





# ANNUAL REPORT 2021



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna, 2022

#### UNIDO Annual Report 2021

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Unless otherwise mentioned, all references to sums of money are given in United States dollars. References to "tons" are to metric tons, unless otherwise stated.

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Appendices (available online at www.unido.org)

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# FOREWORD BY THE DIRECTOR GENERAL

In 2021, the COVID-19 pandemic had the world firmly in its grip for the second year. The consequences are dramatic and go far beyond a health emergency. We are witnessing a poly-pandemic with a severe impact on livelihoods, education, inequalities, poverty, economic growth and global stability. Development progress of several decades is being undone. Hundreds of millions of people have fallen back into poverty.

This crisis is also showing us the value of multilateralism and the importance of practical and effective solutions. It is opening our eyes to existing fragilities and growing inequalities.

Our world is more connected than ever before. We can no longer close our eyes to the global crises that are a threat to our future. We have to take decisive action to address poverty, climate change and the accelerating loss of biodiversity and the resources essential for the survival of humankind.

In December 2021, I took office as the Director General of UNIDO. Building on my eight years of experience as Federal Minister of Economic Cooperation and Development of Germany, I am determined to make UNIDO an even stronger international platform for knowledge and technology transfer and the facilitation of investments and global partnerships to provide effective and concrete solutions to these global challenges. My thematic priorities will include strengthening agribusiness development and food security, access to sustainable energy and fair supply chains. UNIDO will also reinforce its normative work on standards and industrial policies across these priorities.

I am convinced: if UNIDO had not already been founded in 1966, it would need to be founded today.



We need inclusive and sustainable industrial development. We need "progress by innovation".

This edition of the Annual Report describes the work carried out by UNIDO in 2021. It is also the last report covering the medium-term programme framework for 2018–2021 and the programme and budgets for 2020–2021.

The achievements outlined in this report are a reflection of the strong commitment of the entire UNIDO workforce and the successful leadership of my predecessor, LI Yong, during his tenure from 2013 to 2021.

At the beginning of my term as Director General of UNIDO, I am asking you for your trust and support. We already have the knowledge and the technologies worldwide to address the current global challenges. UNIDO has an important contribution to make to the achievement of the Sustainable Development Goals and the objectives of the Paris Agreement.

I look forward to building on these foundations over the coming years and to working closely with our Member States, funding partners and other stakeholders towards a world that leaves no one behind. Together we can achieve a lot. It is more urgent than ever that we act now!

Gerd Müller, Director General of UNIDO



# **UNIDO** at a glance



# **UNIDO**

was established in **1966** and became a specialized agency of the United Nations in 1985





As at 31 December 2021, the Organization has 170 Member

www.unido.org/member\_states

Gerd Müller was appointed Director General of UNIDO by the nineteenth

by the nineteenth session of the General Conference in November 2021





€85.3 million regular and operational budget (expenditure) of UNIDO in 2021

43 % 57 %

UNIDO employs 682 staff members as well as 1,691 consultants on ISA contracts from 135 countries (as at 31 December 2021)

UNIDO contribution to the United Nations resident coordinator system approved by Member States for 2021: \$2,637,121





The value of technical cooperation delivery in 2021 amounted to \$179.4 million



\$197.3 million

net voluntary contributions in 2021 for project implementation, with a total portfolio of projects in hand of \$575.2 million



**76.5 million** tons of CO<sub>2</sub>-equivalent and over **500,000** tons of **pollutants reduced** with UNIDO contribution in 2021



Projects implemented in 121 countries in 2021



UNIDO participated in **99 United Nations country teams** in 2021



In addition to its Headquarters in Vienna, UNIDO has liaison offices in **Brussels, Geneva** and **New York.** 

Its field network consists of **48** regional hubs, and regional and country offices covering **156** countries.

UNIDO maintains **Investment and Technology Promotion Offices** in **9** locations (Beijing, Bonn, Lagos, Manama, Moscow, Rome, Seoul, Shanghai and Tokyo).

Regional sustainable energy centres exist in **8** locations (Bridgetown, Cairo, Kampala, Kathmandu, Nuku'alofa, Praia, San Salvador and Windhoek).

UNIDO partners with **65** National Cleaner Production Centres of the Global Network for Resource Efficient and Cleaner Production (RECPnet).



All Member States
Meets every 2 years
Next regular session
27 November–1 December 2023



Industrial Development Board

53 Members Meets once a year Next regular session 21–23 November 2022



Programme and Budget Committee

27 Members Meets once a year Next regular session 21–22 June 2022



The primary objective of UNIDO is the promotion of

# **INCLUSIVE AND SUSTAINABLE INDUSTRIAL DEVELOPMENT (ISID)**

in developing countries and economies in transition











- TECHNICAL COOPERATION
- ANALYTICAL AND POLICY ADVISORY SERVICES
- NORMATIVE FUNCTIONS, STANDARDS AND QUALITY-RELATED ACTIVITIES
- CONVENING FOR KNOWLEDGE TRANSFERS, PARTNERSHIPS AND NETWORKING

# **TOP FUNDING PARTNERS FOR UNIDO PROGRAMMES AND PROJECTS IN 2021** (in millions)



lapan

\$21.8



Switzerland

\$13.8



Italy

\$6.9





Germany

\$6.2





\$5.5





\$2



\$1.9





United States of America \$1.3





**Global Environment** Facility (GEF) \$45.9<sup>°</sup>



Multilateral Fund (MLF) \$22.7

# PROGRAMME FOR COUNTRY PARTNERSHIP (PCP)

# **IMPLEMENTATION**



CAMBODIA



PERU

**EGYPT** 

SENEGAL



ZAMBIA

**ETHIOPIA** 



MOROCCO





**PROGRAMMING** 





**RWANDA** 



**APPROVED FOR DEVELOPMENT** 





**SELF-STARTER** 

**UNITED REPUBLIC OF TANZANIA** 

The nineteenth session of the General Conference took place from 29 November to 3 December 2021 at UNIDO Headquarters in Vienna. In the second year of the Decade of Action to deliver the Global Goals, and as the world recovers from the COVID-19 pandemic and its socioeconomic consequences, the Conference convened under the theme "Building a better future".





The General Conference also marked a transition, with high-level dignitaries bidding a fond farewell to LI Yong, who headed the Organization for over eight years, and confirming the appointment of Gerd Müller, former Federal Minister for Economic Cooperation and Development of Germany, as UNIDO Director General from 10 December 2021 for a period of four years.

Due to the COVID-19 pandemic, the Conference was held as a hybrid event with limited physical and extensive virtual participation. An exhibition in both physical and virtual formats showcased the work of UNIDO and its partners.

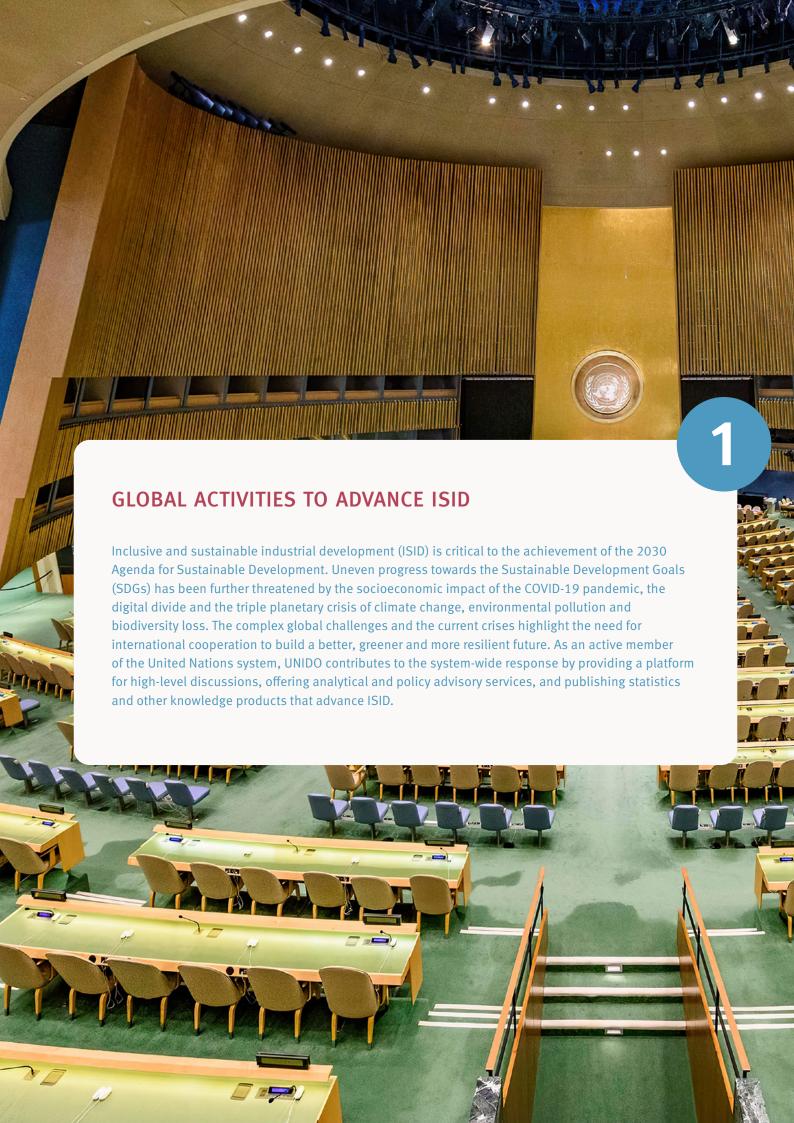
www.unido.org/ 19th-general-conference

# **MAIN EVENTS**

- Fifty-fifth anniversary of UNIDO
- Eighth ISID Forum
- Fifth Donor Meeting
- Launch of the *Industrial Development Report* 2022
- Women as levers of change for sustainable industry during COVID-19 and beyond: UNIDO Gender Equality Mobilization Award
- UNIDO's contribution to the International Year of Creative Economy for Sustainable Development 2021
- The post-pandemic world will be digital: implications of the Fourth Industrial Revolution for developing countries
- New forms of investment as drivers for a sustained post-COVID-19 recovery
- Revival of industrial policy prospects for establishing a global industrial policy forum for multilateral policy learning and knowledge-sharing
- Accelerating climate impact for Member States through ISID







The theme of the 2021 high-level political forum on sustainable development (HLPF) was "Sustainable and resilient recovery from the COVID-19 pandemic that promotes the economic, social and environmental dimensions of sustainable development: building an inclusive and effective path for the achievement of the 2030 Agenda in the context of the decade of action and delivery for sustainable development". In reviewing SDGs 1, 2, 3, 8, 10, 12, 13, 16 and 17, the HLPF 2021 provided UNIDO with an opportunity to highlight its efforts to build back better through inclusive and sustainable industrial development via green recovery, the circular economy and digitalization. While the Industrial Development Board did not submit written inputs to the HLPF 2021, UNIDO still participated actively. The Organization led the development of two policy briefs on the interlinkages of SDGs 7 and 9, and SDGs 7 and 12 through its participation as a member of the United Nations Energy Technical Working Group. During the HLPF, which took place in a hybrid format, UNIDO also contributed to several side events, including on the circular economy, green recoveries for a job-rich future, and circularity for resilience and jobs.

# REFORM OF THE UNITED NATIONS DEVELOPMENT SYSTEM

In May 2018, the General Assembly endorsed the ambitious repositioning of the United Nations development system (UNDS) with the ambition to transform the development cooperation function and realize the full capacity of the UNDS for the implementation of the 2030 Agenda. UNIDO is fully committed to strengthening the UNDS, coordinated inter-agency collaboration and collective support for the SDGs. With the COVID-19 pandemic as its first litmus test, the reform continues to mature. The crisis underscored the importance of international

development and of the United Nations system to respond to major global challenges.

In 2021, UNIDO continued contributing to the reform as a member of the United Nations Sustainable Development Group and other inter-agency coordination mechanisms. Engagement at the country level deepened the understanding of partners about the key role of ISID and structural transformation for sustainable development and economic recovery. The Organization contributed to the development of common country assessments and United Nations Sustainable Development Cooperation Frameworks (UNSDCFs). UNIDO also continued its strategic engagement with resident coordinators, including through meetings with the newly appointed coordinators in China, Eritrea, Kazakhstan, Kenya, Madagascar, Mexico and Turkmenistan.

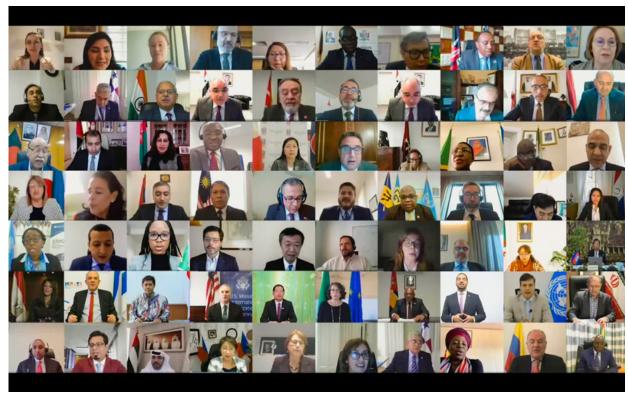
# INDUSTRIAL POLICY ADVICE AND RESEARCH

UNIDO provides Member States with relevant analysis, research and evidence-based policy advice that help shape appropriate industrial strategies and policies. The collaboration with a multitude of organizations, institutes and academic institutions enriches research and the policy advice function.

Throughout 2021, UNIDO shared regular analyses and opinion pieces on how COVID-19 affected industry, and outlined policies that could mitigate these challenges. The publication of the flagship *Industrial Development Report 2022: The future of industrialization in a post-pandemic world* provided evidence at the country, industry and firm levels, documenting the impacts of the crisis and examining the drivers of resilience and vulnerability.

The UNIDO Industrial Analytics Platform continued to provide data on select indicators of industrial development and relevant research by leading experts in an accessible format.

Collaboration with Governments contributes to the design, revision and implementation of industrial strategies and policies, capacity development for industrial policy, and value chain development in 18 countries, namely Bangladesh, Cambodia,



Speakers at the main events of the nineteenth session of the General Conference

Côte d'Ivoire, Egypt, Guinea, Jordan, Kenya, Lebanon, Malaysia, Nigeria, Peru, Rwanda, South Africa, Sudan, Thailand, United Republic of Tanzania, Zambia and Zimbabwe.

The Organization built capacity to develop policies through training courses and webinars on sectoral policies, innovation for economic development and value chain diagnostics for policymaking. In collaboration with the Korea International Cooperation Agency, UNIDO ran the third training programme on policies for ISID.

# STATISTICAL WORK ON SDG 9

Helping Member States monitor their long-term patterns of industrial performance and track the post-pandemic recovery of industry, UNIDO continued to produce and disseminate global industrial statistics products, such as the International Yearbook of Industrial Statistics 2021 and the quarterly World Manufacturing Production reports.

To better track the impact of COVID-19 on manufacturing, UNIDO expanded its collection of monthly data on industrial production, and disseminated findings through regular information briefs and two analytical reports. Following contributions to the first two volumes, the Organization also contributed to the third report, How COVID-19 is changing the world: A statistical perspective, published by the Committee for the Coordination of Statistical Activities.

UNIDO updated its Competitive Industrial Performance (CIP) index in 2021. Developed in 2002, the index now ranks 152 countries and helps assess national industrial performance in the global economy. The 2020 CIP report, published in April 2021, provides an extensive analysis of Africa's industrial competitiveness.

Given its mandate to maintain worldwide industrial statistics, UNIDO serves as custodian agency collecting and compiling data for six industry-related indicators under SDG 9. In this role, the Organization provided data and narratives for the

Secretary-General's 2021 report on *Progress towards* the SDGs, the Sustainable Development Goals Report 2021 and the Sustainable Development Goals Progress Chart 2021.

The 2021 edition of the Statistical Indicators of Inclusive and Sustainable Industrialization presented an analysis of global progress towards ISID. Based on the six SDG 9 indicators related to industrialization, the report introduced two supplementary tools to help countries track progress towards achieving SDG 9. These tools are available on the Industrial Analytics Platform as the SDG-9 Industry Tracker.

To help countries improve the compilation, processing and analysis of industrial statistics, UNIDO published the report Modernizing products and services of industrial statistics in the context of the Sustainable Development Goals. Concrete examples of new practices in Angola, India, Kenya, the Republic of Korea and other countries provide fresh ideas.

# UNIDO INVOLVEMENT IN THE TECHNOLOGY FACILITATION **MECHANISM**

UNIDO contributes to various science, technology and innovation (STI) forums in the United Nations system, including in the context of the HLPF, the Commission on Science and Technology for Development (CSTD), and the Technology Facilitation Mechanism and its Inter-agency Task Team (IATT) on STI. The Organization contributed on "Industry 4.0 for inclusive development", one of the priority themes of the CSTD for the 2021-2022 period.

In the framework of the IATT, UNIDO delivered capacity-building to more than 250 policymakers in Latin America and the Southern African Development Community. In partnership with the Joint Research Centre of the European Commission, UNIDO contributed to the STI roadmap for Serbia and Ukraine. Analytical work on emerging technologies served as a contribution to the IATT report Emerging science, frontier technologies, and the SDGs. This analysis informed discussions at the HLPF 2021, as well as the

STI Forum 2021, where UNIDO co-organized two highlevel side events.

The Organization also co-organized the eighth European Conference on Corporate R&D and Innovation (CONCORDi), where it contributed developing country perspectives and initiatives on green and digital transitions, a novel feature for a conference usually focused on industrialized countries.

#### **G20 AND BRICS ENGAGEMENT**

UNIDO expanded its engagement with the G20 under the presidency of Italy, providing expertise in multiple working groups and ministerial meetings. To accelerate digital transformation and its benefits for the economy and society, UNIDO provided perspectives on women and the gender divide, as well as on digital transformation in production. Additional research and analysis enhanced policy recommendations for G20 discussions on the environment, with insights on resource-efficient and cleaner production, and on economic development through an input on enhancing territorial development and SDG localization.

UNIDO also worked with Think20 (T20), a G20 engagement group, in the area of trade, investment and growth. Following the co-organization of a webinar on global value chains, two policy briefs on the topic were developed with UNIDO support. With Youth 20 (Y20), UNIDO conducted workshops on "Opportunities for Youth's Economic Inclusion in the Agriculture and Agribusiness Sector in Africa" and "Reaching net-zero with youth".

UNIDO further strengthened its engagement with the BRICS group of five major emerging economies, which celebrated its fifteenth anniversary in 2021. UNIDO helps deepen BRICS cooperation in the fields of digitalization, industrialization and innovation through the Partnership on New Industrial Revolution. The Organization is also working to establish the BRICS Center for Industrial Competences, deploying resources from the New Development Bank, which was established by the group.

# **UNIDO IN NEW YORK**

The socioeconomic response to the COVID-19 pandemic remained high on the agenda of the United Nations in New York and its various intergovernmental bodies and inter-agency coordination mechanisms. As a follow-up to the Declaration on the commemoration of the seventyfifth anniversary of the United Nations, adopted by the General Assembly as resolution 75/1 in 2020, the UNIDO Liaison Office in New York helped ensure that the Organization's voice was heard during global consultations in preparation for the Secretary-General's Our Common Agenda report. The report outlines an agenda of action across the 12 commitments of the declaration to accelerate the implementation of the SDGs. UNIDO briefed the Executive Committee and related Deputies Committee on its contribution to digital cooperation. This helped define the

United Nations system's vision for the Fourth Industrial Revolution.

In line with the UNIDO priority of climate-neutral industry and circular economy, the outcomes of the global consultations on circular economy, hosted by UNIDO and co-chaired by Austria and Costa Rica, featured prominently during the HLPF 2021. This laid the groundwork for further engagement with the Economic and Social Council and its subsidiary bodies.

For the first time, the 2020 quadrennial comprehensive policy review, which guides the United Nations development system reform work from 2021 to 2024, stresses the needs of vulnerable groups. UNIDO contributed at the level of the Deputy to the Director General to the UN Youth Strategy 2030 and its High-Level Steering Committee.

# UNIDO: responding to the crisis, building a better future

The COVID-19 pandemic has caused the worst human and economic crisis for decades, leading to a decline in manufacturing output, spending, incomes, employment and overall economic growth, ultimately resulting in the deepest recession since the Second World War. Beyond these short-term dynamics, the pandemic triggered major shifts such as the accelerating pace of digitalization and automation, and its impact on labour markets and productivity. The effects of the pandemic could be severe and long-lasting, unless the international policy response

focuses on a robust and sustainable recovery and on economic, societal and climate resilience.

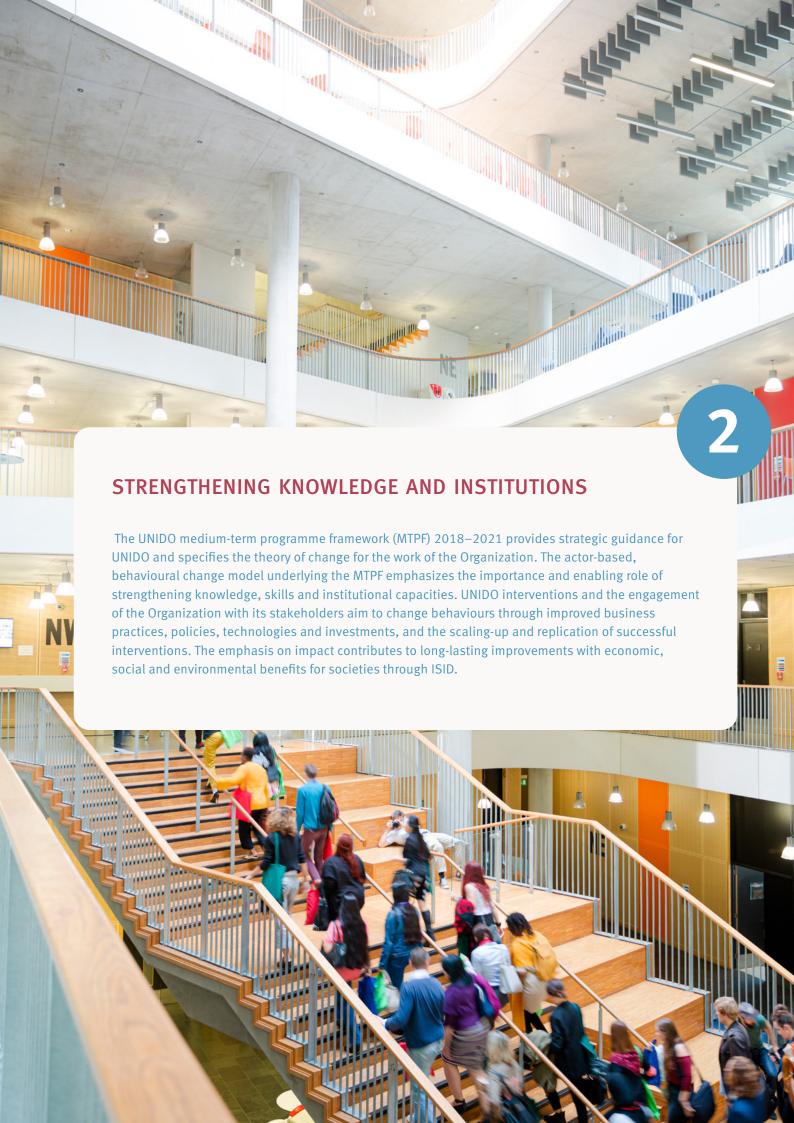
During the COVID-19 pandemic, economies with a strong, diversified industrial sector were found to be associated with a lower loss in economic growth and a faster recovery. The work of UNIDO in promoting inclusive and sustainable industrial development is therefore of critical importance for the socioeconomic recovery and for building a more inclusive, sustainable and resilient future.



In addition to the wide range of UNIDO programmes and projects that by their nature contribute to socioeconomic recovery, UNIDO implemented specific activities in response to the COVID-19 crisis in 2021, building on the experience of activities in 2020:

- Information sharing, including through articles, analyses and opinion pieces on the impact of COVID-19 and its mitigation
- Industrial Development Report 2022
- Surveys of manufacturing firms
- Global call 2021 for innovative ideas and technologies
- COVID-19 Industrial Recovery Programme (CIRP)
- Guidance for micro, small and medium-sized enterprises (MSMEs), including on business continuity and recovery
- Knowledge-sharing through online conferences, webinars and training
- Harmonization of quality standards for hand sanitizers, medical face masks, other personal protective equipment (PPE) and lung ventilators

- Supporting the local production and testing of PPE, medical devices, etc.
- Capacity-building for MSMEs, small and medium-sized enterprises and entrepreneurs for workplace safety, to contain economic consequences
- Supporting enhanced integration into value chains
- Medical waste management and disposal of hazardous medical waste
- Contributing to the joint response of the United Nations system and country teams, including through socioeconomic response plans
- Supporting regional approaches and the work of regional commissions and regional economic communities



# REACH, REACTIONS, KNOWLEDGE AND CAPACITIES

For UNIDO, advancing inclusive and sustainable industrial development means building capacity at multiple levels: skills among people and firms, infrastructure and investments among public and private institutions, and policies and guidelines for Governments and global actors. This enhanced capacity can trigger important changes in behaviour that enable positive social, economic and environmental impacts.

