

# Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Progress in Latin America and the Caribbean up to 2026

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



## Sustainable Development Goal (SDG) 9 and human rights

The human rights focus of the 2030 Agenda for Sustainable Development stems from an explicit grounding in the Universal Declaration of Human Rights and international human rights treaties, in addition to other instruments, such as the Declaration on the Right to Development (art. 10).

The SDGs are universal in scope, seeking to “realize the human rights of all” in developed and developing countries alike. The recognition of the need to fight poverty and inequalities in the 2030 Agenda is evident in its focus on reaching the furthest behind first and ensuring that no one is left behind —a principle which underpins the central, transformative promise of the 2030 Agenda and its 17 SDGs.

Although the SDGs are not specifically framed in human rights terms, many of their targets align with international standards. Goal 9 (Industry, innovation and infrastructure) is directly related to the Universal Declaration of Human Rights, particularly with regard to access to basic services, decent employment, clean technologies and a safe environment. It also has links to other human rights instruments, such as the International Covenant on Civil and Political Rights and the Convention on the Elimination of All Forms of Discrimination against Women.

### **Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation**

The targets include ensuring affordable and equitable access to quality infrastructure; promoting job creation through industry; expanding access to financial services and markets; fostering innovation and technology transfer; and increasing access to information and communications technology.

- **Right to enjoy the benefits of scientific progress and its applications:** Universal Declaration of Human Rights (art. 27) and International Covenant on Economic, Social and Cultural Rights (art. 15, para. 1.b).
- **Right of access to information:** Universal Declaration of Human Rights (art. 19) and International Covenant on Civil and Political Rights (art. 19, para. 2).
- **Right to adequate housing, as well as to land and resources:** Universal Declaration of Human Rights (art. 25) and International Covenant on Economic, Social and Cultural Rights (art. 11).
- **Equal rights of women to access financial credit and rural infrastructure:** Convention on the Elimination of All Forms of Discrimination against Women (art. 13.b and art. 14, para. 2).

The mechanisms that comprise the universal human rights protection system, namely the universal periodic review, human rights treaty bodies and special procedures, make recommendations to each Member State (see Universal Human Rights Index <https://uhri.ohchr.org/en>).

## > Regional overview

With only a few years remaining until the deadline for the implementation of the 2030 Agenda, some Goal 9 targets show moderate progress and will require a significant acceleration of efforts to be achieved, while others have stalled or even regressed. Progress in transport infrastructure has been limited, while the contribution of manufacturing to GDP and employment has trended downward. At the same time, access to credit and loans for small businesses in the region has improved, but barriers persist, such as higher risk associated with these firms and elevated transaction costs. Carbon dioxide emissions per unit of GDP have declined slightly, while expenditure on research and development as a proportion of GDP has stagnated over the past decade. While the region has made substantial progress towards universal access to the Internet and information and communications technology, it remains considerably behind in the deployment of advanced mobile networks. Innovation capacity and productive transformation in the region are constrained by structural factors, including low levels of spending on research and development, limited business sector participation, the concentration of research activity in higher education institutions and the low density of researchers.

## > Key facts on the region

- Passenger transport volume in the region recovered in 2022 (3.8 trillion passenger-kilometres), following the sharp decline in 2020, and the figures for air transport surpassed 2019 levels.
- Total volume growth for freight transport in the region was moderate, rising from 5.1 trillion ton-kilometres in 2019 to 5.4 trillion ton-kilometres in 2022.
- The volume of loaded and unloaded freight in regional maritime transport was around 2 million metric tons in 2023, up from 1.8 million metric tons in 2020.
- While over 90% of the road network is paved in countries such as Mexico, Panama and Uruguay, the figure is around 20% in others such as Colombia and the Plurinational State of Bolivia.
- The share of manufacturing in the GDP of the region declined by 8.4% in the period 2015–2024, while the share of employment fell by 5.2% between 2015 and 2023.
- Between the periods 2016–2017 and 2023–2024, the share of small and medium-sized enterprises regarding access to finance as a severe constraint decreased in Barbados, Colombia, Costa Rica, Jamaica, Mexico, Peru and Trinidad and Tobago, but increased in Ecuador and Paraguay. In El Salvador and Uruguay, the percentage increased among medium-sized firms and decreased among small firms.
- Carbon dioxide emissions per unit of GDP in the region fell by nearly 20% between 2000 and 2022. However, the regional average annual reduction of 0.0013 kg per dollar falls short of the global mitigation pathways of the Intergovernmental Panel on Climate Change in 2023.
- Between 2014 and 2023, regional research and development intensity remained stable at around 0.6% of GDP. By contrast, in 2023 it was 4.96% in the Republic of Korea, 3.45% in the United States, 2.70% in member countries of the Organisation for Economic Co-operation and Development and 2.58% in China.
- Official international support for infrastructure in Latin America and the Caribbean increased cumulatively by 143% between 2000 and 2023.
- In 2024, regional mobile coverage stood at 95% for 3G, 93% for 4G and 48% for 5G.

