



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

Progress by innovation



INDUSTRIAL DEVELOPMENT REPORT 2024



**TURNING CHALLENGES INTO
SUSTAINABLE SOLUTIONS**
The New Era of Industrial Policy

Overview

INDUSTRIAL DEVELOPMENT REPORT

2024

TURNING CHALLENGES INTO SUSTAINABLE SOLUTIONS

The New Era of Industrial Policy

About UNIDO

UNIDO is a specialized agency of the United Nations with a unique mandate to promote, dynamize and accelerate industrial development. Its mandate is reflected specifically in Sustainable Development Goal (SDG) 9: “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”, but UNIDO’s activities contribute to all the SDGs. UNIDO’s vision is a world without poverty and hunger, where industry drives low-emission economies, improves living standards, and preserves the livable environment for present and future generations, while leaving no one behind.

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Contents

FOREWORD	6
EXECUTIVE SUMMARY	8
ACKNOWLEDGMENTS.....	10

PART A

INDUSTRIAL POLICY: A SOLUTION TO MEET GLOBAL CHALLENGES AND ACCELERATE PROGRESS ON THE SDGS **12**

Section 1. Global challenges	14
Section 2. Industry brings solutions.....	20
Section 3. Shaping the future: The next generation of industrial policy	26
Section 4. Turning challenges into opportunities: a new deal for fair globalization and solidarity	38

PART B

INDUSTRIAL POLICIES IN ACTION: REGIONAL PERSPECTIVES **42**

Section 5. Africa: from SDG assessment to policy solutions	44
Section 6. Asia-Pacific: from SDG assessment to policy solutions	50
Section 7. Eastern Europe: from SDG assessment to policy solutions	54
Section 8. Latin America and the Caribbean: from SDG assessment to policy solutions.....	58

NOTES AND REFERENCES

FOREWORD

Gerd Müller

Director General

United Nations Industrial Development Organization (UNIDO)



UNIDO is a specialized agency in the UN system with a unique mandate to promote and strengthen sustainable industrial development. In the face of the multiple global crises that we are facing today together, this mandate is more important than ever.

Looking at the world around us, the challenges before us are all too clear. A world with many wars and conflicts - a world where a billion people go to bed hungry every day and struggle with poverty and malnutrition. A world where resources are scarce, where access to clean water is precarious. A world where especially the Global South is suffering the impacts of climate change, and the poorest of the poor are hit the hardest. And where developing countries are still struggling to fully recover from the impacts of the COVID-19 pandemic. Moreover, the gap between rich and developing countries ever widens.

We live in an interdependent world, everything is interconnected. We must recognize that we share one planet and bear responsibility for global developments which ultimately impact us all.

If today 10 per cent of the most affluent people residing mainly in the industrialized countries own 90 per cent of the wealth, and 20 per cent of us are responsible for 80 per cent of the global emissions and environmental pollution, then something is not right with how we are cooperating as one world. Thus, I reiterate that industrialized countries have a special responsibility: a duty to solidarity. They must live up to their many development commitments. Together we should demand much more strongly that the industrialized countries achieve the 0.7 per cent of GDP development spending target.

What we need is a new global ethical code of responsibility and a rethinking of our models of growth, globalization and sustainable development. This in turn necessitates a fair balance of interests between rich and poor, between industrialized countries, developing countries and emerging economies. We have the technologies, the knowledge and the investment resources to provide effective answers to growing global challenges. But knowledge alone is not enough. The countries of the Global South need a development perspective. A precondition for this is access to sustainable energy for all, because energy is the basis of any and all development. Moreover, the growing population in developing countries will need decent jobs - industry can provide these! We need long-term investment in sustainable industrial development, skills training, and above all true global partnership and solidarity to give the hundreds of millions of young people worldwide a promising perspective for the future. The world must act now, and the world must act together for our common benefit and our shared future.





EXECUTIVE SUMMARY

We live in a complex and challenging world, marked by resource scarcity, global warming and widening socio-economic disparities, which disproportionately affect developing countries. Amidst these challenges, our world today is also marked by technological breakthroughs that offer unprecedented opportunities to accelerate inclusive and sustainable development.

The Industrial Development Report 2024 (IDR24) stresses the pivotal role of the industrial sector in delivering sustainable development solutions, given its strong impact on societal and environmental goals. Sustainable industrialization involves fighting climate change, accelerating economic growth, and generating millions of decent jobs, while harnessing cutting-edge technologies. The report highlights that every manufacturing job creates 2.5 jobs, on average, in other sectors of the economy, with the manufacturing industry significantly contributing to green innovation compared to other sectors: 60 per cent of all green patents in the world are held by industrial firms. Accelerating sustainable industrial development is therefore crucial for achieving the Sustainable Development Goals (SDGs).

However, industrialization does not happen on its own. It requires investments, coordinated efforts and carefully designed policies. The industrial policies of the future cannot simply replicate those of the past. This report advocates for a new era of modern industrial policies with four important elements.

First, modern industrial policies should align with the SDGs. Second, they should be future-ready and must consider the megatrends that are reshaping the world right from inception: the energy transition, the fourth industrial revolution, the rebalancing of global production and trade flows as well as demographic trends. Third, modern industrial policies should be collaborative. Governments cannot solve today's challenges on their own. Industry and business must jointly contribute to policy design and ensure effective implementation in the context of private sector development. Finally, such policies should be regionally coordinated to mitigate tensions and unlock the full potential for cooperation amongst neighbours.

The IDR24 introduces a new approach to comprehensively assess progress on sustainable industrialization. This approach takes several indicators into account. In addition to SDG 9 (industry, innovation and infrastructure), it considers SDG 7 (affordable and clean energy) and SDG 8 (decent work and economic growth) as well. The report analyses the latest available data from 2021. To assess the speed

of progress, pre-COVID data from 2009-2019 was used, assuming that most industrial sectors have or will soon revert to pre-COVID trends. The results of the analysis are clear. Global progress towards industry-related SDGs has been far too slow and has been further derailed by the COVID-19 pandemic. Urgent attention, specifically in developing countries, is required in three critical areas: clean energy, decent jobs and innovation.

In 2021, developing countries lagged behind innovation-related targets for 2030 by 80 percentage points and pre-COVID progress was also disappointingly sluggish. Meeting the targets would have taken more than a century, as only 0.33 percentage points of the gap towards the goal was reduced annually. Thus, even with a return to pre-COVID-19 trends, achieving the targets is beyond reach at this pace. A similar picture emerges for employment and clean energy.

Assessing regional progress highlights that priority areas for investment and intervention differ across regions. This fact needs to be accounted for when designing future industrial policies. For example, 90 per cent of the population in developing countries, on average, had access to energy in 2021, compared to only 60 per cent in Africa. This highlights the urgent need to channel targeted investments on the African continent to energy access. Moreover, the fact that industrial sector performance in countries in Latin America and the Caribbean is decreasing, while the region was already approaching the 2030 targets, is particularly concerning. Now, the region is showing signs of premature deindustrialization, while developing countries were generally making progress in closing the gap on the industry-performance targets.

Effective modern industrial policies alone are insufficient without an entirely new level of international cooperation and solidarity. This necessitates the transfer of expertise and technologies. It also calls for investments with the long-term vision of creating real structural change. The international community needs to commit to increased and sustainable financing, as well as to transforming the global financial system with a focus on fairness and developing countries' needs. Moreover, we need to invest more in our biggest asset, namely providing the world's youth with the skills they need to have a promising future.

This overview document, which was prepared for the twentieth session of UNIDO's General Conference, presents the main findings and key messages of the IDR24.



ACKNOWLEDGMENTS

The *Industrial Development Report 2024* (IDR24) was prepared under the overall guidance of Gerd Müller, Director General of the United Nations Industrial Development Organization (UNIDO). It is the result of intense research efforts, fruitful discussions and close collaboration among UNIDO and research partner institutions, global experts and policymakers from all over the world. The in-house team was headed by Cristiano Pasini, Director of the Division of Capacity Development, Industrial Policy Advice and Statistics, and Nobuya Haraguchi, Chief of the Industrial Policy Research Unit. Alejandro Lavopa coordinated the production process and played an instrumental role in the successful completion of the report. The in-house team comprised Fernando Cantu, Carolina Donnelly, Charles Fang Chin Cheng, Muazu Ibrahim, Gina Martí, María de las Mercedes Menéndez, Federico Riccio and Cecilia Seri.

A collection of commissioned regional reports supported the drafting of this edition of the IDR. These were submitted by the following experts: João Carlos Ferraz and Wilson Peres, Institute of Economy of the Federal University of Rio de Janeiro (IE-UFRJ); Ashraf Mishrif, Oman Chamber of Commerce and Industry Chair in Economic Studies at Sultan Qaboos University; Dato' Rajah Rasiah, Asia-Europe Institute (AEI) at University of Malaya; Fiona Tregenna, Rex Asiama, Elvis Avenyo, Alexis Habiyaemye and Phumzile Allison Ncube, South African Research Chair in Industrial Development (SARChI) at University of Johannesburg; Zuzana Zavorská, Nikita Egorov, Branimir Jovanović and Olga Pindyuk, Vienna Institute for International Economic Studies (WIIW). Additional background materials were produced by Antonio Andreoni, SOAS University of London; Victor Delbuono and Carlos Freytes, FundAR; Mateus Labrunie, David Leal-Ayala, Carlos López-Gómez, Jennifer Castañeda-Navarrete, Michele Palladino, and Zongshuai Fan, Cambridge Industrial Innovation Policy, IfM Engage, University of Cambridge; Clemente Ruiz Durán, Universidad Nacional Autónoma de México; Marco Sanfilippo, University of Torino; and Roman Stöllinger, Delft University of Technology.

The report greatly benefited from a regional consultation with representatives from UNIDO Member States and prominent regional experts on industrial policy for SDG acceleration, held in Vienna in June 2023. The consultation was made possible thanks to the efforts of an in-house task force led by Ciyong Zou, Deputy to the Director General and Managing Director of the

Directorate of Technical Cooperation and Sustainable Industrial Development, and comprising of Fakhruddin Azizi, Julius Blaser, Rana Ghoneim, Christoph Klose, Virpi Stucki and Florentina-Roxana Vataselu-Jitariu. The following UNIDO staff also contributed to organizing these consultations: Tsung Ping Chung, Victor Djemba, Solomiya Omelyan, Cecilia Ugaz and Jie Zhao.

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PART A

**Industrial policy: a solution
to meet global challenges and
accelerate progress on the SDGs**



SECTION 1. GLOBAL CHALLENGES

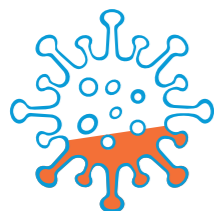
- 1.1 Global polycrisis hits the developing world: SDG progress hampered
- 1.2 Megatrends reshaping the world: developing countries at risk of being sidelined



Global polycrisis hits the developing world: SDG progress hampered

GLOBAL POLYCRISIS...

Causes



COVID-19 pandemic



Armed conflicts



Climate-induced catastrophes

The lingering effects of COVID-19, amplified by a rising number of armed conflicts and climate-change catastrophes, brought dramatic consequences around the world.

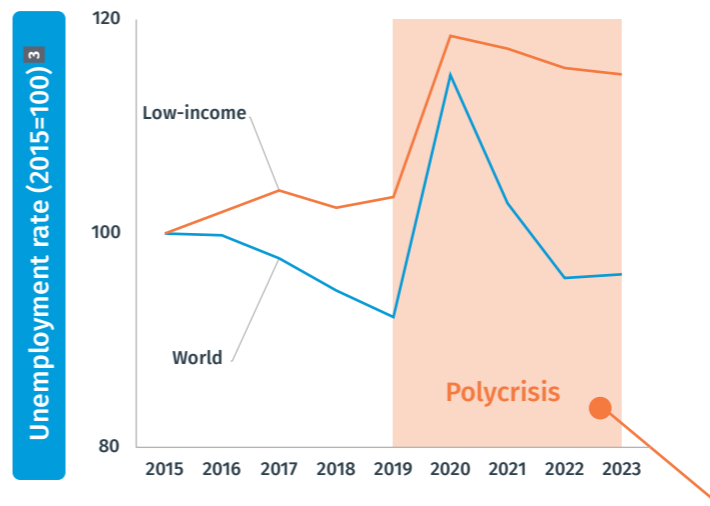
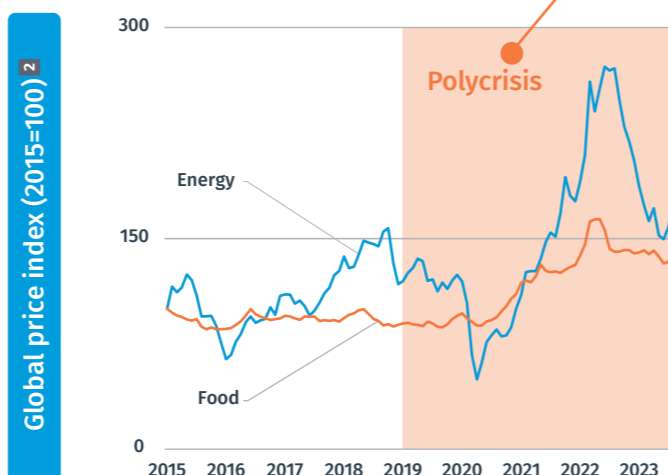
HITS THE DEVELOPING COUNTRIES ...

