Global annual average temperatures from 1850 to 2019. (Credits: https://showyourstripes.info)
This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” or “developing” are intended for statistical convenience and do not necessarily express a judgement about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

This edition of the Annual Report meets the Organization’s reporting requirements with regard to General Assembly resolution 71/243 on the quadrennial comprehensive policy review of operational activities for development of the United Nations system and the UNIDO medium-term programme framework, 2018–2021, taken note of by the General Conference in resolution GC.17/Res.1.

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.


Inner cover image (https://showyourstripes.info): Graphics and lead scientist: Ed Hawkins, National Centre for Atmospheric Science, University of Reading, with data from Berkeley Earth, NOAA, the United Kingdom Met Office, MeteoSwiss, DWD, Institute for Environmental Analytics.

Publishing production: English, Publishing and Library Section, United Nations Office at Vienna.

The paper used for the inner text of this publication is certified by the Forest Stewardship Council (chain of custody) and the Programme for the Endorsement of Forest Certification (chain of custody).

The full report and the appendices are available online at www.unido.org.

APPENDICES (available online at www.unido.org)

Operational statistics • Project approvals under voluntary contributions • Technical assistance to least developed countries (LDCs) • Programmable funds • Programme for Country Partnerships (PCP) • Appointments of Individual Service Agreement (ISA) holders • Agreements and other arrangements concluded by UNIDO in 2019 • Country promotion presentations/seminars organized by Investment and Technology Promotion Offices (ITPOs) in 2019 • Field representation • Overview of UNIDO workforce • Industrial statistics
CONTENTS

Foreword by the Director General iv
UNIDO at a glance vi

GLOBAL ACTIVITIES TO ADVANCE ISID 1
Reporting to the high-level political forum 2
Reform of the United Nations development system 3
Industrial policy advice and research 3
Statistics 4
UNIDO involvement in the technology facilitation mechanism 4
G20 engagement 4

STRENGTHENING KNOWLEDGE AND INSTITUTIONS 9
Reach, reactions, knowledge and capacities 10
Triggering behavioural change to enable and scale up ISID 11

CREATING SHARED PROSPERITY 15
Agribusiness and rural development 16
Women and youth in productive activities 17
Human security and post-crisis rehabilitation 18

ADVANCING ECONOMIC COMPETITIVENESS 25
Investment, technology and SME development 26
Competitive trade capacities and corporate responsibility 28
Entrepreneurship development 30

SAFEGUARDING THE ENVIRONMENT 35
Resource-efficient and low-carbon industrial production 36
Access to clean energy for productive use 39
Implementation of multilateral environmental agreements 43

REGIONAL PERSPECTIVES 49
Africa 50
Arab region 52
Asia and the Pacific 54
Europe and Central Asia 56
Latin America and the Caribbean 58

CROSS-CUTTING PRIORITIES 61
Gender equality and women’s empowerment 62
Partnerships and South-South cooperation 63

MANAGING UNIDO SERVICES 65
Funding and financial contributions 66
Staffing 68
Quality monitoring and programme approval 68
Evaluation and internal oversight 69
Legal services 69
Information technology services 70
Procurement 70
Buildings management 70

ANNEX. INTEGRATED RESULTS AND PERFORMANCE FRAMEWORK 71
Level 1. Global industrial development context 74
Level 2. Country and global results with UNIDO support 77
Level 3. Programmatic offer and programme management effectiveness 79
Level 4. Organizational resources and efficiency 83

Abbreviations 86
UNIDO organizational structure 87
The adoption of the Abu Dhabi Declaration at the eighteenth session of the UNIDO General Conference in November was a highlight of 2019 and a milestone for the Organization. The Lima Declaration of 2013 renewed the mandate of UNIDO, defined inclusive and sustainable industrial development (ISID), and laid the foundation for Sustainable Development Goal 9 (SDG 9). The Abu Dhabi Declaration reiterates the clear mandate of the Organization and gives guidance for the way forward into the last decade of the 2030 Agenda for Sustainable Development. Member States highlighted the role of UNIDO, among others, as a platform for private sector cooperation and in the Fourth Industrial Revolution.

It is clearer than ever before that climate change and inclusive and sustainable development are the most urgent areas of action in our time. The years 2015 to 2019 were the five hottest ever recorded. Young people around the world taking to the streets, extreme weather conditions and natural disasters remind us of the urgency of the climate crisis, affecting the poorest the most. The other defining issue of our time is persistent extreme poverty and increasing inequality among and within countries.

Just as these major challenges are interrelated, the solutions are also interlinked. Inclusive and sustainable industrial development is an important part of the solution. The positive effects on job creation, income generation, economic growth and social inclusion are evident. At the same time, industry plays an important role in addressing the climate crisis via a more sustainable use of resources, as well as innovative and sustainable energy solutions that have the potential to create green jobs.

As the Organization of the United Nations mandated to address the complex development challenges through ISID, UNIDO strives continuously to increase the impact of its work to reduce poverty and inequality, while safeguarding the environment. With strong financial and political support from Member States and our partners, we remain committed to efficiency, effectiveness, results-orientation and transparency.

We report on achievements in several areas in 2019 and on progress in advancing the management objective of “integration and scale-up”. The Programme for Country Partnership (PCP) is a notable example in this regard, coordinating different streams of resources to advance ISID and other goals of the 2030 Agenda. While programming and implementation is advancing well in the PCPs of the pilot phase, the PCP portfolio expanded to 10 countries during 2019, including supporting the industrialization goals of Côte d'Ivoire, Egypt, Rwanda, and Zambia.
For UNIDO as the lead agency of the Third Industrial Development Decade for Africa (IDDA III), 2019 was an important year. In the year of the seventh Tokyo International Conference on African Development (TICAD 7), and under the Japanese G20 presidency that continued the work on industrial development in Africa, we advocated for structural transformation and sustainable industrialization of the African continent. In parallel to the efforts to advance the implementation of IDDA III, the Small Island Developing States Strategy 2019–2025 and the UNIDO Strategic Framework for Partnering with Middle-Income Countries were also adopted in 2019.

In terms of service delivery volume, I am pleased to inform you that our technical cooperation implementation reached $190.3 million in 2019, well above the average of the past five years. At the same time, we recorded voluntary contributions for programme implementation of $154.7 million, over two thirds of which come from governmental donors and the European Union. To better illustrate the contribution of UNIDO to development results and impact beyond financial figures, this edition of the Annual Report utilizes the new indicators of the integrated results and performance framework (IRPF).

I truly appreciate the continued support of our Member States and funding partners, as well as the trust placed in the Organization by our partners. I felt fortunate to observe the strong spirit of cooperation and support among participants at the last session of the General Conference, where the programme and budgets for the 2020–2021 biennium and other important resolutions and decisions were approved.

Looking back at the past year, I am encouraged by the many positive developments and achievements. At the same time, I am mindful that much remains to be done to achieve the Goals of the 2030 Agenda for Sustainable Development and make the world a prosperous and healthy planet where all people can live productive, vibrant lives, and where no one is left behind.

LI Yong, Director General of UNIDO
UNIDO was established in 1966 and became a specialized agency of the United Nations in 1985.

