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Overview

SDG 9 Progress Report 2023

Introduction

The Sustainable Development Goals (SDGs) were adopted as a universal call to action to end poverty, protect the planet and build a better future for all by 2030.

At the halfway point to delivering the SDGs, global leaders are sounding the alarm: **only 15 per cent of the Goals are on track** and over one-third have seen no progress at all or even worse, have regressed below the 2015 baseline.

The message is clear: the world is at **great risk of missing the SDGs**, a reality that is further compounded by the climate crisis, geopolitical instability, surging inflation, the economic slowdown and lingering impacts of the COVID-19 pandemic.

In the midst of these challenges, let us recall that **industrial development is a cornerstone of economic growth, job creation and prosperity**. It is closely linked to innovation, digital transformation, economic resilience and the green transition, and thus plays a pivotal role in achieving the SDGs. Taking action towards **SDG 9 has positive impacts on other Global Goals**, such as SDG 2 (zero hunger), SDG 7 (affordable and clean energy) or SDG 13 (climate action).

Against this backdrop, UNIDO's SDG 9 Progress Report presents the strides different country groups have made towards achieving the industry-related targets, and highlights areas where interventions are urgently needed to close disparities.

"We have the technologies, the knowledge and the global capital for solutions. So the good news is that first, we know what to do. Second, we know how to do it. But we need the ambition and the political will to follow through!"

- UNIDO Director General Gerd Müller at the 11th Annual International Conference on Sustainable Development at Columbia University, 20 September 2023

UNIDO is the custodian agency for six industry-related indicators of SDG 9 seeking to "build resilient infrastructure, promote sustainable industrialization and foster innovation".

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Trends in industrial development

Despite some pockets of progress, we are not on track to achieving SDG 9

The world is clearly lagging behind, with most countries recording negative or stagnant trends across all industry-related SDG 9 targets. This lack of progress is evident in the SDG 9 Industry Index, which benchmarks 137 economies. There is a clear and strong correlation between income level and performance in the SDG 9 Industry Index. Among the top 20 ranked economies, all but three belonged to the group of high-income industrial economies.

The Index ranks countries on all three dimensions of inclusive and sustainable industrial development, namely economic (share of manufacturing in the economy; share of small-scale industries in total industry value added; share of MHT industries in manufacturing); social (manufacturing employment as a share of total employment) and environmental (emission per unit of manufacturing value added).

Only a handful of countries achieved tangible progress, most of which are located in Eastern Asia. In terms of country groups, both high- and middle-income industrial economies achieved the best performance, while low-income economies remain at the bottom of the Index's ranking at a considerable distance from other country groups.