## > Good practices in the region

- The South American Integration Routes programme prioritizes the development and modernization of strategic corridors that connect the entire transport infrastructure to reduce logistics costs, improve territorial connectivity and strengthen regional productive integration.
- In Costa Rica, the share of medical, surgical, dental and veterinary instruments and devices in industrial exports increased from 15.5% in 2013 to 51.2% in 2024. This growth was driven by a combination of policies, including the attraction of highly targeted foreign direct investment, the development of specialized human talent, the establishment of productive linkages and the strengthening of suppliers, and cluster-based governance systems.
- Colombia and Chile have been highly effective in expanding access to credit for small businesses through the National Guarantee Fund and the Small Business Guarantee Fund, respectively.
- Plan México, under the Development Poles for Well-being, envisages an additional fiscal stimulus for new fixed asset investments, provided they promote dual-track training programmes and drive technological innovation.
- The Latin American artificial intelligence index, promoted by ECLAC, provides quantitative and qualitative data on the progress of artificial intelligence in 19 countries across the region.
- The ECLAC platform for the coordination of clusters and other productive initiatives serves as a virtual portal to explore cluster initiatives in the region and access relevant data and statistics.

## > ECLAC recommendations

- Initiatives aimed at strengthening logistics corridors, encouraging multimodality and improving territorial planning should be promoted, as a more integrated, sustainable and resilient transport infrastructure can generate significant economic, social and environmental benefits.
- In order to increase the contribution of industrialization to employment, economic growth and productivity, there is a need to design and implement productive development policies that foster strategic agendas focused on driving sectors, while supporting clusters and other productive coordination initiatives.
- Recommendations for improving small businesses' access to financing include strengthening and expanding guarantee systems, as well as promoting financial education, technical assistance focused on financial inclusion and accounting professionalization programmes.
- Strengthening innovation capacity and accelerating productive transformation requires linking educational systems, productive sectors and innovation ecosystems; increasing the number of graduates and improving the quality of science, technology, engineering and mathematics programmes; and adopting policies that support training in this area, from primary education through to higher education.



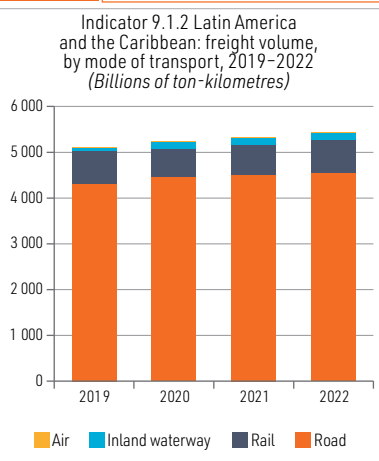
# Key regional statistics

## Goal 9 of the 2030 Agenda for Sustainable Development

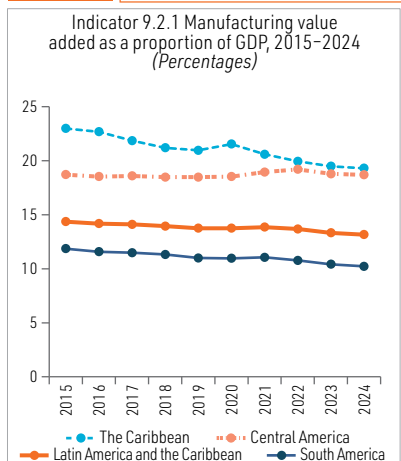
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Progress in Latin America and the Caribbean