LI Yong has been the Director General of UNIDO since June 2013, and was reappointed for a second four-year term by the General Conference in November 2017.

UNIDO employs 671 staff members as well as 1,426 consultants on ISA contracts from 139 countries (as at 31 December 2019).

As at 31 December 2019, the Organization has 170 Member States.

UNIDO contribution to the United Nations resident coordinator system approved by Member States for 2019: $7,898,817, for 2020: $2,637,121.


All Member States meet every 2 years.

Next regular session 29 November–3 December 2021.

53 Members meet once a year.


27 Members meet once a year.


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).

The value of technical cooperation delivery in 2019 amounted to $190.3 million.

$154.7 million net voluntary contributions in 2019 for project implementation, with a total portfolio of projects in hand of $586.6 million.

49 million tons of CO₂-equivalent and over 90,000 tons of pollutants reduced with UNIDO contribution in 2019.

Projects implemented in 125 countries in 2019.

€84.1 million regular and operational budget (expenditure) of UNIDO in 2019.

43% 57%

In 2019, UNIDO participates in eight United Nations country teams.

EURO: $2,647,714.

As at 31 December 2019, the Organization has 170 Member States.

www.unido.org/member_states

The value of technical cooperation delivery in 2019 amounted to $190.3 million.

$154.7 million net voluntary contributions in 2019 for project implementation, with a total portfolio of projects in hand of $586.6 million.

49 million tons of CO₂-equivalent and over 90,000 tons of pollutants reduced with UNIDO contribution in 2019.

Projects implemented in 125 countries in 2019.

€84.1 million regular and operational budget (expenditure) of UNIDO in 2019.

43% 57%

In 2019, UNIDO participates in eight United Nations country teams.

EURO: $2,647,714.
The primary objective is the promotion of inclusive and sustainable industrial development (ISID) in developing countries and economies in transition.

- Technological cooperation
- Analytical and policy advisory services
- Normative functions, standards and quality-related activities
- Convening for knowledge transfers, partnerships and networking

Some of the development challenges facing the world:

- Over 736 million people live in extreme poverty, 433 million in sub-Saharan Africa.
- Youth are 3 times more likely to be unemployed than adults.
- Manufacturing value added per capita: $132 in LDCs, $5,469 in industrialized economies.
- 840 million people without electricity, mostly in sub-Saharan Africa.

Real GDP growth in LDCs 4.8% annually (2010–2017), less than the 7% target.

SAFEGUARDING THE ENVIRONMENT

5 times: resource use in developing countries for the same economic output as industrialized countries.

2019 was the second hottest year on record since 1850.

Over 736 million people live in extreme poverty, 433 million in sub-Saharan Africa.

Industrialization in LDCs is too slow to meet the 2030 targets.

TOP FUNDING PARTNERS FOR UNIDO PROGRAMMES AND PROJECTS IN 2019 (in millions)

- Japan $16.8
- Switzerland $9.2
- Italy $8.7
- Sweden $7.6
- China $5.5
- Germany $4.1
- Norway $3.0
- Austria $1.9
- Morocco $1.7
- Republic of Korea $1.7

European Union $25.2
Global Environment Facility (GEF) $28.2
Multilateral Fund (MLF) $16.1

PROGRAMME FOR COUNTRY PARTNERSHIP (PCP):

- Ethiopia
- Senegal
- Peru
- Morocco

IMPLEMENTATION

PROGRAMMING

COTE D’IVOIRE

EARLY PROGRAMMING

Egypt

Rwanda

Zambia
GLOBAL ACTIVITIES TO ADVANCE ISID

The critical role of inclusive and sustainable industrial development (ISID) and the contribution of UNIDO to achieving the Sustainable Development Goals (SDGs) is clearly recognized by the 2030 Agenda for Sustainable Development. High-level events, such as the SDG Summit and the Climate Action Summit, launched a universal call to action to end poverty and hunger, while protecting our planet from environmental degradation. UNIDO shares knowledge and expertise at a range of important events, bringing together relevant stakeholders and providing a platform for discussion. The Organization further contributes on the global level by publishing statistics and other knowledge products that advance ISID. UNIDO works closely with its partners to address the complex challenges of today.
REPORTING TO THE HIGH-LEVEL POLITICAL FORUM

Responding to the invitation of the President of the Economic and Social Council (ECOSOC), the Industrial Development Board (IDB) prepared an input document for the high-level political forum on sustainable development (HLPF) in July 2019. Aligned to the forum’s 2019 theme, “Empowering people and ensuring inclusiveness and equality”, the document reviewed the implementation of SDGs 4, 8, 10 and 13 from the perspective of the Organization’s mandate to accelerate ISID and the advancement of SDG 9. The IDB submission highlighted the role of ISID in enabling industries to adopt practices that contribute to low-emission climate-resilient development, strengthen institutional capacity and reduce inequality, create green jobs and increase access to clean energy and high-quality education. Further, the SDG Summit (HLPF under the auspices of the General Assembly) was held in September as the first United Nations summit on the SDGs since the adoption of the 2030 Agenda in 2015.

In addition to the SDG Summit and the general debate of the General Assembly, world leaders also participated in a series of summits and high-level meetings to boost action on climate change and accelerate progress on sustainable development. The United Nations Climate Action Summit drew particular attention and demonstrated growing recognition that the pace of climate action must be rapidly accelerated.

<table>
<thead>
<tr>
<th>22 September</th>
<th>23 September</th>
<th>23 September</th>
<th>25 September</th>
<th>27 September</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerating technology diffusion to promote low-emission industrialization</td>
<td>Private Sector Forum: Commitments for a 1.5°C Future</td>
<td>Sustainable Cities: Hubs of climate action and innovation</td>
<td>Global Manufacturing and Industrialisation Summit (GMIS): Standards for the digitalization of inclusive and sustainable value</td>
<td>Mission Transforming Island Lives! The Network of Regional Sustainable Energy Centres for Small Island Developing States (SIDS)</td>
</tr>
</tbody>
</table>
REFORM OF THE UNITED NATIONS DEVELOPMENT SYSTEM

UNIDO embraces the vision of the 2030 Agenda and is fully committed to strengthening the United Nations development system and its collective response in support of the SDGs. The Organization supports the reform initiated through General Assembly resolution 72/279 as a far-reaching transformation aimed at more cohesive and coordinated inter-agency collaboration.

In 2019, UNIDO continued contributing to the implementation of the reform as a member of the United Nations Sustainable Development Group with its four Strategic Results Groups and various working groups. UNIDO supported the development of key documents, such as the Mutual Accountability Framework, the renewed United Nations Sustainable Development Cooperation Framework (UNSDCF) and Common Country Assessment framework, and the multi-country office review. The Organization also provided inputs to a guidance document on economic transformation and is contributing to the work of the United Nations Economists’ Network established by the United Nations Department of Economic and Social Affairs.

Briefings on the reform, including for the Informal Working Group on Programme and Budget Committee-related issues, and several documents for UNIDO policymaking organs kept Member States informed.