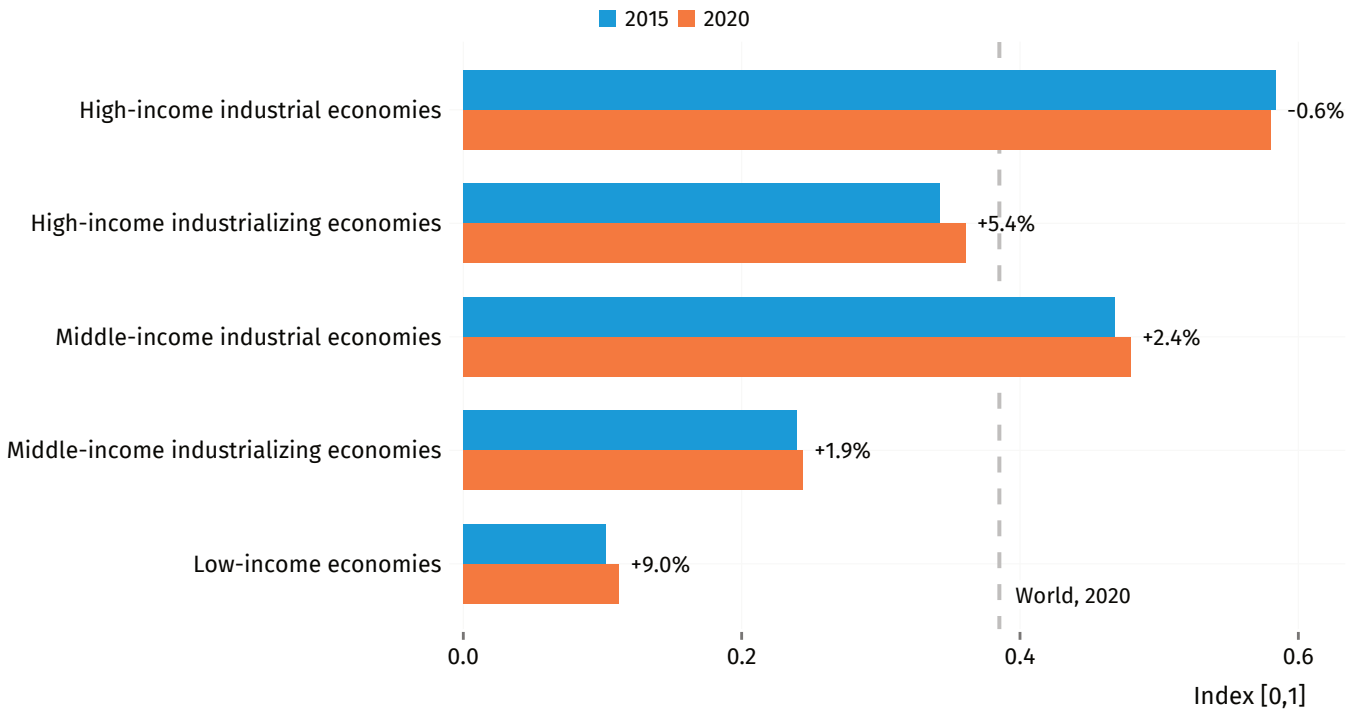
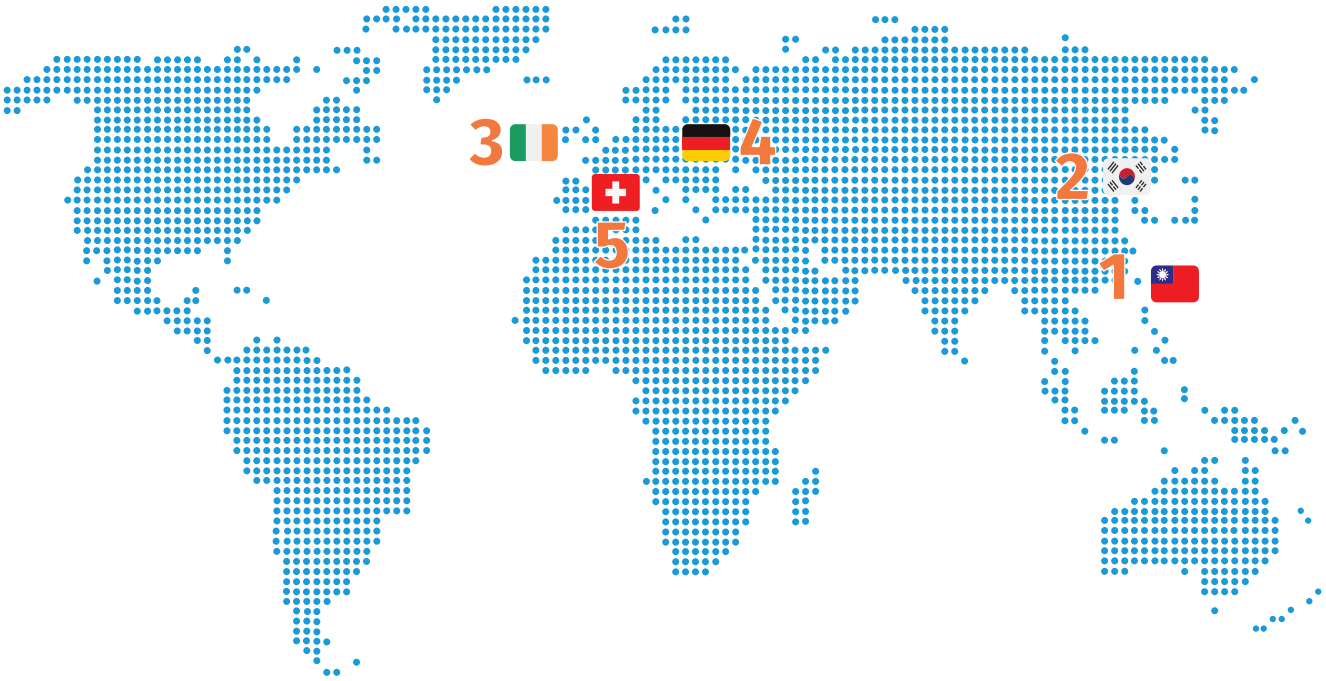