Consequences

- Surge in inflation and unemployment
- Disruptions in value chains
- Unprecedented increase in extreme poverty and hunger

122 million

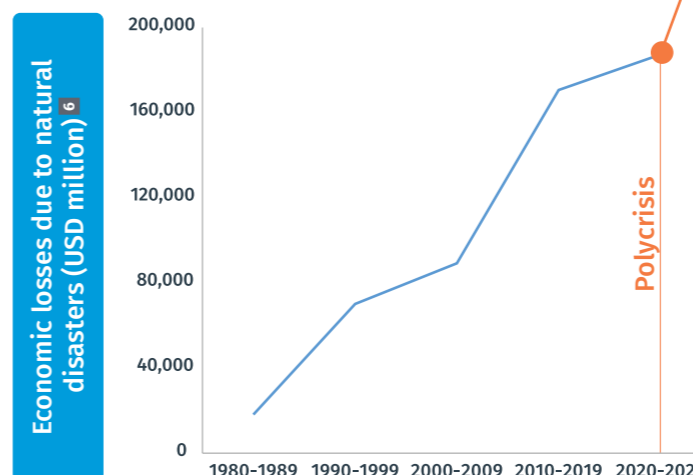
more people faced hunger in 2022 than in 2019, before the global pandemic¹



70 million

more people are estimated to be in extreme poverty⁴

number of recorded disasters increased by a factor of five in the past 50 years⁵



- Massive lay-offs and sharp increases in prices due to COVID-19 and the Ukraine armed conflict led to an increase in extreme poverty⁴ and food deprivation.¹ Economic losses have increased sevenfold since 1970 due to climate change-related catastrophes.⁵
- Low-income countries suffered the hardest hit. Unemployment rates and production at the global level have come back to pre-COVID-19 levels, whereas in low-income countries, the recovery has been much slower. At the same time, the surge in food prices has been particularly severe for low-income countries, which are more dependent on food. Low-income countries are also estimated to lose 1 per cent of their GDP per annum due to climate-attributed disasters, compared to 0.2 per cent in high-income countries.⁷

SDG PROGRESS AT RISK: HALTED OR REVERSED

15%
On track

48%
Moderately or severely off track

37%
Stagnation or regression

The combined effects of the polycrisis put at risk the achievement of all SDGs.⁸ At the midpoint to Agenda 2030, it is unlikely that the SDGs will be achieved. A course correction is urgently needed.

Megatrends reshaping the world: developing countries at risk of being sidelined



Energy transition

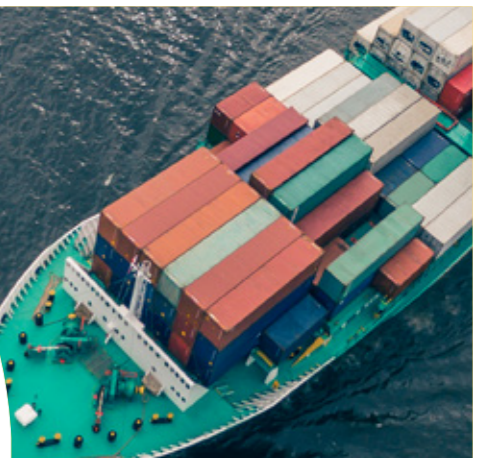
Climate change requires a sharp revision in production modes to reduce emissions and environmental degradation. Renewable energy sources are key elements of this new landscape. More stringent environmental regulations will come with new challenges.

1

A substantial shift in economic power is taking place. Developing Asia-Pacific is a new emerging pole in the global economy, primarily through a rapid integration into global value chains (GVCs). Growing geopolitical tensions and trends towards reshoring might revert this trend.

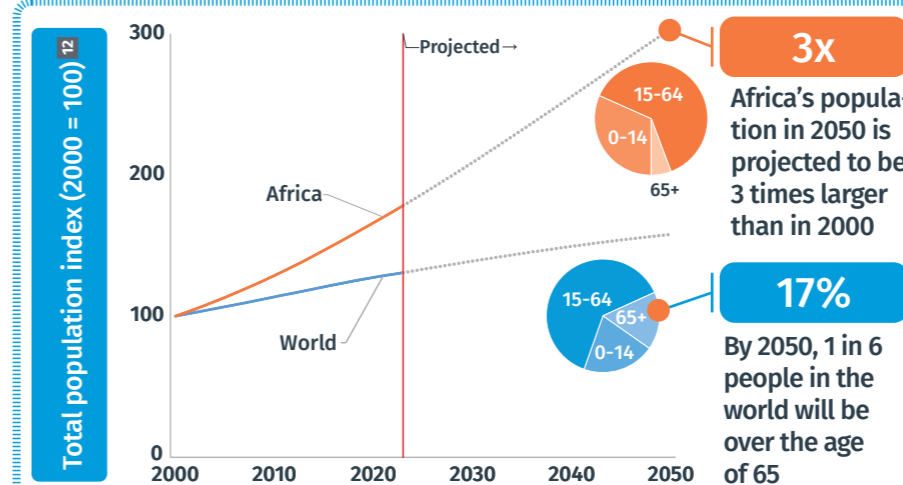
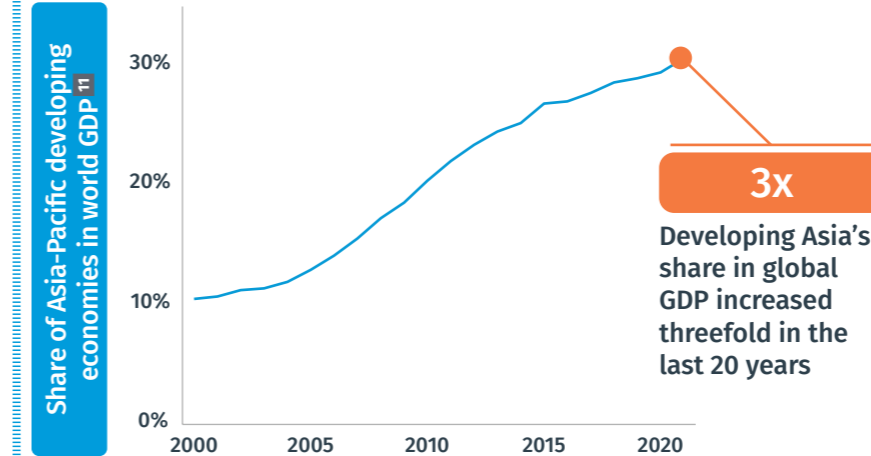
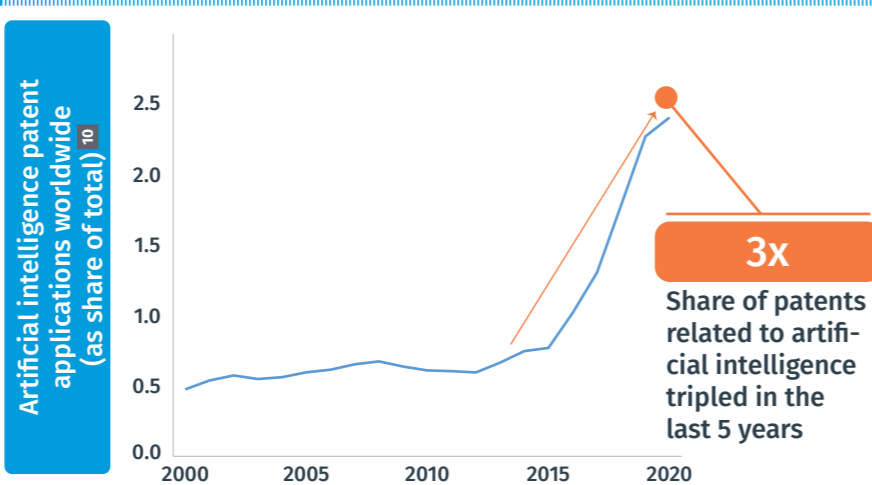
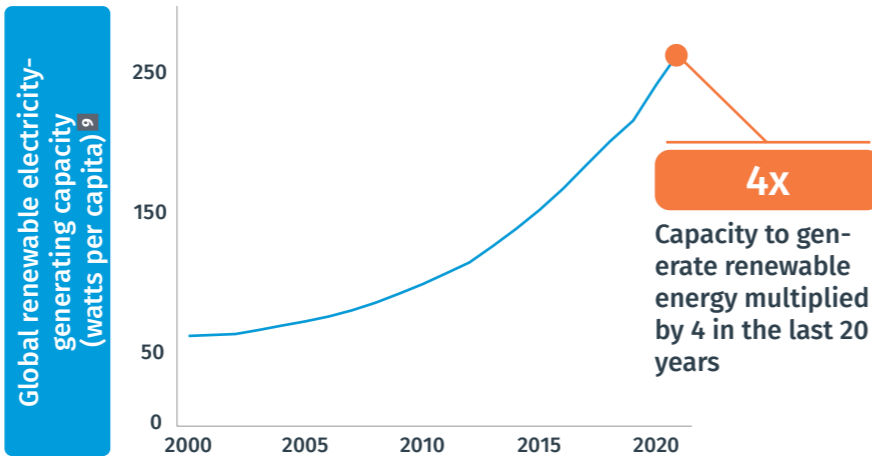
Global rebalancing

3



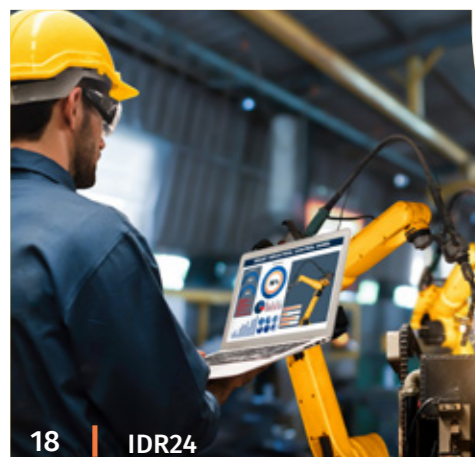
Challenges

- The world is rapidly changing, particularly in the area of fast-paced technology. While these innovations can act as catalysts for sustainable development, countries that do not have access to emerging technology are at risk of being left behind.
- These transformations pose new challenges for countries seeking to recover from the polycrisis and accelerate progress towards achieving the SDGs.



Solutions

- Government actions are needed to ensure a rapid recovery from the polycrisis and accelerate progress towards sustainable development.
- This means massive investments and suitable policies to direct those investments into the most beneficial sectors.



Fourth Industrial Revolution

Industry 4.0 technologies such as artificial intelligence, advanced robotics, the Internet of Things, additive manufacturing, big data analytics, and cloud computing, are reshaping the way we live, consume and produce.

2

Steady population growth in the developing world and a rapidly aging population in advanced countries pose major challenges for future development. The demand for food, energy and medicines and the need for more jobs will increase dramatically worldwide.