INDUSTRIAL POLICY ADVICE AND RESEARCH

As a global facilitator of knowledge and advice on policies and strategies towards achieving ISID, UNIDO supports Member States with relevant research findings and sound policy advice. Four highlights in this area were the Industrial Development Report, the Industrial Analytics Platform (an innovative tool featuring data on selected industrial development indicators), the diagnostics for the PCP Egypt, as well as the upgrade of the Enhancing the quality of industrial policies (EQuIP) toolbox with modules related to climate change mitigation, the Fourth Industrial Revolution and gender equality.

In collaboration with partner institutions, UNIDO contributed to research publications, such as Integrating Southeast Asian SMEs in global value chains co-authored with the OECD, the joint OECD-WTO publication Aid for Trade at a Glance 2019, the Green Growth Index of the Global Green Growth Institute, and Promoting Development of Global Value Chains through the Belt and Road Initiative.

UNIDO supported the Governments of Cambodia, Cuba, Ethiopia, Kuwait, Oman, the Bolivarian Republic of Venezuela, Viet Nam and the United Republic of Tanzania, in the design, revision and implementation of industrial strategies, policies and value chain development interventions. Capacity development activities were provided for policymakers in southern and eastern Africa, members of the Central Asia Regional Economic Cooperation Program, and the individual countries of Cambodia, Indonesia, the Lao People’s Democratic Republic and the Philippines.
STATISTICS

Given its long-standing mandate to maintain worldwide industrial statistics, and its unique role within the international statistics system, UNIDO serves as custodian agency for six industry-related indicators under SDG 9. Specifically, the Organization reports figures on manufacturing value added, manufacturing employment, small-scale industries, carbon dioxide (CO₂) emissions, and on medium- and high-technology industry. UNIDO provides data for the global database of SDG indicators and published a biennial progress report on *Statistical Indicators of Inclusive and Sustainable Industrialization* in 2019.

UNIDO provided data and narratives for the Secretary-General's *Sustainable Development Goals Report 2019* and the *Report of the Secretary-General on SDG Progress 2019 Special Edition*, as well as the *Sustainable Development Goals Progress Chart 2019*.

As an analytical product, UNIDO published a new edition of the *Competitive Industrial Performance Report* (CIP), which contained performance indicators and CIP rankings for 150 countries, for the first time supplemented with a CO₂-adjusted index.

In December, UNIDO hosted a workshop for representatives of national statistical offices on data and statistics for evidence-based voluntary national reviews. During the year, UNIDO also implemented technical cooperation projects on industrial statistics in Cambodia, Cuba, Jordan, Oman and Saudi Arabia.

UNIDO INVOLVEMENT IN THE TECHNOLOGY FACILITATION MECHANISM
UNIDO continues to contribute to the Technology Facilitation Mechanism (TFM) and its Inter-agency Task Team on Science, Technology and Innovation (STI). Regarding TFM, UNIDO co-organized a side event on “Development partnerships to address binding constraints around innovation, education and the environment” with the Government of Morocco and the European Commission Joint Research Centre at the fourth STI Forum in May. Participants learned about initiatives that bridge capability gaps to enable the adoption and scaling-up of STI for the SDGs.

In the context of the STI inter-agency task team, UNIDO offered substantive guidance at a workshop for Latin American policymakers in Panama, and contributed to the development of the STI road maps methodology, including the selection of pilot countries for this initiative. In support of partnership building, UNIDO delivered a keynote address at the seventh European Conference on Corporate R&D and Innovation (CONCORDi).

G20 ENGAGEMENT
Under the presidency of Japan, UNIDO continued its work to support the G20 Development Working Group, contributing to deliberations on economic and industrial development in Africa. In 2019, UNIDO prepared a report on the progress made by the Group on implementing the G20 initiative on “Supporting industrialization in Africa and least developed countries (LDCs)” started in 2016. Using theoretical and applied methodologies, the review tracks progress in industrialization and identifies policies, challenges and opportunities for the future, including those arising from the Fourth Industrial Revolution. The findings of the report are also featured in the *Osaka Comprehensive Accountability Report on G20 Development Commitments* reviewing progress since the adoption of the G20 Action Plan in 2016.
The UNIDO Office in New York acts as a coordinating hub on United Nations matters for UNIDO, advocating for ISID to help eliminate poverty and achieve other SDGs. This is achieved through engagement with Member States and partnerships with other United Nations agencies and private sector institutions.

In 2019, the New York Office consulted with Member States on the circular economy, women’s economic empowerment, and how to help least developed and vulnerable countries capitalize on the opportunities of the Fourth Industrial Revolution and develop competitive and productive industrial sectors.

UNIDO organized and co-organized 27 side events during high-level events that advocated for a variety of approaches and activities. These were held at the Commission on the Status of Women, the Youth Forum, the Financing for Development and SDG Investment Forum, the Science, Technology and Innovation Forum, the Micro-, Small and Medium-sized Enterprises Day, the High-level Political Forum, World Cities Day and Africa Industrialization Day.

The New York Office also supported the organization of four side events during the General Assembly high-level week: the Climate Action Summit, the SDG Summit, the Financing for Development High-level Conference and the Small Island Developing States Accelerated Modalities of Action (SAMOA) Pathway High-level Mid-term Review Conference. These actions emphasize the work of UNIDO on sustainable cities, the IDDA III, and the GMIS and Sustainable Energy Centres in small island developing States (SIDS).
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. In 2019, UNIDO initiated the formulation of new PCPs for Côte d’Ivoire, Egypt, Rwanda and Zambia. Going forward, the programme will gradually expand to additional countries.

**Status in 2019**

**Implementation**
- **Ethiopia**: Implementation started in 2015
  - Focus: Agro-food processing • Textiles and apparel • Leather and leather products
- **Senegal**: Implementation started in 2015
  - Focus: Industrial policy development • Agro-poles • Integrated industrial platforms • Regional mining hub • Special economic zones and incentive package reform
- **Peru**: Implementation started in 2018
  - Focus: Quality and innovation • Value chain and enterprise development • Sustainable industrial parks and zones
- **Morocco**: Implementation starting in 2020
  - Focus: Industrial zones • Agro-industry • Energy • Circular economy • Industry 4.0 • E-commerce

**Programming**
- **Cambodia**: Programming started in 2017
  - Focus: Sustainable tourism • Agro-industry and creative industry value chains • Industrial diversification, in particular through special economic zones
- **Kyrgyzstan**: Programming started in 2017
  - Focus: Energy • Agro-industry • Construction materials • Textiles and apparel • Tourism

**Early Programming**
- Côte d’Ivoire
- Egypt
- Rwanda
- Zambia
The PCPs continued to demonstrate strong national leadership and the effective integration of UNIDO services through the provision of technical assistance, analytical and advisory services, and convening. Collaboration with development partners solidified, which facilitated the leveraging of public and private resources, particularly towards large-scale flagship projects.

In the four early programming countries, priority areas for each PCP are being formulated in line with the respective national development plans, under the leadership of the Government and in consultation with development partners. Côte d’Ivoire and Egypt have also committed national resources to the programming phase. In Egypt, the national coordination body is already operational, the country diagnostic has been finalized and the development of a full-fledged PCP programme document is in process.