For example, hydrogen offers the opportunity for a paradigm shift in how to decarbonize energy, mitigate climate change and diversify economies. As this technology matures, the International Hydrogen Energy Centre in China works together with UNIDO to develop the skills needed to create policy and regulatory frameworks, safety codes and standards harmonization.

The Organization accelerates scale-up by engaging actors at different levels in an integrated way. For example, training and financial support is provided to young people to develop their entrepreneurial ideas and businesses. Private entities, including small and medium-sized enterprises (SMEs), receive technical training to help them develop their innovative systems. Intermediary institutions and government bodies are, in parallel, assisted in guiding SMEs to further develop these innovations.

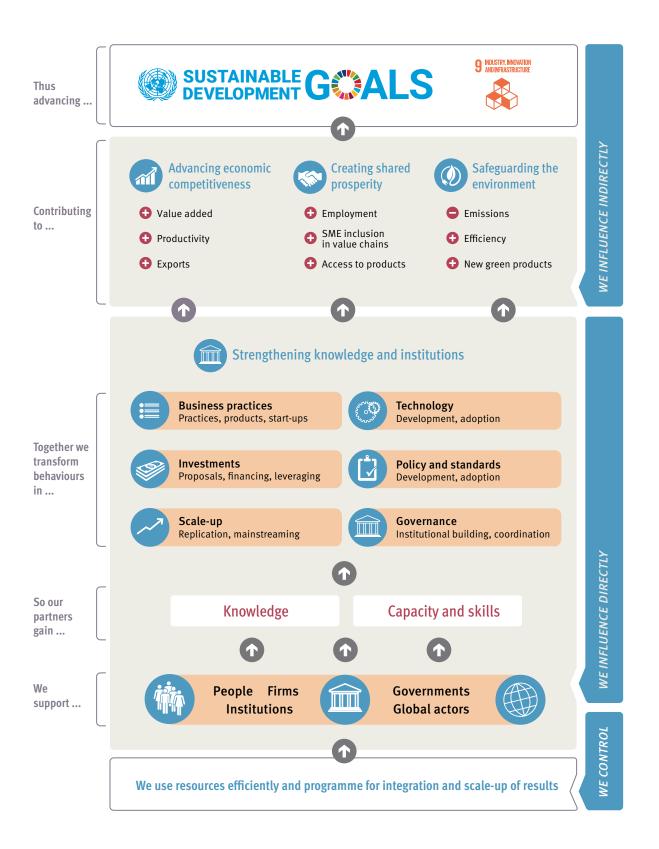
To reduce the impact of harmful substances that pollute the air, land and water, UNIDO built strong knowledge management systems and databases in the Latin America and Caribbean region. This strengthened knowledge, institutions and governance arrangements, and increased the quality of stakeholder coordination mechanisms and sustainability of policymaking. In 2021, UNIDO development cooperation led to 13 Governments developing national action plans in the artisanal and small-scale gold mining sector.

Support networks and communities created through UNIDO engagement with stakeholders enable replication. Under the Global Network of Regional

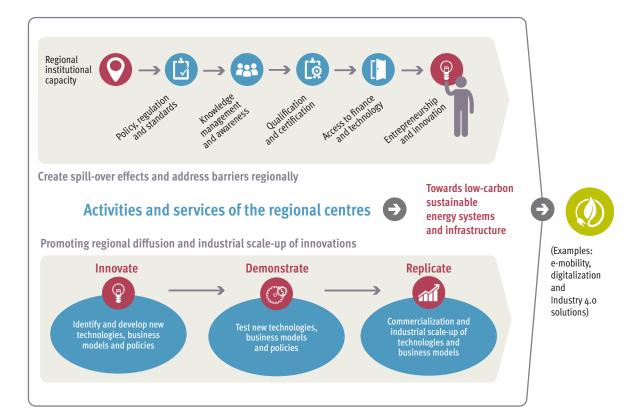
Sustainable Energy Centres programme, UNIDO has established eight regional sustainable energy centres, which now belong to regional economic communities. The centres provide important public infrastructure and act as hubs for international partnerships on climate action. The related network, covering 108 countries, facilitates South-South and triangular cooperation, promoting joint energy solutions, economies of scale and spillover effects between countries.

Replication and scale-up also occur when UNIDO interventions promote or leverage financing. Training in investment profiling methodology helped investment and technology promotion agencies in the African, Caribbean and Pacific regions identify, formulate and promote bankable investment opportunities. Participants learned how to apply a gender lens to create better perspectives regarding women in business, considered critical for swift and sustainable recovery from the COVID-19 crisis. By working through global structures, such as the network of Investment and Technology Promotion Offices (ITPOs), and across national jurisdictions in common geographical regions, cross-fertilization creates a larger combined regional impact on investment promotion and facilitation.





#### GLOBAL NETWORK OF REGIONAL SUSTAINABLE ENERGY CENTRES



# TRIGGERING BEHAVIOURAL CHANGE TO ENABLE AND SCALE UP ISID

The UNIDO contribution to the SDGs is based on an integrated service approach, combining the core functions of the Organization. Primarily through strengthening knowledge and institutions, the integrated approach results in:

- Improvements in business practices by firms, including the adoption of best practices and standards, and the development of new products or establishment of start-ups
- Development of new technologies, and the transfer and adoption of technologies, both at the enterprise and country levels
- Changes in public and private investment flows, through investment proposals and leveraging of financing for businesses and projects

- Development, adoption and implementation by policymakers of ISID-relevant policies and standards
- Changes in governance, through strengthened institutional settings and improved coordination mechanisms

The UNIDO Global Market Access Programme funded by Norway is a good example of how capacity-building is being used to change behaviours and scale up innovations. Built on experiences with the Global Quality and Standards Programme funded by Switzerland, the programme intervenes at all levels to increase market access to value chains and countries, and to help SMEs become more competitive. Capacity-building in best practices and skills improves compliance with standards and enhances quality infrastructure systems. Advocacy and awareness-raising support a sustainable quality culture. Supported by both programmes, this

harmonized approach is now used in 14 countries and covers 16 value chains with a budget of €25.5 million.

The UNIDO Global Eco-Industrial Parks Programme funded by Switzerland is another initiative that helps companies learn and adopt new technologies so that they can reduce waste generation and resource consumption while becoming more competitive. In 2021, Ukraine used the UNIDO guide Lessons learnt from assessing 50 industrial parks in eight countries against the International Framework for Eco-Industrial Parks to develop its National Economic Strategy 2030. Financial support is allocated to systems that reduce waste and increase energy and resource efficiency in the country's industrial parks. Practices are now being shared in other countries where the programme operates, including in Colombia, Egypt, Indonesia, Peru, South Africa and Viet Nam.

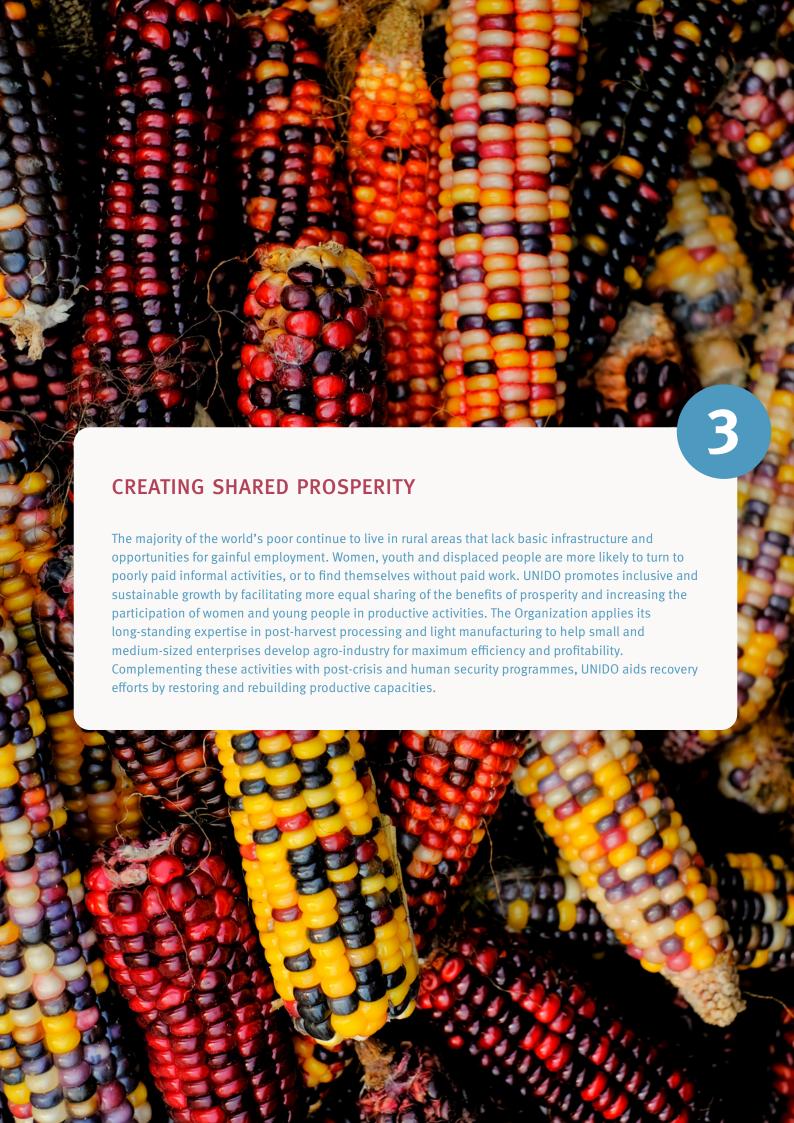
UNIDO helps plan, design and implement hubs, where farmers and processors of agricultural products also benefit from integrated approaches. Synergies are created between agricultural producers and processors, business service providers, government agencies, and research and training centres. Capacity-building helps smallholder farmers and

agro-processing enterprises adopt and implement good agricultural and manufacturing practices, improve post-harvest management practices, apply food safety standards and enhance business operations. Collaboration with academic institutions facilitates sustainable training and advocacy for continued growth. Good infrastructure and economies of scale provide further benefits, while by-products are reused and recycled.

The impact of UNIDO cooperation goes beyond traditional technical assistance. For example, initial capacity-building in Ethiopia attracted further support for expanding agro-industrial parks. From an initial design phase budget of €1.8 million for four integrated agro-industrial parks in Ethiopia, an additional \$1.2 billion has been committed from public and private investors based on the country's capacity and infrastructure to scale up and provide significant returns. Within a radius of 150 to 200 kilometres, one agro-industrial park of 250 hectares can provide a market outlet for over one million smallholder farmers, offering employment and reducing poverty in rural areas.



Yirgalem Integrated Agro-industrial Park in Sidama State, Ethiopia



# AGRIBUSINESS AND RURAL **DEVELOPMENT**





























Seventy-five per cent of impoverished people worldwide live in rural areas, where productivity is low and local economic activity is inadequately diversified. Many rural people are unemployed, while others hold jobs that are insecure. UNIDO recognizes that the eradication of global poverty requires sustainable modernization and growth of rural economies. This is imperative not only to make growth inclusive, but also to reduce pressures to overexploit natural resources and to migrate, often to overcrowded cities.

The Organization supports communities in developing agriculture-based livelihoods. It helps reduce post-harvest losses and strengthens linkages between agriculture, industry and markets. It advances value chains for agriculture-related products including value-added foods, leather goods, handicrafts and textiles, all with a particular focus on SMEs.

UNIDO helps develop industrial parks, where companies reduce costs by sharing services. The Yirgalem Integrated Agro-Industrial Park, inaugurated in Ethiopia in March 2021, is expected to employ more than 100,000 people. In the new Diamniadio industrial park in Senegal, seven companies have begun manufacturing clothing, pipes, packaging materials, magnetic e-cards and electric bicycles.



# Expanding the role of Egypt in global textile value chains

Egypt is internationally known for its long-staple cotton, which can be transformed into lustrous, durable fabrics. Yet shrinking harvests have diminished the country's role in global textile value chains. Furthermore, pressures to modernize have grown, as most major clothing brands and retailers have adopted global sustainability standards.

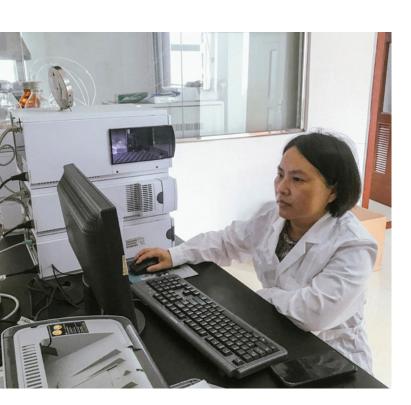
With funding from Italy and the International Islamic Trade Finance Corporation (ITFC), UNIDO has guided Egyptian farmers striving to grow more cotton while meeting quality and environmental standards set by the Better Cotton Initiative (BCI), a worldwide framework for sustainability and licensing.

Following the three-year project, growers consumed 20 per cent less water, reduced pesticide applications by 25 per cent and increased cotton yields by 15 per cent, holding labour costs steady. The project provided technical training and advice to 7,000 small-scale cotton farmers, of whom 1,600 obtained BCI licences, and another 3,600 others are working towards this goal.

UNIDO also addressed the need for circularity in the fashion industry, in which less than one per cent of material used in clothing production is incorporated into new garments. Partnering with an Italian textile firm, Egyptian manufacturers turned waste denim into cotton yarns that can be used to produce high-value knitwear. An Italian fashion designer led a workshop on this production process for Egyptian and Italian fashion design students.

> **66** As a cotton trader, thanks to the Egyptian cotton project, we learned what sustainability means in cotton production. If the production is sustainable and farmers are happy, we all win."

> > Mona Kassem, export manager



# Strengthening food safety in China

In Jiangxi Province, China, local authorities seek to enhance food security by reducing food spoilage and contamination. To reach this goal, they are working with UNIDO to upgrade food quality and testing capacity.

With funding from China, the Organization equipped rapid testing rooms at 11 farmers' markets in Quannan County and trained personnel on testing protocols. Market personnel now conduct daily tests of foods on sale, from vegetables to fruit to fish, and have run 34,000 tests over a two-year period. UNIDO also improved capacity at the county testing centre, helping it gain accreditation. Its staff regularly visit markets to sample and test products.

Routine testing has improved consumer confidence and provided smallholder food producers and processors with increased inclusion in value chains and access to markets.

# WOMEN AND YOUTH IN PRODUCTIVE **ACTIVITIES**





















Women and young people have the drive and ideas to be catalysts of rural modernization and sustainable development. However, they often lack access to the services that support entrepreneurship, including financing, networks, mentorships and job training.

UNIDO adopts an integrated approach to removing these barriers by providing development cooperation and advising on policy that fosters inclusion of women and youth in entrepreneurship. The Organization identifies sectors with high growth potential, channels financing and collaborates in technical, vocational and entrepreneurial skills training.

To engage women and young people in the clean energy transition, in January 2021 UNIDO joined with the Vienna Energy Forum, the Global Women's Network for the Energy Transition and the SDG 7 Youth Constituency to convene a two-day experts' dialogue on inclusion of women and youth in the transition. During the sixty-fifth session of the Commission on the Status of Women in March 2021, UNIDO and

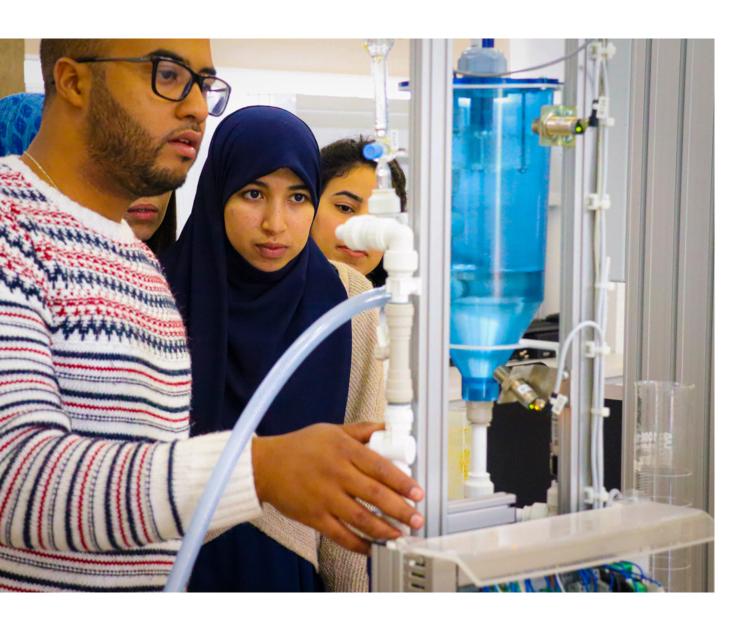
Finland hosted a side event in which speakers addressed leadership by women in climate-neutral and circular industries.

# Training water sector professionals in Morocco

Water was once abundant in Morocco, but now the country faces scarcity. Water shortages arise from drought, overuse, low rates of water reclamation, and increasing urbanization and industrialization. Thirty per cent of Moroccans lack access to clean drinking water, and only 20 per cent of collected wastewater

gets treated. Despite the need for expertise, few Moroccans have training in the water sector.

The H2O Maghreb project supported by the UNIDO Learning and Knowledge Development Facility addresses this problem with a five-month tuition-free programme that prepares young Moroccans to work in industrial and municipal water management. The project has trained 94 Moroccans, 80 per cent of them aged 20 to 24, and three quarters of them women. The accredited curriculum combines theoretical knowledge and hands-on experience including an internship. Students practise laboratory techniques, learn automation technology and use adaptive virtual



reality to envision workplace hazards. Because the curriculum is modular, it can be customized to train water managers beyond Morocco.

Funded by the United States Agency for International Development (USAID), the project is a public-private partnership with EON Reality, a company from the United States of America, and the German company FESTO Didactic, which helped equip the H2O Maghreb training hub within the National Office for Electricity and Drinking Water in Rabat. Among the first two groups of trainees, 76 per cent found employment, of whom 91 per cent attributed their hiring to their training with H20 Maghreb.

# **HUMAN SECURITY AND POST-CRISIS** REHABILITATION













TOP UNITED NATIONS IMPLEMENTING PARTNERS:







The world's most vulnerable people are the least prepared to face natural disasters, political upheaval and disease, and the least able to recover from such disruptions. In the past decade, armed conflict, poverty, food insecurity, terrorism and climate change have caused millions of people to leave their country of birth. Most migrants and refugees come from the world's poorest populations.

As communities emerge from crises, micro- and small-scale enterprises hold the keys to socioeconomic progress. UNIDO supports the creation of such enterprises by strengthening vocational training systems that nurture an entrepreneurial culture. It also upgrades infrastructure and provides modern equipment. UNIDO cooperates with the private sector in setting up enterprise-based technical and vocational training programmes.

Through its work to strengthen and develop productive activities, the Organization helps to forge the social equity and cohesion that provide the foundation for stable societies and the achievement of the 2030 Agenda.

# Helping Sudanese smallholders develop businesses and access loans

Almost half the Sudanese population is considered poor, and youth unemployment is high. Agricultural value chains have a high potential for spurring growth and strengthening food security for this population. However, owners of micro and small-sized agro-enterprises, particularly women, find themselves excluded from the financing they need to improve and expand their businesses.

With funding from Italy and UN Women, UNIDO facilitated microloans for 1,500 smallholder farmers in Kassala State. Guided by UNIDO experts, the farmers adopted new technologies, improved business practices and crop quality, and created more than 1,100 jobs. They were able to raise prices after upgrading the quality of sesame, onions, fodder and chickpeas; their profits rose an average of 66 per cent compared to the profits of farmers not participating in the project.

UNIDO also established the Entrepreneurship Development Committee, which provided loans to 101 women and created 321 jobs, and the Entrepreneurial Hub at the University of Kassala that continues this development cooperation.

> 66 Thanks to the UNIDO project, I obtained a loan from a formal financial institution for the first time in my life. I proudly reimbursed the entire loan. Now I'm seeking new loans to expand my work."

> > Shoeab Salih Mohamed Abakar, farmer

# **Enhancing self-reliance in the Kurdistan** Region of Iraq

Poverty has reached 15 per cent in the Kurdistan Region of Iraq, affecting both host communities and the nearly 230,000 Syrian refugees who live there. Youth unemployment rates are 69 per cent for women and 24 per cent for men.

With funding from Austria, UNIDO provided entrepreneurship and agro-processing training in Duhok Governorate in northern Iraq. The Organization helped 49 people to establish microenterprises and

guided 30 owners in scaling up small businesses. Those beneficiaries created jobs for 156 people besides themselves. In addition, UNIDO worked with 21 teachers and government officials to implement its Entrepreneurship Curriculum Programme in vocational schools serving 800 students.

To build social cohesion, the project ensured that participants included 70 per cent host community members and 30 per cent displaced people and refugees. Four in ten of those assisted were women, and about half were aged 18 to 35. One new entrepreneur is Shahnaz Abdulrazaq, who opened a



tiny bakery in Bardarash Camp. During a 15-day business incubation course, she assessed the market and wrote a budget. The bakery helps her support her seven children and provides a taste of her Syrian homeland to some of the 14,000 camp residents.

# Improving fish quality in South Sudan

Scaling up fishery activities in South Sudan would allow fish harvested in Upper Nile State to play a key role in the country's economic development and food security. However, war and unrest have depleted government coffers, and infrastructure is minimal. Up to half the fish caught go to waste.

UNIDO has begun to improve livelihoods in the important Nile River fishing community of Terekeka, north of Juba. More than 1,300 fishers received training in post-harvest handling and processing. With funding from Canada, the Organization invested

\$2 million in infrastructure, including a landing site for fishing boats that provides solar power and ice. The quantity of fresh fish sold at target markets increased by 56 per cent, and prices rose by 28 per cent.

When the project provided fishers with new smoking ovens, the value of smoked fish climbed by 86 per cent. This prompted traders to visit the area's 36 fishing camps more often. Fishers saw income jump by 30 to 40 per cent. Food insecurity eased. Among consumers surveyed, 80 per cent reported eating more diverse and nutritious food than before the project's inception.

> **66** We are making more money now, allowing me and my family to save money. We want to buy some goats and maybe a cow. We couldn't do this before."

> > Abraham Pitia Buya, fisher, Terekeka County



# MASHROU3I GUIDES TUNISIANS IN CREATING NEW ENTERPRISES



Nihel Nasfa was unemployed for two years after earning an engineering degree in Tunis. She found herself among the 40 per cent of recent university graduates in Tunisia who cannot find work. "Those were the hardest two years of my life", she recalls. Then Ms. Nasfa decided to start her own business and discovered Mashrou3i through the business centre in her home city.

With Mashrou3i, "my project" in Arabic, UNIDO promotes an entrepreneurial mindset and prepares youth for the future of work in the digital economy. Building on its extensive experience supporting the creation and growth of new enterprises, UNIDO provides coaching and tailored technical instruction, and connects participants to business courses offered by HP LIFE.

The public-private partnership has helped several thousand young Tunisians like Ms. Nasfa start SMEs or expand existing businesses, generating jobs for themselves and others. In the past five years, Mashrou3i-supported businesses have generated more than 5,400 new full-time jobs in a country with 18 per cent unemployment overall, and 35 per cent among young people. Funding comes from UNIDO, HP Foundation,

Italy and the United States Agency for International Development (USAID).

For Ms. Nasfa, the first step was taking HP LIFE courses online. The 32 practical courses cover topics such as finance, operations, marketing and communications. Mashrou3i has helped 8,800 Tunisian young people and women learn about business and strengthen information technology skills through HP LIFE.

Like others in the project, Ms. Nasfa then attended in-person workshops, wrote a business plan, and was matched with a UNIDO trainer and mentor. "Whenever I felt like giving up, he encouraged me to move forward", said Ms. Nasfa. At her new firm, she now oversees a team of seven who provide personal and professional coaching, team-building and Montessori training. When the COVID-19 crisis limited in-person meetings, online consultations and webinars served 100 to 160 participants each month, including international clients.