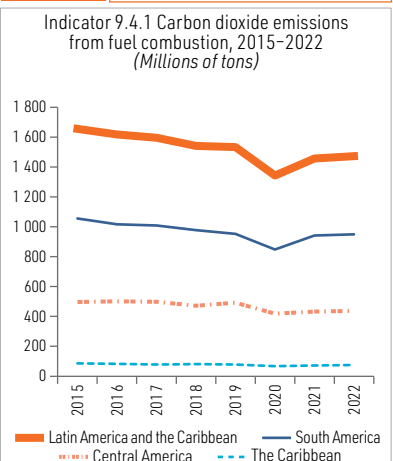
**Target 9.1**  
Infrastructure development



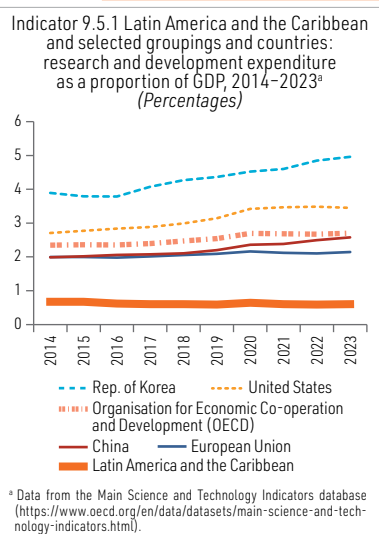
**Target 9.2**  
Inclusive and sustainable industrialization



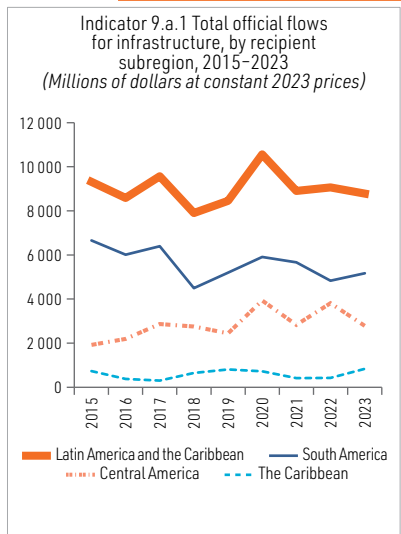
**Target 9.4**  
Sustainable and clean industries



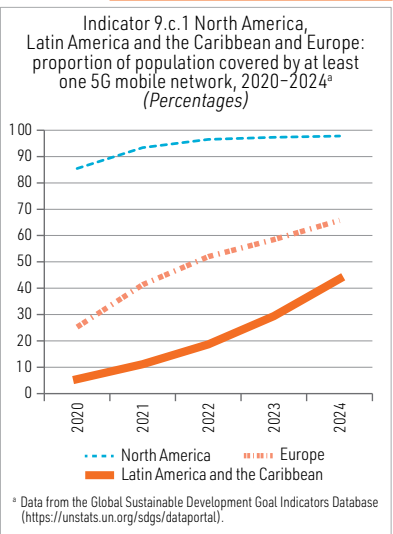
**Target 9.5**  
Research and development



**Target 9.a**  
Resilient infrastructure



**Target 9.c**  
Access to information and communications technology and the Internet



9.2 9.a 9.1 9.5 9.4 9.c 9.3 9.b

- The trend has stalled or is moving away from the target
- The trend is in the right direction, but progress is too slow for the target to be met
- Target already reached or likely to be reached on the current trend
- Insufficient data

**Source:** Economic Commission for Latin America and the Caribbean, on the basis of United Nations. (n.d.). *SDGs in Latin America and the Caribbean: statistical knowledge management hub*. Regional Knowledge Management Platform for the Sustainable Development Goals in Latin America and the Caribbean. <https://agenda2030lac.org/estadisticas/index.html>.

**Note:** Each indicator comprises one or more statistical series, which partially or fully cover the corresponding indicator. In the figures presented here, one or more statistical series were used for the respective indicator.

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