Implementation and programming advanced in the six PCPs of the pilot phase. Highlights include major progress in partnerships and resource mobilization around the four integrated agro-industrial parks of PCP Ethiopia. In PCP Senegal, the establishment of three agro-poles is progressing; one feasibility study is being completed and the financing for the studies of the other two agro-poles is under final discussion. With policy advice from PCP Peru, the Government developed a national strategy on industrial parks, now integrated in the country’s new national development programme for 2019–2030. The PCP Morocco programme document was signed in March 2019, a national financial contribution was received for PCP programming, and new technical projects were developed in the identified priority areas. In Kyrgyzstan, the Government approved the National Strategy for Sustainable Industrial Development 2019–2023 and its action plan, both developed with the support of UNIDO. The PCP programme document and priority areas were revised in line with the new strategy, paving the way for the start of implementation in 2020. In Cambodia, several projects are ongoing in the priority and cross-cutting areas of the PCPs, with new projects under development. Key initiatives include the provision of industrial policy advice, the start of a large-scale fisheries project and the development of a masterplan for a multi-purpose special economic zone in Sihanoukville.
The medium-term programme framework (MTPF) 2018–2021 calls for the strengthening of knowledge and institutions to facilitate the integration of all UNIDO services across functions and thematic areas and to achieve long-term development results for Member States. The UNIDO results framework is founded on an actor-based, behavioural change model to help structure the Organization’s performance story. Knowledge and institutional capacity are important enabling elements of the UNIDO theory of change. This results framework explains how knowledge and capacities resulting from the Organization’s interventions and engagement with stakeholders can lead to changes in behaviour, ultimately contributing to ISID and SDG impact. Knowledge is a strategic asset for UNIDO and is a major contribution to its development partners.
The “leaving no one behind” commitment is at the heart of the 2030 Agenda. For UNIDO, this means that ISID must benefit all countries and all people, and offer equal opportunities and an equitable distribution of the benefits of industrialization to all stakeholders. UNIDO believes that close engagement with key stakeholders not only triggers development outcomes benefiting them, but also the expansion, replication, adaptation and sustainability of successful results beyond the directly assisted groups.

In 2019, the Organization continued to engage with stakeholders at all levels, including Governments, the private sector, in particular small and medium-sized enterprises (SMEs) and individual entrepreneurs, academia and key groups such as women and youth. Governments and policymakers play a key role in ensuring ownership and leadership, which constitute important factors for successful scaling-up. For example, the Government of Indonesia has a strong vision for the Fourth Industrial Revolution and organized the first Regional Conference on Industrial Development on that theme with UNIDO. Similarly, the Government of Cuba requested UNIDO assistance to produce an Industrial Competitiveness Report and establish a multidisciplinary Intelligence Unit of Industrial Competitiveness.

Capacity-building is at the core of UNIDO interventions. When designed well, UNIDO capacity-building interventions have also been shown to trigger social changes, for instance in post-crisis situations. In Somalia, UNIDO established vocational training centres and provided youth with technical training that helped build life skills, improve job opportunities and generate incomes, thus enhancing social cohesion. Further, capacity-building interventions have been shown to enhance the sustainability and scaling-up of technological improvement projects. The Investment and Technology Promotion Office (ITPO) in Tokyo successfully promoted the transfer of almost 300 technologies by focusing on training and capacity-building, and by strengthening partnerships between beneficiary countries and donors.

The scaling-up potential increases when actors at different levels are engaged in an integrated way. The UNIDO “SMART-Fish” initiative in Indonesia highlighted in chapter 3 engaged stakeholders at the macro, meso and micro levels, resulting in significant development results. It is estimated that 66 per cent of programme interventions were replicated and scaled up through efforts, such as the mobilization of expertise in partnership with local research institutions, and the piloting, monitoring and assessment of good practices to identify success factors for adoption and scaling-up.

Support networks and communities created out of UNIDO engagement with stakeholders enable replication. In a project in the Republic of Moldova funded by the Government of Austria, the creation of “industry champions” alongside the involvement of regional communities and information sharing supported replication. Platforms established to tackle collective opportunities and challenges also played a role in driving replication. For example, Resource efficient and Cleaner Production (RECP) centres supported progress towards the mainstreaming of RECP concepts through policy instruments and provided the successful trigger. Replication and scaling-up also occurred when UNIDO interventions used incentives to leverage financing.
TRIGGERING BEHAVIOURAL CHANGE TO ENABLE AND SCALE UP ISID

The updated IRPF identifies five major behavioural change areas triggered by the strengthening of knowledge and institutions, as illustrated in the figure below.

In a pioneering use of the IRPF approach as part of the methodology, the Synthesis of UNIDO Independent Evaluations 2015–2018 shows that, at completion, projects were able to trigger changes in knowledge, attitude, skills and the aspirations of individuals and groups, thus contributing to behavioural change outcomes. Several experiences confirm that a common precondition for replication and scaling-up is the systematic combination of these results areas. The PCPs in Ethiopia and Senegal are examples of how the integration of UNIDO technical assistance, policy advice and strengthened partnerships can mobilize resources for results at scale. In Ethiopia, the interministerial mechanism established under the leadership of the Government of Ethiopia in collaboration with over 20 partners is helping scale up financial and technical resources, including over $500 million allocated by the Government, for the establishment of integrated agro-industrial parks (IAIPs) in line with the PCP and the Government’s industrial development priorities.

In the actor-based model of UNIDO, it is possible to identify the combination, and to some extent the sequencing, of factors that can lead to development impact. By building knowledge, skills and capacities, the UNIDO industrial energy efficiency programme successfully supported changes in the practices of industrial companies, resulting in measurable energy and cost savings, and greenhouse gas (GHG) emissions reductions. The programme also stimulated upstream measures in support of industrial energy efficiency, including increased investments, the adoption of international standards and the development of policies and regulations.

UNIDO partnership building, especially with the private sector is supporting the Organization to progress towards its desired development impact. This is illustrated by the UNIDO Cleantech project in Pakistan, where 249 start-ups were trained and connected with investors, and almost $20 million were invested in clean technology innovations. Private sector engagement is set to increase through the continuation of project initiatives by national actors such as the Islamabad Chamber of Commerce and Industry. National technology funds will be channeled towards cleantech innovators, showing
further scope for UNIDO to trigger changes to business model development and finance leveraging to induce scale-up and replication.

In the second year of the implementation of its management priority of integration and scale-up, UNIDO is making progress towards a broader adoption of results. The 2019 synthesis of UNIDO independent evaluations shows that 38 per cent of projects demonstrate partial mainstreaming, sustaining, replication and scale-up of results. Twenty-six per cent of the assessed projects included plans for broader adoption, mostly through mainstreaming, where stakeholders incorporated information, knowledge or specific project results into laws, policies, regulations and programmes. In the Russian Federation, an amended Federal Waste Act and implementing regulations were adopted as a result of a UNIDO intervention on management of e-waste. Similarly, the Governments of Ecuador and Peru endorsed mercury reduction targets as a result of UNIDO technical and policy assistance, with Peru also banning the use of mercury in mining.