The project has also helped prepare university students for work or entrepreneurship by instructing their professors in how to incorporate HP LIFE courses into business curricula. More than 200 educators in Tunisia have attended these Mashrou3i workshops.



15 new enterprises launched





100 small enterprises enlarged

5,500 new full-time jobs created

200 teachers trained to include entrepreneurship in coursework





Mashrou3i began in 2013 in four governorates with high youth unemployment. It has now broadened its reach to serve young people in 14 of the country's 24 governorates. Project experts have guided web designers, marketing consultants, and producers of foods, including chocolates, organic date sugar, spirulina, and juices. They have coached participants whose companies make furniture, jeans, organic fertilizer and essential oils distilled from Tunisian flowers.

Many of the enterprises supported by Mashrou3i are agricultural. In 2020 and 2021, more than 60 per cent of the full-time jobs generated by the project were in agribusiness and other industrial activities. For example, Hayfa Khalfaoui was a software developer who got interested in cattle breeding and was inspired to change her career. In 2018, she won a competition co-sponsored by Mashrou3i, qualifying her for a mentorship. Mashrou3i introduced her to a livestock expert who advised her as she developed a mobile phone application for dairy farmers.



To date, 50 dairy farms have adopted her mobile app to monitor the well-being of their animals. This increases profits and lightens the farmers' workload. A second app allows creameries and milk factories to trace their products. Ms. Khalfaoui was preparing to expand in early 2022 from 7 to 11 employees, 5 of them women. She aims to market her apps elsewhere in Africa.

Mashrou3i is part of a larger effort by UNIDO to teach digital skills to young people, foster entrepreneurship and increase employment. As part of the Organization's long-standing partnership with HP, it is empowering youth in Libya, Morocco and Nigeria.

> **66** I would say to young people, find your passion. Do a business you care about. Women, don't be afraid to work in non-traditional fields like agriculture. And keep learning: it's the key to success."

> > Hayfa Khalfaoui, Smart Farm app developer

# Programme for Country Partnership (PCP)

The Programme for Country Partnership (PCP) was first introduced in 2014. The pilot phase comprised Cambodia, Ethiopia, Kyrgyzstan, Morocco, Peru and Senegal. The PCP portfolio progressively expanded to include Côte d'Ivoire, Egypt, Rwanda, the United Republic of Tanzania and Zambia. In 2021, Nigeria became the newest PCP approved for development. Going forward, the programme will gradually expand to additional countries.





**OWNERSHIP** 



PARTNERSHIP





PRIVATE INVESTMENT



APPROVED FOR DEVELOPMENT



# **KEY FEATURES**

#### **IMPLEMENTATION**



#### STATUS IN 2021



#### CAMBOD

Focus: Agro value chain development, including linkages to the tourism sector • Industrial diversification, innovation and development of special economic zones



#### EGYP<sup>\*</sup>

Focus: Industrial policy and governance • Investment promotion • Green industry • Smart cities and sustainable industrial parks • Value chains • Mainstreaming industry 4.0



#### ETHIOPIA

Focus: Agro-food processing • Textiles and apparel • Leather and leather products



#### MOROCCO

Focus: Industrial zones •
Agro-industry • Energy •
Circular economy •
Industry 4.0 • E-commerce



#### PERL

Focus: Quality and innovation •
Value chain and enterprise
development • Sustainable
industrial parks and zones •
Industrial resource and energy
efficiency, and renewable energy



#### SENEGAL

Focus: Industrial policy development \* Agro-poles \* Integrated industrial platforms \* Regional mining hub \* Special economic zones and incentive package reform



#### ZAMBIA

Focus: Improving the policy environment • Industrial skills development • Fostering manufacturing industries and value addition to primary commodities



#### NIGERIA

The Government and UNIDO will work together to develop a new programme to support the country's industrial and development goals.

## **PROGRAMMING**



#### CÔTE D'IVOIRE

Focus: Human capital development, including Industry 4.0 and gender • Investment and finance • Governance and promotion of industrial zones • Development of agro-industrial value chains • Circular economy and sustainable energy • Regional value chain development



### KYRGYZSTAN

Focus: Energy • Agroprocessing • Construction materials • Textiles and apparel • Tourism



#### **RWANDA**

Focus: Agro-food processing: Integrated agro-industrial parks
• Livestock value chain development • Garments • Industry 4.0



# UNITED REPUBLIC OF TANZANIA

Focus sectors and areas are being formulated in line with the national development plan, under the leadership of the Government and in consultation with development partners

# **SELF-STARTER PCP**



#### KFNY

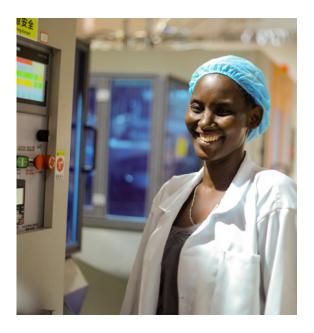
The Government is leading the implementation of the PCP self-starter in Kenya, with the advisory and technical support of UNIDO, building on best practices of ongoing PCPs.

As a tailored and integrated approach anchored in partnerships, the Programme continues to provide technical assistance and analytical, advisory and convening services, contributing to socioeconomic recovery efforts.

By facilitating the pooling of resources, coordinated actions and joint initiatives, the PCP also plays a key role in collective efforts of the United Nations development system at the country level to advance the SDGs, supported by the United Nations resident coordinators. National ownership and leadership remain essential features of the PCP.

Milestones in 2021 included Cambodia holding its first meeting of the PCP's high-level interministerial national coordination body, and Egypt and Zambia officially starting the PCP implementation phase following the signing of the PCP programme document by their respective Governments.

In February, UNIDO organized its first peer learning session for high-level representatives of PCP countries and those interested in the PCP model. The workshop responded to the desire for an exchange of experiences. It focused on stakeholder coordination, partnership and resource mobilization, and the establishment of industrial parks as the key to advancing ISID within the PCP framework. UNIDO also supports the PCP self-starter in Kenya building on such best practices.



The eighth ISID Forum provided a platform to discuss how multi-stakeholder approaches, such as the PCP, galvanize socioeconomic recovery and contribute to efforts to build back better from COVID-19. The Forum brought together high-level government representatives from PCP countries to present their first-hand experiences and lessons learned, as well as partners from the United Nations development system, financial institutions and other stakeholders to share their views.







# INVESTMENT, TECHNOLOGY AND **SME DEVELOPMENT**











TOP UNITED NATIONS IMPLEMENTING PARTNERS



















The flourishing of SMEs is crucial to achieving prosperity in developing and middle-income countries, where these enterprises account for the majority of jobs created and serve as the backbone of the economy. The COVID-19 crisis has added to development challenges through disruptions in trade and investment flows and by altering established patterns of production, value chains and commerce.

UNIDO promotes partnerships at the corporate, institutional and political level to support developing countries in attracting investments and technology transfer. The Organization delivers customized training programmes that increase productivity and efficiency among SMEs and help them develop investment project proposals crucial to accessing global value chains. It also promotes digitalization, resource-sharing, policy coordination, and investment and technology matchmaking in close cooperation with a variety of partners in this field.

Technology adoption and access to investors help SMEs keep pace with international industrial trends. UNIDO facilitates this, among others, through its ITPOs in eight countries, namely Bahrain, China, Germany, Italy, Japan, Nigeria, the Republic of Korea and the Russian Federation.

In 2021, UNIDO support to SMEs and MSMEs continued to follow the incremental approach of the COVID-19 Industrial Recovery Programme (CIRP) as articulated through the guidance document Responding to the COVID-19 Crisis – Pathway to Business Continuity & Recovery. Examples of COVID-19 recovery support to MSMEs include the upgrading of PPE production in Nigeria and a Switzerland-funded project in Cambodia in the agribusiness and tourism sector.

# **INDUSTRIAL DEVELOPMENT REPORT 2022**

UNIDO launched the 2022 edition of its flagship Industrial Development Report at the General Conference on 1 December 2021. Under the title "The future of industrialization in a post-pandemic world", the report presents fresh evidence on the impact of the COVID-19 pandemic on industrial development and on the prospects for the years to come. One major finding is that industrial capabilities are a key factor of resilience. Not only did the industrial sector continue to provide employment and income generation opportunities during the pandemic, the sector also ensured

continuous access to essential goods and services for populations all over the world, including food, medical equipment and pharmaceutical products. The report reveals that countries with stronger manufacturing capabilities and more diversified industrial sectors have weathered both the economic and health impacts of the COVID-19 pandemic better than their peers. Findings reaffirm the centrality of SDG 9 to the achievement of the 2030 Publication: Agenda for Sustainable Development.

Industrial Development Report 2022

#### Competition honours cleantech innovators

As the world faced the increasingly visible effects of climate change in 2021, the ITPO network conducted the second UNIDO Global Call. Initiated by ITPO Germany, the global competition was open to developers of novel solutions in cleantech and sustainable land management. Private sector enterprises competed in four categories. The competition's aim was to identify technologies that address the effects of climate change and contribute to sustainable and inclusive economic development.

The contest attracted 294 entries from 71 countries, with a third of submissions from women-led businesses. The winners were invited to take part in a side event at the United Nations Climate Change Conference in 2021.

> **66** Going through the shortlist of the Global Call 2021 in the run-up to the COP26 was really energizing. It shows once more that solutions are out there and are already being implemented. Meeting people who put in the effort to come up with solutions to the climate challenge has been a shower of optimism."

Andrea Camponogara, United Nations Framework Convention on Climate Change, jury member of the 2021 UNIDO Global Call

#### WINNING PROPOSALS OF THE GLOBAL CALL

**RUNWITHIT Synthetics** uses artificial intelligence to digitally **simulate** cities and regions. which allows decision makers to test policies, technologies and infrastructure solutions "in silico".





Betteries takes a circular economy approach to energy storage by giving a second life to electric vehicle batteries, with modular systems that can be used off-grid.

Polycare supports sustainable and circular **construction** by building blocks from polymer concrete with inferior sands or processed waste and recycled PET, a plastic resin common in packaging.





**Zhejiang Chint New Energy Development combines** the generation of green power in the desert with sand control and ecological restoration at its Kubuqui 310 MW solar photovoltaic project.

# Joint institute in Shanghai promotes clean technologies

Cross-border integration and rapid restructuring of industry worldwide require SMEs to identify and employ new sustainable technologies. To address this need, ITPO Shanghai has partnered with Shanghai Jiao Tong University to establish the Joint Research Institute for Green Growth. Its purpose is to identify sustainable technologies and promote their dissemination across borders.



The Institute's platform fosters knowledge exchange and collaboration in green growth and innovative technologies through the World Industrial and Innovative Technology Cooperation initiative. The initiative connects Chinese and international technology companies with developing and developed countries, identifies investors and supports companies as they enter markets and scale up. So far, the institute supports 97 enterprises in categories including medicine and health, green growth and advanced digital production. The firms' innovations include technologies that enable energy recovery in data centres, remediate heavy metal contamination in soils, and monitor gastrointestinal dynamics using radio frequency identification tags.

# **COMPETITIVE TRADE CAPACITIES** AND CORPORATE RESPONSIBILITY



























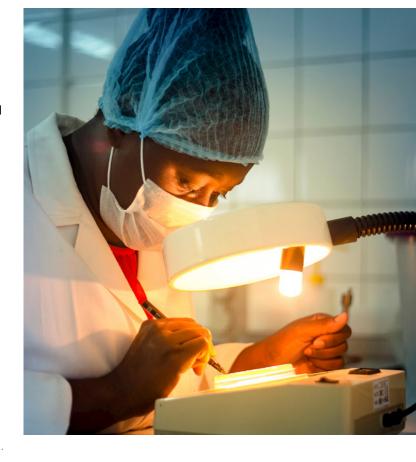






The sale and trade of products in regional and global markets has the potential to create economic growth and reduce poverty in developing countries by generating jobs and incomes in rural and urban areas. However, companies need to assure buyers, users and authorities that their products comply with standards established by Governments and transnational corporations.

UNIDO plays a crucial role in the internationalization and competitiveness of enterprises by helping SMEs establish their eligibility to enter foreign markets. The Organization uses a wide range of programmes and services to guide Governments, industries and institutions in setting up quality infrastructure systems. It helps them develop the policies, practices and legal and regulatory frameworks that support high-quality,



safe and environmentally sound goods, services and processes. UNIDO training helps SMEs upgrade technology and collect and disseminate market information.

Joining with partners from the public and private sectors, academia and national and international organizations, UNIDO promotes good practices and sustainable capacity. It also fosters global cooperation in standard-setting, measurement and compliance development along value chains.

# New guide supports countries building laboratory systems

The COVID-19 pandemic has underlined the vital role of testing capacities in public health and, more broadly, of a robust laboratory system. Laboratory infrastructure supports technology advancement, climate change adaptation and food safety, and is vital for access to international value chains.

#### **GLOBAL MANUFACTURING AND INDUSTRIALISATION SUMMIT**

The fourth Global Manufacturing and Industrialisation Summit (GMIS) was held in November 2021, in Dubai. UNIDO and the United Arab Emirates co-chaired this high-profile event under the theme of "Rewiring societies: repurposing digitalisation for prosperity". The six-day event featured over 250 global speakers, including five Heads of State, four Heads of United Nations entities, 16 ministers, and government representatives, and experts from 178 countries. More than 16,000 people registered for the Summit, over 3,170 of them as in-person attendees.

As a long-lasting strategic outcome, UNIDO supports a GMIS legacy initiative after every Summit. To date, four of these initiatives have been initiated, including the Initiative for Global Prosperity (2017), the President's Challenge (2019), the Green Chain Initiative (2020) and the Global



Biomedical Industrial Centre (2021). A Global Initiative on Future Industrial Safety was also launched at GMIS 2021.

> Website: **GMIS**

One challenge is that countries seeking to strengthen laboratory systems may unintentionally waste resources by duplicating services or induce unproductive competition among facilities.

UNIDO has joined with the International Network on Quality Infrastructure to create a tool for policymakers developing laboratory systems. Funded by the European Union, Laboratory Policy: A guide to development and implementation assists countries with establishing fit-for-purpose, effective and efficient laboratory capabilities. The guide describes international best practices and offers advice on good governance of quality infrastructure.

The Organization spearheaded the pilot application of the guide in Senegal. A UNIDO national quality expert coordinated discussions to consider the spectrum of laboratory activities countrywide. An inventory of laboratories was also carried out. Based on consultations and workshops, Senegal formulated its first national policy on laboratories and is

preparing a costed action plan. This work paves the way for scaling up the initiative elsewhere in West Africa and across the African continent.

In the Caribbean region, UNIDO works with the CARICOM Regional Organisation for Standards and Quality to develop a non-medical laboratory policy fit for adoption or adaptation by Caribbean countries. Policy deliberations have begun in three pilot countries with economies of different sizes, namely Antigua and Barbuda, Belize, and Trinidad and Tobago.

# New platform provides data on standards compliance of exporters

Exporters of food and non-food industrial products must comply with technical regulations and standards, which continually evolve. Exports from developing countries are sometimes rejected for

#### **HEALTH INDUSTRY INITIATIVE LAUNCHED**

Far-reaching disruptions of global supply chains for critical health products during the ongoing pandemic and persisting challenges encountered in making COVID-19 vaccines available across developing countries have reconfirmed the strategic importance of the geographically diversified provision of medical goods and services.

Since 2006, UNIDO has been supporting the African Union in pharmaceutical sector development, specifically for the accelerated implementation of the Pharmaceutical Manufacturing Plan for Africa (PMPA). UNIDO has also developed tools, including regional and national road maps for the pharmaceutical industry, to progress towards full compliance with international standards of Good Manufacturing Practices as well as guidance on vaccines manufacturing. At the onset of the pandemic, UNIDO and the World Health Organization (WHO) joined forces to enhance the provision of locally produced hand sanitizer, disinfectants and PPE in Africa.

Building on this experience, and encouraged by requests from Member States to strengthen value chains for health-care products such as essential medicines, vaccines and PPE, UNIDO launched a global health industry initiative in 2021.



The objective is to further strengthen the contribution of industrial development in Member States to the improved health and well-being of their populations.

To this end, UNIDO is developing a strategic framework in consultation with Member States, international development partners and private sector representatives. The approach envisioned will address demand and supply side bottlenecks facing health industry development while promoting the enabling environment that is required for local manufacturing of high-quality health-care products.

failing to meet safety and quality requirements. Yet national Governments face a problem when they seek to improve compliance: how can they know which products get rejected most often, and why?

UNIDO has developed an online platform that helps answer these questions. Funded by Switzerland, the new online standards compliance analytics tool pinpoints problem areas and analyses trends.

Analysis of the capacity of countries to comply with trade standards is based on key indicators and indexes developed by UNIDO, namely the relative rejection rate, the unit rejection rate, the total number of rejections and the reasons for rejection. Platform users can customize their inquiries by choosing parameters such as exporting country, product group, market, year and reasons for rejection.

Users can visualize information on a world map and compare how countries score in meeting trade standards in the export market and for the product group of their choice. Moreover, the platform allows users to compare and assess performance in detail by visualizing key rejection indicators.

These analyses can help not only government policymakers and partners, but also development organizations such as UNIDO itself. The reports assist the Organization in designing capacity-building services that prioritize countries or industries facing acute compliance challenges.

#### ENTREPRENEURSHIP DEVELOPMENT















TOP UNITED NATIONS IMPLEMENTING PARTNERS:









Entrepreneurship plays a crucial role in sustainable development and poverty eradication by catalysing economic growth and creating jobs. The entrepreneurial ecosystem gives enterprising individuals the chance to create new products and services, profit from new economic opportunities and change the nature of economies.

By targeting the economic and social change agents of tomorrow, the UNIDO Entrepreneurship Curriculum Programme (ECP) aims to foster an enterprising mindset in youth before they enter the labour market. The programme introduces a hands-on curriculum for secondary schools that builds young people's business skills and fosters an entrepreneurship culture.

The long-standing UNIDO programme was featured among the 2021 SDG good practices. This designation recognizes the cost-effectiveness and sustainability of the curriculum in enabling young people to help transform the economies of their communities and their countries.

> Website: SDG good practices

# Sao Tome and Principe adopts entrepreneurship curriculum

Sao Tome and Principe ranked 135th of 189 countries in the Human Development Index of the United Nations Development Programme (UNDP) in 2020, and one in five jobseekers aged 15 to 24 cannot find work. In response, the ECP enables young people to participate in their country's economy.

Working with the Ministry of Education, and with funding from Sao Tome and Principe, the Organization helps the country implement a nationwide entrepreneurship curriculum. Around 5,500 students in grades 10 and 11 attend weekly classes as part of the mandatory two-year course, now offered in all of the country's 15 secondary schools.

The curriculum helps young people build the confidence to pursue careers in the private sector. Every student creates and carries out a business project, from identifying opportunities to budgeting and sales. They also visit local businesses.

"Entrepreneurship discipline has turned me into a creator", said student Álvaro Real, who makes and sells electronic toys from recycled toys and damaged electrical appliances that he finds in the trash. He reports that the course has helped him become more organized.

Student Diana Sofia Rita established a costume jewellery business, borrowing money from her mother to buy the first jewellery-making materials. Now she has repaid her mother and is self-sufficient. She uses income from her business to pay for school fees and supplies.

> **66** With the discipline of entrepreneurship, I can help students get their ideas out of the drawer and work on them."

> > Luís de Castro, teacher at the National High School

# FROM COSMETICS TO COCOA, UNIDO HELPS GHANA EXPAND EXPORTS

Small and medium-sized enterprises form the backbone of the economy in Ghana. More than half of employed Ghanaians have jobs in SMEs, and many more work for them informally. To facilitate trade, Ghana participates in the African Continental Free Trade Area. Yet the country's potential as an exporter remains largely unrealized. According to the Ghana Export Promotion Authority, the untapped income from cocoa and cashew products alone would have been nearly \$3 billion in 2019.

UNIDO supports two programmes that bolster competitiveness and increase exports in seven selected value chains: The Ghana component of the Global Quality and Standards Programme focuses on cocoa, cashews and oil palm, with funding from Switzerland. The West Africa Competitiveness Programme (WACOMP) works on cassava, cosmetics, mangoes and pineapples, with funding from the European Union.

Both programmes support SMEs by creating links between value chain actors, bringing together producers of similar products, supporting low-carbon development, enabling conformity to international standards and advising national institutions that support and certify SMEs.

### Connecting value chain actors

Using the cluster approach in Abura, Ghana, WACOMP benefited both cassava farmers and a cassava processor. UNIDO experts showed 230 growers how to select the best varieties and improve cultivation, irrigation and storage. They then introduced the farmers to a cassava flour processor in Abura who had been driving long distances to find high-quality roots. The processor now buys cassava from the local farmers, and the collaboration has boosted production and quality.

The cluster approach also connected 60 farmers' cooperatives in Dodowa and Somanya with a new buyer for their mangoes. Hendy Farms, owned by two sisters, sought more mangoes for value-added products such as jams, hot sauces and chutneys. The programme trained cooperative members in good agricultural practices and linked them with Hendy Farms, which now buys their overripe fruit. Hendy Farms signed a subcontract with WACOMP and purchased a €22,000 solar fruit dryer that will reduce greenhouse gas emissions and increase



production capacity from 7 to 100 tons annually. This expansion will open opportunities for export to neighbouring countries. The programme has signed similar subcontracts for €550,000.

In the cosmetics cluster, the programme organized a course on online commerce and social media marketing in 2021. Those attending represented 30 SMEs that make cosmetics and body care products. Twenty-six companies participate in a cluster website featuring their shampoos, oils, lotions and soaps. Heads of companies in the cluster confer every month with a business coach.

Shea butter is a main ingredient in many Ghanaian cosmetics. Around 1.8 million Ghanaians produce it, 80 per cent of them women. The programme is partnering with a university to study how equipment used to roast shea nuts affects product quality and worker safety. Researchers from the University of Development Studies in Tamale have developed a prototype for a more efficient roaster that improves quality, saves energy and emits less smoke.



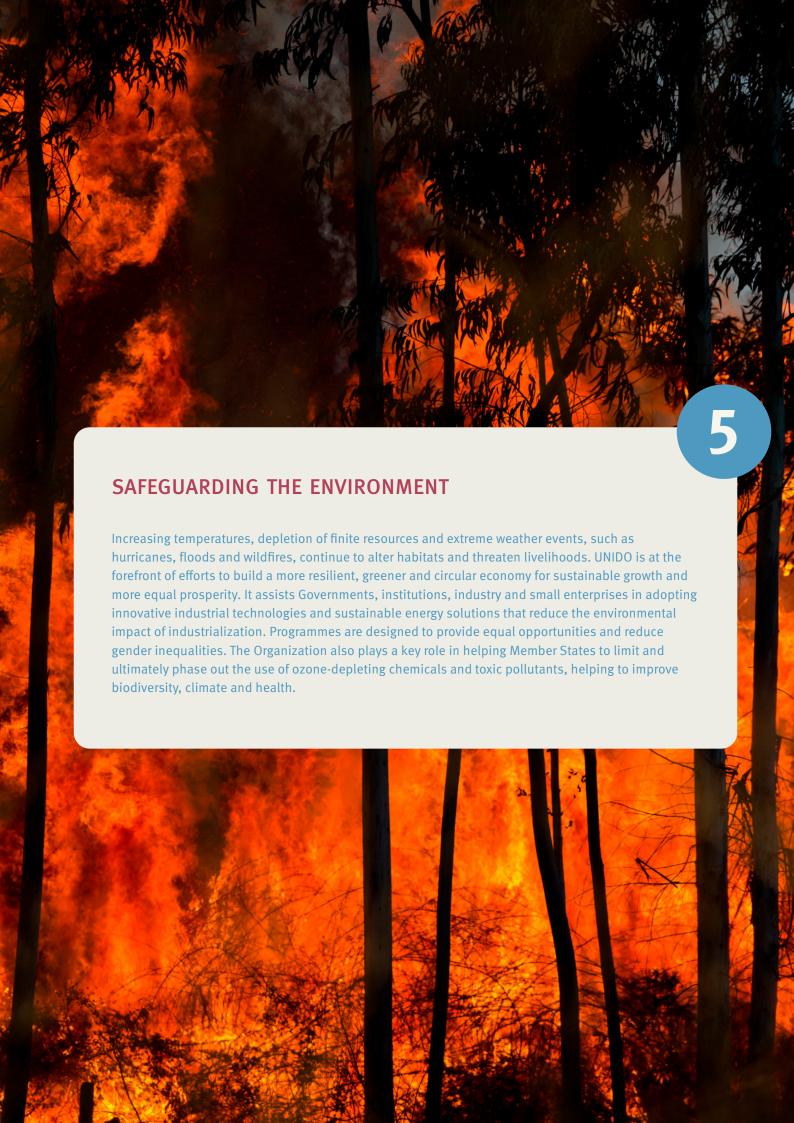
# Meeting standards opens doors to global markets

To help SMEs meet requirements for exporting their products, the programmes have helped 11 laboratories expand their capacity for testing products for compliance with international standards. The cosmetics laboratory for the national Food and Drugs Authority gained accreditation from the National Standards Institute of the United States. In addition, the two UNIDO programmes jointly helped develop more than 30 new standards for quality, safety and packaging for the targeted value chains. Testing and certification of her products has allowed the head of Aya Naturals and Kaydua Luxuries, Sharon Acheampong, to export her hair and skin care products to seven African countries. Now she is seeking customers in the United Kingdom and the United States.