Figure 1 | Average scores in the SDG 9 Industry Index by country group



Top 10 economies in the SDG 9 Industry Index

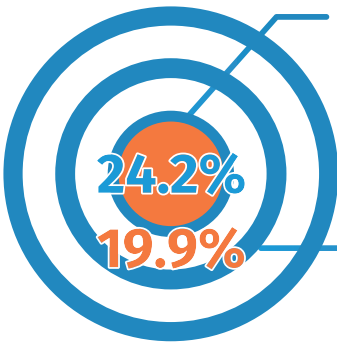
1. Taiwan, Prov. of China
2. Republic of Korea
3. Ireland
4. Germany
5. Switzerland
6. Czechia
7. Singapore
8. Japan
9. Slovenia
10. Austria

The gap between high-income and low-income countries is widening

The rising share of manufacturing in high-income industrializing economies suggests a shifting economic structure towards a prioritization of manufacturing. However, middle-income industrializing economies achieved only limited progress in this target, which could be a cause for concern, considering that industrial development remains crucial for maintaining sustained growth and escaping the middle-income trap. Avoiding premature deindustrialization should therefore be a policy priority for this country group.

The weight of manufacturing in high-income industrial economies has diminished considerably. This corroborates that this country group is experiencing a gradual process of de-industrialization. Manufacturing increased slightly in low-income economies—which includes many Least Developed Countries (LDCs)—yet not fast or substantial enough to achieve the SDG 9 industry-related targets by 2030. While Asian LDCs are making significant strides in terms of increasing the share of manufacturing in both economic output and manufacturing employment, African LDCs have made very limited progress or in some cases even regressed.

African LDCs are not on track to reaching the target share of manufacturing in GDP by 2030!



24.2% is the target share LDCs should reach by 2030

Asian LDCs reached **19.9%** in 2021

African LDCs achieved **only 9.1%** in 2021

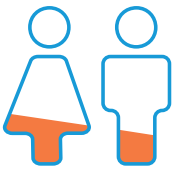
9.1%

Jobs are not keeping pace with manufacturing

The manufacturing engine seems to be running out of steam, despite being a pillar of economic development and consistently demonstrating resilience. The sector's growth decelerated in 2022 and has stalled in the first half of 2023. Another notable observation is that manufacturing employment never recovered from the financial crisis and is declining. The underlying reasons are linked to globalization, increasing automation and a growing concentration of manufacturing activities in a limited number of countries. Thus, the underlying reasons for this trend are not a reduced capacity of the manufacturing sector to generate jobs. This "jobless" growth of manufacturing implies that the sector's contribution to employment and to providing livelihoods could be at risk.