Demographic transitions

4



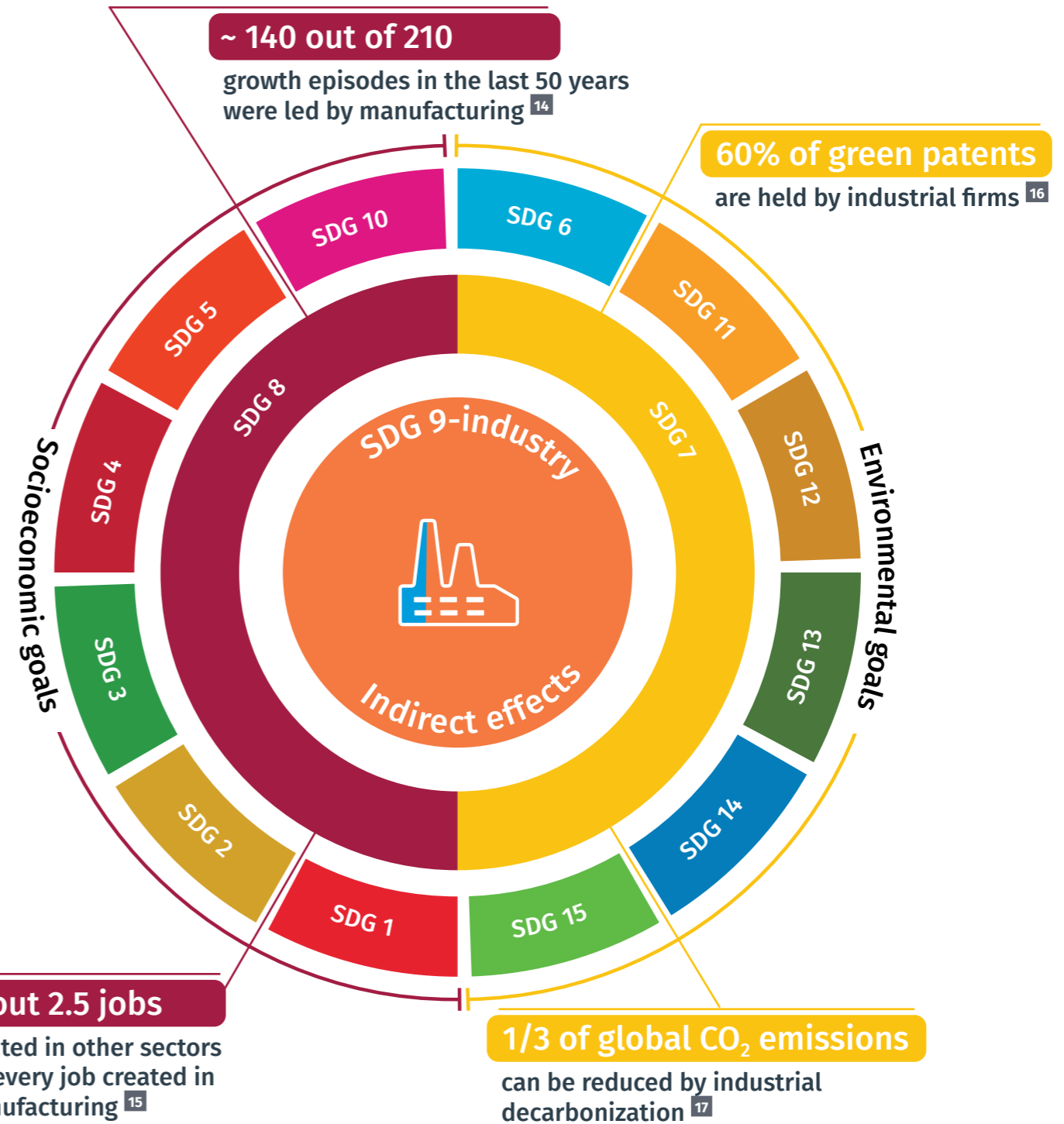
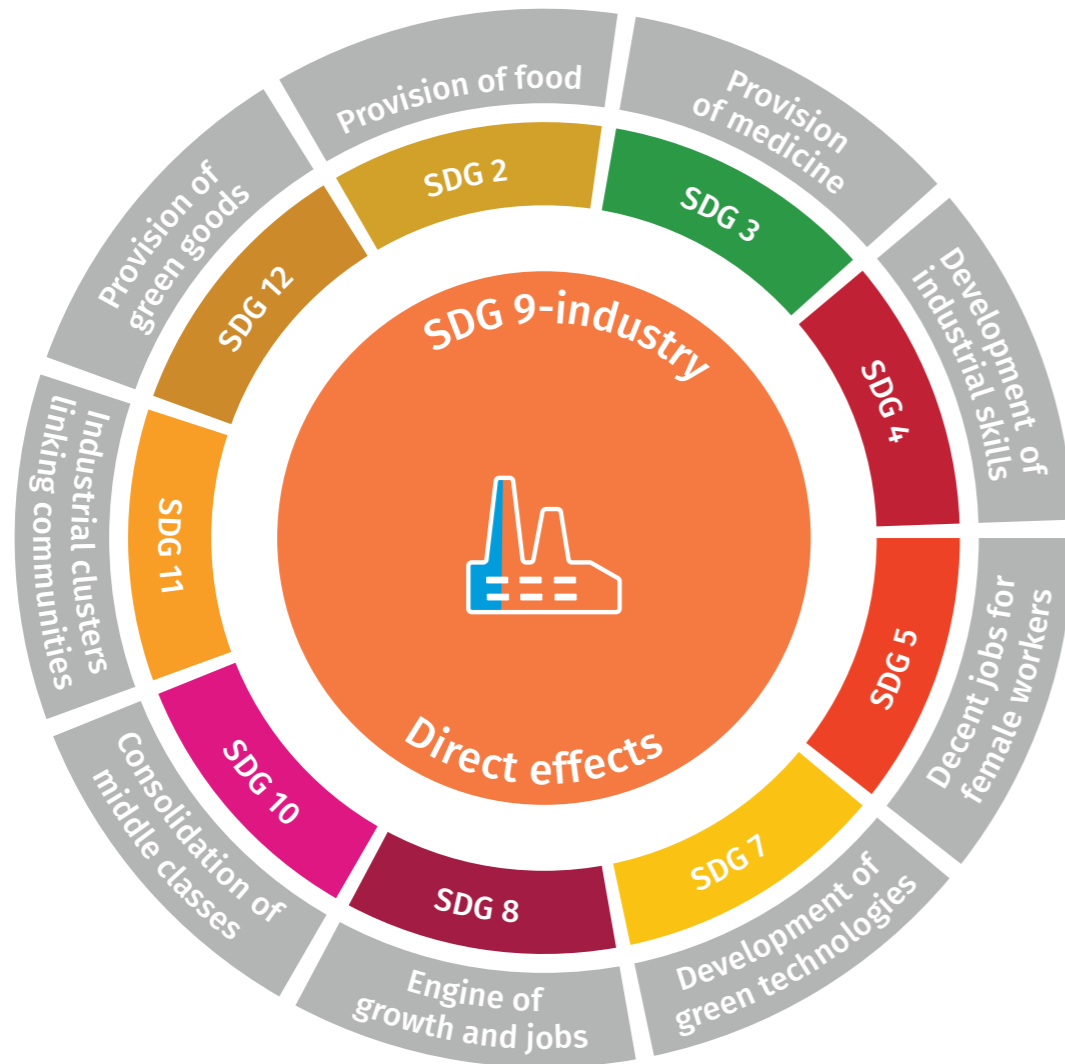
SECTION 2. INDUSTRY BRINGS SOLUTIONS

- 2.1 Accelerating the SDGs through industry
- 2.2 New industrial policies are urgently needed



INDUSTRY CAN BECOME A MAJOR ENGINE TO RESCUE THE SDGs

Industry is key to accelerating growth, innovation, creating jobs, reducing poverty and hunger, making more equal societies, and fighting climate change.

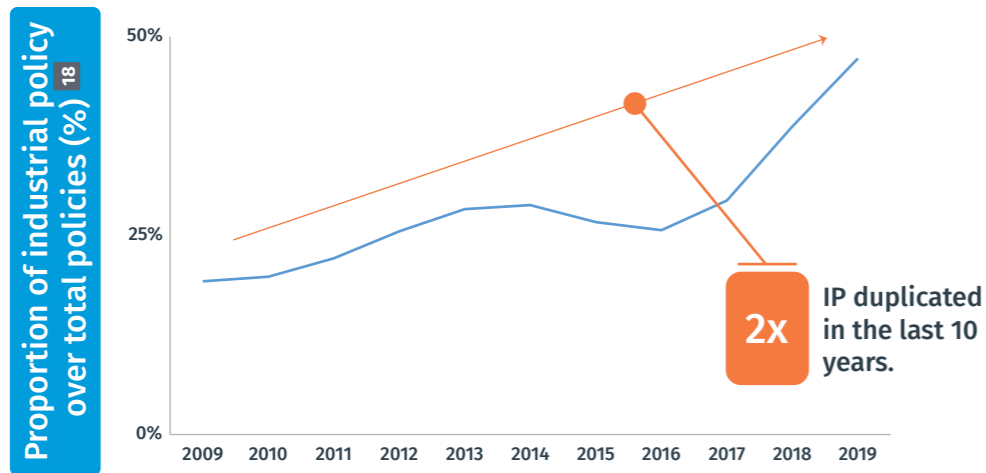


- When resources are scarce, they should go to activities with the strongest multipliers. Industry is particularly well-suited to accelerate progress as it directly and indirectly affects all SDGs.¹³
- Direct effects include: the provision of essential goods (SDGs 2, 3 and 12); the development of industrial skills (SDG 4) and new technologies to accelerate growth (SDG 8) and reduce emissions (SDG 7); the creation of decent jobs (SDGs 5 and 8); the development of a middle class (SDG 10); and the creation of industrial clusters (SDG 11).

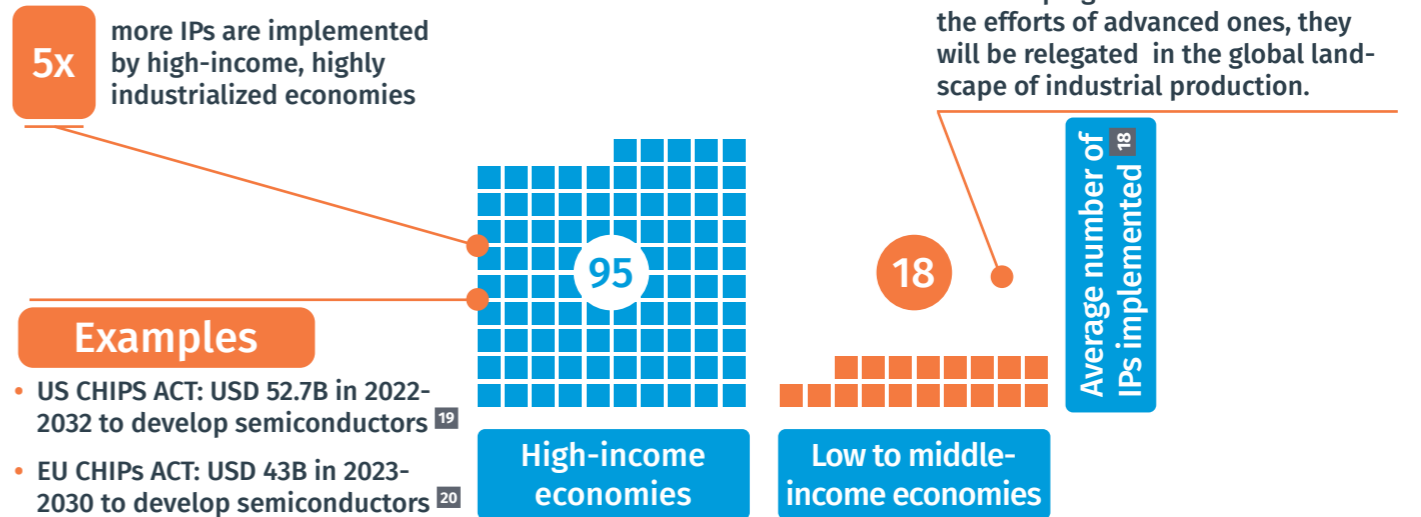
- Indirect effects materialize mostly through SDG 7 and SDG 8. Economic growth acceleration and the creation of decent jobs are the two primary drivers of achieving the socio-economic goals, such as poverty alleviation. Industrial innovations for the energy transition are fundamental for achieving environmental goals, such as climate action.
- Industrial development can potentially accelerate all SDGs, if it is set into motion by the next generation of industrial policy.

THE RENASCENCE OF INDUSTRIAL POLICY (IP)

Industrial policy is on the rise.



But it is primarily driven by high-income economies.



- The industrial sector will not automatically modernize, become competitive and sustain progress over time. It requires industrial policy.
- Recent years have witnessed a renaissance of industrial policy, which is at the top of the political agenda.

- This renaissance is not about igniting infant industries in less developed countries. It has been primarily motorized by the most industrialized countries of the world.
- Low-income countries are already at a disadvantage compared to advanced economies because their manufacturing sector is less productive and competitive.
- A revival of industrial policy in advanced countries could exacerbate these differences and widen the global divides, causing more challenges for developing countries to accelerate their industrialization.

Industrial policy (IP) refers to interventions that seek to change the structure of the domestic economy towards sectors, technologies, or tasks that are expected to offer better prospects for economic growth or societal welfare.



What is industrial policy?



Developing countries need new industrial policies today more than ever, but these policies must be more **inclusive and harmonized internationally**.

SECTION 3. SHAPING THE FUTURE: THE NEXT GENERATION OF INDUSTRIAL POLICY

- 3.1 A new mindset - putting the SDGs at the front
- 3.2 Looking into the future
- 3.3 Working in collaboration
- 3.4 Coordinating with the neighbours



A new mindset - putting the SDGs at the front

Modern industrial policy should combine four elements

Collaborative
to ensure success amongst all stakeholders, as governments alone cannot solve the challenges of today's world.

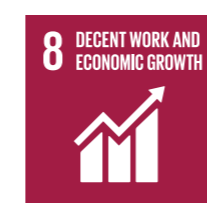
Future-ready
to avoid surprises and make the most of the opportunities.



SDG-oriented
to give a clear direction of change.

Regionally coordinated
to avoid tensions and unlock the full potential among neighbours.

- An SDG-oriented industrial policy²¹ should start with a clear assessment of where countries and regions are in terms of their progress towards achieving the SDGs.
- When it comes to industrial policy, the most immediate SDGs for action are SDG 7, SDG 8 and SDG 9.
- The Industrial Development Report 2024 (IDR24) proposes a new approach for assessing the progress of focus SDGs.
- IDR24 also discusses the main priority areas, challenges and industrial policy instruments that governments around the world can use to accelerate progress in these crucial dimensions.



How do we assess progress towards SDGs 7, 8 and 9?

Each of the three assessed SDGs combines multiple indicators associated with different targets. To operationalize the assessment, these indicators are clustered along three analytical dimensions for each SDG.²² Using official UN data²³, a composite indicator is calculated based on the distance to achieving the target, for each dimension, and in each region. Whenever possible, the target is defined using the ideal target implicit in the 2030 Agenda. This is the case, for instance, in indicator 7.1.1, “Proportion of population with access to electricity”, where the target was set to 100%. In all other cases, the target was defined based on the best performance in all countries with available data between 2000 and 2021 (after excluding outliers). The indicators were then normalized between zero and one, with the latter representing the optimal target achievement, and aggregated by dimension at the country level using arithmetic means. Finally, country-level indicators by dimensions were aggregated at the regional and sub-regional levels using population-weighted averages.