Systematic results monitoring leads to better-designed projects, which includes replication, scaling-up and eventually systemic change. In this regard, the implementation of the IRPF and continued application of results-based management principles will enhance efforts towards a broader adoption of development results.
More than 1,700 people came to the eighteenth session of the UNIDO General Conference in Abu Dhabi, in November. UNIDO welcomed the Heads of State of Madagascar and Niger, the Deputy-Prime Ministers of the United Arab Emirates and Vanuatu, as well as around 20 Ministers and over 15 Vice-Ministers.

The Lima Declaration adopted in 2013 renewed the UNIDO mandate of ISID and laid the foundation for a dedicated Sustainable Development Goal on industry, SDG 9. With the adoption of the Abu Dhabi Declaration, Member States confirmed the UNIDO mandate and their support for the Organization, while recalling the urgent need for increased international cooperation to achieve the 2030 Agenda and address poverty and climate change.

MAIN EVENTS

- Seventh ISiD Forum
- Launch of the World Entrepreneurs Investment Forum (WEIF)
- Sustainable Development Goal Impact Investment Platform – Circular Economy
- Side-event on gender and launch of the Strategy for Gender Equality and the Empowerment of Women (2020–2023) and the Future of Inclusive Industry
- Launch of the Industrial Development Report 2020
- Launch of the Industrial Analytics Platform
- Cleantech as a Catalyst for Climate Action and the Clean Energy Transition
- Fostering Innovation and Connectivity for a Smooth Transformation to Industry 4.0
- Young Entrepreneurs as Drivers of Innovation and Job Creation for Competitive and Resilient Economies
- Promoting Sustainable Industrial Parks and Low-Carbon Urban-Industrial Development for Inclusive and Sustainable Industrialization

www.unido.org/unido-18th-general-conference

ONSITE AND VIRTUAL EXPO WITH SEVEN DIFFERENT HUBS:

Gender • Youth and entrepreneurship • Industry 4.0 • Industrial parks • Circular economy • Sustainable energy • Partnerships
CREATING SHARED PROSPERITY

The majority of the world’s poor have to rely heavily on agriculture for their livelihoods. With no infrastructure and no resources to industrialize, incomes remain low. Vulnerable groups, such as women and youth, often have fewer employment opportunities and are more likely to be poorly paid. Poverty also reduces resilience to conflicts and disasters. UNIDO applies its long-standing expertise in post-agricultural processing and light manufacturing to helping SMEs create jobs and raise productivity and incomes, with a particular focus on the most vulnerable. By allowing the benefits of prosperity to be shared more equally, UNIDO fosters inclusive and sustainable growth. Complementing these activities with post-crisis and human security programmes, UNIDO aids recovery efforts by repairing and rebuilding productive capacities.
By 2050, food supplies will have to double to feed the exploding global population, while agricultural land use, water and forest resources are already under increasing pressure.

UNIDO provides training to farmers and agribusinesses to create higher quality products at lower cost and less waste. Cleaner technologies are being introduced to enable them to comply with the quality and food safety practices needed to access wider markets and increase incomes.

UNIDO is also helping develop agro-industrial parks to bring companies together to share services and further reduce costs. The PCP Ethiopia established four parks, and one is under development in the Democratic Republic of the Congo. In Senegal, UNIDO mobilized partners to develop comprehensive feasibility studies to establish three regional agro-poles.

Non-food agribusiness is also potentially lucrative. With the Better Cotton Initiative as part of a project funded by Italy, UNIDO is helping Egyptian companies achieve certification for access to international markets. By the end of 2019, 20 companies and more than 1,200 cotton growers had committed to reaching certification, compared to only one company and 335 cotton growers supporting certification at the beginning of the project.

Improving food safety increases trade

In the Arab region, food and agricultural safety standards accounted for more than half of the non-tariff barriers to intraregional trade. UNIDO is working with the League of Arab States to open this market through the “SAFE initiative”, funded by Sweden. Common standards and regulatory frameworks were developed, and training provided to improve surveillance and meet export market standards.

By the end of 2019, numerous improvements were in place, including benchmarking inspection and certification systems in three countries, needs assessments of the national food control system in the Sudan and Tunisia, six Codex Alimentarius international food standards guidelines, Arab Rapid Alert System for Food and Feed guidelines, and 14 certified risk assessors in 10 Arab countries. The programme also provided education on the adverse effects of climate change to ensure the full support of community members and leaders.

Uganda banana production practices reduce deforestation and increase incomes

Uganda is among the top banana-producing countries, but unpredictable temperatures and rainfall due to climate change and pests and diseases are threatening this crop.

With funding from the Global Environment Facility (GEF), UNIDO is helping vulnerable farming communities adapt to climate change, reduce deforestation and increase their income. Biodigesters installed in eight districts now generate biogas from cow dung for lighting and cooking. The decomposed dung also fertilizes the banana fields, providing a dual benefit.
With this new clean energy, women and children no longer need to spend hours each day searching for firewood and making charcoal. This leaves children more time for schoolwork, and women are earning money in new processing plants built by UNIDO that meet international guidelines. Bananas that would have ripened before they reach the market are dried for banana chips or made into juice, providing income that would otherwise have been lost.

**WOMEN AND YOUTH IN PRODUCTIVE ACTIVITIES**

In many developing countries, weak rural agroprocessing industries providing few jobs drive young men and women to migrate to urban areas and across borders in search of opportunities.

Together with the Food and Agriculture Organization of the United Nations (FAO), UNIDO is implementing a programme to increase youth employment in agriculture in Cabo Verde, the Democratic Republic of the Congo, Ghana, Kenya, Tunisia and Zambia. The programme, launched at TICAD VII in 2018, strengthened government policies and frameworks and trained young people to establish SMEs and create jobs in agricultural value chains and food systems.

Together with FAO and UN Women, UNIDO also launched the second phase of a project funded by the Government of Italy to increase the number of women-led micro, small and medium-sized enterprises (MSMEs) in Algeria, Egypt, Jordan, Lebanon, Morocco, the State of Palestine and Tunisia.

**Increasing food and labour security in Armenia**

Women and young migrants usually face the highest risk of trafficking and labour exploitation, food insecurity and poverty. Through a project funded by United Nations Trust Fund for Human Security, the Government of Armenia is working with a consortium of United Nations organizations to address this issue. UNIDO is responsible for generating economic opportunities for the most vulnerable and building the capacity to sustain these incomes.

In 2019, clusters and businesses with strong growth potential were identified in four communities. Producer groups were selected, and their technical and financial support needs identified. A special focus was given to women, since they are at higher risk of poverty, particularly when they are the head of the household. UNIDO is now providing training to the participants in environmentally-resilient practices, and teaching them to develop bankable business plans and funding applications.

Three vulnerable communities in the Shirak, Tavush and Lori regions are focusing on developing new business models for dairy products, fruits and berries, dried fruits and herbs, and high-value field crops, using renewable technologies such as solar heaters and small biogas units for agricultural processing and greenhouse operations. One project in the Tumanyan
district is introducing sustainable waste management through separate collection and recycling of plastic waste to reduce the environmental risk to their agroprocessing industry.

These new income opportunities are empowering women and youth to take control of their livelihoods and their environment, reducing their risk of exploitation and helping boost their communities’ economies.