Manufacturing employment in total employment fell to 13.6%, while **manufacturing** as a share of GDP rose to 16.8%

Gender-transformative policies are needed to counter the relative decline of women's participation in manufacturing employment



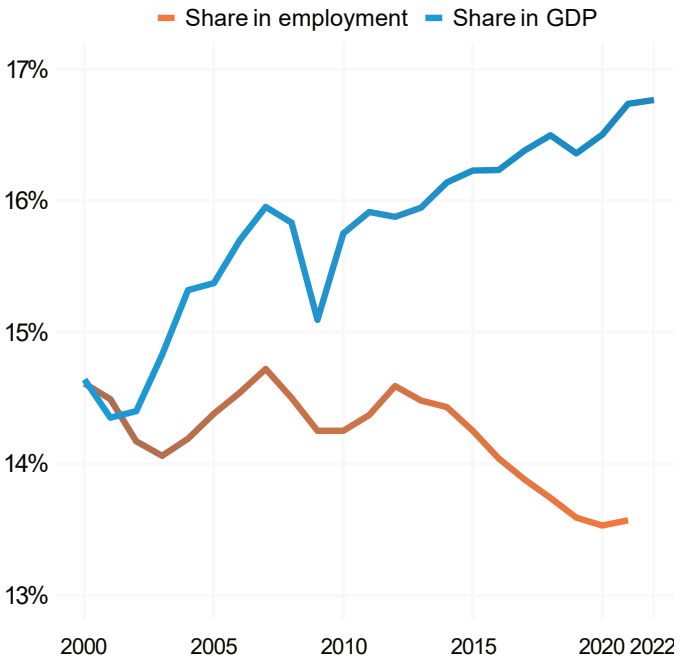


Figure 2 | Proportion of manufacturing in world GDP and employment

Some progress in structural change is evident in low-income economies, where a positive trend in the share of manufacturing employment was visible. Middle-income industrial economies (excluding China) also saw some improvements. However, considering that manufacturing employment only accounted for 6.1 per cent of total employment in these country groups in 2021, there is still a large gap with the levels reached in industrialized economies. Moreover, the limited growth of manufacturing production in these economies raises uncertainties about sustained employment growth in the sector.

Spotlight on Africa and LAC: Progress remains uneven and insufficient to reach SDG 9

The majority of countries in Africa have made either negative or insignificant progress on all SDG 9 industry-related targets since 2015, indicating that the region is critically off course for achieving the SDG 9 targets. Africa underperforms in terms of share of manufacturing in economic output and participation of small-scale industries in manufacturing, which is crucial for sustainable industrialization and job creation.

Targeted strategies, coordinated efforts by governments, the private sector, financial institutions and the international community are needed to drive meaningful progress, especially in African LDCs. Moreover, many countries in Africa still lack sufficient data for monitoring SDG 9, which poses a major challenge for monitoring progress and implementing evidence-based policies to support industrialization.

The Latin America and the Caribbean (LAC) region witnessed a general deceleration in the SDG 9 Industry Index, suggesting that a de-industrialization process is underway. The trends, in particular, of share of manufacturing in economic output and manufacturing employment in total employment were negative or stagnant, raising concerns about the LAC region's likelihood to reach at least partial progress towards the SDG 9 industry-related targets by 2030. One silver lining in contrast to the Africa region is that LAC has some of the highest levels of access to financing for small firms in the world and has favourable participation prospects for small-scale industries in the economy.