Mariana Mazzucato

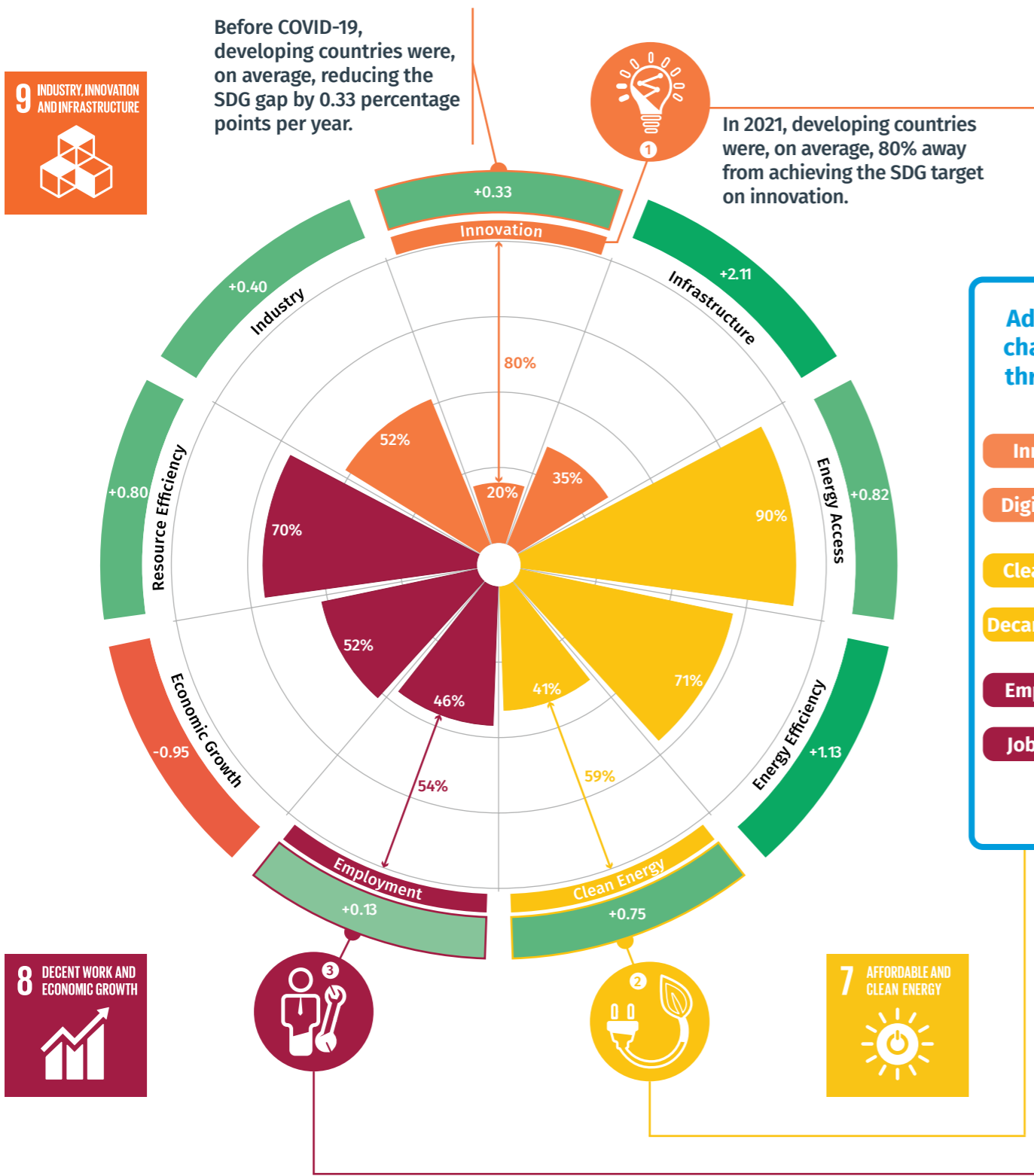
“One of the reasons why we have not been able to achieve the SDGs is that they are not embedded in our industrial strategies and innovation policies. A mission-oriented approach to an industrial strategy that uses the SDGs as challenges can start changing this. By placing the SDGs at the centre of our industrial, technological and innovation policies, we can direct our economies towards more inclusive and sustainable models. We need industrial strategies that are ambitious and introduce conditionalities to ensure that government support is directed to achieving the SDGs.”



Professor at University College London and Author of *Mission Economy*

Distance to SDG targets: the developing world in 2021

Industrial policy solutions to accelerate progress



• The assessment of SDG progress for the developing world²⁴ shows three areas that need special attention: innovation, clean energy and employment.

• Accelerating progress in these areas through industrial policy means supporting industrial digitalization, industrial decarbonization and industrial job creation. Each dimension requires specific policy instruments to address specific challenges.²⁵

ONGOING GLOBAL TRANSFORMATIONS OFFER OPPORTUNITIES TO ACCELERATE PROGRESS THROUGH WELL-CRAFTED INDUSTRIAL POLICIES



Energy transition



1

More stringent environmental standards for existing products will come together with new market opportunities in renewable-based goods and their inputs.

The four main megatrends shaping the world present significant challenges for developing countries, but at the same time, they open up new opportunities.

Energy transition products

1.1

Create industrial clusters around the exploitation of rare minerals and the production of new products required for the energy transition.



1.2

Clean energy production

Promote industrialization around clean energy production (e.g. wind, photovoltaic, green hydrogen).



IDR24 identifies eight areas of opportunity to accelerate SDG progress through the next generation of industrial policy.



4IR competitiveness

2.1

Increase industrial competitiveness through digitalization and 4IR skills development.



Digital solutions

2.2

Create new sectors providing digital solutions to advanced manufacturing.



Fourth Industrial Revolution

2

Advanced digitalization can spur industrial competitiveness, open new market opportunities and drive future innovations.

Global rebalancing



3

Global rebalancing such as reshoring, back-shoring and friend-shoring create problems on one side of the shore, but opportunities on the other side.



Relocating FDI attraction

3.1

Expand domestic industry by attracting FDI that is relocating due to major shifts in the global structure of production.



3.2

Greater integration

Upscale industrial production by tapping into regional markets through greater integration and policy coordination.



Each opportunity primarily affects SDG 9 - industry, but also impacts other SDG dimensions:

SDG 7 - Clean energy

SDG 9 - Innovation

SDG 8 - Decent work and economic growth

1.1

1.2

2.1

2.2

3.1

3.2

4.1

4.2

Leverage population growth for economic transformation through the development of labour-intensive industries.

Labour-intensive industries

4.1



Tap into growing demand for health and food to develop new industries or expand on existing ones.

Health and food industries

4.2

Population is growing exponentially in some parts of the world and aging rapidly in others. Demand for food and medicine will continue to grow worldwide.

4

Demographic transitions



Working in collaboration

- Modern industrial policies must stand at the frontier of knowledge to be future-oriented and harness the transformative potential of ongoing trends shaping the world. This ensures that they are not only reactive, but are also rather proactive and anticipate the needs of tomorrow.
- The market falls short in knowledge-sharing. A forward-thinking approach requires a continuous knowledge exchange between stakeholders, as neither the private sector nor the government can achieve this alone.
- Identifying solutions, deciding on technological investments, and setting overarching economic growth directions must be a collaborative effort between governments and businesses.
- Public-private sector collaboration is a foundational pillar for modern industrial policies. These partnerships must involve sharing risks and rewards, and having a collective vision for the future. Both parties must be equally invested, with the public sector showing leadership through bold visions, and the private sector bringing innovation and adaptability to the table.²⁶
- In the context of the megatrends, the significance of these partnerships becomes even more pronounced.²⁷

Energy transition



1

Public-private partnerships are crucial in addressing infrastructure barriers for industrial decarbonization and championing sustainable innovations. These partnerships can increase resource efficiency, enhance energy efficiency, enable fuel switching, advance carbon capture and storage, and gather better data for informed decision-making.

Fourth Industrial Revolution



2

Collaborative efforts are essential to accelerate technology adoption, especially with smaller firms. These efforts can range from pooling diverse expertise, providing demonstration facilities to establishing research linkages, and investing in enabling infrastructure.

Global rebalancing



3

Open collaboration in global and regional supply chain development can help anticipate and respond to disruptions, support business continuity planning, strengthen international coordination, and encourage the use of resilience-enhancing technology.

Demographic transitions



4

Public-private sector collaboration is essential to develop new skills and ensure the employability of future generations. This collaboration should build stronger ties between employers and training providers, promote on-the-job training, and diversify the workforce.

Andrea Illy

“The world might lose half of suitable land for coffee production in the next three decades as a result of climate change. This would put at risk the virtuous circle that exists between the well-being that coffee brings to consuming countries and its contribution to the development of the countries which produce it. This virtuous circle must be nurtured in order to improve the sustainability of the sector. The most urgent action needed to achieve this goal is to foster public-private partnerships aimed at boosting investments in climate change adaptation and mitigation, particularly related to smallholders’ coffee plantations in low-income countries.”

“



Chairman of illycaffè

Coordinating with neighbours

- The most pressing challenges confronting the world are global in nature, but the policy solutions to address them are designed and implemented by individual countries.
- At a national scale, industrial policies implemented by large and influential countries have major global implications.
- Policy coordination at the global and regional levels is paramount to ensure that common benefits are maximized, and the unintended negative impacts and harmful competition of policies are avoided.
- Supra-national policies and programmes can set a general framework for national-level industrial policies. Such frameworks provide guidance, coordination, and flexibility for each country to integrate industrial policies into existing national priorities and strategies, and to leverage their comparative advantages.
- International and regional cooperation can leverage the endeavours of national policies and existing networks, such as those led by development organizations. These networks have a strong potential to build and grow learning platforms for industrial policy best practices.



Jeffrey Sachs

“Solutions to the great sustainable development challenges must be pursued not only at the national level but also at the regional and global levels. No country can efficiently decarbonize by itself. An efficient net-zero energy system should also be pursued through regional-scale infrastructure and long-term strategic planning at the regional level. Regional strategies and cooperation also play a vital role in achieving economies of scale in research and development. My advice to all countries is to get along with your neighbours! Regional-scale cooperation and global cooperation across regions is our real path to success.”



Director of the Center for Sustainable Development at Columbia University



SECTION 4. TURNING CHALLENGES INTO OPPORTUNITIES: A NEW DEAL FOR FAIR GLOBALIZATION AND SOLIDARITY

4.1 Ingredients for success

4.2 The need for solidarity

Ingredients for success

The review of policy cases done in IDR24 demonstrates three important ingredients for success in a modern industrial policy:

- **Strong government capabilities:** a modern industrial policy has more ambitious targets than in the past while facing new challenges. The pre-condition for success is capacity building and strengthening of the government.
- **Proper financing:** even if capabilities are developed, a modern industrial policy can only reach the scale needed to make change happen if it has sufficient financial resources.
- **Wide societal consensus:** capacity and finance must go hand in hand with a wide societal consensus to ensure the continuity of industrial policy beyond political cycles.

A modern industrial policy combining all these ingredients provides the opportunity to ignite industry's full potential and accelerate the SDGs.

The international community can play a key role in supporting countries to make this happen.

The need for solidarity

Domestic efforts alone will not be sufficient. The international community must come together in solidarity to support the most vulnerable countries by:

- Ensuring expanded and sustainable **financing**, with a commitment to transform the global financial system and prioritize the needs of developing countries.
- Supporting the development of **government capabilities** to design and implement a modern industrial policy.
- Supporting the transfer of new **technologies** and domestic efforts to adapt them to the local conditions.
- Supporting the development of new **skills** to reduce unemployment and underemployment, increase productivity, and improve living standards.
- Opening the **policy space**.

José Antonio Ocampo

“Deep reforms are needed in the international financial system to support sustainable development and expand the provision of global and regional public goods, primarily in the struggle against pandemics and climate change. To this end, there is a need to continue to reform the Bretton Woods Institutions, broadening the voice and participation of developing countries in decision-making processes. It is also necessary to move towards a more representative body at the helm of the international economic cooperation system and build a denser, multi-level architecture, especially strong regional and sub-regional institutions, which are growing in importance as they support intraregional trade, investment flows and other economic integration goals.”

Professor at Columbia University and former UN Under-Secretary-General for Economic and Social Affairs, Executive Secretary of ECLAC and Finance Minister of Colombia



PART B

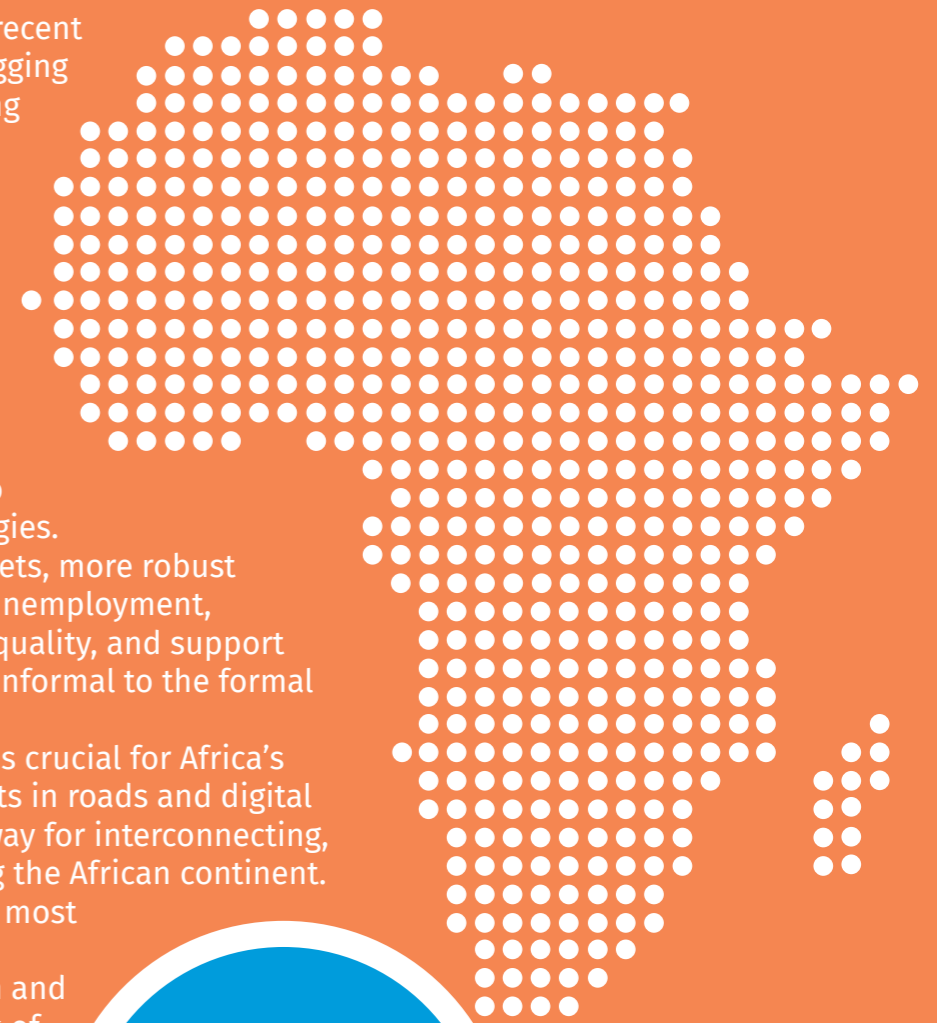
Industrial policies in action: regional perspectives



SECTION 5. AFRICA: FROM SDG ASSESSMENT TO POLICY SOLUTIONS



- Despite positive progress in recent years, **industry** in Africa is lagging compared to other developing regions. Urgent actions are needed to accelerate industrialization in Africa while promoting other SDGs.
- **Clean energy** offers a unique opportunity for Africa to accelerate progress on the SDGs. With its vast renewable resources, there is huge potential for Africa to leapfrog into green technologies.
- To improve **employment** targets, more robust policies that address youth unemployment, promote workforce gender equality, and support workers' transition from the informal to the formal economy are required.
- **Infrastructure development** is crucial for Africa's industrial growth. Investments in roads and digital infrastructure can pave the way for interconnecting, integrating, and transforming the African continent.
- **Innovation** stands out as the most pressing challenge. Without significant efforts in research and development, Africa is at risk of being left behind in the global technological race.



