile	Sustainable Development Programme (Jan. 2023)	The plan aims to promote environmental and socially sustainable economic growth, improve productivity, diversify the productive matrix, and incorporate knowledge, human capital and innovation to generate opportunities in new productive areas. Moreover, the plan works towards creating quality employment and promoting equitable development at the territorial level.
Colombia	Reindustrialization Policy (Feb. 2023)	The plan intends to foster a knowledge-based, productive, and sustainable economy. It aims to close productivity gaps, strengthen value chains and investment, diversify and upgrade industry capacity, and deepen integration with other LAC countries.
Costa Rica	National Development and Public Investment Plan 2023-2026 (Dec. 2022)	The sectoral objectives of the productive strategy are to increase the country's participation in the international economy, boost national productivity, create more formal jobs, and enhance competitiveness, particularly of small and medium enterprises.
Honduras	Honduras National Plan 2022-2026 (Sep. 2021)	The main objective of this plan is to increase local value addition by modernizing and upgrading the manufacturing and agro-industrial sectors. It promotes strategic industries in industrial clusters such as the food sector, biofuels, and pharmaceuticals.
Peru	National Industrial Development Policy (Nov. 2022)	The policy sets four priority areas: (i) productivity; (ii) complexity of manufacturing exports; (iii) industrial infrastructure and specialized services; and (iv) institutional and regulatory environment.

Source: Authors elaboration.

Overall, long-standing challenges persist such as the importance of fostering innovation, efficiency, technical vocational training and MSMEs' productivity. At the same time, a changing

economic, technological and geopolitical context and emerging global issues have brought new challenges and opportunities for industrial policy in the region.

Opportunities and actions

Global megatrends such as climate change, the energy transition, rapid technological change in digital, health and food technologies, and the reconfiguration of GVC all create new challenges for developing countries and call for new forms of industrial policy to turn these challenges into development opportunities.



Energy transition

LAC is well-positioned to lead the global energy transition. The region has an abundance of renewable energy sources and minerals essential for clean energy technologies. Moreover, its history of clean energy leadership means LAC countries have the capabilities to thrive in the green transition. Some interesting areas of opportunity are solar photovoltaic (PV) energy, green hydrogen, and critical minerals.

Solar PV's potential for energy generation has grown at exceptional rates in recent years. It has been the focus of renewable energy investments in the region from 2005-2022, placing LAC as the third largest destination of solar PV FDI after Europe and Asia-Pacific. Countries such as Argentina, Brazil, Chile, Mexico and Peru have some of the world's best solar resources and account for most of the capacity and generation of PV energy in the region.

Another major opportunity is the development of green hydrogen. LAC countries can leverage competitive renewable resources to produce low-cost and low-emissions hydrogen, which can be valuable in decarbonizing heavy industry and freight transport both domestically and internationally. By 2023, many LAC countries had developed green hydrogen policy strategies, roadmaps, and 25 low-carbon hydrogen projects.⁷

The energy transition also creates opportunities to develop technological and productive capabilities around critical minerals. LAC countries have significant amounts of essential minerals for many clean energy technologies, including around half of the world's lithium reserves and over one-third of copper and silver reserves. There are ample opportunities to develop upstream (suppliers of goods and services) and downstream (production of processed products) industries around these minerals. A case in point is the manufacture of lithium cells and batteries to respond to the global demand for electric vehicles. Efforts have been taken in many LAC countries to develop the necessary technological capabilities required to process these resources. Argentina's National Plant for Technological Development of Lithium Cells and Batteries (UniLiB) provides a good example of this matter.⁸

Amid this promising context, the challenge of connecting these efforts with broader national industrial development strategies remains a crucial issue for reducing dependence on imported technologies and products.

Digitalization



Advanced digital production (ADP) technologies greatly enhance the productivity of manufacturing firms, and their adoption is associated with countries' higher industrial competitiveness.⁹ In the last decade, significant progress has been made in LAC countries regarding digitalization. Overall, the region is well-positioned to take advantage of the opportunities created by this latest wave of technological transformation, but there is large heterogeneity across countries and actors. Two priority areas for action are MSMEs' engagement and skill development.

MSMEs are a vital component of LAC's productive base, accounting for a quarter of the region's gross domestic product and around 60 per cent of formal employment.¹⁰ Yet MSMEs suffer important productivity gaps vis-à-vis larger firms. Given the competitive advantages that ADP technologies provide, their adoption can play a crucial role in bridging the productivity gaps. This is increasingly acknowledged in policy initiatives from the region that promote the adoption of industry 4.0 technologies among MSMEs. These initiatives typically focus on facilitating access to digital technologies and supporting the early stages of technology adoption through capacity building and the provision of technical and financial assistance. However, they rarely aim to develop a deeper transformation of technological and strategic capabilities. This would require embedding initiatives such as integrating digital solutions in supply chains or supporting the creation of new business models into industrial policies.

The development of a skilled workforce that can effectively use ADP technologies is another important enabler to seize the opportunities the digital transition opens. In LAC, this poses extra challenges for the educational system. Historically, vocational and training institutions (VTI) play a key role as the region's most important career development source, and many institutions incorporate digital skills and adapt to the changing economies and learning needs of the region. However, the current interrelated challenges associated with the megatrends (listed earlier) require breaking down institutional and policy silos. VTIs must strengthen their connection to national needs and priorities by increasing the involvement of a broad range of stakeholders and aligning education and vocational training policies with industrial policies.