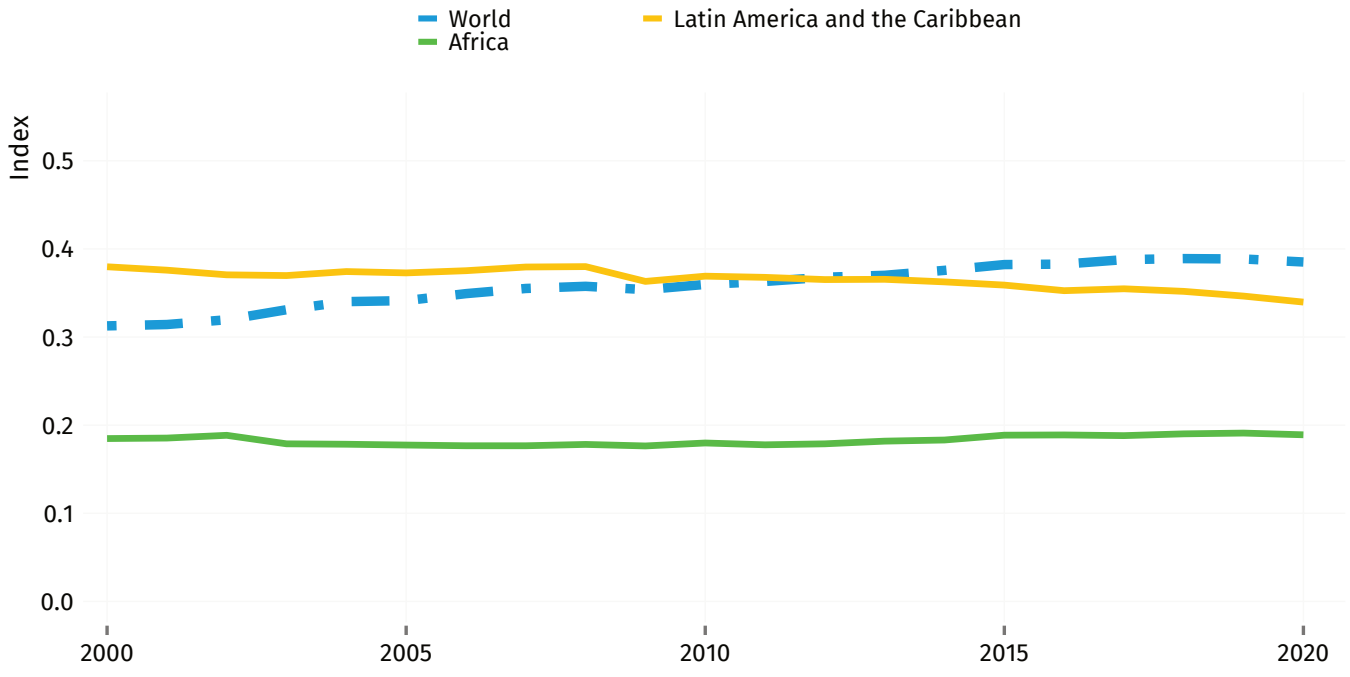


Figure 3 | SDG 9 Industry Index average scores by region

Technological upgrading fuels economic growth, but concerns about disparities are on the rise