African countries produce most of the world's cocoa supply, and Ghana is second only to its neighbour Côte d'Ivoire. To strengthen this value chain, the Quality and Standards Programme analysed the readiness to implement blockchain technology. The technology would allow buyers to track every step taken, from plantation to supermarket shelf. Blockchain would create a durable digital record of certifications such as those for organic cultivation and fair treatment of workers. The analysis concluded that cocoa is ready for blockchain. It would be the first Ghanaian value chain to use this technology.

> **66** UNIDO-WACOMP has been a pillar for this company. It's been like a journey, and it's been very, very, helpful."

Josephine Oduro Boateng, Head of Jodacy Plus, Accra



# **RESOURCE-EFFICIENT AND LOW-**CARBON INDUSTRIAL PRODUCTION

















TOP UNITED NATIONS IMPLEMENTING PARTNERS:









The world faces a threefold crisis in the form of climate change, biodiversity loss and increasing pollution. Burning fossil fuels continues to contribute to greenhouse gas (GHG) emissions and the worldwide use of natural resources, which has tripled since 1970, keeps rising. Without action, the effects of climate change will worsen. The International Resource Panel estimates that effective policies for efficient use of resources and sustainable consumption and production could reduce emissions by 90 per cent while increasing the global gross domestic product by 8 per cent by 2060.

UNIDO supports developing countries in transitioning from the take-make-dispose model to a circular economy. The Organization is a founding partner of the Global Alliance on Circular Economy and Resource Efficiency, as well as of the Circular Economy Coalition for Latin America and the Caribbean. It is also a partner in the global project "SWITCH to circular economy value chains", which promotes circularity in textile, garment and plastics value chains. In May 2021, UNIDO hosted the first global consultations on circular economy, co-chaired by Austria and Costa Rica. Following preparatory regional consultations, over 430 specialists from Member States, United Nations entities, public and private organizations, and academia contributed to the discussions.

UNIDO leads the Industrial Energy Accelerator, a network of industrial energy efficiency initiatives operating in 14 countries. The Accelerator launched five Efficiency Solutions Kits that highlight the role of renewable energy in generating high-temperature heat in heavy industry. The Three Percent Club, a global coalition which UNIDO joined in 2019 as institutional partner, assists India, Indonesia, Morocco and South Africa, four countries with growing industrial sectors, to achieve the target of a three per cent annual improvement in energy efficiency.

# Keeping plastic waste out of Africa's coastal waters

Plastic pervades the world's oceans. An estimated eight million tons leak from land into seawater each year. The plastic comes from single-use shopping bags, synthetic clothing, lost fishing gear and microbeads in facial scrubs and toothpaste. It harms fisheries and undersea ecosystems, sullies tourist destinations and threatens livelihoods. The global community has mobilized to stem the flow of this litter. In 2019, the Japanese G20 presidency shared the Osaka Blue Ocean Vision, which aims to halt marine plastic littering by 2050. With funding from the Government of Japan, UNIDO is engaged in two projects in Africa that build on the Organization's leadership in promoting circular economies. Circularity in plastic value chains requires selecting more sustainable materials, minimizing packaging and optimizing waste collection and recycling.

UNIDO and its partners have completed studies of plastics value chains and regulatory frameworks in Egypt, Kenya and Nigeria. Each country's report assesses strategies for improving management and recycling of plastic waste and identifies innovations in packaging and alternatives to plastic. These include a material made from fermented corn starch and one that combines wood fibres and lignin, a pulp industry by-product. Both are biodegradable.

Another project funded by Japan supports South Africa in its efforts to transition from conventional plastics to more environmentally friendly substitutes. The project seeks out such alternatives and sets out an action plan for this transition. UNIDO also supports measures to strengthen the role and improve the safety of informal workers who sort and sell waste for recycling. These collectors salvage 80 to 90 per cent of



paper and packaging in South African landfills and kerbside drop-offs.

Using Japanese technologies, researchers at the Council for Scientific and Industrial Research (CSIR) in South Africa verify that materials billed as compostable fulfil that promise. The lab is working towards international accreditation as the country's first biodegradation testing facility.

> **66** Sustainability is no longer a choice. It needs to be a conscious position, one decided upon and implemented at every level."

> > Maya John, Senior Research Chemist, CSIR, Pretoria

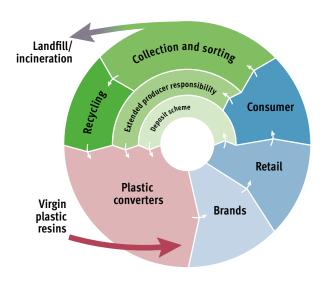
### Expanding plastics recycling in Israel

Israel has one of the world's highest rates of per capita plastic consumption, yet it recycles just six per cent of discarded plastic. Domestic recyclers cannot meet the growing demand for the plastic resins used for recycled products, including carpet fibre, detergent containers and drainage pipes.

With European Union funding, UNIDO supports Israel's efforts to make its plastics industry more circular. The Organization works with public and private partners to map the plastic waste recycling value chain, upgrade plastic waste collection and prepare the recycling industry to handle greater volumes. As a result, the Government plans to introduce standards for plastic recycling. With advice from UNIDO, Israel strengthens its extended producer responsibility scheme for plastic packaging, an approach that makes the manufacturer of a product accountable for what happens to it once its useful life

Rather than recycling plastic bottles, Israel exports most discarded bottles made of PET, or polyethylene terephthalate. The Government is following a UNIDO recommendation to add large PET bottles to the country's bottle-deposit system. In addition, the project has completed a market study for a recycling plant for these containers. The plant would transform PET bottles into plastic flakes and resins for making new products.

Next on the agenda is a pilot to make existing packaging recyclable. This will demonstrate the



The plastics value chain

usefulness of an interactive tool developed by the project to assist designers of sustainable packaging.

The project is the latest in a series in which the Organization has demonstrated the benefits of resource-efficient and sustainable production in Israel through the SwitchMed Programme.

# Increasing boiler efficiency to cut emissions in Viet Nam

Inefficient industrial boilers waste fuel and pollute the air. In Viet Nam, many boiler owners and operators lack the skills required to diagnose and remedy inefficiencies or mitigate GHG emissions. Before the intervention by UNIDO, Viet Nam had no efficiency standards for boiler energy usage.

With funding from GEF, UNIDO has completed a five-year project that addressed these problems, guiding enterprises in evaluating their boilers and in upgrading or replacing those that were wasteful. The project ran awareness events for more than 300 government officials and boiler owners, operators and manufacturers. It created a network of in-country experts by training more than 600 boiler operators and designers, along with energy managers and consultants. In addition, Viet Nam revised and adopted two technical requirements for boilers, one setting

standards for energy efficiency and the other for design, manufacture, installation, use and repair.

The project completed 150 boiler efficiency reviews and oversaw nearly 70 boiler replacement projects. Enterprises involved in food processing, textiles and garments, chemicals and fertilizers, boiler manufacturing, and paper, pulp and wood processing participated. The project reduced overall energy consumption by 2.9 million gigajoules per year and cut annual CO<sub>2</sub> emissions by 488,000 tons.

One beneficiary was the Trang An Confectionery Company, which produces moon cakes and coconut candies in coastal north-central Viet Nam. UNIDO experts found that its coal-fired boilers were not only inefficient, but their emissions also exceeded national environmental standards. Following expert advice, the company decided to replace its coal-fired boilers with biomass boilers fuelled by sawdust and rice husks. Energy efficiency rose from 58 to 85 per cent, and the factory's reduced emissions now fulfil national standards. The conversion reduced the company's operational costs by 25 to 40 per cent, with a payback period of 32 months.

We have seen a significant energy efficiency improvement: We reduced fuel use per ton of steam by about 40 per cent and saved 1,400 tons of coal per year, equivalent to \$74,000 in fuel costs."

> Le Thahn Quang, boiler energy manager, Hanoi Dyeing Joint Stock Company



#### **NEW INITIATIVE TACKLES EMISSIONS BY HEAVY INDUSTRY**

Decarbonization of heavy industry is the next frontier in confronting climate change. Research from the Intergovernmental Panel on Climate Change predicts that if developing countries expand their infrastructure and average emission rates remain unchanged, the construction sector alone will emit 470 billion tons of CO<sub>2</sub>-equivalent by 2050. This would exceed the remaining carbon budget for avoiding dangerous climate change.

Emissions from steel and cement production stand out, with each representing 7 to 8 per cent of energy-related emissions worldwide. These sectors pose unique challenges, because making steel and cement requires continuous intense heat, which mostly comes from fossil fuels. Reaching net-zero CO<sub>2</sub> emissions will require reducing demand for these materials, recycling them more effectively and scaling up renewable energy.

To contribute to this undertaking, UNIDO in 2021 partnered with the Clean Energy Ministerial to launch the Industrial Deep Decarbonisation Initiative. This global coalition works to stimulate demand for low-carbon industrial materials by collaborating with Governments to establish green procurement targets for public and private sector projects. The initiative also works to standardize carbon assessments, to incentivize investment in low-carbon product development and to design industry guidelines.

Co-led by India and the United Kingdom, the Industrial Deep Decarbonisation Initiative brings together related initiatives and partners, including the Mission Possible Platform, the Leadership Group for Industry Transition, the International Renewable Energy Agency and the World Bank. Current members include Canada, Germany and the United Arab Emirates.

# **ACCESS TO CLEAN ENERGY** FOR PRODUCTIVE USE

















TOP UNITED NATIONS IMPLEMENTING PARTNERS: .....









(M) UNHCR

Industry accounts for 37 per cent of global energy consumption and 23 per cent of GHG emissions. As climate change risks intensify, it becomes increasingly clear that industry worldwide must innovate and shift from fossil fuels to more sustainable sources of energy.

One such source is green hydrogen, a fuel produced by using renewable energy to split water into hydrogen and oxygen. It has the potential to contribute to clean, carbon-neutral industrial production. In July 2021,

UNIDO launched its Global Programme for Green Hydrogen in Industry. With funding from the Governments of Austria, Germany and Italy, the programme promotes industrial applications of green hydrogen and facilitates global exchanges of knowledge about policies, technical guidelines and standards. In cooperation with China, UNIDO also established the International Hydrogen Energy Centre in Beijing to support the research, development and application of green hydrogen.

Another UNIDO programme to promote innovation, environmentally friendly technologies and clean energy is the Global Cleantech Innovation Programme (GCIP). With financing from GEF, the Organization identifies and nurtures clean energy technology innovators and entrepreneurs. The programme builds capacity within national institutions and partner organizations to implement the accelerator approach and help Governments develop supportive policy frameworks for cleantech entrepreneurs.

# Providing sustainable energy to rural Mozambicans

In Mozambique, electricity reaches only 27 per cent of rural areas. This hinders the development of industrial enterprises in the vitally important agricultural sector. Extending electricity grids is costly and technically difficult, and where settlements are sparse, expansion is inefficient. Many farmers therefore rely on expensive diesel, firewood and charcoal, while manufacturing enterprises burn wood for the manufacturing of products such as bricks, bread and soap.

To make rural development more sustainable, UNIDO helps Mozambique expand access to green energy to support the adoption of market-based integrated renewable energy systems for productive activities. With funding from GEF, in 2021 the Organization initiated a \$1 million credit line to help finance the transition from diesel and wood fuels in rural Mozambique. Dubbed "Guarantee fund", it offers fixed-rate loans for green energy projects. It serves borrowers who may be ineligible for standard commercial loans. The fund is managed by a commercial bank in partnership with Energy Fund, a public entity that promotes low-carbon production and energy conservation.

The project also offers training to counter false assumptions that diesel and wood fuels cost less than renewable energy. In addition, with input from UNIDO, in 2021 the Government approved a regulation that streamlines private investment in off-grid renewable energy systems. These measures are expected to reduce fossil fuel consumption, cut GHG emissions and ease forest degradation and soil and water

The fund's first client was a water supplier in the southern province of Maputo. With a \$13,500 loan, the company is installing a solar-powered system and disconnecting from the unreliable electric grid. The switch will save 60 per cent of the energy costs of pumping water for storage and distribution, and will allow the company to expand from 20 to 100 customers. In the long term, the company plans to supply water to health centres, schools, construction sites and gardens.

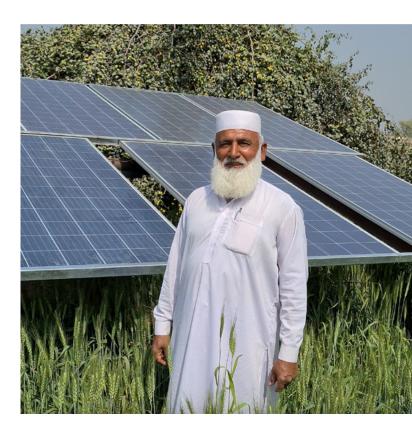
With the adoption of a system that does not only depend on electricity, we hope to receive water 24 hours a day."

a Shine Water customer.

# Stimulating investment in energy efficiency and renewables in Pakistan

Industry in Pakistan faces a widening gap between uninterrupted supply and demand for energy. Many factories must turn to their own diesel or coal-fired plants during electricity cuts. Those affected are mostly SMEs, which constitute 90 per cent of businesses in Pakistan. Power shortages undermine their productivity, reduce profits and stifle growth. Yet producers have been reluctant to embrace energy efficiency or tap into renewable energy sources.

With GEF funding, UNIDO helps to increase expertise and accelerate investment in energy efficiency and renewables to power the industrial sector. An overarching goal is to avoid GHG emissions.



The project installed solar photovoltaic modules of a total capacity of 2.68 megawatt (MW) using a pay-as-you-go model for four industrial units, and it established an online platform that consolidates information on providers of energy services and technology. It awarded microloans to more than 100 SMEs applying renewable energy solutions and subsidized 30 per cent of the borrowers' costs.

UNIDO deployed local and international consultants to train more than 100 individuals per year on how to improve energy efficiency and introduce renewable sources. It certified 40 energy auditors and managers as lead auditors for ISO 50001-2018. In addition, through 10 newly initiated regional and sectoral consortiums, consultants are guiding the implementation of energy management systems in 50 industrial units countrywide. The systems align with ISO 50001, the global standard for optimizing energy management, which was developed in 2011 with UNIDO support. The solar energy panels installed in 2021 will produce approximately 2,500 MW hours of clean energy per year, resulting in a reduction of Proiect website 1,122 tons of CO<sub>2</sub> emissions annually.

### Creating synergy for cleantech in Barbados

The vital tourism economy in Barbados has dwindled due to COVID-19 travel restrictions. While Barbadians await the return of tourists, UNIDO is helping young entrepreneurs venture into the new territory of green and blue economies. The island aims to lead the Caribbean in developing clean technologies and

In partnership with the Government of Barbados, UNIDO supports the Caribbean Community's first cleantech cluster, BLOOM. Hosted by the Barbados Investment Development Corporation, BLOOM seeks to tap into new technologies, such as waste-to-energy, green electric mobility, energy storage, green hydrogen, and wind and ocean energy. Funded by GEF, the cluster's 20 members include the Government, start-ups, industry and universities.

Ten young people, including four women, are now launching start-ups at BLOOM. Participants begin with

#### **VIENNA ENERGY FORUM**

The Vienna Energy Forum is a biennial event focused on a global sustainable energy future. Established in 2008 as a joint initiative of the Government of Austria, the International Institute for Applied Systems Analysis and UNIDO, the forum has gathered Heads of State and Government, ministers, energy experts and representatives of intergovernmental and non-governmental organizations, academia, civil society and the private sector.

The 2021 Forum convened in July under the theme "Where action meets ambition", focusing on the needs of end-use sectors, including industry, transport, and food systems. The event was preceded by more than 20 virtual discussions and featured its first "Youth for VEF" day, to promote the involvement of young people in climate and energy. More than 2,200 participants and speakers, of whom 40 per cent were women, joined from over 140 countries.

Forum recommendations and inputs fed into the United Nations Food Systems Summit in July, the High-Level Dialogue on Energy in September, and the United Nations Climate Change Conference in November 2021. Discussions also led to the formulation of the Gender and Energy Compact, an initiative with the ENERGIA network and the Global Women's Network for the Energy Transition.

six months of online courses. Guided by seven cluster experts, they then spend two years refining their business models, securing financing, creating products and attracting their first clients. Start-ups nearing the end of incubation receive a \$20,000 grant from UNIDO, and the cluster introduces them to the

Organization's network of donors, angel investors, venture capitalists and commercial banks.

One young entrepreneur developed biodegradable films that can supplant fossil fuel-based packaging such as Styrofoam and polyethylene. Her formulas incorporate sargassum seaweed, plant matter and volcanic ash.

Another participant is producing mulch and green agrochemicals for organic growers. He makes the solutions from invasive plants and organic waste, including leaves and fish offal. The chemicals support fragile soil organisms responsible for building soil structure, storing carbon, cycling nutrients to plants and protecting pollinating insects. The company received a Commonwealth Innovation Award in 2021. The prize is one of five won by BLOOM start-ups so far.

# IMPLEMENTATION OF MULTILATERAL **ENVIRONMENTAL AGREEMENTS**





























UNIDO helps developing and middle-income countries honour their obligations under multilateral agreements on protecting the environment. For more than three decades, the Montreal Protocol has addressed substances that deplete the planet's ozone layer. As a result, chlorofluorocarbons have been withdrawn from commercial use as refrigerants and propellants. An alternative, hydrochlorofluorocarbons (HCFCs), also depletes ozone, and many manufacturers then substituted hydrofluorocarbons (HFCs). As these are potent GHGs, UNIDO discourages their use, in line with the Protocol's Kigali Amendment, and supports alternatives with a lower

global warming potential. In 2021, UNIDO helped 12 countries prepare plans to reduce HFCs and started preparations in another 11 countries. UNIDO has provided development cooperation to help prevent ozone depletion in 111 countries since 1993. Cumulative emission reductions from UNIDO activities related to the Montreal Protocol amounted to 69.5 million tons CO<sub>2</sub>-equivalent in 2021.

UNIDO leads implementation of the Stockholm Convention on Persistent Organic Pollutants by supporting circular economy and sectoral approaches to chemicals and waste management. From 2014 to 2020, the Organization helped eliminate or safeguard almost 87,000 tons of waste that contained these toxins, which threaten health and disrupt ecosystems by accumulating in living organisms. It also avoided or safeguarded more than 131,000 milligrams of emissions of persistent organic pollutants (POPs) that were unintentionally formed from thermal processes involving organic matter and chlorine.

Mercury is a major public health concern. The greatest contributor to human-made mercury emissions is artisanal and small-scale gold mining, which uses mercury to isolate ore. Under the Minamata Convention on Mercury, UNIDO supports responsible gold supply chains and facilitates access to financing for cleaner technology in the Plurinational State of Bolivia, Burkina Faso, Ghana, Madagascar, Mongolia, Nigeria and the Philippines.

# Promoting alternatives to destructive gold mining methods

The extraordinarily rich ecosystems of coastal north-west Colombia are under threat, partly from artisanal and small-scale gold mining. Small gold mines tend to degrade the environment through erosion, deforestation and the indiscriminate use of mercury for processing. Mercury disrupts the functioning of ecosystems and can cause serious human health problems, including dementia, personality changes, insomnia, tremors and depression.

A European Union-funded UNIDO project seeks to improve livelihoods in selected communities in the Chocó Department, part of this biodiverse region.



Many families there depend for their survival on mining, whose contribution to the economy is surpassed only by subsistence farming. The Organization works to empower the community councils that administer the area by offering technical tools, knowledge and expertise to facilitate responsible and sustainable mining that does not employ mercury. Colombia signed the Minamata Convention in 2013, and the use of mercury in mining there is illegal. As a pilot, the project in Chocó Department will introduce gold extraction technology that works without mercury and increases yields.

UNIDO fosters effective participation by community councils in territorial decision-making to ensure that the local population benefits economically from the region's natural resources. Project support includes developing a business model for processing and marketing biodiversity-based products such as natural colourants and other ingredients for the food and cosmetics industries.

# Stemming industrial air pollution in Côte d'Ivoire

In just one generation, cities worldwide are likely to double in size, with the greatest expansion expected in Africa and Asia. As in other fast-growing cities, increased urban GHG emissions have accompanied population growth in Côte d'Ivoire's economic capital, Abidjan.

Cities provide important opportunities to address global environmental degradation, and UNIDO runs a GEF-funded project in Abidjan to increase knowledge about how integrated urban planning can mitigate climate change by addressing industrial sources of pollution.

The project has built capacity for evaluating and monitoring the environmental impact of the industrial sector in the city through emissions sampling and technical guidelines. UNIDO provided two air-quality monitoring stations as part of a larger monitoring network in the port city. It also prepared socioeconomic studies evaluating the health impact of exposure to industrial pollution and cost-benefit analyses of key measures for reducing it. In addition, project specialists developed action plans for potential beneficiaries in the cities of Abidjan, Bouaké and San-Pédro.

The project reduces CO<sub>2</sub> emissions into the atmosphere by 75,000 tons annually, and it keeps the equivalent of 4.3 grams of POPs out of the environment each year. This was accomplished in part by introducing 15 new technologies for reducing industrial pollution. Training sessions at 27 firms centred on technology upgrades and best environmental practices.

# Implementing the Stockholm Convention in the Caribbean

Several Caribbean countries are parties to the Stockholm Convention on POPs and have pledged to reduce or eliminate the production, use and release of these toxins. However, after signing the Convention, some countries have not fully developed legislation on POPs or measures for enforcing limits and disposing of the pollutants.

In a regional project entering its seventh and final year, UNIDO and GEF have helped eight countries to implement the Convention. The project established a regional database on POPs after inventorying the chemicals in the participating countries, namely Antigua and Barbuda, Barbados, Belize, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago. Legal experts drafted a model legislative act for integrated chemicals management. They designed the legislation so that countries could customize it to meet their unique needs, and seven countries have now updated their national implementation plans. The project also completed technical studies for three demonstration projects. These projects were a design for a sanitary landfill in Suriname, remediation of a landfill in Trinidad and Tobago and a review of medical waste disposal options for Belize. The project also transferred medical waste disposal demonstration technology to Belize.



**66** Under the project, we have been able to get tangible outputs, such as the POPs inventory reports and the update of our National Implementation Plan. The project undoubtedly supports policy development toward protection of human health and the environment."

Keima Gardiner, Environmental Policy and Planning Division, Trinidad and Tobago

### **UNIDO IN GENEVA**

Geneva has a high concentration of United Nations and other international organizations. With the need for an inclusive and sustainable recovery from the COVID-19 pandemic and its socioeconomic impact, much of the discussion in Geneva focused on how to transform global approaches to trade, investment and health, and how to chart an agreed way forward. Geneva saw major international conferences in 2021, including the fifteenth session of the United Nations Conference on Trade and Development (UNCTAD XV), the World Investment Forum, the International Labour Conference and the World Health Assembly. The UNIDO Office in Geneva helped ensure that the role of UNIDO in increasing economic resilience, in transitioning to a green and circular economy and in increasing access to vaccines and essential medicines is well

recognized. This outreach included organizing high-level events at the World Investment Forum, the Aid for Trade stocktaking event and the Public Forum of the World Trade Organization. The Office facilitated meetings of the Friends of Industry and Innovation, a group of likeminded ambassadors committed to furthering SDG 9 in Geneva. Throughout the year, UNIDO participated in prominent forums on health and digital technologies, and contributed to numerous intergovernmental and expert meetings on trade, technology and employment. The new development context and the outcomes of the aforementioned conferences offer opportunities for enhanced cooperation with Geneva-based institutions in the years ahead, particularly in relation to the normative role of UNIDO.