**Promoting youth employment in Liberia**

UNIDO is implementing a large-scale programme aimed at revitalizing the technical vocational education and training sector in Liberia, with a particular focus on industrial skills relevant for high economic growth sectors. Specifically, the programme aims to promote youth employment in technical occupations linked to the mining, agriculture, agro-forestry and construction sectors. By creating jobs for youth, the programme also contributes to overall security and stability in Liberia. The programme comprises several projects, funded by the European Union and the Governments of Japan and Sweden, totalling nearly $40 million. It builds on the successful experience of UNIDO in supporting labour market-oriented training programmes in the country, specifically for careers in industrial mechanics as proven by the high employment rates of the training graduates.

**Reducing youth radicalization by addressing environmental degradation**

Lack of food or income often triggers conflict. Environmental degradation significantly reduces the land available for pastures and agriculture that provides a community’s nutrition and livelihood. Unemployment and threatened livelihoods create conditions for young people to become frustrated and radicalized.

In Guinea, UNIDO initiated a programme to reduce this vulnerability and increase opportunities for the young men and women most at risk of radicalization. With funding from the United Nations Peacebuilding Fund, UNIDO is working with four local non-governmental organizations to identify the most vulnerable areas and improve them with new, green practices.

Sixty-five villages have been selected for the training of 650 young men and women to gain entrepreneurial skills and learn how to protect their environment and earn an income from greener practices. The programme comprises a combination of interdependent interventions to mitigate the effect of climate change while establishing a healthier economy that reduces conflict and radicalization.

**HUMAN SECURITY AND POST-CRISIS REHABILITATION**

Millions of people have left their homes in the past years to escape conflict, extreme violence, severe economic and political instability, and the impact of environmental and climate change-related hazards.

UNIDO builds resilience to crises and supports recovery efforts in the most vulnerable communities through training and education, value chains, technology transfer and institutional capacity-building. This support helps create new job opportunities and raise employability, improving social cohesion between displaced people and host communities.

The Organization works with other United Nations agencies in these efforts. In 2019, UNIDO became a member of the United Nations Network on Migration and signed an agreement for the Start-up Fund for Safe, Orderly and Regular Migration, a newly established financing mechanism which facilitates inter-agency collaboration in this area.

**Training entrepreneurs in Iraqi refugee areas to reduce economic and security risks**

Nearly 1.5 million refugees and displaced Iraqis are living in the Kurdistan region. More than half are
under the age of 20, with unemployment rates at 24 per cent for men and 69 per cent for women.

UNIDO introduced the Entrepreneurship Development Programme (EDP) for both the refugees and host communities in the Erbil province to reduce economic risks and improve their security. With funding from Japan, UNIDO trained local university staff to become EDP trainers for teachers at secondary vocational schools.

These teachers taught nearly 300 unemployed graduates and out-of-school youth the concepts of entrepreneurship and how to develop business plans. At the vocational schools, students could select from courses in the service industry, agrifood processing, graphic arts, mobile phone repair, automobile maintenance, and sewing and fabric arts. Students winning top awards for their business plans received equipment such as laptops, toolkits and software, and paid internships to provide job experience. UNIDO ensured that women, who are often excluded from the job market, comprised almost half the group.

Nearly 200 refugees in the Gawilan refugee camp in Duhok, who had no means of livelihood before the programme, learned how to manage chickens, goats, alfalfa and dairy processing. They now have eggs and milk to feed their family and money from sales of their produce. Students in other communities have started graphic design and technology enterprises.

The Ministry of Education is bringing the EDP to more provinces and has translated the training materials into the local language.

Independent researchers studied the effect of the programme on migration. Their paper is helping planning and decision-making in Iraqi communities prone to displacement and migration.

Somali youths learning construction to rebuild their city

In March 2019, a terrorist attack in Mogadishu extensively damaged a government building and killed several staff of the Ministry of Labour and Social Affairs. Car bombs are a regular occurrence in Somalia, and this incident was a powerful demonstration of the insecurity facing the city.

Through a youth employment project that is part of a joint United Nations programme, UNIDO is helping Somalia improve access to sustainable job opportunities in key sectors with high growth potential.

To provide young people with the required skills to enter the labour market and make them less vulnerable to radicalization, UNIDO strengthens vocational and technical skills through on-the-job training in critical urban infrastructure. Both men and women learned how to plaster, paint, and install doors, windows and tiles. Women made up 35 per cent of the trainees. As part of the project’s focus on public asset rehabilitation, the bombed-out Ministry building was chosen for the training and brought back into usable condition.
Ethiopia is the second most populous country in Africa with one of the continent’s fastest growing economies. The Government is implementing an ambitious plan to transform the economy so it can compete in the global market and become a middle-income country by 2025.

UNIDO has been actively engaged in Ethiopia since 1968. Through the PCP, the Organization has brought together development partners, United Nations agencies, financial institutions and the business sector, under the leadership of the national Government, to help achieve its goals.

Agriculture remains central to the country’s economy, contributing 44 per cent of gross domestic product (GDP). Smallholder farmers are the main producers, but their scattered plots are highly fragmented with little irrigation and mechanization, reducing efficiency and increasing post-harvest losses. The PCP is supporting the Government to improve the efficiency of its agro-industry with training in ways to conserve natural resources, improve irrigation systems and plant higher value products.

The other growth opportunity in the country is industry, particularly the manufacturing sector, which only contributes 4 per cent to GDP. The PCP is promoting three light manufacturing sectors: agrifood processing, textiles and apparel, and leather and leather products.

**Agro-industries link farmers to markets**

Agro-industries add value through processing, giving products a longer shelf life and reducing waste. Placing these industries within industrial parks in rural areas closer to the farmers can lead to greater efficiency and rural off-farm job creation.

UNIDO is therefore working with the Government of Ethiopia to establish four integrated agro-industrial parks (IAIPs). They provide large- and medium-sized firms with developed industrial land, access to infrastructure, utilities and business services. Rural transformation centres set up around each IAIP provide modern warehouse and market facilities. They serve as aggregation points where investors can promote key markets and farmers sell their produce.

UNIDO has helped design the complexes with superior environmental standards that improve the management of waste, water, energy, emissions and hazardous chemicals. In Ethiopia, an estimated 300,000 tons of animal by-products are dumped annually in open fields. Apart from being an environmental problem, this is also a waste of valuable economic resources. The rural transformation centres use these by-products as a source of efficient renewable power generation in addition to small hydropower stations.

Specific attention has been given to assure a steady and sufficient supply of raw materials to enterprises in the IAIPs. To this end, a strategic analysis of key value chains, including dairy, livestock, potatoes and fresh vegetables, was conducted with, inter alia, the Food and Agriculture Organization of the United Nations (FAO) and the Agricultural Transformation Agency, the Ethiopian Institute of Agricultural Research and the Federal Cooperatives Agency.

**Leather and leather products**

Ethiopia has one of the largest livestock herds in Africa and a strong leather and leather products sector. However, the industry remains constrained by a shortage of hides and skins, outdated equipment, insufficiently skilled labour, low utilization of installed capacities and a lack of price incentives for superior quality goods.