Albert Muchanga

“As part of promoting regional and continental value chain development, African countries are working together by leveraging the platform of the African Continental Free Trade Area. The aim is to harmonize their industrial policies and build specialized production hubs in specific and complementary sectors. Consequently, this will enable them to reap the benefits of a dynamic, inclusive and sustainable industrialization process across the continent. In this way, industrial policy can contribute towards the achievement of the United Nations SDGs in Africa and the African Union Agenda 2063.”



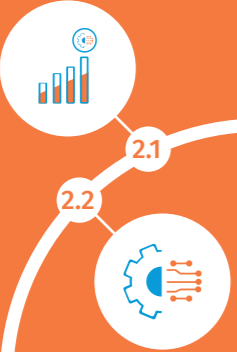
African Union Commissioner for Economic Development, Trade, Tourism, Industry and Minerals

Distance to SDG targets: Africa in 2021

SDG Assessment

- Africa's low performance in innovation indicates a critical area for improvement as this can hamper technology adoption and economic growth.
- Tapping into 4.0 technologies can accelerate innovation, industrial **competitiveness** [2.1] and economic **diversification** [2.2].

Areas of opportunity



Policy in action

- 2.1 Kenya's** Industry and Entrepreneurship Project 250+ (KIEP) is set up to increase productivity and innovation of SMEs.
- 2.2 Rwanda's** ICT Hub Implementation Framework seeks to improve innovative capabilities in ICT and develop technological capabilities to provide solutions in niche areas.

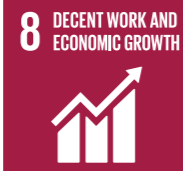
Opportunity Areas

- 2.1 4IR competitiveness
- 2.2 Digital solutions



Policy in action

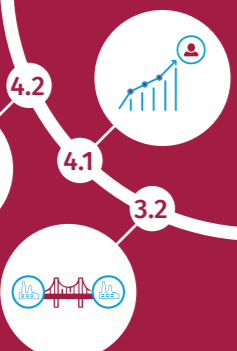
- 3.2 The African Continental Free Trade Area (AfCFTA)** is expected to spur intra-African trade, creating a common market to overcome many industrialization barriers faced by African countries.
- 4.1 Ethiopia's** Industrial Parks Development Programme (IPDP) aims at establishing and developing industrial parks to attract FDI and promote job creation.
- 4.2 Egypt's** National Industrial Development Strategy (NIDS) and the New Investment Law aim at leveraging the country's strengths to transform it into a leading hub in pharma.



Opportunity Areas

- 3.2 Greater integration
- 4.1 Labour-intensive industries
- 4.2 Health and food industries

Areas of opportunity



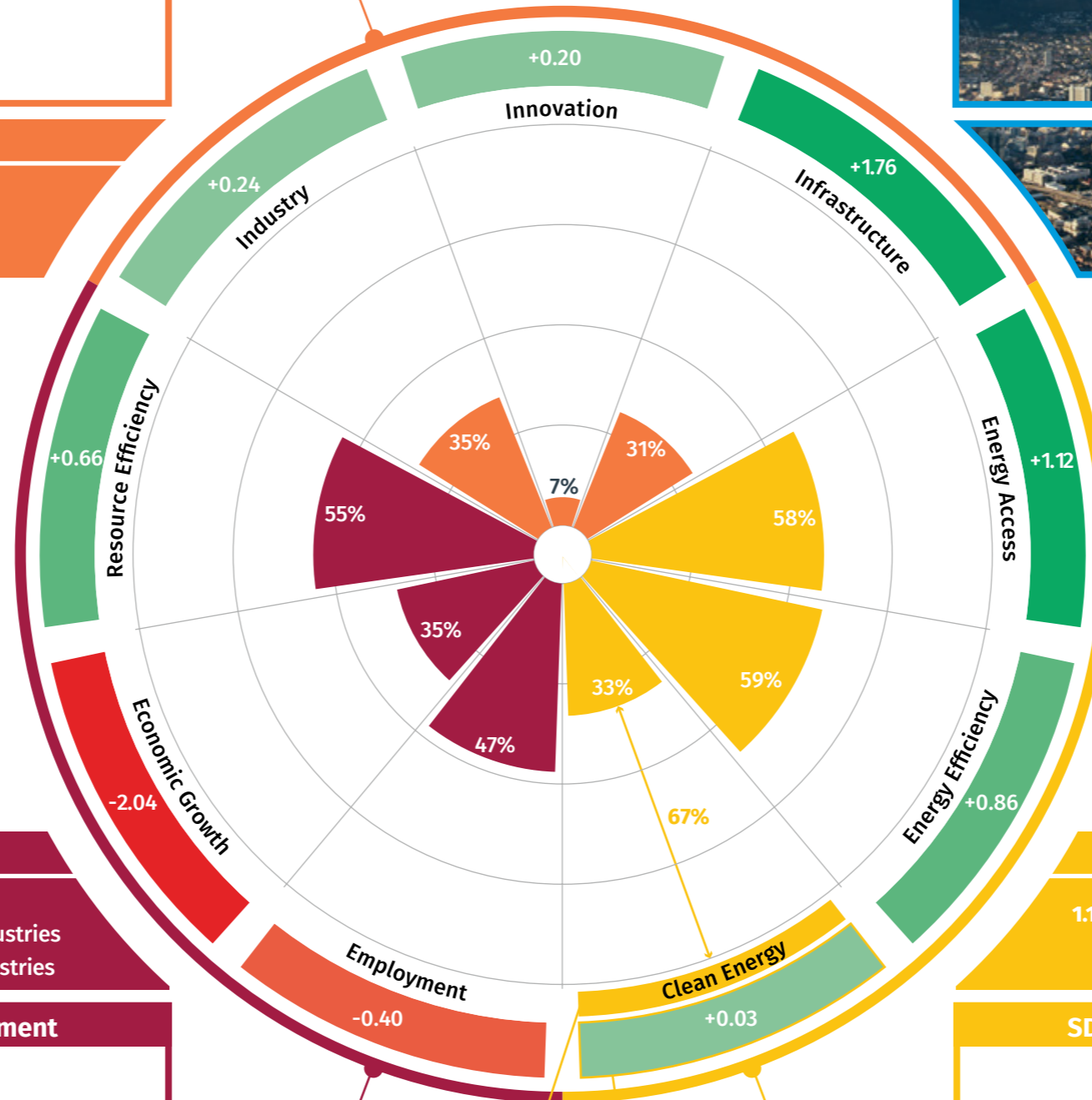
SDG Assessment

- Economic growth can be accelerated through deeper **regional integration** [3.2] and diversification towards sectors with **high expected demand** [4.2].
- Attracting FDI that is relocating to support **labour-intensive industries' development** [4.1] can help create jobs.

In 2021, African countries were, on average, 67% away from achieving the SDG target on clean energy.

How to read this graph?

Before COVID-19, African countries were, on average, reducing the clean energy gap by 0.03 percentage points per year.



Policy in action

- 1.1 & 1.2 Uganda's** National Development Plan (NDP) focuses on diversifying energy sources and improving energy access, including the production of solar energy-powered electric vehicles (EVs).
- 1.1 Nigeria's** National Automotive Industry Development Plan (NAIDP) focuses on bolstering the local production of vehicles, including EVs, to increase clean fuel consumption and reduce emissions.

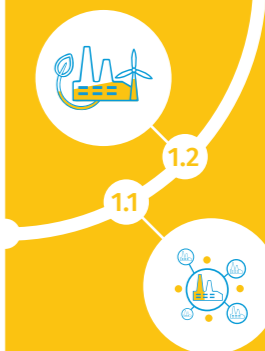


Opportunity Areas

- 1.1 Energy transition products
- 1.2 Clean energy production

SDG Assessment

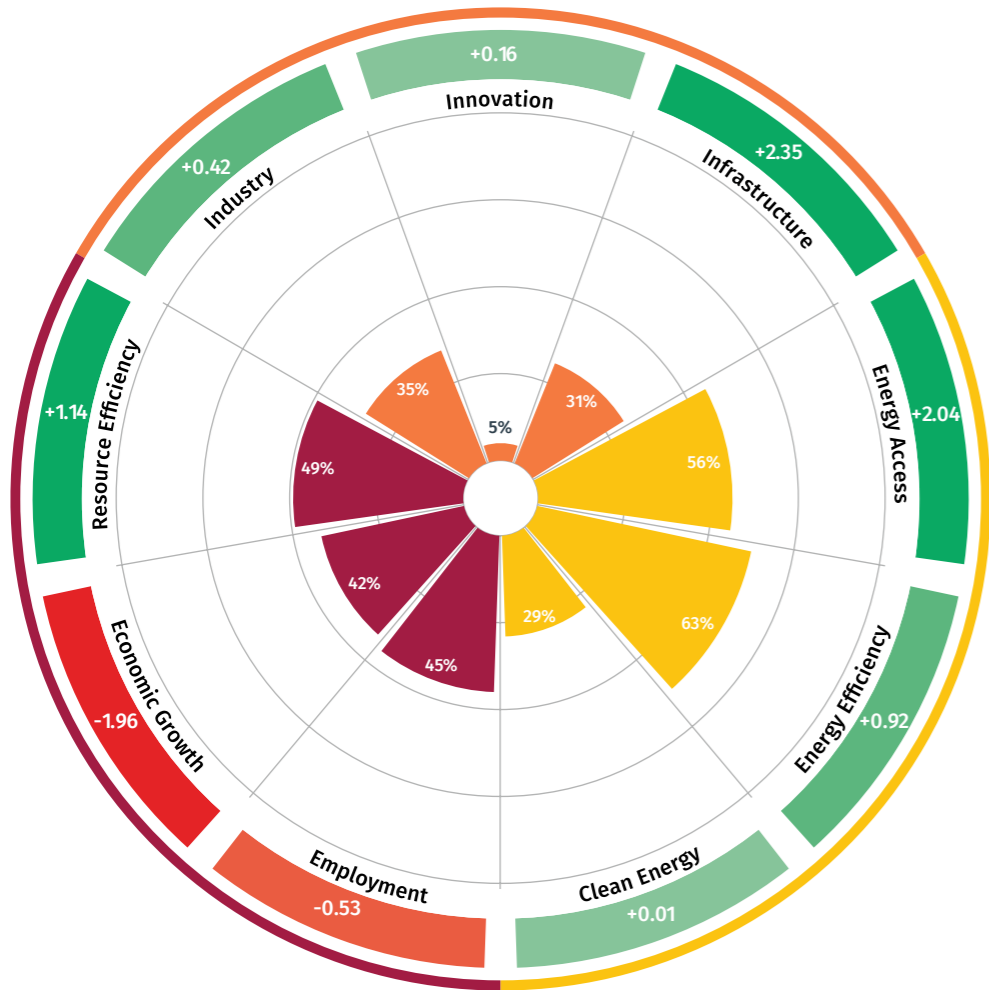
- **Supply chain development** [1.1] around the rare minerals needed for the energy transition and electric mobility opens important opportunities for Africa's industrialization.
- Energy access can be enhanced by promoting industrialization around **clean energy production** [1.2].