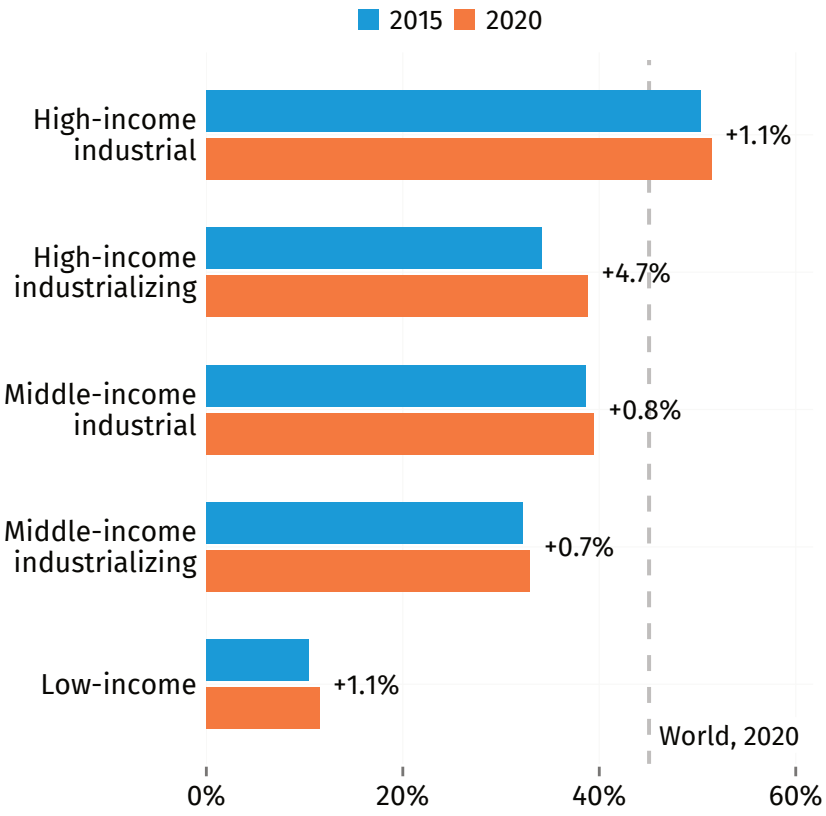


Figure 4 | Share of MHT MVA in total MVA by country group

Manufacturing in LDCs remains concentrated in low-technology industries

The share of medium- and high technology (MHT) industries in global manufacturing production has remained stable over the years at around 45 per cent. These industries, which include computers, electronics and pharmaceuticals, among others, are a driving force of economic growth and have proven their resilience during recent global crises.

MHT industries continued to grow, albeit at a moderate pace, while activity in lower-technology industries started declining in 2022 in the face of global instability, rising prices, tighter economic policy and high uncertainty. This positive trend indicates progress towards SDG 9, but could lead to growing inequalities, with countries specializing in low-technology sectors at risk of being left even further behind.

Low-income economies trail far behind other country groups, with their manufacturing sectors remaining concentrated in low-technology, mostly resource-based industries. High-income industrial economies on the other hand, witnessed the highest level of technology upgrading, with over half of their MVA originating in MHT industries.

Manufacturing activity and CO_2 emissions are showing signs of decoupling, but further action is needed

Since reaching a peak in CO_2 emissions in 2014, the manufacturing sector – despite continued growth – has witnessed a gradual reduction in CO_2 emissions. While this trend is promising, total emissions from manufacturing remain high, underscoring the need for further efforts to align manufacturing with climate goals.

There are stark differences between different income groups. The manufacturing sector in high-income industrial economies registered the lowest CO_2 emissions, indicating a shift away from carbon-intensive industries towards knowledge-based manufacturing and high value-added services. In contrast, high- and middle-income industrializing economies remain the largest polluters, with a large share of their industry still dependent on carbon-intensive sectors, such as petroleum refining, and on resource-based manufacturing.

Low-income economies have made some modest progress in reducing their manufacturing sectors' CO_2 emission intensity and promoting the adoption of clean technologies, including green energy sources, such as green hydrogen. Moreover, energy efficiency improvements will be crucial to ensure that these countries do not follow in the footsteps of other country groups whose past development paths were emission-intensive. A transition towards high-technology, innovation-driven industries translates into advances in environmental sustainability. Formulating strategies for low-carbon energy technologies and green manufacturing requires a comprehensive and collaborative approach, calling for an alignment of climate and energy security priorities with economic opportunities.