Global rebalancing

In the last decade, Asian countries have emerged as a new pole of the global economy, while LAC is falling behind. Recent supply chain disruptions

and rising geopolitical tensions are putting pressure on current GVCs configurations, which could lead to the reshoring of some economic activities. While evidence of reshoring is still scarce, a restructuring is visible in recent FDI flows. This type of investment is still high in Asia, but there has been a drop in recent years. In LAC, the opposite is happening.¹¹

GVCs reconfiguration may open new opportunities for the LAC countries. Particularly, nearshoring from multinational enterprises based in the USA can become an important source of new FDI to the region and stimulate production. Improving the so-called "reshoring readiness" is key to enhancing these opportunities. At the same time, maximizing the possible benefits from nearshoring requires that the relocated production positively contributes to the development of the hosting economy.¹²

Available infrastructure, quality of logistics, levels of human capital, and production capabilities are crucial components to ensure reshoring readiness. These factors are also necessary to ensure that attracting FDI does not result in industrial enclaves but offers opportunities for production upgrading. The recently launched Isthmus of Tehuantepec Inter-Oceanic Corridor in Mexico illustrates how governments in the region are trying to improve these factors.¹³ The project takes advantage of the country's strategic position by constructing a railway connecting strategic ports and ten industrial parks that will host critical productions.

Growing the demand for food and health



Global demographic changes constitute another megatrend that opens global challenges but may also bring important opportunities for LAC. As the global population continues to grow, the demand for food worldwide will increase. At the same time, food systems are changing with the integration of digitalization and new genetic

innovations that are leading to a wave of revolutionary product innovations (e.g., plant-based food alternatives to animal proteins) in food processing industries.

Considering the prominence of the food industry both in manufacturing value added and employment generation in the region, LAC countries need to adjust their food industries to sustain industrial competitiveness in this sector. To this end, existing institutional, regulatory, research and productive structures need to adapt to new innovation models. Targeted industrial policies can support this process by fostering advanced research that can lead to revolutionary product innovations in this industry.

A major demographic trend in LAC is the population's ageing. An ageing population implies a rising global and regional demand for pharmaceutical and medical supplies, which in turn provides opportunities to tap into new industries in the health sector. Some LAC countries have already taken interesting steps in this direction. For example, since the 1980s, Costa Rican industrial policies have targeted the health sector and established a dynamic medical supply industry. Notably, capabilities and experience harnessed from other sectors (i.e., electronics) were moved from low-tech manufacturing hubs to research and development and advanced manufacturing ecosystems in the health sector.¹⁴

Lessons learned

The experiences across LAC present common challenges to overcome and demonstrate how industrial policy can help to achieve the SDGs. Five important conclusions are:

- 1. MSMEs should continue to be a policy priority and receive specific support.** MSMEs continue to be a crucial yet fragile component of the LAC economies. Development programmes must consider the specificities of MSMEs to leverage open opportunities and avoid the widening of existing productivity and technology gaps with larger firms.
- 2. Opportunities exist to foster niche-oriented industrial development.** Energy transition, digitalization, agro-industrialization and the health sector constitute country-specific potential development areas.
- 3. Governments should continue to promote FDI attraction.** The current reconfigurations in GVCs open opportunities to enter new global productions, but stronger emphasis should be placed on local industrial development and upgrading.
- 4. Policy continuity and government capabilities are essential.** It is crucial to invest in policy-making capabilities and achieve policy continuity beyond the political cycles to avoid implementation failures.
- 5. International and regional cooperation should be leveraged to foster industrial policy learning.** An effective dialogue between countries and networks of regional and international organizations in the region could constitute a solid basis to accelerate the process of improving policy capabilities.

Endnotes

1. This brief summarizes the main findings and messages of UNIDO (2024) “Industrial development report 2024. Turning challenges into sustainable solutions: The new era of industrial policy”, Chapter 8.
2. Lavopa and Riccio (2024) “Manufacturing-led growth: driving and sustaining economies”, UNIDO IID Policy brief series, No. 15.
3. See UNIDO (2024), Chapter 2.
4. Lavopa and Menéndez (2023) “Who is at the forefront of the green technology frontier?”, UNIDO IID Policy brief series, No. 6.
5. See UNIDO (2024), Chapter 8.
6. Ferraz and Peres (2024), “Sustainable development challenges and industrial policies in Latin America and the Caribbean”, Background report prepared for the UNIDO Industrial Development Report 2024.
7. See UNIDO (2024), Box 8.1.
8. See UNIDO (2024), Box 8.2.
9. UNIDO (2019) “Industrial development report 2020. Industrializing in the digital age”.
10. Dini and Stumpo (2020) “Mipymes en América Latina: Un frágil desempeño y nuevos desafíos para las políticas de fomento”, Documentos de proyectos e investigación. Santiago: ECLAC.
11. IMF (2023) “World Economic Outlook, April 2023: A rocky recovery” and UNCTAD (2024) “World Investment Report (2024)”.
12. Pietrobelli and Seri (2023) “Reshoring, nearshoring and development. Readiness and implications for Latin America and the Caribbean”, *Transnational Corporations* 30 (2): 37–70.
13. See UNIDO (2024), Box 8.5.
14. See UNIDO (2024), Box 8.7.



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