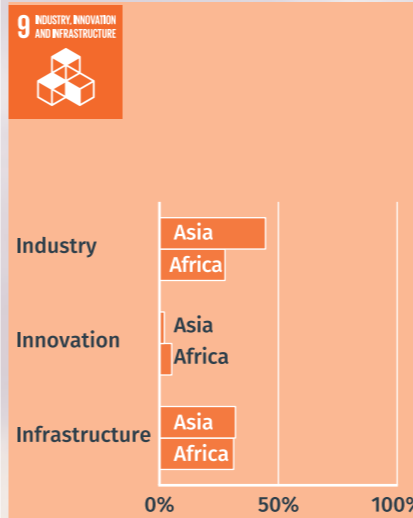
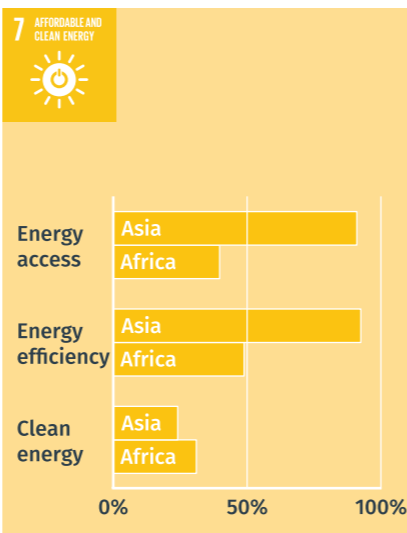
Areas of opportunity

Focus on least developed countries (LDCs)

Distance to SDG targets: the LDCs in 2021



- In all the dimensions assessed, the LDCs are further away from the SDG targets than all other developing countries.
- The progress towards achieving the SDGs is particularly slow in the areas of energy access, resource efficiency, industry and innovation. In all these dimensions, the LDCs are at least 15 percentage points behind the developing countries' average.
- However, not all LDCs stand at the same place: LDCs from Asia-Pacific show much better results than their counterparts from Africa. In six of the nine assessed dimensions, Asia-Pacific LDCs are closer to the target than African LDCs.



Divergent trends in SDG progress: African and Asia-Pacific LDCs

Drivers of divergence: the role of industry

- In 2000, the industrialization levels of Asia-Pacific and African LDCs were remarkably similar. Since then, the LDCs' share of manufacturing industries in GDP has doubled in Asia-Pacific compared to Africa.
- The difference in the level and speed of industrialization explains the SDG progress gap between Asian and African LDCs.
- Some East and South Asian LDCs have made progress in developing vibrant manufacturing bases, especially in labour-intensive activities benefiting from globalization.
- Many African LDCs have yet to leverage their industrial potential. Low levels of human and physical capital, integration into low value-added segments of GVCs, historic weaknesses in infrastructure and high reliance on natural resources all act as major constraints to manufacturing growth in the region.
- Accelerating progress on the SDGs in African LDCs requires specific industrial policies to address market failures and coordinate the structural change pattern while stimulating international integration.
- The AfCFTA can grant African LDCs access to a larger market, which is crucial for stimulating demand in the manufacturing sector, bringing investments, and attracting more Foreign Direct Investment (FDI) in modern sectors.

LDCs are low-income countries confronting severe structural impediments to sustainable development. They are highly vulnerable to economic and environmental shocks and have low levels of human assets. There are currently 46 countries on the list of LDCs including 33 in Africa, 12 in Asia-Pacific and Haiti.²⁸ The list is reviewed every three years by the Committee for Development Policy (CDP), and is based on the following criteria: low income per capita; low levels of human assets; and high levels of economic and environmental vulnerability.



What are LDCs?



SECTION 6. ASIA-PACIFIC: FROM SDG ASSESSMENT TO POLICY SOLUTIONS



- The performance of Asia-Pacific²⁹ in achieving **industry** targets stands out compared to other developing regions, showcasing its rise as a powerhouse in global industrial production.
- The robust performance of Asia-Pacific in **energy access** and **efficiency** indicates a promising energy landscape for the region. Still, more efforts are needed to improve the adoption of **clean energy**.
- Over the past decade, the region has made substantial efforts in **infrastructure** enhancement, making it a focal point for potential investments and industrial growth.
- Despite the overall good performance in **economic growth**, Asian countries' growth rates have decelerated over the past decade, which suggests the need for strategic interventions to reignite growth.
- Asia-Pacific faces challenges in **employment** and **innovation**, but improvement over the past decade demonstrates the region's commitment to address these areas.



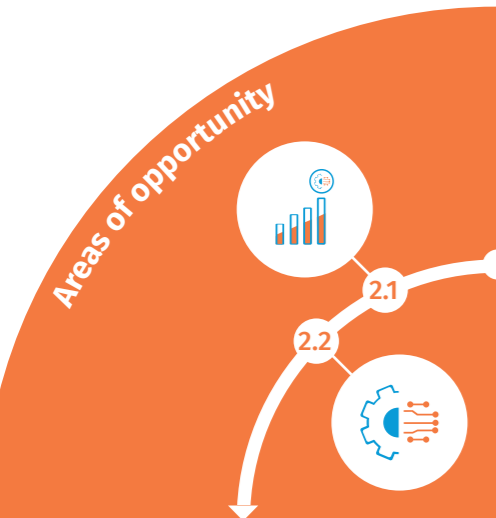
Justin Yifu Lin

“Economic development is a continuous process of technological innovation, industrial upgrading and the improvement of infrastructure and institution. Technological innovation and industrial upgrading in the Asia-Pacific region are constrained by numerous infrastructure and institutional bottlenecks. In a context of limited resources, it is essential that the governments of the region prioritize their interventions and focus on providing adequate infrastructure and institutions to those industries that already have latent comparative advantages. The final objective should be to transform these latent advantages into actual advantages. If the region can allow industrial policy to be implemented according to the above principle, it will be better positioned to achieve inclusive, sustainable and dynamic growth, making the realization of SDGs a reality.”



Dean of Institute of New Structural Economics at Peking University and former World Bank Chief Economist and Senior Vice President

Distance to SDG targets: Asia-Pacific in 2021



SDG Assessment

- Innovation is comparatively better than in other regions, but still behind its strong industrial scores.
- The adoption and development of Industry 4.0 technologies can spur **competitiveness [2.1]** and **diversification [2.2]** and help restore rapid economic growth.

Policy in action

2.1 India's Smart Advanced Manufacturing and Rapid Transformation Hub (SAMARTH) Udyog Bharat 4.0 aims to drive industrial digital transformation to improve competitiveness and innovation.

2.2 Jordan's National Digital Transformation Strategy emphasizes the need to integrate digital technologies into local production and develop the digital skills of young workers.

Opportunity Areas

2.1 4IR competitiveness
2.2 Digital solutions

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Policy in action

3.1 Bahrain's International Investment Park (BIIP) focuses on attracting FDI to promote export-oriented indigenous companies.

4.1 Pakistan's Textiles and Apparel Policy (2020-2025) aims to provide employment opportunities to millions, especially the youth.

Opportunity Areas

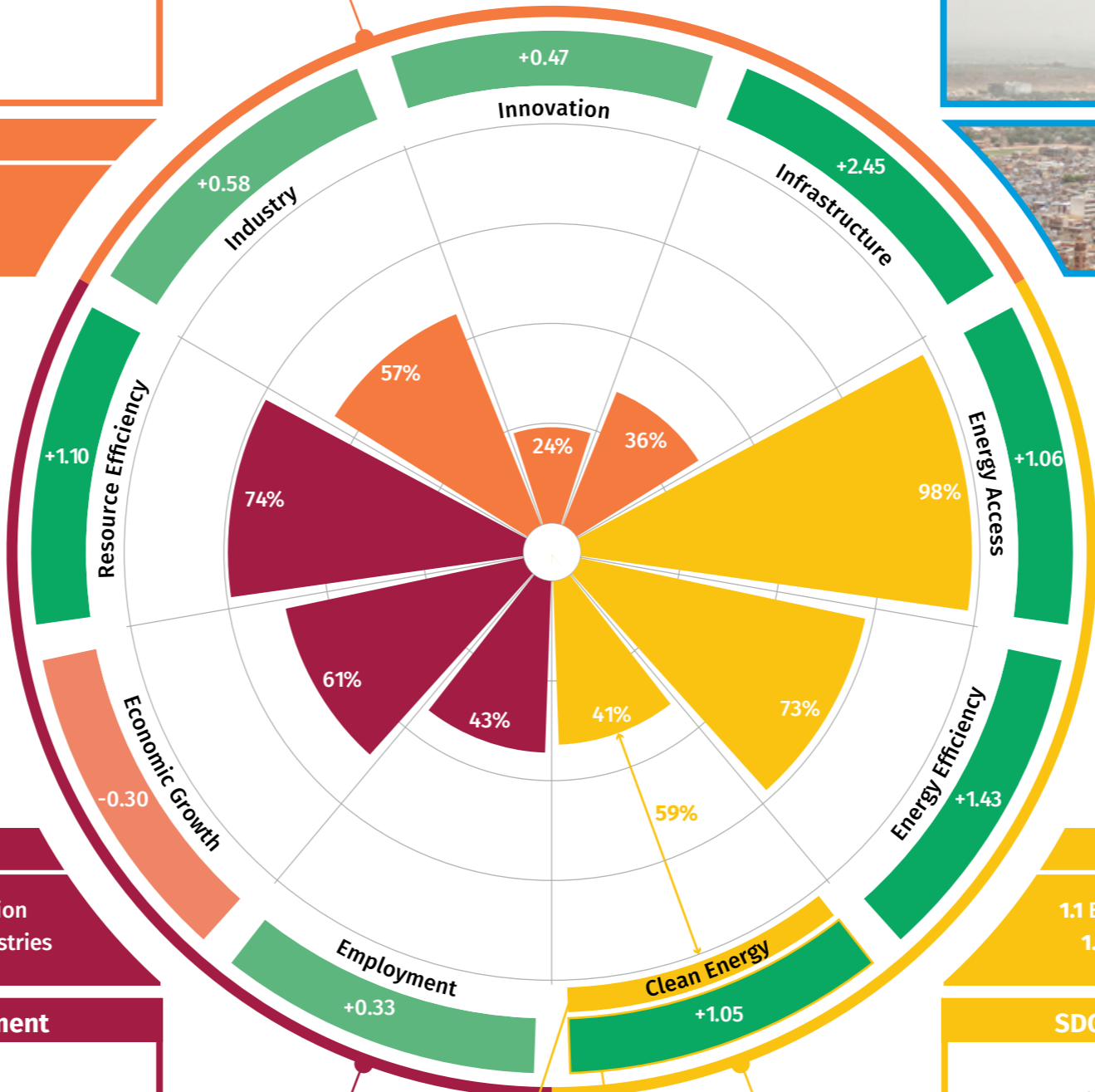
3.1 Relocating FDI attraction
4.1 Labour-intensive industries

8 DECENT WORK AND ECONOMIC GROWTH



SDG Assessment

- Employment in the Asia-Pacific region remains a significant area for enhancement.
- **Attracting FDI that is relocating [3.1]** and making targeted interventions for **labour-intensive industries [4.1]** can support job creation for an increasing population.



Policy in action

1.1 China's New Energy Vehicle (NEV) Industrial Development Plan supports the establishment of a green, robust, and internationally competitive auto industry in China.

1.2 Saudi Arabia's NEOM Green Hydrogen Project (NGHC) aims to turn the country into a leading centre for green hydrogen production.

Opportunity Areas

1.1 Energy transition products
1.2 Clean energy production

7 AFFORDABLE AND CLEAN ENERGY

SDG Assessment

- Strong existing capabilities position the region particularly well to develop new industrial clusters around **electric mobility [1.1]**.
- **Clean energy production [1.2]** has shown rapid growth over the past decade and has a strong potential to expand further, especially in Western Asia.



In 2021, Asia-Pacific countries were, on average, 59% away from achieving the SDG target on clean energy.

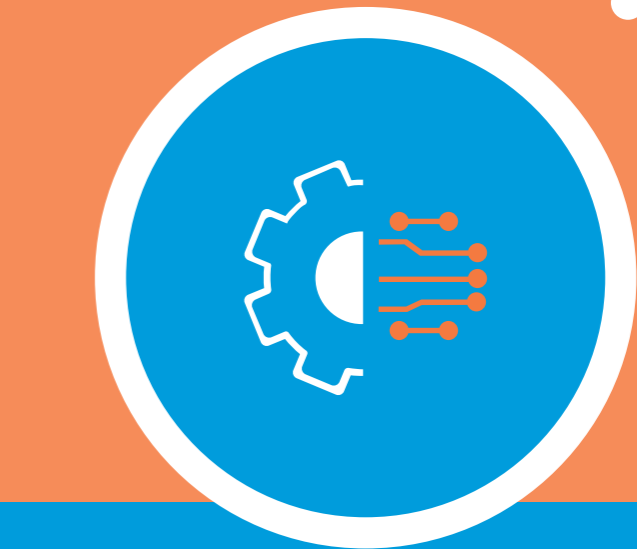
How to read this graph?

Before COVID-19, Asia-Pacific countries were, on average, reducing the clean energy gap by 1.05 percentage points per year.

SECTION 7. EASTERN EUROPE: FROM SDG ASSESSMENT TO POLICY SOLUTIONS



- Eastern Europe³⁰ shows good performance in **industry** targets compared to other regions.
- Full **energy access** and significant progress in **infrastructure** development set a solid foundation for future development.
- The decline in **economic growth** over the past decade is concerning and requires attention.
- The high performance in the **employment** dimension underscores the region's potential to capitalize on its human resources for further development.
- Eastern Europe's progress in **innovation** is slow. This represents an opportunity for improvement, given its critical position in the region and the possibility of being a key driver of industrial development and economic growth.