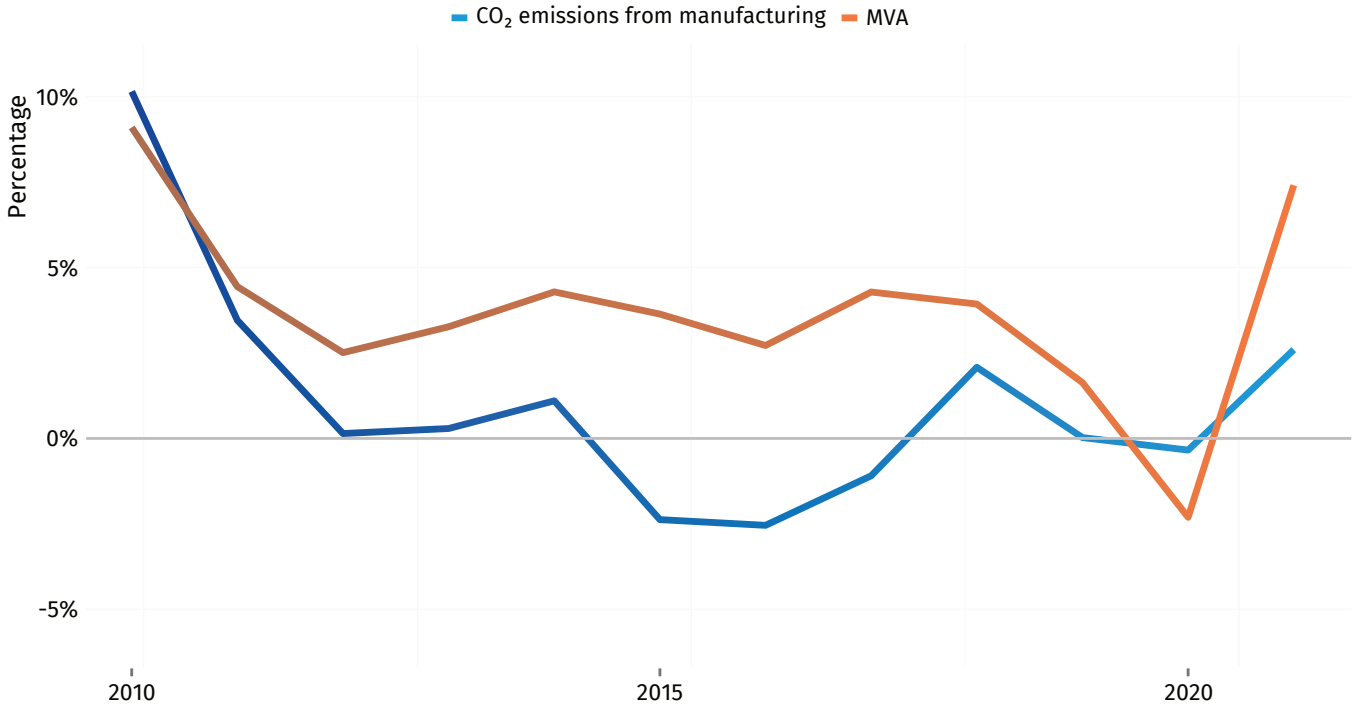


Figure 5 | Annual growth rates of Global CO^2 emissions from manufacturing and MVA

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Progress towards SDG 9: A long road ahead

Key messages

The results of the SDG 9 global outlook assessment present a clear picture: unless progress is resolutely accelerated in the coming years, the world will not reach the SDG 9 industry-related targets by the end of the 2030 Agenda.

1. **The most significant improvement since 2015 has been achieved in reducing manufacturing's CO_2 intensity**, with 44.3 per cent of countries having registered substantial or fair progress by 2020.

2. **Limited headway has been made in the target share of manufacturing employment in total employment**, with only 16.6 per cent of economies demonstrating substantial or fair progress.

3. **LDCs have achieved limited progress towards promoting inclusive and sustainable industrialization** in terms of share of manufacturing in GDP and in employment, though Asian LDCs are quickly advancing towards attaining the target.

4. Only a small share of global economies are on track to achieving the SDG 9 industry-related targets.

5. **Over half of economies worldwide must reverse trends and start moving decisively towards the targets**, in particular for share of MHT industries in manufacturing and share of manufacturing in GDP.

Do you want to know more?

This overview is based on the UNIDO SDG 9 Progress Report 2023. The 2023 edition provides a comprehensive overview of global and regional trends in industrial development and progress towards the Goal. Based on the industry-related indicators of SDG 9, for which UNIDO is the custodian agency, the report offers insights into recent developments across regions and country groups. The report makes use of UNIDO SDG 9 Industry Index, a benchmarking tool covering 137 countries worldwide. Additionally, it provides a concrete evaluation of progress achieved and the prospects of achieving the Goal by 2030. This 2023 edition of the report includes a thematic chapter on SDG 9 data availability, identifying the main gaps and proving a roadmap for bridging them and completing the statistical evidence needed for accelerating progress towards the Goal.
You can access the publication at the UNIDO Statistics Data Portal (stat.unido.org) or follow the QR-code.

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