# UNIDO PARTNERS WITH FOUR AGENCIES TO ACCELERATE THE GREENING OF ECONOMIES

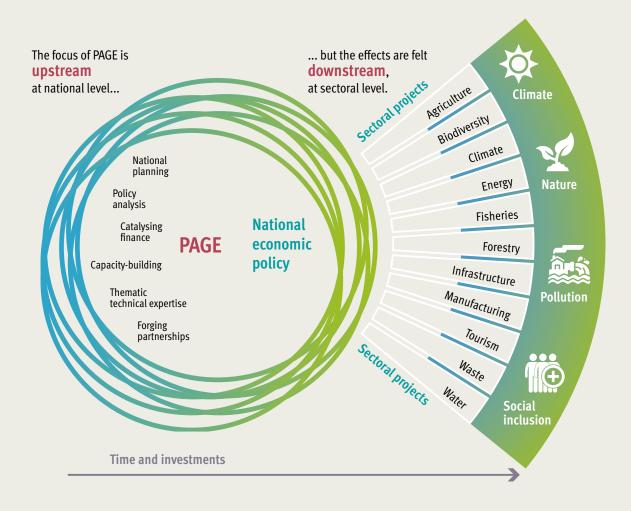
The United Nations Partnership for Action on Green Economy (PAGE) was established in 2013 to help interested nations and regions reframe policies to foster sustainable economic growth through green jobs. This contributes to global efforts to adhere to the 1.5-degree global warming target and to reduce pressure on natural ecosystems. UNIDO participates in PAGE, along with the International Labour Organization (ILO), the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP) and the United Nations Institute for Training and Research (UNITAR).

The chief role of UNIDO in this alliance is to guide countries in developing and greening their industrial sectors. Its contribution focuses on analysing and advising on industrial

policy, supporting its implementation by engaging industry, training actors in this transformation and building public-private partnerships.

Under the PAGE green recovery support, UNIDO assists national Governments in restructuring their industrial sectors to transform and adapt to changing circumstances during the COVID-19 recovery phase. UNIDO has supported Government-led efforts towards green economic recovery in 13 of the 20 PAGE countries.

In 2021, the Organization provided substantial support to Brazil, Morocco, Thailand and Uruguay in the form of analytical work, capacity-building and outreach to assist the countries in aligning green recovery policies with SDG and climate targets.



It also launched a global study, Impact of COVID-19 on green enterprises: Policy guidance towards inclusive, resilient, and sustainable recovery, focusing on Ghana, India and Uruguay.

UNIDO works with Kazakhstan to develop a plan for using a government emissions fund created with taxes paid by industrial enterprises that emit GHGs. In 2021, Kazakhstan and UNIDO began a pilot project in the Pavlodar Region that uses part of the fund to support SMEs in adopting greener practices. In the pilot, the fund subsidizes low-interest bank loans to energy services companies. SMEs can use the loans for projects such as retrofitting boilers, installing more efficient heating systems or replacing wasteful lighting. The loans support SMEs in cutting carbon emissions and creating green jobs. Moreover, the pilot provides a testing ground for a national policy to allocate the emissions fund to support green industry.

Improving waste management is one of Kazakhstan's priorities, and three PAGE partner agencies provide advice. UNIDO specializes in industrial waste, while UNEP and UNDP respectively focus on municipal waste and medical waste. In 2021, the Government adopted a national waste management policy. The next step is to mobilize industries to adapt energy management practices in keeping with the new policy.

In Indonesia, the Organization began in 2021 to promote a bottom-up approach to policymaking for decarbonizing industry with an initial focus on enhancing energy efficiency and clean production at 10 fertilizer plants. UNIDO also set up demonstration projects in the country's cement industry. Insights from the two efforts will be generalized to contribute to the country's low-carbon development initiative for heavy industry. The Organization also helps bolster circular economy practices in Indonesia.

In Uruguay, UNIDO has been supporting the development of a 10-year waste management plan for reducing waste streams destined for landfills. The Organization created the Uruguay

#### **PAGE in numbers (2013–2021)**









83 policy development plans



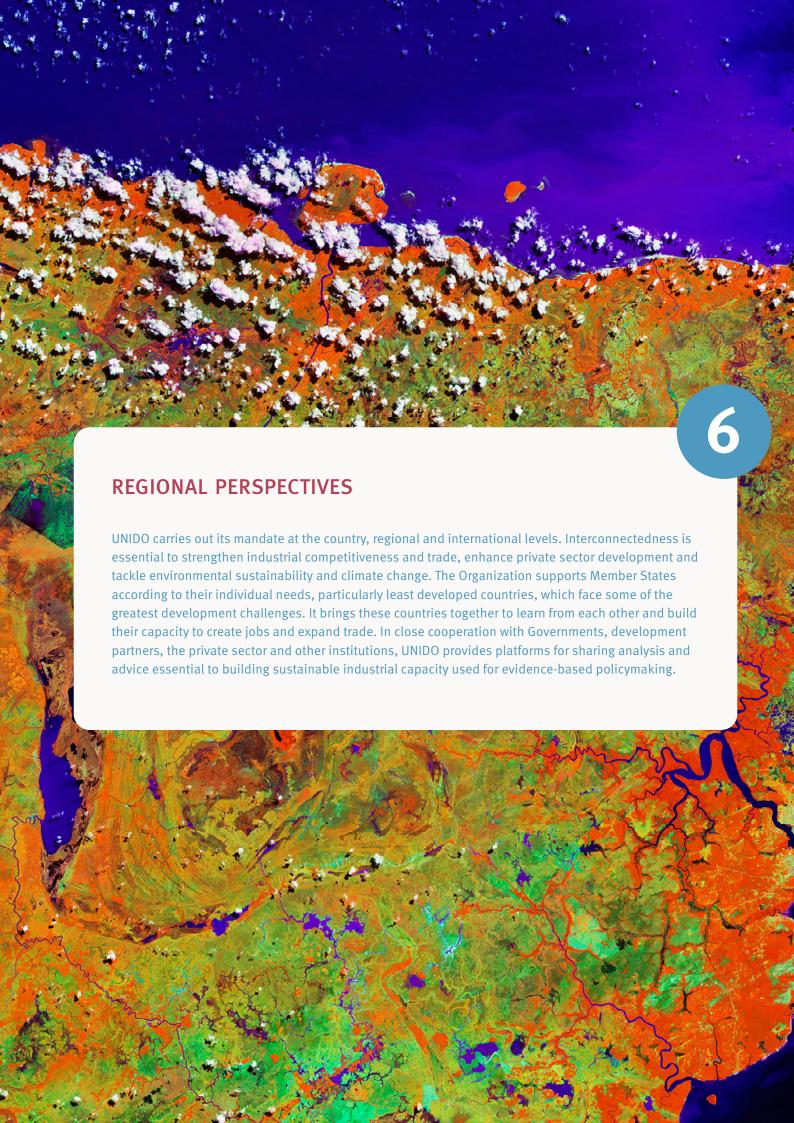
Circular Awards, now in their third year, and paid for training and capacity-building for award winners. To assist a 2020 winner, the Organization is partnering with the engineering faculty at the Universidad Católica del Uruguay to improve a tyre recycling plant. And in Mauritius, UNIDO completed an industrial waste cost structure study that provides a basis for creating government policies on waste.

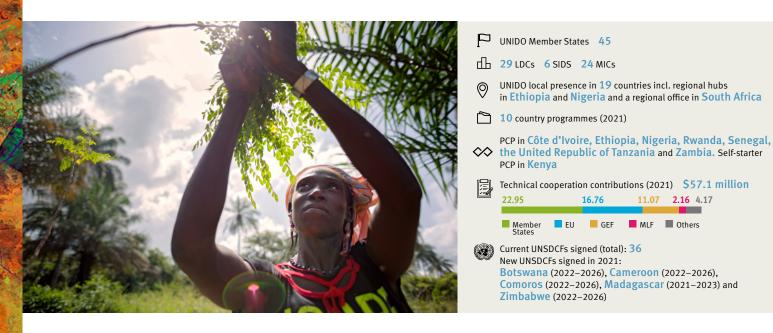
In line with the objectives of the PAGE strategy for 2030, in 2021 UNIDO provided policy advisory services that established or strengthened five institutions, improved management practices of 53 firms and collaborated with 17 business actors.

Funding for PAGE comes from the European Union, Finland, Germany, Norway, the Republic of Korea, Sweden and Switzerland. The 20 PAGE countries and regions to date are Argentina, Barbados, Mato Grosso State in Brazil, Burkina Faso, Jiangsu Province in China, Ghana, Guatemala, Guyana, India, Indonesia, Kazakhstan, Kyrgyzstan, Mauritius, Mongolia, Morocco, Peru, Senegal, South Africa, Thailand and Uruguay.

> **66** Even if we have goodwill, both political will and public support, we don't necessarily have the knowledge, expertise and technology to go the greener way. That's where initiatives like PAGE help very much. PAGE is not just a good idea, it is an imperative."

> > Oyun Sanjaasuren, former Minister of Environment and Green Development, Mongolia





#### **AFRICA**

The African continent is a diverse region, hosting the largest number of least developed countries (LDCs) and 20 countries that are classified as fragile or affected by conflict. Income growth served as an effective driver of poverty reduction in the previous decade, but the COVID-19 crisis pushed an additional 47 million women and men into extreme poverty in 2020 and 2021.

The African Continental Free Trade Area (AfCFTA) opened for trade in January 2021. The market, worth \$3 trillion and with 1.2 billion consumers, offers vast new opportunities. Production systems, skills, policies and regional value chains need to be strengthened to benefit from intra-African trade and regional development.

UNIDO-led cooperation in the region gives MSMEs and vulnerable groups, such as women and youth, the skills, policies, technologies and infrastructure they need to address the region's main challenge of poverty. Adding value to agricultural produce strengthens food security and creates jobs and incomes.

#### UNIDO at work in Africa

To mitigate the fallout from COVID-19, UNIDO helps reduce reliance on imports by developing local sources of quality-assured PPE products, hand sanitizer and disinfectants in Egypt, Ethiopia, Gabon, Ghana, Kenya, Senegal, South Africa and the United Republic of Tanzania. To analyse the consequences of the pandemic on MSMEs in the agro-food sector in Côte d'Ivoire, UNIDO, the Food and Agriculture Organization of the United Nations (FAO) and the African Union Development Agency conducted a joint survey to inform strategies going forward.

UNIDO strengthens regional approaches to take advantage of AfCFTA trade opportunities. The Organization leads a continental study mapping regional value chains, and is jointly managing the West Africa Competitiveness Programme with the International Trade Centre.

With the United Nations Regional Collaborative Platform, UNIDO leverages new technologies and enables digital transitions through strengthened integrated data and statistics, macroeconomic management and industry diversification.

UNIDO strategies for West and Central Africa strengthen regional dialogue and networking. With regional economic communities, the Organization has established a network of regional renewable energy and energy efficiency centres covering nearly the entire continent. UNIDO also works to create regional agro-industrial hubs within the Comprehensive Africa Agriculture Development Programme.

In the context of the PCP Ethiopia, three integrated agro-industrial parks opened in 2021 to create new jobs in rural areas. UNIDO links smallholder farmers, small-scale agro-processing enterprises and partner industries. To expand agro-processing, UNIDO helped establish the country's first hub to support creative industries and entrepreneurs in developing leather and leather products, and a coffee training centre to expand the coffee market.

As part of the PCP, the second phase of the Diamniadio integrated industrial park in Senegal was launched with financial support from the Export-Import Bank of China. UNIDO assisted companies from Côte d'Ivoire, France, Senegal and Tunisia in setting up operations, and 23,000 new jobs are anticipated.

Progress was also made in the PCPs, which are in the programming stage. Programming was initiated in the United Republic of Tanzania, while in Côte d'Ivoire and Rwanda the country diagnostics establishing the analytical framework and confirming the focus areas of the respective PCPs were finalized and validated by the Governments.

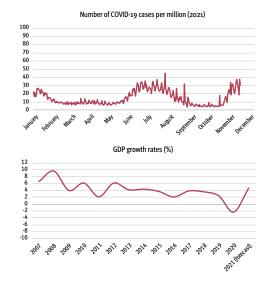
The five-year PCP Zambia was signed at the General Conference in 2021 to foster manufacturing industries and value addition for primary commodities, developing industrial skills and improving the policy environment. UNIDO also provided technical input into a pre-feasibility study for a joint Zambia-Zimbabwe agro-industrial park.

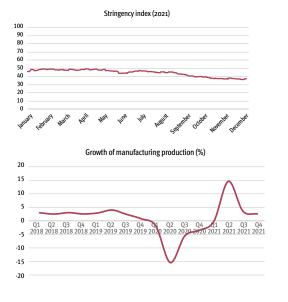
In 2021, UNIDO and FAO helped accelerate job creation and entrepreneurship for youth in agriculture and agribusiness in Cabo Verde, the Democratic Republic of the Congo, Ghana, Kenya and Zambia. In Côte d'Ivoire, cocoa-based food systems are being scaled up with assistance from UNIDO, FAO and UNDP through the development and testing of sustainable cocoa standards, certification and traceability systems. In Togo, UNIDO and UNDP are implementing a traceability and digitalization system for agrifood value chains to improve sustainable market access for MSMEs.

UNIDO works closely with United Nations country teams for integrated planning, technical coordination and advocacy at key events. In 2021, UNIDO contributed to the common country assessments in Cabo Verde, Congo, Côte d'Ivoire, Gabon, Ghana, Togo, Zambia and Zimbabwe.



The impact of COVID-19 on Africa\*







## **ARAB REGION**

The Arab region continues to face significant obstacles due to COVID-19, as well as ongoing challenges from conflicts, political unrest, the oil price crisis and the Beirut port explosion. Unemployment in the region, especially among women and young people, is high. The majority of employment is in the informal sector, with poor working conditions and limited job stability. The region also hosts 6 million refugees and more than 11 million internally displaced people. Both groups have been severely affected by the pandemic and lockdowns. Over half of the Syrian refugees in Arab countries are now living in poverty.

In response to these diverse challenges, over a hundred UNIDO projects in the region are under way, addressing agribusiness, entrepreneurship, vocational training, youth employment, environment, energy, e-mobility, industrial zones, statistics, industrial strategy and policy advice. In post-conflict countries, UNIDO focuses on restoring and improving livelihoods, skills upgrading for youth and agribusiness development.

# UNIDO at work in the Arab region

Policy advice and coordination is a focus of UNIDO across the region. In the Sudan, UNIDO concluded a comprehensive industrial diagnostics study and supported the Government with industrial policy advice.

In Jordan, UNIDO established an industrial observatory unit which builds national capacities to develop evidence-based industrial policies in line with international best practices. UNIDO also supports the Government to develop an artificial intelligence strategy and complete the country's food security strategy 2022–2027 with a chapter on mainstreaming food-based industries. It helps Jordan implement its Green Growth National Action Plan, with the support of GEF and the Montreal Protocol.

With UNIDO support, countries across the Arab region are transitioning to a green economy through circular economy approaches and cleaner and resource-efficient industrial production, and are increasingly digitalizing with the use of technologies of the Fourth Industrial Revolution. Algeria, Egypt, Jordan, Lebanon, Morocco and Tunisia are among the supported countries.

With the signature of the PCP document by Prime Minister Moustafa Madbouli, the PCP Egypt officially started implementation in April 2021. To speed up digital transformation, UNIDO organized a webinar in June 2021 on enhancing readiness for the Fourth Industrial Revolution. In partnership with the Organisation for Economic Co-operation and Development, UNIDO helped finalize the *Production Transformation Policy Review of Egypt*. A study on value chains for the industrial recovery from COVID-19 formed a joint industrial policy initiative with the African Development Bank (AfDB).

The PCP Morocco focuses on transitioning to a green economy. This is supported through PAGE, which was launched in Morocco in 2021, and the second phase of the GCIP which develops new solutions and jobs. UNIDO also supports the Government through the Three Percent Club, a collaboration committed to three per cent annual improvements in energy efficiency. A public-private partnership project developed by UNIDO to support the agro-industry component of the PCP attracted \$3.5 million from USAID.

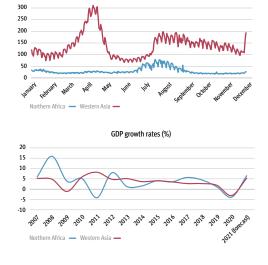
The country programme in Lebanon has eight projects under implementation. At least 48 enterprises, mainly in the agro-food and wood sectors, benefited from UNIDO interventions in technology transfer, training and improved market access. The Organization continues to support Beirut to recover from the 2020 explosion, targeting reconstruction, reform and recovery.

UNIDO is actively engaged in numerous United Nations initiatives in the region, including 14 common country assessments, and is leading or co-leading thematic working groups in five countries. The Organization also contributes to UNSDCFs, co-leading the prosperity pillar in Algeria, Egypt, Lebanon, Libya and the Sudan, and supporting the evaluation of United Nations Development Assistance Frameworks in Jordan and Morocco. UNIDO also worked with the United Nations youth task forces in Egypt and Morocco, in particular on the 2021 United Nations Climate Change Conference, and together with Egypt contributed to the newly formed United Nations Joint Team for Technology and Innovation.

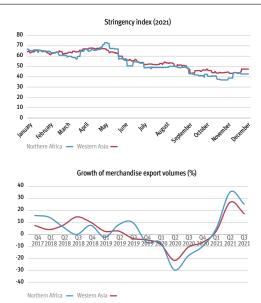


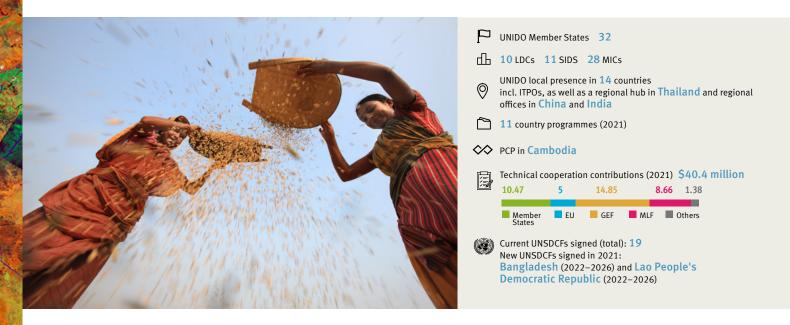
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### The impact of COVID-19 on Northern Africa and Western Asia\*



Number of COVID-19 cases per million (2021)





### **ASIA AND THE PACIFIC**

The region is a key economic and manufacturing powerhouse, accounting for approximately half of global manufacturing value added, generated largely in China, India, Indonesia, Japan, Malaysia, the Republic of Korea and Thailand. Continued economic growth helped reduce poverty in recent decades, but economic strength varies greatly in the region and COVID-19 reversed this positive trend. South and South-West Asia are still home to almost 180 million people living in extreme poverty. Population growth, rapid urbanization and unsustainable patterns of growth aggravate natural resource depletion, climate change and environmental degradation.

#### UNIDO at work in Asia and the Pacific

The comparatively advanced development status of the region, dominated increasingly by middle-income countries (MICs), explains the strong focus of UNIDO development cooperation on circular economy, energy efficiency, renewable energy and management of toxic chemicals and pollutants. UNIDO continues to address pockets of poverty that persist despite continued economic growth, to support agro-based

value chains to ensure food security, and to foster technology and knowledge transfer. UNIDO also helps improve the quality of work, trade competitiveness, infrastructure in cities, and sustainable consumption and production.

A number of projects in the region aim at providing policy advisory services and at building capacities of local Governments for policy development. This type of intervention is particularly relevant for MICs, as they have a pressing need to strengthen their integration into regional and global value chains by harmonizing policies and building capacities in statistics and research. The Organization sees the number of MICs and emerging donors in the region as an opportunity for South-South and triangular cooperation and knowledge transfer.

UNIDO promotes bridging the divide in the digital economy and increasing developing countries' capacity to use new technology. For example, UNIDO has been one of the supporting organizations of the China International Import Expo (CIIE) since 2018. This large-scale event hosted by the Government of China aims to support trade liberalization and economic globalization, and to actively open the Chinese market to the world. At the 2021 Hongqiao International

Economic Forum held alongside the CIIE, UNIDO participated in plenary and side events and organized a digital pavilion to showcase emerging technologies.

Further capacity-building events and workshops, specifically on the Fourth Industrial Revolution, took place in Cambodia, Indonesia, Pakistan and Viet Nam. In November, UNIDO organized the second Regional Conference on Industrial Development in Jakarta, which resulted in the signing of the country programme (CP) for Indonesia (2021–2025) and the issuance of a working paper that will inform the G20 presidency of Indonesia in 2022.

In Indonesia, UNIDO also leads a new joint initiative with UNDP, the United Nations Children's Fund and UNEP to enhance the resilience of SMEs and improve their access to diversified capital, essential technology and know-how.

The sixth Bridge for Cities event, organized in October 2021, gathered representatives of 18 cities

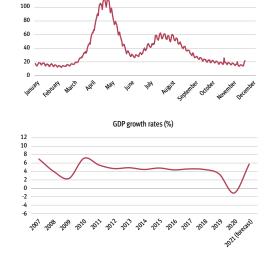
and more than 30 speakers, including the Secretary-General of the United Nations and the Executive Director of the United Nations Human Settlements Programme (UN-Habitat), who reflected on experiences and innovative solutions for recovering from the COVID-19 crisis and building resilience.

Of the 11 ongoing country programmes, those in China, Indonesia and Sri Lanka began new cycles. The unexpected political situation in Afghanistan and Myanmar in August and February 2021 resulted in an interruption of these two country programmes.

Following the signing of the PCP in Cambodia in December 2020, UNIDO supported the Government in establishing the management framework. Throughout 2021, key structures such as the interministerial national coordination body and the Partner and Donor Working Group were established and began supporting programme implementation.

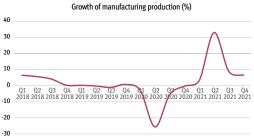


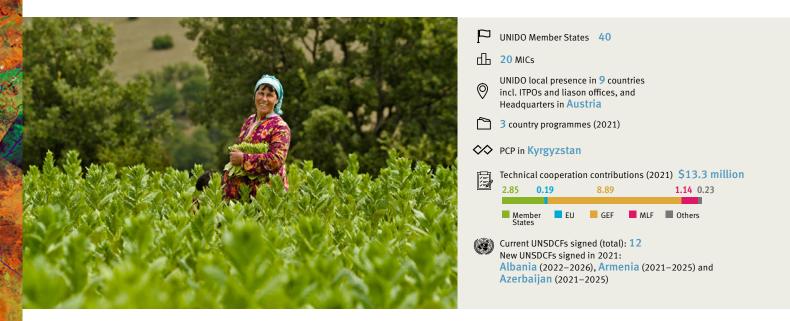
#### The impact of COVID-19 on Asia and the Pacific\*



Number of COVID-19 cases per million (2021)







# **EUROPE AND CENTRAL ASIA**

The region of Europe and Central Asia is diverse. Its countries are either advanced economies or MICs, but their geographic, economic and development backgrounds vary. With the largest number of reported COVID-19 cases per capita, the pandemic has hit Europe and Central Asia hard. The economic effects were particularly adverse for informal workers and women. Despite an economic rebound in 2021, job losses, reduced working hours and inflation have impacted the incomes of most disadvantaged groups. Particularly countries dependent on tourism, fossil fuels or other volatile sources of income were reminded of the importance of diversifying their economies.

UNIDO helps countries in the region recover more quickly by taking advantage of new technologies and innovation. Developing cleaner and more environmentally friendly approaches will also help countries in Central Asia get off the list of the world's most carbon-intensive economies.

UNIDO supports SMEs in this region to modernize, upgrade and integrate into broader value chains and markets. Vulnerable groups such as women and youth are given special attention to help build equitable opportunities in industries.

#### UNIDO at work in Europe and Central Asia

To help women and girls develop and upgrade their business management skills, UNIDO launched the six-module online training course "Digital Business Innovations for Women Entrepreneurs and Managers". Developed with funding from the Russian Federation, the course is free and accessible on the UNIDO e-learning platform in English and Russian.

UNIDO also organized a webinar series and panel discussion at the third Eurasian Women's Forum under the theme "Emerging opportunities for women in the digital age", reviewing best practices and conducive policies. UNIDO is consolidating a list of policy recommendations that came out of these talks, which will be promoted for further discussion and implementation.

In this region, UNIDO also continued to help specific countries improve processes and approaches that increase productivity and expand trade. The Organization prepared 10 country industry profiles, analysing trends in economic and industrial development in order to identify how UNIDO and other organizations can support the countries on their way to ISID.