In the framework of a project funded by the Government of Italy, a common footwear production unit inaugurated in April will allow the Ethio-International Footwear Cluster Cooperative Society (EIFCCOS) to increase and diversify its production. In 2019, the five clusters supported by UNIDO employed more than 4,850 workers, 33 per cent more than the baseline of 2014. Of this number, 48 per cent were women and 90 per cent aged 24 or below. The technology upgrading has directly benefited 273 SMEs participating in the cluster. Profit margins have increased by 12.5 per cent on average and export volumes by 8 per cent.
Textiles and apparel

Ethiopia grows some of the world’s finest cotton and has a rich spinning and weaving history. As with the agrifood processing sector, raw material shortages pose a challenge. Weak spinning and ginning industries, lack of skills, low capabilities in support institutions for the textiles and apparel value chain and, most notably, weak trade logistics, are all significant obstacles to developing this sector.

In collaboration with its partners, UNIDO is supporting the Government of Ethiopia and the private sector to promote investment, increase the supply of quality raw materials, improve the skills of the workforce, build the capacity of support institutions and significantly improve trade logistics.

Employment opportunities have been created for 369 young graduates, recruited in Mekelle Industrial Park since January 2019 in synergy with the European Union-funded SINCE Programme. In September, the Mekelle Garment College Centre of Excellence was inaugurated with the aim to train and graduate about 200 people per month, and to create a potentially replicable model for the rest of the country.
The Fourth Industrial Revolution

The Fourth Industrial Revolution is driven by rapid advances in digital technologies, including artificial intelligence, machine learning, robotics, additive manufacturing (3D printing), the Internet of Things, distributed ledger technology (including blockchain) and quantum computers, and their integration with biotechnology, nanotechnology and cognitive, social and humanitarian sciences (known as convergent and nature-like technologies). These frontier technologies are innovative, fast-growing, deeply interconnected and interdependent, and are at the core of successful ISID.

Industrial Development Report 2020

The Industrial Development Report 2020 titled “Industrializing in the digital age” was launched in November 2019. The UNIDO flagship publication presents analytical and empirical evidence on the future of industrialization in the context of the current technological paradigm shift. It empirically examines related concerns, including the labour-displacing impact of robots, the potential for the “backshoring” of previously outsourced production by advanced economies, and fears that inadequate skills and capabilities will exclude most countries from the next phase of manufacturing production. The report reaffirms that industrialization remains the principal path for successful development, and also highlights the critical linkages between new technologies and ISID.
**EQuiP**

Conscious of the importance of the Fourth Industrial Revolution for industrial policy, in 2019 UNIDO updated its industrial policy tool "Enhancing the Quality of Industrial Policy" (EQuiP), developed jointly with the German Agency for International Cooperation (GIZ), to integrate the investigation of the uptake of frontier technologies and their potential impact on developing countries.

**GMIS**

In July, UNIDO co-organized the Global Manufacturing and Industrialisation Summit (GMIS) 2019 in Yekaterinburg, Russian Federation. The event featured a keynote address by Vladimir Putin, President of the Russian Federation, as well as four high-level discussion panels addressing the implications and challenges of the Fourth Industrial Revolution for the circular economy, women's empowerment, industrial policy, and investment and technology promotion. GMIS 2019 attracted over 3,500 policymakers and representatives of the private sector, academia and civil society. To build momentum ahead of the 2019 summit and to gain perspective on local and regional contexts, GMIS Connect events were organized in China, Egypt, India, Mexico, Singapore and at the Hannover Messe, Germany. A GMIS Connect event also took place at the high-level week of the General Assembly in New York. At the end of 2019, two regional workshops in South Africa and the United Republic of Tanzania attracted the participation of 16 countries from southern Africa and six from eastern Africa.

**Principles for Digital Development**

In June 2019, UNIDO endorsed the Principles for Digital Development recognizing that technology and innovation are important to the mandate and work of the Organization. The Principles are nine living guidelines to help development practitioners apply digital technologies to their programmes. They are part of an ongoing effort among development practitioners to share knowledge and support continuous learning.

**First Interagency Innovation Bootcamp**

UNIDO was selected to participate in the first Interagency Innovation Bootcamp, organized by the United Nations Innovation Network (UNIN), a collaborative community of United Nations innovators, in May. The week-long high-intensity training programme aimed to spark and catalyse new innovation projects across the United Nations. UNIDO tested the SDG Impact Investment Platform, which was subsequently presented at the General Conference.
ADVANCING ECONOMIC COMPETITIVENESS

Inequalities, geopolitical and trade uncertainties, and rapid technological change threaten global economic stability. Enhancing innovation and the capacities to compete in international trade help counter these risks and distribute the benefits of sustainable development. UNIDO assists developing countries to make these transformations, equipping people with the requisite knowledge and skills and initiating regional approaches that share resources. The Organization helps build trade capacity through programmes that raise productivity in SMEs, facilitate technology transfer and allow better access to global markets. UNIDO also provides policy advice to Governments and institutions on setting up regulatory frameworks that nurture business and entrepreneurs and attract investors.
Globalization has dramatically expanded economic opportunities. The ability of MSMEs in the manufacturing sector to benefit from them is frequently constrained by a lack of competitiveness, an insufficiently skilled workforce and low technology levels. Furthermore, their ability to innovate and invest can be hindered by an often unsupportive regulatory environment.

UNIDO programmes help MSMEs and SMEs learn how to innovate, scale up and seize new opportunities in domestic and international markets, strengthening their competitive position. Intelligent manufacturing systems can increase productivity, reduce costs and improve existing goods, but they can be extremely complex and costly to implement, and many SMEs have encountered problems establishing them. UNIDO established the Shanghai International Intelligent Manufacturing Promotion Centre to train industries and business associations on intelligent manufacturing and information and communications technology, which in turn train SMEs in their respective industrial sectors.

SMEs can also become more competitive through branding. UNIDO developed two new technical service modules on the topic in 2019, and jointly organized the “IconVienna Brand Global Summit” with the European Brand Institute. Comprehensive, multi-year UNIDO projects in two countries demonstrate the potential of branding to increase competitiveness and opportunities for women. In Tajikistan, a “LA’AL Textiles” brand was created that expanded Tajik product exports and created new jobs. Armenian garment producers created the new brand “5900BC” that nearly tripled exports and doubled employment. The majority of employees are female, with several enterprises owned or run by women.

To speed up the development of new technologies, products, industries and the business models of enterprises, UNIDO established the Shanghai Global Science and Technology Innovation Centre that provides training in industrial design, additive manufacturing, finance, intellectual property, solid waste treatment and nanotechnology. In 2019, 13 new products and 11 business models were added to the platform, including a course on impact investing to support the new Shanghai Stock Exchange Science and Technology Innovation Board (or STAR Market). This platform created 90 new jobs, and more than 10 international cooperation partnerships are being established. In addition, the Centre facilitated the signing in 2019 of new bilateral cooperation projects between China and Canada, Norway, the Republic of Korea, Saudi Arabia and Singapore that transfer mature technologies to developing countries in other regions.
UNIDO also brings representatives of emerging nations to major events providing opportunities to present development projects and attract international investors, such as the annual “Hannover Messe” industrial technology fair held in Germany, and the first “Industrial Transformation Mexico”, the Latin-American version of Hannover Messe. Almost 200 business connections between entrepreneurs and investors were promoted at the two events in 2019.