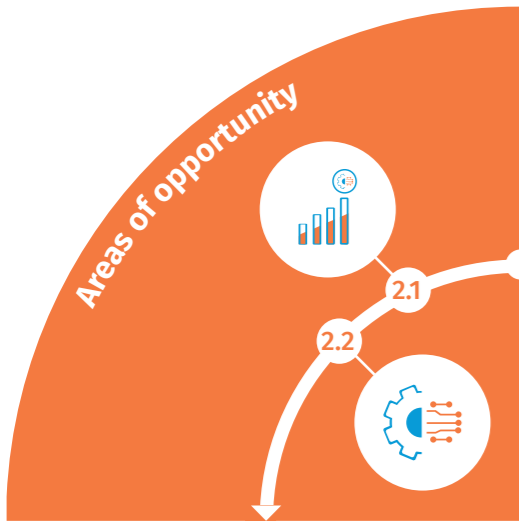
Olga Algayerova

“Each country in Eastern Europe has its unique economic trajectory and challenges, so a wide variety of industrial policy measures is used across the region. It is suffering from global challenges, such as food, energy, climate or debt crises, exacerbated by the economic consequences of the armed conflict in Ukraine. The mid-term review of Agenda 2030 is clear: we are off track with the SDGs. Sustainable economic development requires ongoing reforms, investments in human capital and focus on innovation and entrepreneurship. By focusing on sustainable industrialization, innovation, and inclusive economic growth, Eastern European countries will make substantial progress towards all 17 SDGs.”



Advisor to the Ministry of Foreign and European Affairs of the Slovak Republic and Former Executive Secretary of the UN Economic Commission for Europe

Distance to SDG targets: Eastern Europe in 2021



SDG Assessment

- **Innovation** scores are comparatively better than in other regions, but progress has almost been absent in the last decade.
- Targeted support to strengthen industrial innovation ecosystems around Industry 4.0 technologies can prompt **competitiveness [2.1]** and **diversification [2.2]**.

Policy in action

2.1 Czechia's South Moravian S3 Strategy focuses on 4.0 technologies and innovation to ensure the workforce is equipped for future challenges.

2.2 Romania's ICT strategy aims at making the country a hub for digital services in Europe, capitalizing on digital solutions for advanced manufacturing.

Opportunity Areas

2.1 4IR competitiveness
2.2 Digital solutions

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Policy in action

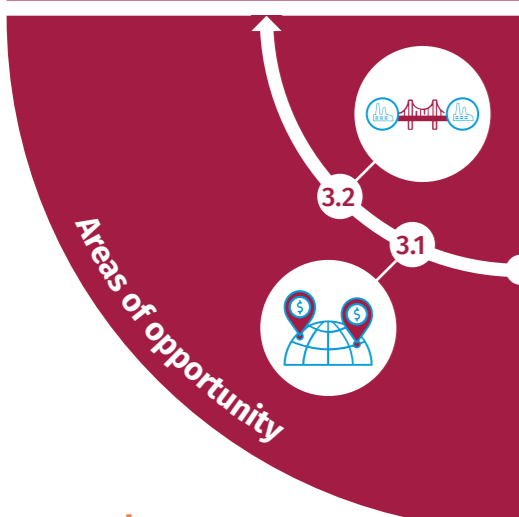
3.1 Serbia's technoparks focus on attracting innovative, high-tech foreign investments while stimulating domestic innovation and strengthening infrastructure.

3.2 Slovakia's Research and Innovation Authority (VAIA) matching grants for EU funds aim at increasing participation in EU initiatives to spur sustainable innovation and industrialization.

Opportunity Areas

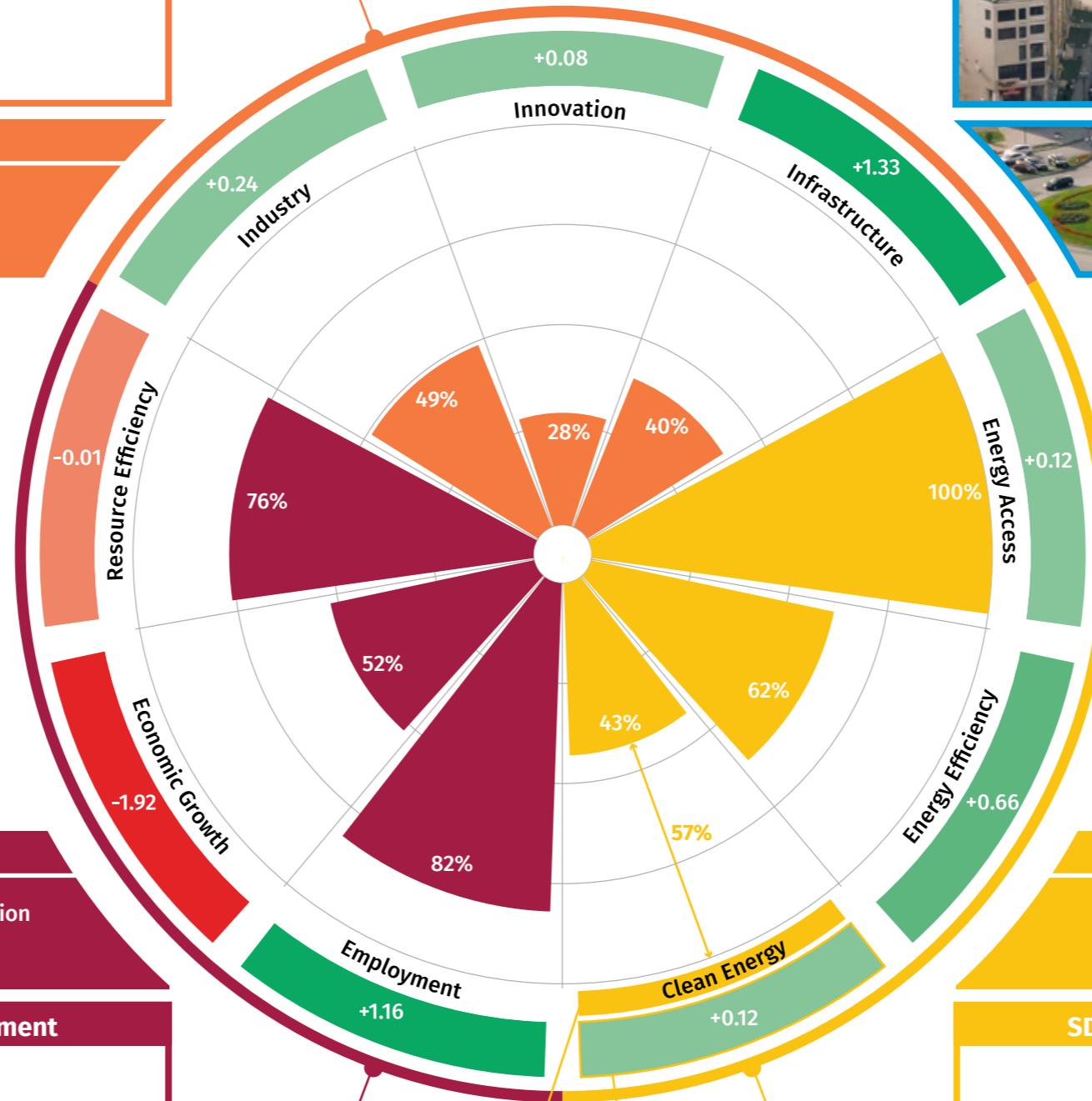
8 DECENT WORK AND ECONOMIC GROWTH

3.1 Relocating FDI attraction
3.2 Greater integration



SDG Assessment

- Economic growth performance is comparatively better than in other regions but has significantly decelerated in the last decade.
- Attracting **FDI that is relocating [3.1]** and strengthening **regional integration [3.2]** can help revert this trend.



In 2021, Eastern European countries were, on average, 57% away from achieving the SDG target on clean energy.

Before COVID-19, Eastern European countries were, on average, reducing the clean energy gap by 0.12 percentage points per year.

How to read this graph?



Policy in action

1.2 Ukraine's 2017 Energy Strategy and Feed in Tariff (FITs) programme has significantly increased the share of renewables in the electricity generation mix.

1.2 Montenegro's strategy on renewable energy aims at making the country a regional exporter of clean energy.

SDG Assessment

- Eastern Europe is less than halfway towards target achievement in clean energy. It has been slowly moving towards its target in the past decade.
- Investments in **renewable energy generation [1.2]** can spur the region's industrial development.



SECTION 8. LATIN AMERICA AND THE CARIBBEAN: FROM SDG ASSESSMENT TO POLICY SOLUTIONS



- The negative performance of Latin America and the Caribbean³¹ concerning **industry** targets calls for urgent actions to revert a process of premature deindustrialization while promoting the other SDGs.
- Important strides in **clean energy** deployment demonstrate a strong commitment to sustainable practices. The region's near-universal **energy access** is also commendable and efforts should continue to maintain this achievement.
- The stagnant progress in terms of **employment** over the past decade suggests the need for policies that promote job creation and address potential structural bottlenecks.
- The sharp decline in **economic growth** underscores the need for transformative policies and strategies to revitalize the region's economy.
- The improvement in **infrastructure** highlights successful policy interventions and investments, indicating a focus on foundational growth drivers.



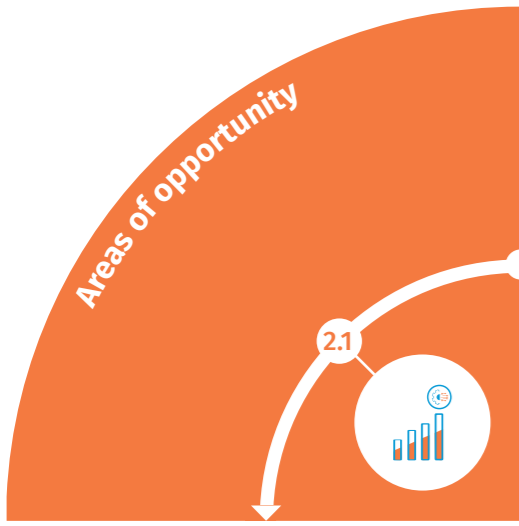
Rebeca Grynspan

“There is no development without a diversified economy and without industry – in the ample sense of the word. In this new era of globalization, with industrial policy and open regionalisms on the rise, Latin America and the Caribbean has a great opportunity to diversify its economic structure and achieve the SDGs. However, there is great uncertainty in this new era, as rapid changes are putting in danger the rules-based international trade frameworks on which small and medium-sized countries depend. Deepening the intra-regional integration of Latin America and the Caribbean is undoubtedly an important pillar required to navigate this uncertainty, and a long overdue project in the region.”



Secretary-General of United Nations Conference on Trade and Development (UNCTAD)

Distance to SDG targets: Latin America and the Caribbean (LAC) in 2021



SDG Assessment

- LAC's low performance in innovation indicates a critical area for improvement as this can hamper technology adoption and economic growth.
- Tapping into 4.0 technologies can accelerate innovation and help industrial development through **increased competitiveness** [2.1].

Policy in action

2.1 Dominican Republic's INFOTEP initiative emphasizes vocational training for the green and digital economy.

2.1 Peru's Digital Route Strategy aims at enhancing digital competencies of SMEs, promoting Industry 4.0 adoption and skill development.

Opportunity Areas

2.1 4IR competitiveness

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Policy in action

3.1 Mexico's Inter-Oceanic Corridor of the Isthmus of Tehuantepec project aims at cementing its position in global trade and drawing significant FDI.

4.2 Brazil's Araucária Foundation research support in alternative proteins seeks to position the Paraná State as a leading player in cultivated meat products for the food industry of the future.

Opportunity Areas

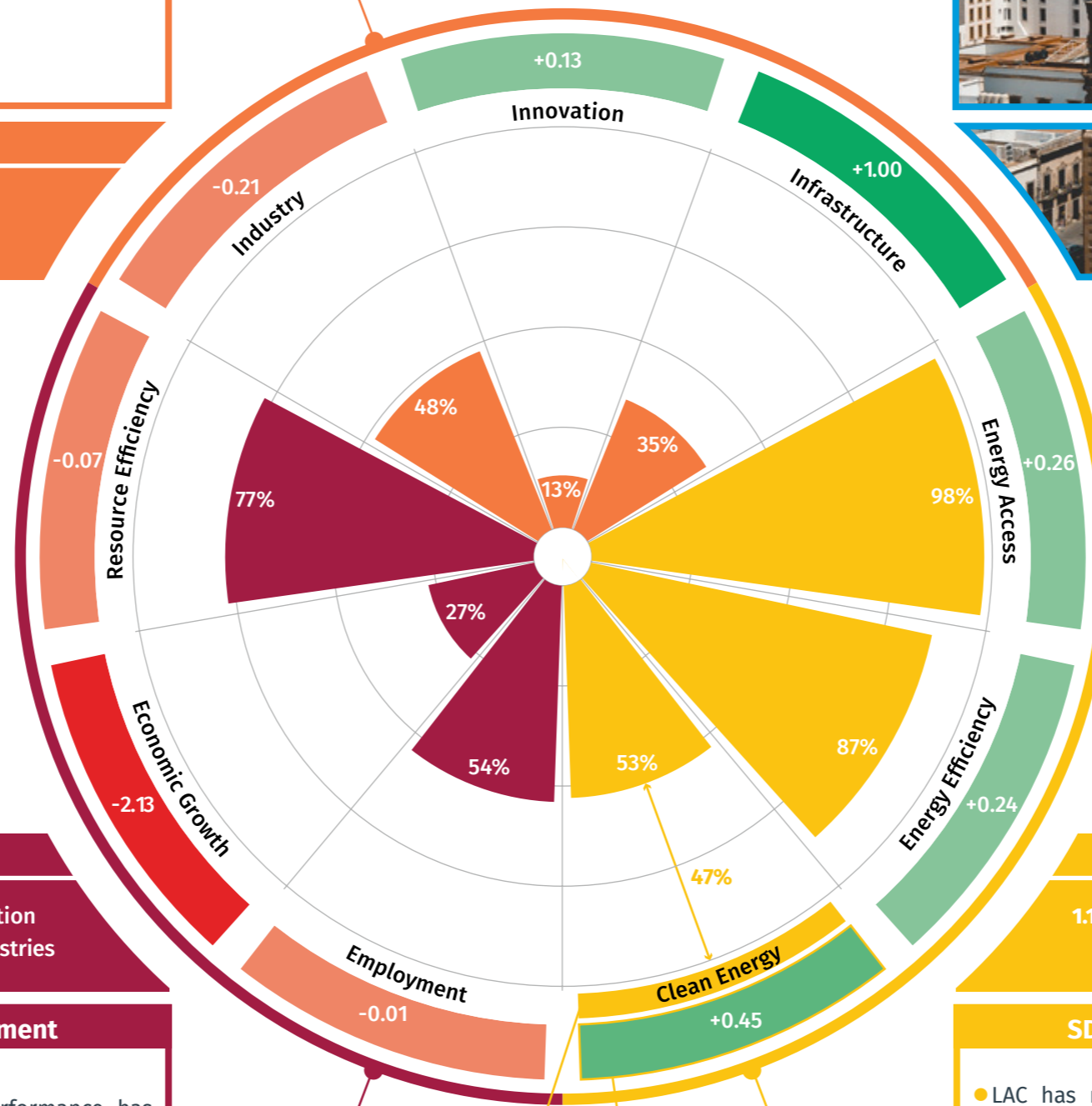
8 DECENT WORK AND ECONOMIC GROWTH

3.1 Relocating FDI attraction
4.2 Health and food industries



SDG Assessment

- Economic growth performance has been very weak in LAC, underscoring the urgent need for targeted actions.
- Attracting FDI that is relocating** [3.1] and promoting the development of industries with **high expected demand** [4.2], notably food processing, can help reignite economic growth in the region.