In Armenia, with UNIDO support, the competitiveness of the country's clothing and footwear industries improved. In Tajikistan, UNIDO has been working to upgrade the carpet weaving, embroidery and traditional textile sectors. In Belarus, demonstration and innovation centres for Fourth Industrial Revolution technologies are being piloted. In Uzbekistan, UNIDO has begun modernizing the silk processing industry. In Turkey and Ukraine, a large portfolio of projects covers diverse dimensions of environmental sustainability and clean energy.

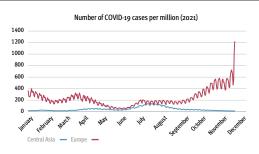
Cooperation with the European Union is expanding in the region, providing opportunities to put in place the necessary infrastructure. Within the EU4Environment programme, UNIDO continued working in Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine to demonstrate opportunities for greener growth and introduce mechanisms to better manage environmental risks and impacts. Under the United Nations Joint

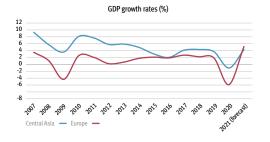
Programme in Georgia supported by the European Union, UNIDO conducted a pioneering study mapping 57 emerging and potential manufacturing, agribusiness and primary agriculture clusters.

The preparatory assistance phase of the PCP Kyrgyzstan has been completed. The new CP Armenia was signed with the Government for the period 2022–2026. In the framework of the CP Albania, UNIDO analysed the fisheries and aquaculture industry to show how it can be used to develop the country's "blue" marine economy. A UNIDO analysis in Albania identified the sectors of fruit, vegetables and medicinal and aromatic plants as offering high development potential.

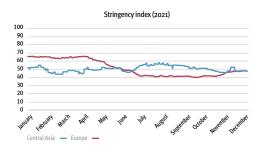
Actively participating in the United Nations Digital Transformation Group for Europe and Central Asia, UNIDO contributed policy recommendations on digitalization within the framework of the Regional Forum on Sustainable Development in 2021 and the World Summit on the Information Society Forum 2021.

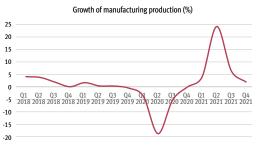






#### The impact of COVID-19 on Europe and Central Asia\*









### LATIN AMERICA AND THE CARIBBEAN

Despite the development progress of recent decades, wealth distribution within countries in Latin America and the Caribbean is more unequal than in MICs in other regions. The gap between extreme wealth and extreme poverty deepened further due to the COVID-19 crisis, which also aggravated structural problems, such as low productivity and investment, high informality, a job market with low wages and security, unemployment and poverty. Maintaining inclusive and environmentally sustainable growth is a challenge, also in view of the region's vulnerability to climate-related natural disasters. The mining, construction, manufacturing and service sectors returned to the production levels of 2019 in several countries and GHG emissions will likely rise to pre-pandemic levels by 2024.

# UNIDO at work in Latin America and the Caribbean

UNIDO activities in the region continued to be directed towards environmental sustainability, aimed at renewable energy and energy efficiency, quality

infrastructure, agro-industries, the circular economy and the implementation of multilateral environmental agreements.

To help MSMEs recover in the aftermath of the pandemic, UNIDO initiated a series of webinars on entrepreneurship and the circular economy for businesses related to the plastics sector in Costa Rica. Five UNIDO publications on the circular economy supported these and other efforts in 2021 in the region.

To strengthen cooperation in the region, UNIDO established a task force with the Group of Latin American and Caribbean States. Best practices throughout the United Nations system are being identified by UNIDO field offices. A UNIDO-developed SDG 9 Accelerator Platform further strengthens regional knowledge exchange and dissemination among UNIDO Member States, relevant ministries, the private sector, civil society and academia.

With support from Germany, UNIDO helps the region increase the number of jobs in fisheries and fish processing, with a particular focus on attracting more women and youth into the sector.

Countries are learning together as a region, innovating and expanding their value chains.

In 2021, UNIDO country programmes were implemented in the Plurinational State of Bolivia, Cuba, El Salvador and the Bolivarian Republic of Venezuela. The CP Venezuela launched an industrial upgrading and modernization programme.

In Colombia, UNIDO signed a bilateral Programmatic Cooperation Framework for 2021–2024. It focuses on industrial quality infrastructure, trade capacity for MSMEs in less developed regions, bioeconomy, strategies for the Fourth Industrial Revolution, mercury phase-out in artisanal and small-scale gold mining, eco-industrial parks and industrial energy efficiency.

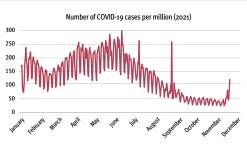
The PCP in Peru helps the country build a more diversified economy, strengthen productivity and transition to a circular economy. During 2021, the UNIDO eco-industrial parks model was used to help develop sustainability criteria and regulations for the national system of industrial parks. UNIDO is also

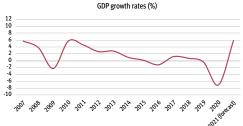
supporting the development of a new industrial policy. The Government established the PCP Peru Partner and Donor Working Group, which held its first meeting in February 2021 and signed the new UNSDCF covering 2022–2026.

UNIDO and UN-Habitat partnered with the Government of Mexico to formulate the territorial industrial atlas for investment attraction in Mexico, a novel approach in which urban and regional territorial planning perspectives are used to attract foreign direct investment.

In Uruguay, UNIDO leads a United Nations Joint SDG Fund project with UNDP and UN Women. It establishes a Renewable Energy Innovation Fund to support the energy transition, help decarbonize the country's economy and boost competitiveness. The fund will combat climate change by helping transition the transportation and industrial sectors of Uruguay to green energy and providing affordable access to innovative clean technologies.

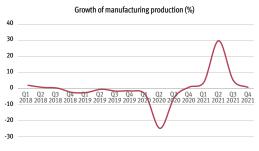






# The impact of COVID-19 on Latin America and the Caribbean\*





### **MIDDLE-INCOME COUNTRIES**

Home to about 75 per cent of the global population, middle-income countries (MICs) often face similar vulnerabilities as low-income countries. Before the COVID-19 pandemic, which made their challenges even more acute, they hosted around 62 per cent of the world's poor. Rising pollution is also a persistent challenge for many MICs. Industrial development and technological know-how play a key role in the complex transitions into and out of MIC status. UNIDO has been working with MICs over the past five decades, boosting its engagement through the San José Declaration adopted in 2013 at the Highlevel Conference of Middle-Income Countries. In 2019, the General Conference adopted the UNIDO strategic framework for partnering with MICs, for which a workplan for implementation was presented to the Industrial Development Board in 2020 and July 2021. With the operationalization of the strategic framework, UNIDO will support the acceleration of ISID in MICs with a focus on technological upgrading, upskilling and capacitybuilding, and environmental sustainability.

Country groups are calculated according to the standard country or area codes for statistical use (M49) of the United Nations. Growth rates compare to the same period of the previous year.

<sup>\*</sup> Sources for the statistical information on the impact of COVID-19 on the regions:

Number of COVID-19 cases per million from January to December 2021: UNIDO elaboration based on WHO data.

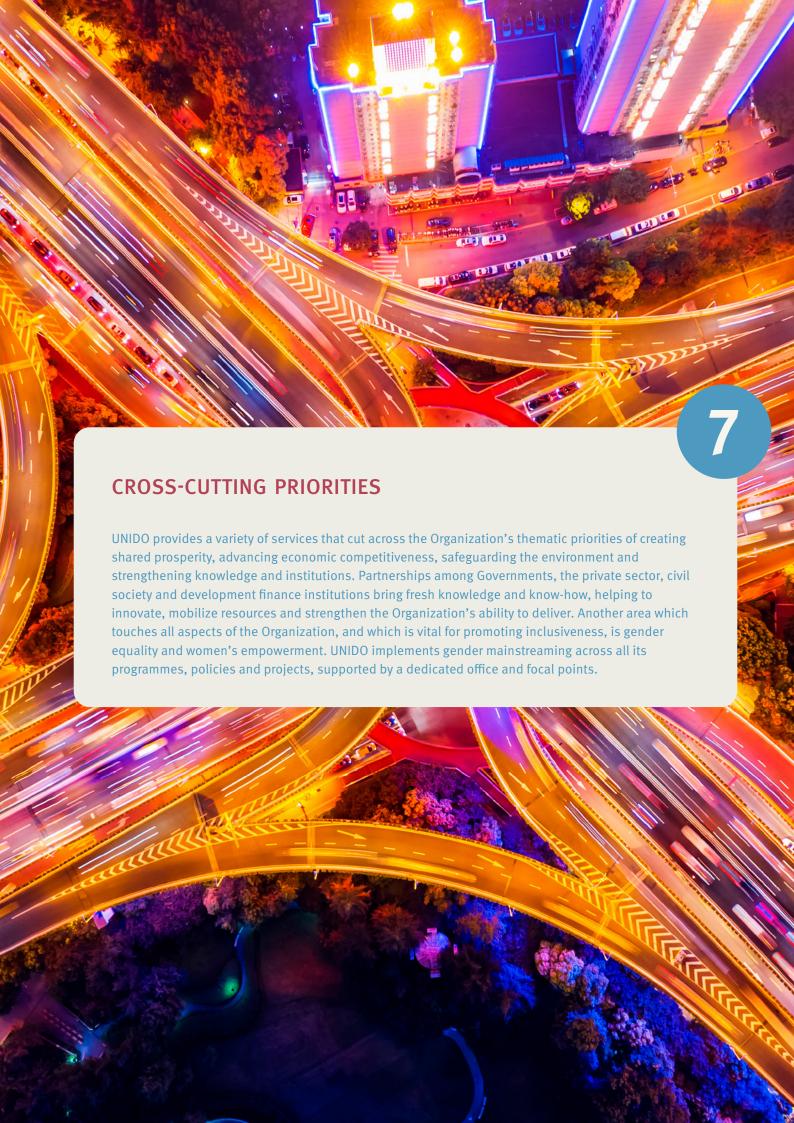
Stringency index (2021): based on the Oxford COVID-19 Government response tracker, Blavatnik School of Government, a composite measure of nine containment measures.

Annual GDP growth rates (2007 to 2021): UNIDO Statistics.

Growth of manufacturing production (2018 to 2021): year-on-year growth of manufacturing output, UNIDO Statistics.

Growth rates of merchandise export volumes (Arab region): UNCTAD.

Population fully vaccinated (share of population who completed the initial COVID-19 vaccination protocol) as at 31 December 2021: UNIDO elaboration based on Our World in Data.



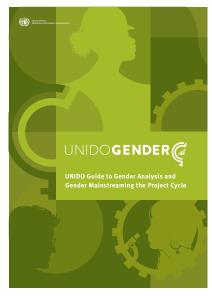
# **GENDER EQUALITY AND WOMEN'S EMPOWERMENT**

For women and men to lead, participate in and benefit equally from industrial development, UNIDO implements programmes that help transform social norms and power relations, and prioritizes the leadership of women. At the organizational level, UNIDO promotes an enabling and inclusive work environment through policies, training and advocacy with other United Nations agencies.

At its midway point, UNIDO continued to be on track to deliver on the gender equality commitments of the 2020-2023 UNIDO Gender Strategy. In 2021, 46 per cent of UNIDO projects approved were assessed to have at least significantly contributed to gender equality and the empowerment of women, exceeding the 2023 target of 45 per cent. To better capture the contributions of CPs, PCPs and projects of a normative and convening nature, UNIDO updated its Gender Compliance and Marker Form. To implement the Gender Strategy commitments further and facilitate the integration of gender considerations in ISID initiatives, the UNIDO Guide to Gender Analysis and Gender Mainstreaming the Project Cycle was launched in June 2021.

In 2021, UNIDO trained government officials on how to measure, analyse and address the effects of inequality on industrial development so as to increase the number of national policies and programmes that promote women's empowerment. In Argentina and Chile, the focus was on how increasing genderresponsiveness can improve environmental protection. In South-East Asia, UNIDO examined women's economic empowerment, bringing together national ministries and industrial stakeholders of ongoing UNIDO projects to share best practices. The Organization is also developing a free, self-paced online training course on gender lens investing. Participants learn the economic and social value of investing in women-owned enterprises and those that promote gender equality in the workplace or through





UNIDO Guide to Gender Analysis and Gender Mainstreaming the Project Cycle



their products, and women entrepreneurs gain tools to navigate emerging public and private markets.

UNIDO co-launched with other Vienna-based United Nations organizations the joint "Dignity and Inclusion at Work" learning initiative for United Nations personnel in Vienna. It includes modules on harassment prevention, LGBTIQ+ inclusion and active bystanders. Through its co-leadership of the Vienna Representation Impact Group of the International Gender Champions initiative, UNIDO promotes the Code of Conduct to Prevent Harassment, Including Sexual Harassment, at United Nations System Events, affirming its zero-tolerance approach.

At numerous global gatherings and forums, UNIDO continued to promote and advocate for gender equality and the empowerment of women in coordination with other United Nations agencies. For International Women's Day, personnel engaged in the #sheis campaign as a rallying call for women's

leadership. At the sixty-fifth session of the Commission on the Status of Women, UNIDO and Finland organized an event to celebrate the contribution of women entrepreneurs to climate action in the fields of circular economy, clean technologies and the energy transition. The third annual Vienna Discussion Forum, which UNIDO held with the United Nations Office on Drugs and Crime, Finland, Norway and Sweden, produced a set of policy recommendations to guard against inequalities that might arise in the process of technological development and digital transformation.

At the UNIDO General Conference in 2021, Member States reaffirmed the importance of efforts towards gender equality and the empowerment of women with a dedicated resolution, and the UNIDO Gender Equality Mobilization Award recognized personnel using a gender lens to build better economies and societies together with UNIDO partners.

### PARTNERSHIPS AND SOUTH-SOUTH **COOPERATION**

Partnerships continue to be central to the work of UNIDO, particularly in helping countries recover from the COVID-19 crisis. In 2021, collaborations expanded in several areas.

UNIDO continued successful cooperation with the United Nations Global Compact (UNGC) through a number of key initiatives. This included UNIDO high-level participation in the UNGC Action Platform on Sustainable Infrastructure for the Belt and Road Initiative to Accelerate the SDGs, where UNIDO delivered a series of awareness-raising workshops to ensure sustainability for the textile and garment industry in Ethiopia. UNIDO also contributed to several UNGC local network events throughout 2021. The Organization has also joined hands with Finland to promote accelerated business sector engagement and the empowerment of women.

UNIDO continued to scale up its engagement with international financial institutions to boost economic recovery and growth. The Organization assisted Member States with formulating and implementing investment operations financed by the AfDB, the ITFC, the World Bank and others. A number of industrial sectors across the Africa, Arab, and Central and South Asia regions received UNIDO support, including the cotton, dairy, fisheries, food and livestock industries.

In relation to multilateral environmental and climate financing mechanisms, UNIDO continued growing and cultivating its cooperation with GEF, the Green Climate Fund (GCF) and the Adaptation Fund over the course of 2021. Further details can be found in the section Funding and Financial Contributions in the next chapter.

UNIDO is adapting its internal operational strategy on South-South and triangular industrial cooperation to best suit the requirements of the outcome



document of the Buenos Aires Plan of Action Plus 40, known as BAPA+40, and outlining how the Organization will promote cooperation among countries in the Global South, as well as with international organizations, civil society and the private sector.

Additionally, UNIDO improved its internal reporting mechanism on South-South and triangular industrial cooperation-related projects and provided regular contributions to United Nations publications on South-South cooperation, demonstrating how combining diverse resources and capacities can help achieve the SDGs.

### **DRIVING SUSTAINABLE INDUSTRIALIZATION IN AFRICA**

The Third Industrial Development Decade for Africa (IDDA III) is an international framework to advance sustainable industrialization on the continent by 2025. UNIDO, together with the African Union Commission, the New Partnership for Africa's Development (NEPAD) and the United Nations Economic Commission for Africa (UNECA), is charged with developing, operationalizing and leading its implementation.

The high-level event on IDDA III during the high-level week of the General Assembly in September 2021 set the theme on strengthening Africa's pharmaceutical industry, as the COVID-19 pandemic highlighted Africa's vulnerability and reliance on imports of vaccines, medicines and other health product needs. Africa imports approximately 94 per cent of its pharmaceutical and medicinal needs from outside the continent and vaccinations against SARS-CoV-2 are lagging behind the global average, due to unequal access.

The event, attended by dignitaries such as the IDDA III Champions, called for increased collaborative efforts towards strengthening pharmaceutical manufacturing in Africa. This is reflected in a joint

communiqué that will serve as key input to the African Union Summit on Industrialization and Economic Diversification, planned to take place in November 2022.

Following the establishment and operationalization of the IDDA III Secretariat, UNIDO initiated consultations with economic communities and selected focal points to discuss the development of joint initiatives under the AfCFTA. The IDDA III Secretariat is supporting a continental mapping of innovation and digitalization initiatives to support the African Union Digitalization Transformation Strategy for Africa (2020–2030), implemented by UNIDO, UNECA and AfDB. The impact of the COVID-19 pandemic on nine African countries is being analysed through an AfCFTA initiative, implemented by UNIDO with its IDDA III partners.

UNIDO is continuing a comprehensive review that identifies industrial development gaps, new opportunities and ongoing Africa-centred programmes by international stakeholders.



## FUNDING AND FINANCIAL CONTRIBUTIONS

### Funding for development cooperation activities

In 2021, voluntary contributions for UNIDO development cooperation services increased by 38 per cent compared to the preceding year, reaching \$197.3 million net of programme support costs. The continued support of funding partners contributed to an overall portfolio of projects and programmes for future implementation of \$575.2 million. Funds mobilized in 2021 also exceeded 2020 levels. reaching \$194.7 million. Despite the continued challenges caused by the COVID-19 pandemic, the delivery of UNIDO services increased to \$179.4 million.

The strong support of Governments and institutions, including the European Union, led to their historically unprecedented contributions to the work of UNIDO in the amount of \$121.9 million. Similar to 2020, Member States contributed the largest share of this amount with \$72.3 million, followed by the European Union with \$39.3 million. As shown in the overview of governmental contributions, the top three voluntary contributors were Japan with \$21.8 million, followed by Switzerland with \$13.8 million and Italy with \$6.9 million. Contributions by China, Finland, Germany, Italy and Japan towards the UNIDO Junior Professional Officer Programme also provided significant support to the work of the Organization.

Voluntary contributions from GEF also increased markedly from 2020, to \$45.9 million, as did the contributions from the Multilateral Fund for the Implementation of the Montreal Protocol (MLF) with \$22.7 million, thus enabling UNIDO to continue to meet the increased demand for its services towards safeguarding the environment.

Pursuing the trend of 2020, safeguarding the environment remained the thematic focus of funding partners, which attracted the main share of overall funding with \$98.7 million, followed by creating



Governmental funding partners with voluntary contributions exceeding \$1 million net of programme support costs (in millions)

shared prosperity with \$51.5 million, and advancing economic competitiveness and cross-cutting services with \$37.8 million and \$9.2 million, respectively.

In geographical terms, UNIDO funding partners prioritized Africa with \$57.1 million, followed by Asia and the Pacific with \$40.4 million, global and interregional interventions with \$38.7 million, the Arab region with \$31 million, Latin America and the Caribbean with \$16.9 million and \$13.3 million for Europe and Central Asia.

## Contributions from global funds: Global Environment Facility, Multilateral Fund for the Implementation of the Montreal Protocol and the Green Climate Fund

The partnership with GEF remained very productive throughout this challenging year. In addition to the above-mentioned increase in funding for the delivery of UNIDO services, the portfolio of GEF-approved concept proposals expected to materialize into development cooperation interventions during the period 2022-2023 is estimated to reach \$110 million.

Concurrently, UNIDO started developing a UNIDO GEF-8 programming strategy seeking integration with the eighth replenishment of the GEF Trust Fund starting in July 2022.

This new portfolio will address key environmental challenges, including industrial decarbonization, application of green hydrogen technologies, green chemistry innovation, sound waste management, innovative investment models in adaptation solutions, and sustainable practices in artisanal and small-scale gold mining, the textile and garment sectors, and e-mobility. UNIDO also expanded its cooperation with the GCF under its portfolio of readiness projects. Following its accreditation to the GCF in August 2020, UNIDO signed an Accreditation Master Agreement with the Fund on 28 June 2021, which paves the way for the Organization to submit climate project proposals to the GCF for funding. After the accreditation of UNIDO to the Adaptation Fund in late 2020, the Organization's first regional concept in Africa was approved by the Adaptation Fund in 2021. The portfolio on climate adaptation will be expanded in 2022 through GEF, the GCF and the Adaptation Fund, further diversifying cooperation opportunities towards safeguarding the environment.

In the discharge of its function as implementing agency of the MLF, UNIDO currently carries out projects in 77 countries to phase out HCFCs and phase down chlorofluorocarbons (CFCs). UNIDO interventions under the Montreal Protocol during the reporting period led to a reduction of 69.5 million tons of CO<sub>2</sub>-equivalent. In 2021, the MLF also approved guidelines for preparatory funding of Kigali implementation plans, which will be part of the future work of UNIDO to phase down CFCs while also addressing energy efficiency requirements. The MLF also approved Kigali implementation plan preparatory funding for 23 countries as well as preparatory funding for one pre-implementation plan investment project.

## Funding from the United Nations, multipartner trust funds and UNIDO-managed trust funds

Consistent with the Organization's commitment to the UNDS reform, UNIDO proactively engaged in

### **UNIDO IN BRUSSELS**

The UNIDO Liaison Office in Brussels provides strategic advisory and advocacy services to reinforce the positioning of UNIDO vis-à-vis institutions of the European Union, the Organisation of African, Caribbean and Pacific States (OACPS), the International Organization of la Francophonie, and partners in Belgium, France and Luxembourg.

In 2021, UNIDO participated in numerous events of the European Union Industry Week, the European Development Days, the Sustainable Energy Week and the eighth European Conference on Corporate R&D and Innovation (CONCORDi). In the spirit of One UN, UNIDO leads the United Nations Brussels Task Force on Digitalization for the SDGs. The Office attended the fourth European Union-Africa Business Summit and celebrated Africa Industrialization Day with the African Union delegation in Brussels.

New engagements were developed on youth with the Sahel Alliance, on creative industries with the European Union and UNCTAD, on economic partnership with the Francophonie, and on digitalization with the IMREDD Institute of Innovation and Partnerships, and SKEMA Business School. A new strategic partnership with OACPS supported preparations for the ninth UNIDO Ministerial Conference of the LDCs in November 2021 and the fifth United Nations Conference on the LDCs set to take place in Doha in 2022.

inter-agency cooperation, which led to a modest increase of contributions from United Nations agencies and multi-partner trust funds for UNIDO services and totalled \$7.2 million.

Notwithstanding the significant commitments made by Member States in the context of the Funding Compact, contributions to the thematic trust funds of UNIDO remained modest. Funding arrangements were concluded with Germany for contributions of

€1 million to the Trust Fund on trade-related capacity-building and €0.5 million to the Trust Fund for Latin America and the Caribbean.

Considering the important needs of the Organization in terms of co-financing, preparatory assistance and resources that enable it to respond swiftly to demands for its assistance, Member States are strongly encouraged to renew their support towards predictable and flexible funding.

#### **STAFFING**

UNIDO adapted administrative processes to respond to the ongoing COVID-19 pandemic. The Organization made special working arrangements for all personnel and provided systems for online learning, recruiting, administering entitlements and digitalizing processes in line with United Nations best practices. UNIDO joined the United Nations System-wide COVID-19 Vaccination Programme to ensure that all field personnel had access to COVID-19 vaccines. With the support of the host Government, UNIDO personnel at Headquarters were able to participate in the vaccination campaign of Austria.

In 2021, vacancy announcements for 202 staff and non-staff positions were filled or initiated through a streamlined process considering competence, gender parity and geographical balance. The Organization hosted 127 interns, 14 Junior Professional Officers and one Partner Expert. UNIDO also signed a service level agreement with the United Nations Global Center for Human Resources Services on reference verification.

UNIDO organized briefings on the key provisions of the newly published Human Resources Strategy 2020–2022. Talent acquisition was further optimized through strategic workforce planning, advisory services on UNIDO competencies and new guidance on recruiting project personnel through shared service funding.

To further strengthen staff capacity, UNIDO enhanced and diversified training for employees.

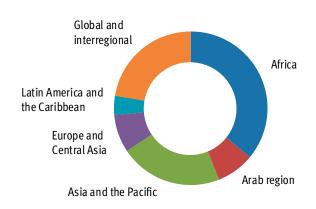
## **QUALITY MONITORING AND** PROGRAMME APPROVAL

Quality monitoring is a continuous, evidence-based, objective function. It supports operationalizing and monitoring the UNIDO Quality Assurance Framework (QAF) and the new Monitoring and Reporting Policy, which was promulgated under the function's custodianship in 2021.

The QAF streamlines the understanding and application of requirements for results orientation and quality management in all UNIDO products, services and processes in alignment with the integrated results and performance framework (IRPF). The Monitoring and Reporting Policy further reinforces the results-based management (RBM) approach and its operationalization across the Organization.

The quality monitoring function provides tools, advice and capacity-building to facilitate adherence to the requirements specified in the QAF and the new Monitoring and Reporting Policy. Through the systematic analyses of data on the quality of UNIDO development cooperation interventions before their entry into portfolio, the function informs strategic decision-making. In 2021, the overall design quality of new projects and programmes improved.

Quality monitoring also provides secretariat support to the UNIDO Executive Board for the approval of development cooperation interventions. In 2021, a total of 216 submissions were processed for internal review and approval, out of which 125 concerned new



Regional distribution of newly approved programmes and projects

programmes and projects. The Executive Board approved 100 per cent of these submissions, with 77 per cent subject to conditions reflecting improved strategic alignment, and adherence to quality requirements and RBM.

## **EVALUATION AND INTERNAL OVERSIGHT**

In 2021, the Office of Evaluation and Internal Oversight (EIO) promulgated new supplementary policies on independent evaluation, internal audit and investigation. It undertook a joint audit and evaluation engagement on COVID-19 lessons learned, and also provided advisory services to international networks and the United Nations system, contributing to the evidence review on COVID-19 and food security with FAO, the International Fund for Agricultural Development (IFAD) and the World Food Programme (WFP).

Eleven independent projects and programmes, the ITPO Network and the UNIDO Policy and Strategy on Gender Equality and Empowerment of Women were evaluated by EIO in 2021. It conducted a desk review of the UNIDO RBM framework and synthesized evaluations of UNIDO renewable energy projects. EIO also initiated evaluations of the MTPF 2018-2021, of the Organization's capacity to contribute to transformational change and of the PCP Senegal.

The EIO audit function continued to adapt its activities to support management in the handling of the COVID-19 crisis by focusing more on advisory services during the year, having laid a solid foundation for this through its audits and an assurance map in the previous year. It issued advisory reports on UNIDO competencies and fraud risk management, and initiated an assurance review of the full cost recovery process. The investigation function continued its activities, thereby contributing to the culture of accountability, ethics, integrity and good governance within UNIDO.

#### **LEGAL SERVICES**

The Office of Legal Affairs advises all major programmes and organs of UNIDO, defends the Organization's rights, positions and interests in disputes and litigation matters, and plays a proactive role in protecting the legal status and the privileges and immunities of UNIDO.

In 2021, the Office responded to numerous requests for assistance and advice, and reviewed, revised and cleared the drafts of numerous legal

### **RISK MANAGEMENT**

As the first results-based budget in the history of UNIDO, the Programme and Budgets, 2022-2023, shifts emphasis from input-based to results-driven accounting with defined targets. In January 2021, the Director General's Bulletin on enterprise risk management established an updated policy framework for risk management at UNIDO, while an Administrative Instruction outlined coordinated risk mitigation actions across the Secretariat and its Member States. A newly created Results and Risk Focal Points network brought together over

30 UNIDO mid-career professionals who produced a revised corporate risk register and action plans designed to contain the Organization's most critical risks.

An online training course featuring concepts and practices of results-based management and risk management elucidated the risk-result paradigm adopted by UNIDO. It was reviewed and accredited by the Institute of Risk Management in London, and successful graduates received certificates. An expanded course will reach a larger audience.

instruments, administrative issuances and other documents, including various agreements and arrangements in support of the delivery of development cooperation and other functions, such as the Accreditation Master Agreement with the GCF. Appendix G to this report contains a consolidated list of 2021 agreements and arrangements. Furthermore, the Office provided substantive legal assistance in connection with the thirty-seventh session of the Programme and Budget Committee, the forty-ninth session of the Industrial Development Board and the nineteenth session of the General Conference.

### INFORMATION TECHNOLOGY SERVICES

The Information Technology Services (ITS) Division provides UNIDO with secure, reliable, effective and efficient digital services. Throughout the COVID-19 pandemic, ITS helped UNIDO adapt to the "new normal", enhancing systems to enable work from anywhere at any time. In particular, ITS replaced the enterprise resource planning infrastructure and the corporate network in Headquarters.

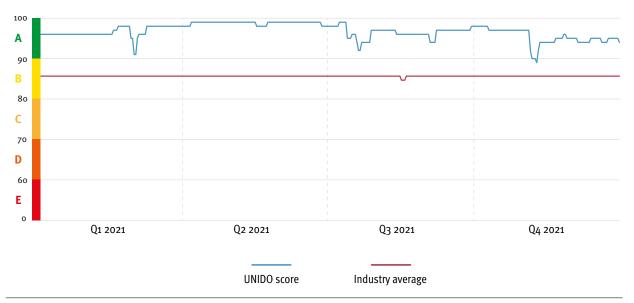
To manage the significant risks to cybersecurity, ITS continuously evaluated emerging cyberthreats and enhanced security controls within the scope of available resources. In particular, ITS kept systems updated, scaled up cybersecurity awareness training and phishing testing, and delivered regular awareness training and campaigns, and fraud prevention workshops. One result of these efforts is a consistent score of "A" given to UNIDO from securityscorecard, an independent source for cybersecurity rating.

ITS collaboratively launched new dashboards for human resources and the IRPF, digitized business processes, supported the digitization of documents and piloted digital signatures. Enhancements to the full cost recovery process and an expansion of the enterprise service management system supported the associated development cooperation modalities.

Critical road maps and initiatives are under consideration for the next UNIDO Corporate ICT Strategy covering the period 2022-2025.

### **PROCUREMENT**

The Procurement Services Division managed a volume of more than \$153 million and 7,500 contracts in 2021, despite continued challenges posed by the COVID-19 pandemic. The Division contributed to a



series of new and revised policies, and developed new grants and procurement manuals to be released in early 2022. These additions establish a solid platform for managing significantly larger transactional volumes that follow best-practice quality and compliance management. The Division continued to support the contractual needs of many high-profile programmatic initiatives. These included the development and expansion of the Global Network of Regional Sustainable Energy Centres hosted by UNIDO. Several outreach activities and international business seminars to which UNIDO was invited continued throughout the year through digital platforms and events. Enhanced procurement practices are positioning UNIDO to scale up and mainstream complex transactional volumes from its various funding partners.



Newly constructed checkpoint at VIC gate 2

### **BUILDINGS MANAGEMENT**

The Buildings Management Services Division is responsible for the smooth, reliable and safe operation of all technical facilities and installations at the Vienna International Centre (VIC). It continually explores new approaches and techniques to improve cost-effectiveness, and promotes a reduced environmental footprint of the VIC.

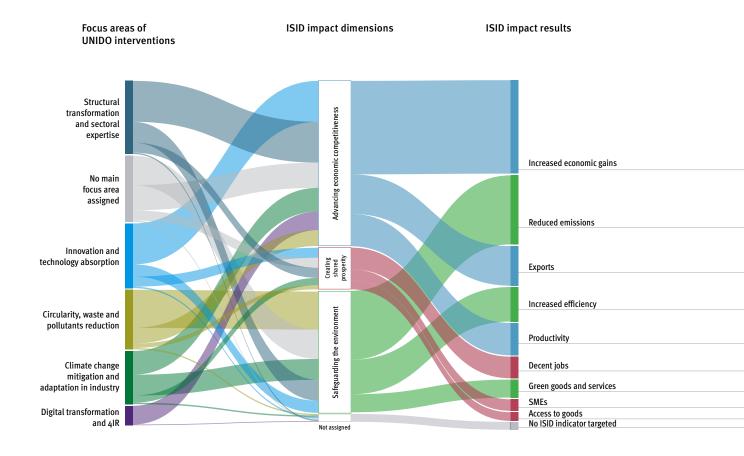
For the sixth consecutive year, UNIDO received the United Nations Framework Convention on Climate Change certificate of climate neutrality for the VIC in 2021.

After 40 years in operation, the low-voltage distribution systems in Buildings F and G were replaced in 2021 and the controller unit for the emergency power generator in Building G was renewed. These state-of-the-art systems fulfil higher security standards. Ten air conditioning plants in

Buildings A, E, C and F were replaced, incorporating a sustainable heat-recovery system that lowers energy consumption. Main drainage pipes, gutters, gullies and connection pipes were also replaced. Refurbished electrical installations, including safety lighting and fire alarm systems in VIC car parking decks, require 50 per cent less energy to operate. Elevator cabins in Building D refurbished with smart elevator technology reduce energy consumption and fulfil new accessibility standards.

New remote service interpretation hubs for the conference systems enable hybrid meetings with off-site delegates and speakers, as well as simultaneous interpretation from the VIC for remote conferences, such as the fourteenth United Nations Crime Congress in Kyoto, Japan.

ANNEX.
Integrated results and performance framework

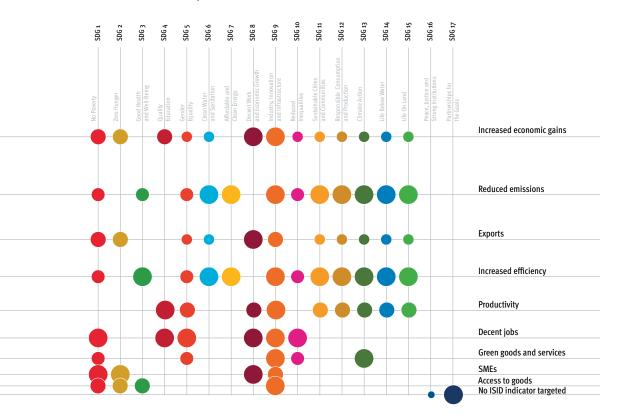


This section of the Annual Report uses the UNIDO integrated results and performance framework (IRPF) to present a structured set of evidence of the Organization's efficiency, effectiveness, and contribution to country and global results towards achieving ISID and the SDGs. This evidence is presented through a combination of data and narratives describing the extent of the transformation triggered by UNIDO. The reporting here is based on data collected by relevant departments and the data extracted from the IRPF online interface, which was added in January 2021 to the UNIDO-internal IT system to capture project and programme results data. While the system contains an improved data set, some quality and coverage limitations in the outcome-level data remain. These limitations notwithstanding, the progress made by UNIDO as demonstrated in this Annual Report is a further step forward in meeting the expectation for improved

UNIDO results reporting shared by Member States, stakeholders and the Organization itself. The ultimate objective remains to increase and sustain results and impact on the ground to accelerate progress towards ISID and the SDGs.

The schematic diagram above illustrates the contribution of UNIDO to ISID and the SDGs. The contribution is quantified according to the Organization's evidence-based methodology, which links ISID impact results data from the UNIDO portfolio with corresponding SDGs. The UNIDO methodology establishes connections between relevant impact results and SDGs based on evidence from development literature, as well as on programmatic evidence from the work of UNIDO. The width of the flow diagram on the left shows the size of the contribution of the UNIDO portfolio to ISID impact. The size of the SDG "bubbles" on the right visualizes the degree to which ISID impact results contribute to each of the relevant SDGs.

### Contribution of ISID impact areas to SDGs





### LEVEL 1. GLOBAL INDUSTRIAL **DEVELOPMENT CONTEXT**

Level 1 presents the SDG 9 indicators for which UNIDO is the custodian agency, reflecting the relevance of inclusive and sustainable industrial development and the role of UNIDO in supporting the achievement of the SDGs. The indicators presented here are of macroeconomic nature, presenting the outcome of collective efforts, influenced by a wide range of factors. Changes in these SDG indicators are thus only indirectly attributable to the results of UNIDO interventions.

## Strategic priority: Advancing economic competitiveness

### SDG Indicator 9.2.1: Manufacturing value added as a proportion of GDP and per capita

Global manufacturing production grew by 7.2 per cent in 2021 after a drop of 1.3 per cent in 2020 and surpassed its pre-pandemic level. The recovery nevertheless remains incomplete and unequal. While many industrialized as well as developing and emerging industrial economies (DEIEs) witnessed a surge in 2021, LDCs experienced a drop of 2.2 per cent.

Despite pandemic-related disruptions, the global share of manufacturing value added (MVA) in total GDP increased from 16.2 per cent in 2015 to 17 per cent in 2021. Both industrialized economies and DEIEs respectively expanded their share from 14 to 14.5 per cent and 20.3 to 20.9 per cent over the same period. Although LDCs managed to increase their share to 13.1 per cent in 2020, it dropped back to 12.6 per cent in 2021.

Uneven recovery of employment and income across different population groups is increasing inequalities within and among countries, as reflected by MVA per capita. While industrialized economies reached their all-time high of \$5,691 in 2021, MVA per capita in LDCs decreased to \$134 in 2021. The recovery prospects for LDCs thus remain uncertain, jeopardizing their achievement of many SDG targets by 2030.

### SDG Indicator 9.b.1: Proportion of medium- and hightechnology industry value added in total value added

The structural transition within manufacturing is best reflected in the shift of industries towards more technologically complex products. Medium and high-technology products continue to dominate manufacturing production in industrialized economies. However, DEIEs, led by China, are catching up quickly. In 2019, the share of medium and high-technology manufacturing was 50.4 per cent in industrialized economies and 38.5 per cent in DEIEs, compared to only 10.5 per cent in LDCs.

The COVID-19 outbreak hit the manufacturing sector hard. Higher technology industries performed better and therefore recovered faster. Most of the industries using medium- and high-technology have reached pre-pandemic levels, except for motor vehicles and other transport equipment. Production of motor vehicles faces larger challenges worldwide due to supply chain disruptions.

## Strategic priority: Creating shared prosperity

### SDG Indicator 9.2.2: Manufacturing employment as a proportion of total employment

The manufacturing sector was among the sectors hit most severely during the pandemic, initially by supply chain disruptions and then by a decline in demand. Because of the pandemic, nearly one in three jobs in manufacturing supply chains globally is likely to have been terminated, faced reductions in working hours or payment, or experienced other worsened conditions. The share of manufacturing employment in total employment thus decreased significantly from 13.7 per cent in 2019 to 13.1 per cent in 2020.

The impact has been particularly pronounced in MICs that have long leveraged participation in production chains as a source of employment and growth. The decline in manufacturing employment in MICs was 8.9 per cent in 2020, compared with 3.4 per cent in low-income and 3.9 per cent in high-income countries.

Garment supply chains, which employ large shares of women workers, felt some of the worst impacts. Women, especially young women, have been among the worst affected, and their recovery has also been among the slowest.

## SDG Indicator 9.3.1: Proportion of small-scale industries in total industry value added

Data for SDG Indicator 9.3.1 is not available on the global and regional levels.

## SDG Indicator 9.3.2: Proportion of small-scale industries with a loan or line of credit

Small-scale industrial enterprises are major sources of employment in developing and emerging economies and thus play a central role in income-generation and poverty reduction. Small businesses are however more vulnerable to economic downturns than larger firms, including those driven by the COVID-19 pandemic.

Access to credit is particularly important for small-scale firms to increase their competitiveness and enable them to integrate into local and global value chains. Although governmental support plays a key role in helping small enterprises to survive and thrive during and after the crisis, such stimuli have seldomly been available in low-income countries. In DEIEs, only

27 per cent of small-scale manufacturing industries benefit from loans or lines of credit compared with 43.6 per cent in industrialized economies. Hence, many of them shut down during 2021

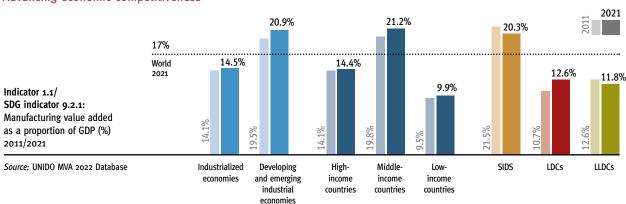
## Strategic priority: Safeguarding the environment

## SDG Indicator 9.4.1: CO<sub>2</sub> emissions per unit of value added

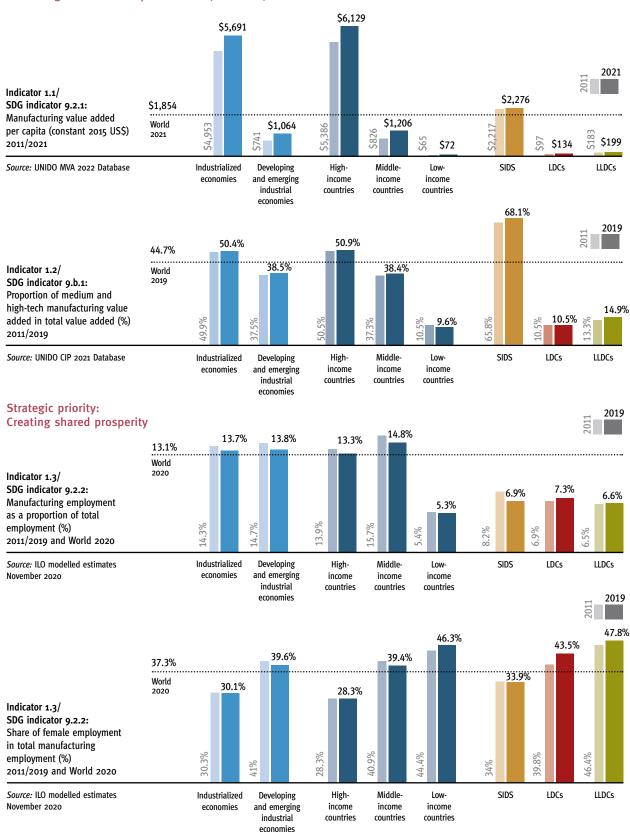
Global CO<sub>2</sub> emissions declined by 5.8 per cent in 2020, the largest ever decline and almost five times greater than the 2009 decline that followed the global financial crisis. CO<sub>2</sub> emissions fell further than energy demand in 2020 owing to the pandemic hitting demand for oil and coal harder than other energy sources while the share of renewables increased. Global CO<sub>2</sub> emissions from manufacturing accounted for almost 18 per cent of total CO<sub>2</sub> energy-related emissions.

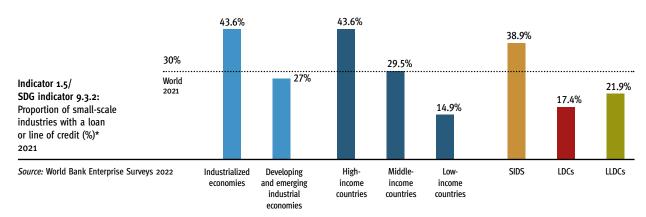
The intensity of global manufacturing CO<sub>2</sub> emissions per unit of MVA in constant 2015 US\$ continued to decline from 0.57 kg/\$ in 2010 to 0.43 kg/\$ in 2019, yet manufacturing CO<sub>2</sub> emissions intensity in DEIEs remained much higher than in industrialized economies, at 0.69 kg/\$ and 0.21 kg/\$ in 2019 respectively.

## Strategic priority: Advancing economic competitiveness

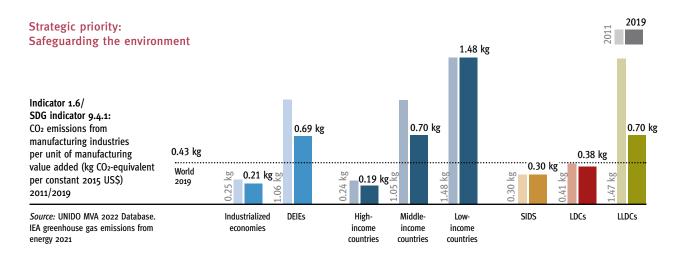


Strategic priority:
Advancing economic competitiveness (continued)





\*Estimated. Regional and global averages of indicators are computed by taking a simple average of country-level point estimates over 2006-2021. For each economy, only the latest available year of survey data is used in this computation.



# LEVEL 2. COUNTRY AND GLOBAL RESULTS WITH UNIDO SUPPORT

Level 2 captures the contribution of UNIDO to transformational outcomes and development impact in order to advance ISID. Programmatic activities make integrated use of the Organization's four core functions to provide holistic support to Member States in achieving ISID. At this level, the responsibility for the achievement of expected outcomes is shared between UNIDO, Member States and all partners involved.

#### **ISID** impact

With the support of UNIDO, countries are able to progress in their inclusive and sustainable

industrialization pathways, bringing about transformational change towards the SDGs. IRPF impact areas reflect the three integrated dimensions of ISID: creating shared prosperity, advancing economic competitiveness and safeguarding the environment.

Partial data from the UNIDO portfolio show that over 6,800 firms realized economic gains valued at more than \$142 million (ECO.1) in 2021. Over 2,800 SMEs increased their inclusion in value chains (SOC.2), while over 215,595 jobs were created or retained (SOC.1). In addition, there is evidence that GHG emissions were reduced by 76.5 million tons of CO<sub>2</sub>-equivalent (ENV.1) and more than 500,000 tons of pollutants were phased out (ENV.2).

#### Outcomes

The approach of UNIDO is centred on strengthening knowledge and institutions. The Organization works closely with the entire spectrum of stakeholders engaged in the industrialization process to strengthen their awareness, knowledge and skills, thereby transforming behaviour in key areas such as business practices, technology, investment, policies and standards, and governance.

In 2021, UNIDO was able to produce specific changes by helping 6,249 firms improve their management practices (BUS.1), more than 850 actors (firms and institutions) develop new products (BUS.2), and more than 1,500 start-ups establish themselves (BUS.3). UNIDO also supported the transformation of organizations by helping firms, global actors, government bodies, institutions, or individuals adopt 70 new or revised policies (POL.1), 116 new standards (POL.2), and more than 400 guidelines (POL.3).

In addition, UNIDO was also able to crowd in financial resources, supporting more than 800 investment-ready proposals (INV.1), delivering more than 6,400 projects/businesses that received finance (INV.2), and leveraging over \$560 million in new investments (INV.3), while helping about 130 organizations adapt or develop new technologies (TEC.1) and more than 400 adopt new technologies (TEC.2).

The UNIDO results framework requires data disaggregation by gender and age. At present, a significant and growing share of UNIDO projects and programmes capture gender-disaggregated data, with the objective of allowing complete portfolio-level reporting in the next few years. The infographics below already present some examples from the Organization's portfolio that demonstrate the results and impact on women of selected UNIDO interventions.