In 2021, LAC countries were, on average, 47% away from achieving the SDG target on clean energy.

How to read this graph?

Before COVID-19, LAC countries were, on average, reducing the gap in clean energy by 0.45 percentage points per year.



Opportunity Areas

7 AFFORDABLE AND CLEAN ENERGY

1.1 Energy transition products
1.2 Clean energy production

Policy in action

1.1 Argentina's UniLiB project harnesses the nation's vast lithium reserves for battery production.

1.2 Chile's National Green Hydrogen Strategy aims at boosting renewables-based hydrogen production.

SDG Assessment

- LAC has made significant progress in adopting clean energy sources, but there is still a large scope for advancement.
- Supply chain development** [1.1] around the rare minerals needed for the energy transition and the **production of clean energy** [1.2] open important opportunities for LAC's industrialization.



Notes and references

+40.25 \$

-05.75 \$

EO	IDGH	EJ+EO	LSM/VK	EJ+EO	EJ+EO	IDGH	EJ+EO	EJ+EO	IDGH	EJ+EO
560	0.650	86.560	▲ 24.7050	▲ 86.560	86.560	0.650	86.560	▲ 86.560	0.650	86.560
030	807.5	57.030	▲ 47.0540	▲ 57.030	57.030	807.5	57.030	▲ 57.030	807.5	57.030
540	0.607	5.7540	▲ 6760.70	▲ 5.7540	5.7540	0.607	5.7540	▲ 5.7540		5.7540
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▲ 24.7050 ▲ 86.560 0.650
▲ 47.0540 ▲ 57.030 807.5
▲ 6760.70 ▲ 5.7540 0.607





Section 1.1

¹ FAO, IFAD, UNICEF, WFP and WHO, 2023. *The State of Food Security and Nutrition in the World 2023. Urbanization, agrifood systems transformation and healthy diets across the rural-urban continuum*. Rome: FAO.

² UNIDO elaboration based on [World Bank Commodity Markets database](#). Accessed 15 October 2023.

³ UNIDO elaboration based on [ILO Modelled estimates database](#), ILOSTAT. Accessed 15 October 2023.

⁴ World Bank, 2022. *Poverty and Shared Prosperity 2022: Correcting Course*. Washington, DC: World Bank.

⁵ WMO (World Meteorological Organization), 2021. *Atlas of Mortality and Economic Losses from Weather, Climate and Water Extremes (1970–2019)*. Geneva: WMO.

⁶ UNIDO elaboration based on [EM-DAT: The Emergency Events Database](#) as reported in Our World in Data. Centre for Research on the Epidemiology of Disasters (CRED)/UCLouvain. Accessed 15 October 2023.

⁷ Newman, R., Noy, I., 2023. *The global costs of extreme weather that are attributable to climate change*. Nat Commun 14, 6103.

⁸ UNDESA (United Nations Department of Economic and Social Affairs), Statistics Division, 2023. *The Sustainable Development Goals Report 2023: Special Edition*. New York: UNDESA.

Section 1.2

⁹ UNIDO elaboration based on Indicator 12.a.1 “Installed renewable energy-generating capacity in developing countries (in watts per capita)” of the *SDG Global Database*, United Nations Statistics Division (UNSD). Accessed 15 October 2023.

¹⁰ UNIDO elaboration based on WIPO (World Intellectual Property Organization), 2022. *World Intellectual Property Report 2022: The direction of innovation*. Geneva: WIPO.

¹¹ UNIDO elaboration based on *National Accounts - Analysis of Main Aggregates (AMA) database*, United Nations Statistics Division (UNSD). Accessed 15 October 2023.

¹² UNIDO elaboration based on [World Population Prospects 2022 database](#), United Nations Department of Economic and Social Affairs (UNDESA), Population Division. Accessed 15 October 2023.

Section 2.1

¹³ See UNIDO, 2020. *Industrialization as the Driver of Shared Prosperity* and UNIDO, 2021. *Industrial Development Report 2022. The Future of Industrialization in a Post-Pandemic World* for recent reviews on the linkages connecting industrial development with the SDGs.

¹⁴ Lavopa A. and Riccio F., 2023. *Manufacturing-led growth*, UNIDO Insights on Industrial Development (IID) Policy Brief, forthcoming.

¹⁵ Lavopa A. and Riccio F., 2023. *The multiplier effects of industrial jobs*, UNIDO Insights on Industrial Development (IID) Policy Brief, forthcoming.

¹⁶ Lavopa A. and Menéndez M., 2023. *Who is at the forefront of the green technology frontier? Again, it's the manufacturing sector*, UNIDO Insights on Industrial Development (IID) Policy Brief No. 6.

¹⁷ Bataille C. and Alfare, M., 2023. *Policy Packages for Decarbonizing Heavy Industry*, UNIDO Insights on Industrial Development (IID) Policy Brief, forthcoming.

Section 2.2

¹⁸ UNIDO elaboration based on Juhász, R., Lane, N., Oehlsen, E., & Pérez, V. C., 2023. *Global Industrial Policy: Measurement and Results*, UNIDO Insights on Industrial Development (IID) Policy Brief No. 1.

Section 3.1

¹⁹ United States Government Publishing Office, 2022. *CHIPS Act of 2022*. Public Law 117-167, 117th Congress.

²⁰ European Parliament, 2023. *European Chips Act* and Poitiers, N. F., and Weil, P., 2022. *Fishing for Chips: Assessing the EU Chips Act*, Briefings de l'Ifri (French Institute of International Relations), July 8.

²¹ Mazzucato, M., 2020. *Mission Economy: A Moonshot Guide to Changing Capitalism*, London: Allen Lane; and Mazzucato, M. and Kattel R., 2023. *Mission-oriented industrial strategy*, UNIDO Insights on Industrial Development (IID) Policy Brief No. 2.

²² The analytical dimensions are the following. For SDG 7, energy access (indicator 7.1.1), energy efficiency (indicator 7.3.1) and clean energy (indicators 7.1.2, 7.2.1, 7.b.1); for SDG 8, employment (indicators 8.3.1, 8.5.2, 8.6.1, 8.8.2), economic growth (indicators 8.1.1, 8.2.1) and resource efficiency (indicator 8.4.2); and for SDG 9, industry (indicators 9.2.1, 9.2.2, 9.4.1, 9.b.1), innovation (indicators 9.5.1, 9.5.2) and infrastructure (indicators 9.1.2, 9.a.1, 9.c.1).

Section 3.3

²³ As reported in the *SDG Global Database*, United Nations Statistics Division (UNSD). Accessed 15 October 2023.

²⁴ The analysis of this section focuses on the “developing world”, defined as all economies not classified by UNIDO as high-income industrial economies. The latest classification is available in UNIDO, 2022. *International Yearbook of Industrial Statistics*, Vienna: UNIDO.

²⁵ The priority areas, challenges and policy instruments presented in the figure are based on the background notes produced by Antonio Andreoni, Mateus Labrunie, David Leal-Ayala, Carlos López-Gómez, Jennifer Castañeda-Navarrete, Michele Palladino, Zongshuai Fan and Roman Stollinger.

²⁶ Mazzucato, M., Kattel, R. and Ryan-Collins, J., 2020. *Challenge-Driven Innovation Policy: Towards a New Policy Toolkit*, J Ind Compet Trade 20, 421–437.

²⁷ See WEF (World Economic Forum), University of Cambridge and UNIDO, 2023. *The Future of Industrial Strategies: Five Grand Challenges for Resilient Manufacturing*, White Paper, WEF: Geneva.

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²⁸ See <https://www.un.org/development/desa/dpad/least-developed-country-category.html>

6

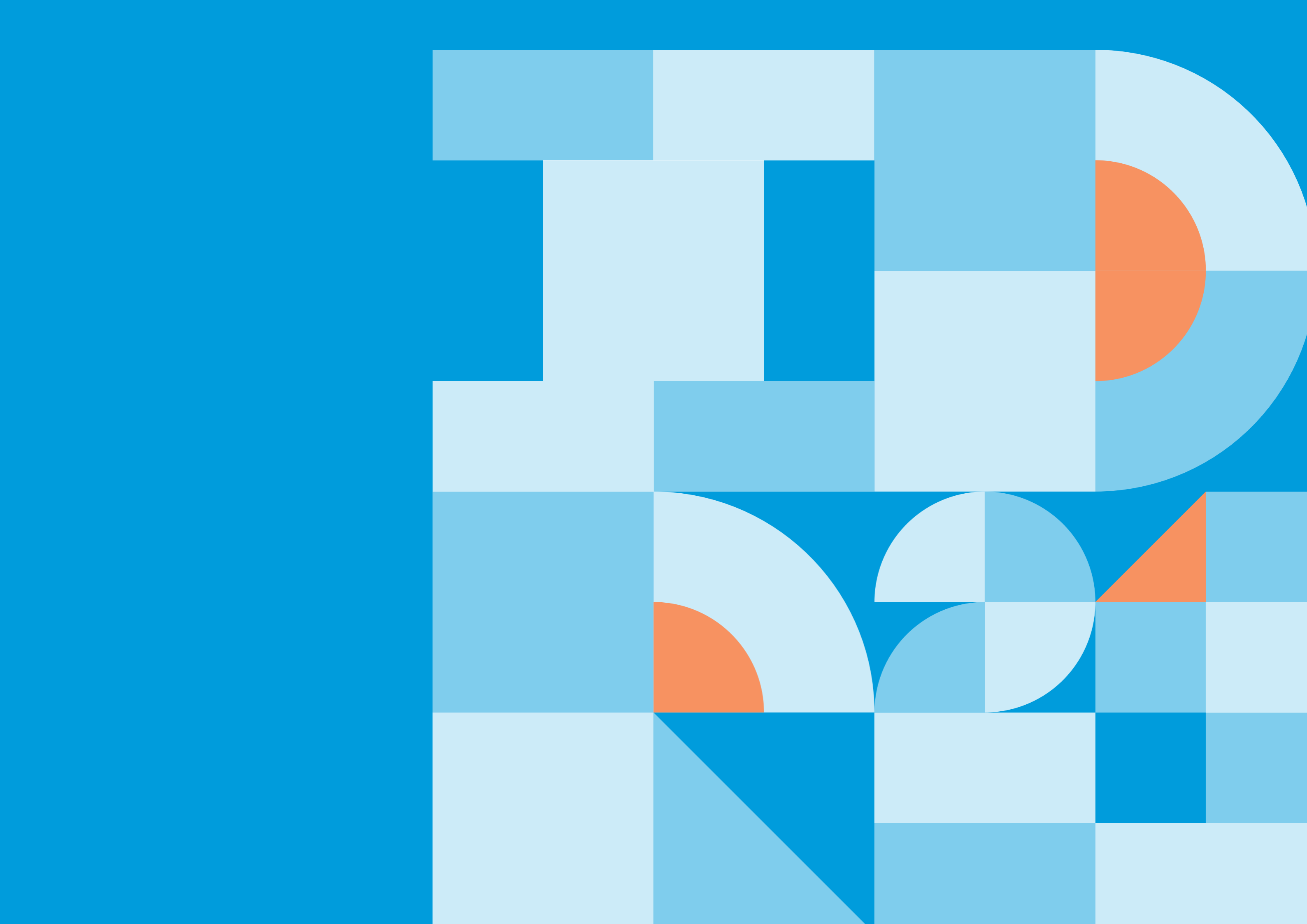
²⁹ The analysis of this section focuses on the developing economies of Asia-Pacific, defined as those not classified by UNIDO as high-income industrial economies. The latest classification is available in UNIDO, 2022 “International Yearbook of Industrial Statistics 2022”, UNIDO: Vienna.

7

³⁰ The analysis of this section focuses on all Eastern European States listed in the corresponding [UN regional group](#) of the General Assembly.

8

³¹ The analysis of this section focuses on all Latin American and Caribbean States listed in the corresponding [UN regional group](#) of the UN General Assembly.





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