LEVEL 2. ISID impact

INDICATOR		2021
Advancing economic competitiveness		
ECO.1 Firms with economic gains (sales, savings)	Annual count of firms reporting increased economic gains (sales or savings) as a result of UNIDO interventions	6,861
ECO.1b Economic gains (US\$) realized by firms	Reported monetary value (in PPP US\$) of gains (sales or savings) realized by firms as a result of UNIDO interventions	142,161,443
ECO.2 Firms with improved labour productivity	Annual count of firms reporting increased labour productivity as a result of UNIDO interventions	669
ECO.3 Firms with an increase in exports	Annual count of firms reporting increased exports as a result of UNIDO interventions	153
ECO.3b Additional exports (US\$) realized by firms	Reported monetary value (in PPP US\$) of additional exports realized by firms as a result of UNIDO interventions	12,247,370
Creating shared prosperity		
SOC.1 Additional jobs created or retained	Annual count of full-time equivalent jobs (including self-employment) that are created or retained as a result of UNIDO interventions	215,595
SOC.2 SMEs with increased inclusion in value chains	Annual count of SMEs that report increased inclusion in value chains as a result of UNIDO interventions	2,859
SOC.3 People living under poverty line who gain access to quality-assured products	Annual count of people living in poverty who gain access to quality products	4,210

Institutions

People

31

54

**INDICATOR** 

LEVEL 2. Behaviour change (continued)

INDICATOR		ACTOR	2021
Investments (continued)			
		Firms	325
		Global actors	3
INV.2 Projects or businesses financed	Annual count of projects (disaggregated by actors) or businesses that have accessed financing as a result of UNIDO interventions	Government bodies	7
muneca	that have accessed financing as a result of ombo interventions	Institutions	42
		People	6,104
		Firms	170,917,618
	Annual count of the value of new investments that are mobilized	Global actors	2,300,005
INV.3 New investments leveraged (US\$)	Annual count of the value of new investments that are mobilized, leveraged or catalysed by relevant actors as a result of UNIDO	Government bodies	85,523,809
tereragea (eeq)	interventions	Institutions	308,080,849
		People	150,000
Policy and standards			
		Firms	
		Global actors	2
POL.1 New or revised	Annual count of new or revised policies that have been adopted by	Government bodies	67
policies adopted	policymakers as a result of UNIDO interventions	Institutions	1
		People	•
		Firms	10
	Annual count of new standards that are adopted or newly	Global actors	4
POL.2 New standards adopted	implemented by relevant institutional actors (such as global or	Government bodies	68
or implemented	regional actors, government bodies or intermediate institutions) as a result of UNIDO interventions	Institutions	34
		People	7-
		Firms	5
		Global actors	2
POL.3 Guidelines adopted	Annual count of guidelines adopted by relevant actors as a result	Government bodies	267
by relevant actors	of UNIDO interventions	Institutions	53
		People	74
Technology	<u>i</u>	1 2242	, , , ,
recimotogy		Eirme	100
	Annual count of instances in which new technologies are developed or adapted as a result of UNIDO interventions. It includes all		100
TEC.1 New technologies developed or adapted	instances in which a given technology progressed on the innovation	Global actors	5
	cycle (e.g. change in technology readiness level) or an existing technology was modified for particular needs or circumstances	Government bodies	10
		Institutions	16
	Count of instances in which new technologies are deployed or	Firms	362
TEC.3 New technologies	adopted by relevant actors as a result of UNIDO interventions.	Global actors	8
adopted	Technology is defined as the application of knowledge for practical purposes into products, materials, tools, processes, techniques,	Government bodies	4
	devices, etc.	Institutions	40
		People	2

INDICATOR		ACTOR	2021
Awareness and knowledge			
		Firms	43,462
	Annual count of relevant actors that have increased their	Global actors	1,105
KASA.1 Actors gaining awareness or knowledge	awareness and knowledge as a result of	Government bodies	13,369
	UNIDO interventions	Institutions	5,988
		People	4,511,906
Capacity building			,
		Firms	4,770
		Global actors	70
KASA.2 Actors gaining skills or capacity	Annual count of relevant actors that have gained skills as a result of UNIDO interventions	Government bodies	876
	, reduct of compositions	Institutions	1,032
		People	46,821

### LEVEL 2. Reactions

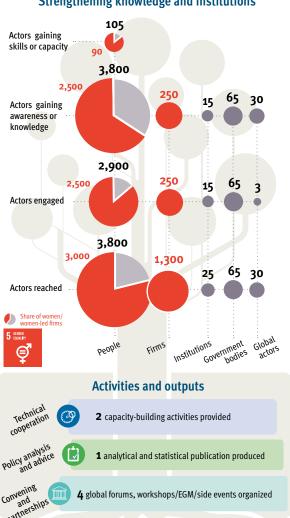
INDICATOR			ACTOR	2021
			Firms	96
Reactions to			Global actors	84
UNIDO interventions	Ratio between r survey responde	number of satisfied survey respondents and total number of	Government bodies	88
(percentage)		····	Institutions	90
			People	98
			Firms	16,206
		Annual count of relevant actors engaged by UNIDO interventions. Engagement refers to more in-depth, bidirectional interactions (e.g. training sessions), which could aim to improve awareness or knowledge but also skills or capacities	Global actors	447
	Engagement		Government bodies	7,618
Donnett			Institutions	2,346
Bennett Level B3.			People	113,398
Reach,			Firms	30,542
engagement F		Annual count of relevant actors reached by UNIDO interventions. Reach refers to interactions that have a	Global actors	5,409
	Reach	unidirectional type of communication (e.g. event or panel	Government bodies	9,748
		session, publication, press conference, exhibition, etc.), typically aiming to improve awareness or knowledge	Institutions	3,798
			People	281,604,916

## Promoting women's empowerment for inclusive and sustainable industrial development in the MENA Region (phase II)

The project aims to enhance women's economic inclusion and promote sustainable and inclusive growth in the region. It does this through supporting the development of women-led MSMEs in selected agricultural value chains in rural and urban areas, with a view to improving productive and employment opportunities.



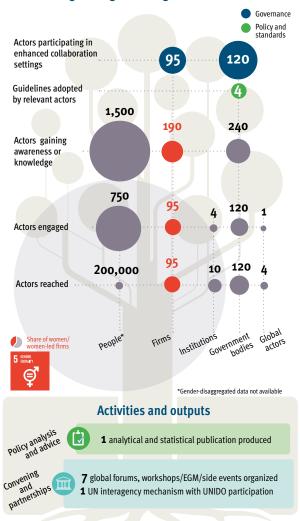
### Strengthening knowledge and institutions



## Economic empowerment of women in green industry

The objective of this global project is to advise policymakers and practitioners on the establishment and implementation of policy frameworks to integrate gender considerations into green industrial policies. This is done with a view to sensitizing and enabling stakeholders to develop more gender-responsive green policies, and to empower more women to take leadership roles in green industries as entrepreneurs or industrial professionals.

### Strengthening knowledge and institutions



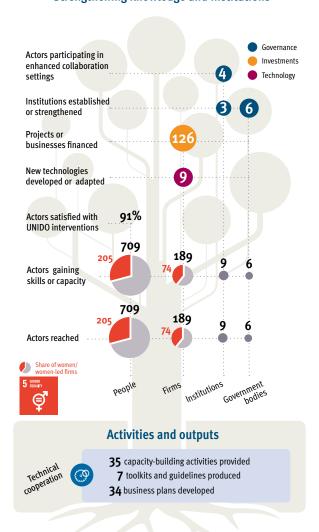
### Agro-technology development for economic growth in south and central Somalia

The project aims to stimulate employment and economic opportunities for entrepreneurial development in the southern and central regions of Somalia. It promotes agro-technology upgrading and entrepreneurship development, delivers vocational

and technical skills training, facilitates access to technology, markets and finance, and provides institutional support on agro-industrial technology transfer, investment promotion and entrepreneurship development.



### Strengthening knowledge and institutions



### LEVEL 3. PROGRAMMATIC OFFER AND PROGRAMME MANAGEMENT EFFECTIVENESS

Level 3 measures the outputs of the programmatic interventions of UNIDO, as well as the quality and effectiveness of portfolio and programme management. Outputs delivered by UNIDO span the Organization's four core functions. Effective programming and programme management, grounded in quality and RBM principles, are fundamental to enabling sustainability and the upscaling of development results. Outputs and programmatic interventions by UNIDO captured by Level 3 fall within the sphere of control of UNIDO. They trigger the higher-level results described in Level 2.

### **Output indicators**

Available figures confirm that development cooperation activities remain a strength of the Organization's value proposition. More than 4,000 capacity-building activities were carried out by UNIDO in 2021 (TCO.1). Equipment, technologies and other assets valued at over \$26.3 million were also provided to target groups (TCO.2) compared to \$12.2 million in 2020. Finally, more than 847 toolkits, guidelines, platforms, curricula and similar material were delivered by UNIDO in 2021 (TCO.3) compared to 316 delivered in 2020, and over 1,290 actionable business plans developed (TCO.4) to support key target groups.

UNIDO also generated extensive analytical and policy insights to help individual countries and the global community respond to the COVID-19 crisis and shape strategies for an inclusive and sustainable socioeconomic recovery. The Organization produced at least 265 industrial policy and strategy documents (PAO.1), almost two times as many as in 2020, and published over 328 analytical and statistical products to advance knowledge on industrial development (PAO.2), including flagship reports, articles, research papers and policy briefs.

In 2021, UNIDO also convened over 965 events, such as global forums, expert group meetings and side events at major international conferences (CPO.1). The Organization participated in at least 88 United Nations

inter-agency bodies and coordination mechanisms (CPO.2) and played a leading role in at least 54 different networks and platforms (CPO.3). Partnerships with both public and private sector actors remain a key approach for UNIDO to scale up development results.

### Portfolio management indicators

Efforts to develop new programmes and projects by the Organization continued in 2021. Overall, 118 new projects and programmes were approved (POR.1). In 2021, the implementation of more stringent quality requirements for programme and project design continued, including in RBM and data monitoring, the summary of which is shown in POR.2.

At the end of 2021, the UNIDO project portfolio comprised 749 projects (POR.3), with a yearly expenditure of \$179.9 million, an increase from 728 and \$177.7 million in 2020. A total of 29 CPs are ongoing and 13 PCPs are at different stages of programming or implementation. The quality of UNIDO interventions is also monitored thoroughly at completion (POR.4).

Mainstreaming gender equality and empowerment of women (GEEW) in the programmatic work continued to be a priority for UNIDO in 2021. The gender marker criteria were satisfied by all projects approved in 2021, and GEEW is either the principal focus or a significant focal area of over 46 per cent of approved projects (POR.5). UNIDO continues to report against the standards of the International Aid Transparency Initiative (IATI) (POR.6). Finally, UNIDO sustains its engagement in the United Nations development system at the country level, participating in 99 United Nations country teams (POR.7).

Level 3. Programmatic offer and programme management effectiveness

NDICATOR				2021
Output indicators				
ГСО.1. Number of capacity-	ouilding activities provided		Provision of training, workshops, lectures and similar activities delivered by UNIDO with the aim of building capacity	4,129
TCO.2. Value of assets provi	ded		Value in US\$ of assets (e.g. equipment, technologies) procured for beneficiaries during implementation of UNIDO projects/programmes	26,323,166
TCO.3. Number of toolkits a	nd guidelines produced		Production of guidelines, training material, checklists, toolkits, software, curricula, platforms, databases and similar material	847
CO.4. Number of business	plans developed		Development of new business plans by or for project beneficiaries through UNIDO interventions	1,290
AO.1. Number of industria drafted/prepared	l strategies and industrial policy	documents	Preparation of policy and strategy documents by or with UNIDO for submission to policymakers	265
PAO.2. Number of analytica	l and statistical publications prod	duced	Production of documents to advance knowledge on industrial development such as articles, research and statistics papers, policy and/or statistical briefs, analytical reports and flagship reports	328
NOO.1. Number of standard	l-setting processes with UNIDO p	articipation	Participation of UNIDO in and contribution to standard-setting processes at national, regional or international level	143
PO.1. Number of global forums, workshops/EGM/side events organized		ms, workshops/EGM/side events organized  Organization of events such as expert group meetings, seminars, side events, global forums, conferences and summits		965
CPO.2. Number of United Nations interagency mechanisms with UNII participation		with UNIDO	Active participation of UNIDO in United Nations inter-agency bodies and coordination mechanisms	88
PO.3. Number of international networks and platforms for which UNIDO is providing secretariat functions (CTCN, PFAN, RECP, etc.)				54
PO.4. Number of intervent system entities	, , , , , , , , , , , , , , , , , , , ,		Joint programming (development and/or implementation) between UNIDO and other United Nations system entities	162
	5. Number of interventions (projects/programmes) in partnership with non-United Nations institutions		Implementation of projects and programmes in partnership with business sector entities and financial institutions	99
Portfolio management in	ndicators			
	CPs and PCPs approved by (disaggregated by region)		f projects, programmes, country programme frameworks and Programmes J proved by the Executive Board per region, excluding Montreal Protocol pro	
	Africa	<u>:</u>		43
	Arab region	····		10
a. Number of	Asia and the Pacific	····		24
approved by the	Europe and Central Asia	·····		9
Executive Board	Latin America and the Caribb	ean		4
Global and Interregional				28
	Total			118
	Africa			2
b. Number of country  Arab region				0
programmes and	Asia and the Pacific			3
Programmes for Country Partnerships	Europe and Central Asia			1
approved by the Executive Board	Latin America and the Caribb	ean		1
LACCULIVE DOGIU	Global and Interregional			0

Level 3. Programmatic offer and programme management effectiveness (continued)

NDICATOR							2021
	rogramme/project documents ing quality requirements at	meeting quality re	equirements as per commonly approve	UNIDO Quality A.	n was assessed, at ssurance Framewor to ensure they me	k (QAF). Those app	oroaching quality
				approaches	requirements	meets re	quirements
a. Overall design qu	ality	••••••		80	0%	2	o%
b. Relevance				1	%	9	9%
c. Technical design				1	%	9	9%
d. Effectiveness and	RBM			60	6%	3	4%
e. Scale-up potentia				38	3%	6	2%
f. Sustainability like	lihood			13	3%	8	7%
g. Efficiency				2;	7%	7	3%
h. Implementation a	rrangements			7	%	9	3%
j. Formal requireme	nts*			9:	2%	8	3%
						*in	cl. ERP data ent
POR.3. Number and volume PCPs (by thematic fo	of ongoing projects, CPs and cus area; by region)		l volume of active p Country Partnership		of ongoing country	programme frame	works and
		Advancing economic competitiveness	Creating shared prosperity	Cross-cutting services	Safeguarding the environment	Other	Total
	Africa	28	52	12	113	1	206
	Arab region	11	32	4	67		114
	Asia and the Pacific	30	16	9	76		131
a. Number of projects/ programmes by	Europe and Central Asia	14	2	7	47		70
thematic focus area	Latin America and the Caribbean	14	5	5	67		91
and region	Global	27	9	31	39	19	125
	Interregional	4	2	3	4	1	14
	Total	128	118	70	413	20	749
		Advancing economic competitiveness	Creating shared prosperity	Cross-cutting services	Safeguarding the environment	Other	Total
	Africa	9,113,100	20,315,900	762,800	13,510,000	82,600	43,784,50
	Arab region	3,513,100	9,789,200	181,900	9,511,600		22,995,80
b. Volume of ongoing	Asia and the Pacific	3,495,400	4,781,700	373,700	35,560,600		44,211,30
projects* by thematic focus and region	Europe and Central Asia	2,521,500	272,700	168,000	7,178,900		10,141,10
	Latin America and the Caribbean	3,308,800	1,654,600	208,400	14,500,800		19,672,50
(2021 expenditure in US\$)	Global	9,210,500	793,200	2,192,900	16,697,100	1,578,400	30,472,10
	Interregional	1,248,200	739,400	115,200	6,560,300	-2,700	8,660,30
	Total	32,410,500	38,346,700	4,002,800	103,519,200	1,658,300	179,937,50

\*The value may differ from figures in ODP and Financial Annexes, as a result of differing calculations. Source for POR.3.a and POR.3.b: SAP extraction of 17 Feb 2022, corrected/adjusted values, to nearest 100

IDICATOR							2021
	e of ongoing projects, CPs and ocus area; by region) (continued)	Total number and Programmes for 0		projects, number o ips	of ongoing country	programme fran	neworks and
	Africa						10
c. Number of	Arab region						1
ongoing country	Asia and the Pacific						11
programmes						3	
by region	Latin America and the Caribbean	1					4
	Total						29
	Africa						8
d. Number of	Arab region						2
ongoing Programmes	Asia and the Pacific	•	•••••	•	•	••••••	1
for Country	Europe and Central Asia	•	•••••	••••••	•	••••••	1
Partnerships by region	Latin America and the Caribbean	1	•••••	•	•	••••••	1
, -	Total	•	•••••	•	•	•••••	13
	ammes/projects whose quality atisfactory at completion		r each quality crit	highly satisfactory eria in the Synthes ble)			
a. Relevance	<del> </del>						100%
b. Effectiveness							98%
c. Scale-up							NA
d. Efficiency		•••••••••••••••••••••••••••••••••••••••	•••••	***************************************	•••••	•••••	77%
e. Likelihood of su	stainability	•••••••••••••••••••••••••••••••••••••••	•••••	***************************************	•••••	•••••	82%
f. Programme/proj	ect management	•••••••••••••••••••••••••••••••••••••••	•••••	•••••	•••••	***************************************	91%
g. Monitoring and	evaluation design	•••••••••••••••••••••••••••••••••••••••	•••••	***************************************	•••••	•••••	95%
h. Monitoring and	evaluation implementation	•••••••••••••••••••••••••••••••••••••••	•••••	***************************************	••••••	•••••	84%
OR.5. Percentage of overa	ll number of UNIDO programme/proj	iorts					
per gender marker		ccs	2B	2A	1	0	Not evaluate
	calendar year; % of projects cleared order each gender marker category	l by gender	1.6%	44.4%	54%	о%	-
b. Ongoing (entire gender marker o	portfolio); % of ongoing projects in a ategory	2021 under each	1.4%	24%	67.8%	2.4%	4.3%
	ogrammes/projects with gender-infor et of ongoing projects allocated under		1.2%	25.6%	67.1%	3.7%	2.3%
	UNSWAP; % of 17 UNSWAP 2.0 indi VAP 2021 results latest available)	icators met or			88%		
DR.6. Transparency (as po	er IATI standards)	UNIDO score und	er each IATI dimei	nsion and overall			
a. Timeliness	;	<del>.</del>					88%
b. Comprehensiven	ess			•	•	•	70%
c. Forward-looking		•••••••••••••••••••••••••••••••••••••••		• • • • • • • • • • • • • • • • • • • •	•••••	•••••	37%
Score						•	65%
Store							

#### ORGANIZATIONAL RESOURCES AND EFFICIENCY LEVEL 4.

Level 4 measures the performance of the Organization's internal operations and corporate services. In 2021, UNIDO continued to maintain business continuity and operational stability in the face of adverse global circumstances, while increasing efficiency and effectiveness. The IRPF Level 4 indicators underline the Organization's continued resilience to the ongoing global crisis.

Regular financial resources amounted to €91.6 million (FIN.1), and additional voluntary contributions of \$197.3 million were approved (FIN.2) in 2021. In addition, the roll-out of full cost recovery mechanisms continued, leading to a total of €17.3 million recovered (FIN.3). Technical cooperation delivery (EXP.2) reached \$179.4 million.

Human resources indicators (HR.1) describe the composition of the UNIDO workforce by gender,

location and contractual type. The data show an overall decrease in the number of core staff and increased reliance on non-core personnel. In 2021, an increase in the male-to-female ratio was recorded for core and non-core personnel in field offices and for non-core personnel at headquarters, reaching 38.43, 40.94 and 51 per cent, respectively.

The efficiency of operational management remained high. OPM.1 shows that 67 per cent of centralized procurement contracts were finalized within 110 days, up 7 per cent from 2020. In 87 per cent of UNIDO projects, implementation began within six months from the start of the trust fund agreement (OPM.2), exceeding the target by 17 per cent. OPM.3 measures the efficiency of information systems operations, showing that 95.8 per cent of standard requests were completed in three working days or less.

Level 4. Organizational resources and efficiency

INDICATOR			2021	
Corporate service efficiend	су			
OPM.1. Procurement timeline	Percentage of procurements for ope from the date a requisition is appro	on competition under centralized procurement that are finalized within 110 days oved	67%	
OPM.2. TC start-up rate	3 , ,	Percentage of technical cooperation projects that launched implementation (incurred expenditure of 5% of project budget or more) within the first 6 months from the trust fund agreement start date. Target: 70%		
OPM.3. ICT operational efficiency	Percentage of standard IT requests	Percentage of standard IT requests that are fulfilled in three working days or less. Target: 90%		
Input and resources				
FIN.1. Regular financial resources		consisting of gross regular and operational budgets, miscellaneous income and ial Account for Core Activities (SAVCCA) approved by the General Conference	million	
	····	Gross regular budget	€72.85	
(1) Total approved gro	ss budgets in EUR (million),	Gross operational budget	€18.61	
including figures fo	or:	SAVCCA	€0.10	
		Total regular financial resources income approved	€91.56	
		Assessed contributions	€64.80	
		Income against operational budget	€19.03	
(2) Total income receiv in EUR (million) inc	ed against approved budgets Iuding:	Miscellaneous income against regular and operational budgets	€0.96	
iii EOK (iiiillioii) iiiclualiig:		Voluntary contributions against SAVCCA	€0.02	
		Total regular financial resources income received	€84.80	

DICATOR				2021	
N.2. Voluntary contribution	is	Voluntary contribut recognized as inco	tions mobilized based on the amount of trust fund agreements signed me	and	
(1) Net approvals in	US\$ (million)	•		\$197.3	
(2) Percentage increa	ase/decrease from previous	year		36%	
.3. Programme support of	osts recovered		Programme support costs incurred by UNIDO in support of the preparation and implement projects funded from extra-budgetary resources that are recovered		
(1) Programme supp	ort costs charged as incom	e to the operational bu	dget in EUR (million)*	€19.03	
(2) Average percentaş	ge of costs recovered based	n PSC, technical and operational services and direct service costs for 2020		12%	
P.1. Regular financial reso implementation	urces budget	Total expenditure i	Total expenditure in EUR (million) against approved regular financial resources		
P.2. Technical cooperation	delivery				
(1) Expenditure in US	5\$ (million) against volunta	ry contributions in a gi	ven calendar year	\$179.4	
(2) Percentage increa	(2) Percentage increase/decrease from previous year				
UNIDO workforce comp	position	partner experts, go	oodwill ambassadors, 200-series (L) staff and monthly short-term staff.		
UNIDO workforce comp	position	•			
a. Core staff compos	ition by category	•••••••••••••••••••••••••••••••••••••••	Total	582	
(P, D, NO, GS)	, , , , , ,		Male/female	343/239	
	Cultural and Continue	l (D =d = h)	Total	208	
	Subtotal professiona	i (P-2 and above)	Male/female	138/70	
	Subtotal NO: nationa	al officare	Total	48	
	Subtotat NO: Hationa	u onicers	Male/female	31/17	
	Subtotal CS, ganaral	consists staff	Total	326	
	Subtotal GS: general	Service Stati	Male/female	174/152	
		Headquarters	Total	434	
		ricauquariers	Male/female	259/175	
		Field	Total	127	
b. Core staff compos	ition by office/location	Ticlu	Male/female	75/52	
2. Sore Stan compos	2, Smerioudion	Offices away from	Total	7	
		headquarters	Male/female	4/3	
		ITPO offices	Total	14	
			Male/female	5/9	
c. Core staff index		Percentage of core	staff in the UNIDO total workforce	23.8%	
		G/P – ratio		1.76	
d. Core staff ratios		P/D - ratio		8.41	
		P1+P2/P3+P4+P5 -	- ratio	0.05	
e. Non-core personn	el index	Percentage of non-	core personnel in the UNIDO total workforce	76.2%	

### Level 4. Organizational resources and efficiency (continued)

CATOR			2021
UNIDO workforce composition (continued)			
	Hoodguartore	Total	853
6 Tatal weekfores access within the office // continue	Headquarters	Male/female	420/433
	Field	Total	1530
	TICIU	Male/female	942/588
f. Total workforce composition by office/location	Offices away from headquarters	Total	17
		Male/female	11/6
	ITPO offices	Total	42
	TIFO diffices	Male/female	24/18
UNIDO workforce geographical diversity			
a. Core staff geographical diversity index	Percentage of Mem	ber States whose nationals are active core staff members	57.7%
b. UNIDO workforce geographical diversity index	Percentage of Mem	Percentage of Member States whose nationals are active members of the UNIDO workforce	

### **ABBREVIATIONS**

AfCFTA African Continental Free Trade Area

AfDB African Development Bank

Brazil, Russian Federation, India, China and South Africa

CIRP COVID-19 Industrial Recovery Programme

CO<sub>2</sub> carbon dioxide CP country programme

ECP Entrepreneurship Curriculum Programme

FAO Food and Agriculture Organization of the United Nations

GCF Green Climate Fund

GCIP Global Cleantech Innovation Programme

GDP gross domestic product
GEF Global Environment Facility

**GHG** greenhouse gas

**GMIS** Global Manufacturing and Industrialisation Summit

HCFC hydrochlorofluorocarbon
HFC hydrofluorocarbon

HLPF high-level political forum on sustainable development

IDDA III Third Industrial Development Decade for Africa
IRPF integrated results and performance framework
ITFC International Islamic Trade Finance Corporation
ISID inclusive and sustainable industrial development
ITPO Investment and Technology Promotion Office

LDC least developed country

MIC middle-income country

MLF Multilateral Fund for the Implementation of the Montreal Protocol

MSME micro-, small and medium-sized enterprise

MTPF medium-term programme framework

PAGE Partnership for Action on Green Economy

PCP Programme for Country Partnership

PCP Programme for Country Partnership polyethylene terephthalate

POP persistent organic pollutant
PPE personal protective equipment

**PPP** purchasing power parity

QAF Quality Assurance Framework of UNIDO

RBM results-based management

SDG Sustainable Development Goal

SIDS small island developing State

SME small and medium-sized enterprise

STI science, technology and innovation

**UN** United Nations

UNCTAD United Nations Conference on Trade and Development

UNDP United Nations Development Programme
UNEP United Nations Environment Programme

**UNSDCF** United Nations Sustainable Development Cooperation Framework

WHO World Health Organization

UNIDO ORGANIZATIONAL STRUCTURE

As at 1 June 2020. (DGB/2020/04)

Buildings Management Services Division

General Services and Logistics Division