Bilateral and regional support increase opportunities

Regional cooperation can expand opportunities, and UNIDO operates several programmes that support cross training and technology sharing across borders. The network of ITPOs covers eight countries, namely Bahrain, China, Germany, Italy, Japan, Nigeria, the Republic of Korea and the Russian Federation, with offices that share unique resources and knowledge.

In 2019, the ITPO Korea published the first technology database of selected technologies available in numerous countries and suitable for transfer. The ITPO Tokyo registered 40 new Japanese technologies suitable for use in developing and emerging countries in its Sustainable Technology Promotion Platform (STePP), and connected African investment advisers with Japanese companies interested in investing in the continent. The ITPO Germany identified more than 40 relevant technologies for Africa.

Increasing opportunities for the Indian bicycle industry to compete internationally

The bicycle industry is important in India, providing employment to almost one million people. However, Indian SMEs are losing market share and international competitiveness in terms of both price and quality. While the number of imported bicycles and parts is increasing by 25 per cent a year, their exports are only growing by 10 per cent.

A UNIDO project funded by the Government of India increased the global competitiveness of the country’s bicycle industry. It started by strengthening the Research and Development Centre for Bicycle and Sewing Machine (RDCBSM) and two industry associations. Detailed site visits and surveys identified weaknesses, which were then addressed through new managerial action plans, training by highly skilled international experts, international study tours and fellowships.

As a result, there are now certified instructors and technicians for higher-value electric bikes. RDCBSM has expanded its services and signed joint declarations with several associations for continued collaboration with and support from international counterpart organizations in Belgium, China, Germany, Portugal and the United States.
Additionally, with funding from the Federal Ministry of Economic Cooperation and Development of Germany, a UNIDO tool helps identify the technical gaps in testing and inspection that hinder trade facilitation agreements. In Malawi, South Africa and the United Republic of Tanzania, the tool was successfully used in the agroprocessing, essential oils, and palm and sunflower oil sectors to develop consensus-built remediation plans to reduce trade barriers. UNIDO also helped develop a national QI in 26 countries and three regions, reducing the cost of their conformity assessment services by 40 to 60 per cent in the past five years. Over the past 20 years, more than 1,000 conformity assessment bodies in 58 countries have benefited from UNIDO support.

Preparing for the future, UNIDO outlined the large-scale investments and knowledge and technology transfer that are required for adapting QI to the Fourth Industrial Revolution in *Rebooting Quality Infrastructure for Sustainable Future*. This publication calls for including AI, smart manufacturing, smart energy, smart agriculture and the circular economy in
QI plans. To build QI capacity among African SMEs and support the implementation of the African Continental Free Trade Agreement, UNIDO held the “First International Quality Infrastructure Forum for Africa” in cooperation with the African Union.

**Consortiums help enterprises reach new export markets**

MSMEs in the agribusiness and cosmetics sectors in the Valle del Cauca region of Colombia had little experience in international trade, and produced insufficient quantities of products for export that often also did not meet the requirements of target markets. With funding from the Korea International Cooperation Agency (KOICA), UNIDO developed export consortiums and helped business owners engage in trade, complying with quality standards and market requirements. Over the project’s three years, 21 SMEs entered 10 new markets, including the United States and in Europe. Fixed-term employment among consortium members grew by 14 per cent between 2016 and 2019, with 37 per cent of the companies led by women. In three consortiums, which were assisted only indirectly through a transfer of methodologies, an employment increase of 28 per cent has been recorded since 2017.

**Increasing SME trade competitiveness in regional and European Union markets**

UNIDO is increasing the competitiveness of Sri Lankan SMEs aiming for regional and European markets by improving compliance capacities in food safety, quality, packaging and labelling towards quality systems certification. Focusing on the spices, food, and information technology and business process outsourcing sectors, the European Union-funded project has helped the Government strengthen regulatory frameworks, increase access to internationally recognized QI and conformity assessment services, build new skills and adopt technologies to comply with the updated standards and regulations.

UNIDO training for national quality infrastructure institutions facilitated the establishment of a national quality infrastructure strategy. Additional training of thousands of people in food safety and quality assurance best practices, International Organization for Standardization standards, accreditation, and conformity assessment for governmental and private laboratories have increased the sustainability of the system.

The increased expertise is expanding the market: accreditation applications were submitted by the Sri Lanka Standards Institute for product certification of biscuits, PET bottles and bottled drinking water. The Medical Research Institute, a testing laboratory under the Ministry of Health, achieved accreditation to an international standard for the first time ever.

In addition, UNIDO provided new equipment for the nationally designated packaging testing centre, the Industrial Technology Institute, as well as training on how to use the equipment. The Institute is now in the process of accreditation, which will allow Sri Lankan exporters to access cost-effective packaging testing services at home, rather than relying on more expensive services abroad.

With UNIDO support, the Cinnamon Training Academy upgraded national competency standards and a curriculum for cinnamon technicians and is now accredited by the Tertiary and Vocational Education Commission to award internationally recognized vocational certification. This is attracting new entrants...
to the industry, establishing more favourable working conditions and improving the wages of upstream producers of cinnamon. Ceylon Cinnamon has applied to the European Commission for the first-ever geographical indication protection in Sri Lanka, protecting the name given to products closely associated with a particular place.

Entrepreneurship is a key driver of employment and growth, offering new approaches and opportunities that diversify the economy and make it more resilient and sustainable. It can also help disadvantaged groups, such as women and youth, gain productive work. However, low vocational and educational skills, limited access to resources and a restrictive business environment prevent many from reaching their potential.

UNIDO fosters the conditions entrepreneurs need to succeed, particularly for disadvantaged groups. The Organization works with Governments to improve the legal and regulatory environments for entrepreneurs to flourish, and to align industrial skills development with what is needed in modern industries. This is particularly important in less developed countries where many young people lack access to modern education on business development and the use of information and communication technologies.

The UNIDO Entrepreneurship Curriculum Programme (ECP) is a cost-effective investment in developing the entrepreneurial capacity of young people while in secondary schools, so that they can shape successful futures. Young people acquire personal qualities such as self-confidence, creativity, the ability to take initiative and calculated risks, and to collaborate.

The ECP is action-oriented: over 50 per cent of the programme consists of practical activities in identifying opportunities for value creation – be they economic, social or personal – assessing the required resources, and learning from successful entrepreneurs and community role models. In 2019, the ECP was implemented in Afghanistan, Egypt and
Nigeria, reaching 19 schools, 149 teachers and some 10,000 students.

**Investment forum provides opportunities for women and youth**

UNIDO organizes the biennial World Entrepreneurs Investment Forum to provide a unique platform in the Middle East and North Africa to connect local, regional and global investors with young entrepreneurs and start-ups. The goal is to forge joint investments between entrepreneurs and to exchange knowledge, share innovative best practices on entrepreneurship and innovation, leverage domestic and foreign direct investments, and establish new partnerships.

At the 2019 meeting held in Manama, 40 per cent of the participants were female, an encouraging sign of efforts being made by UNIDO to support the growth of women entrepreneurs and achieve a more equal gender balance in this field.

University students from the Arab region competed for prizes and the opportunity to connect with investors and other potential business partners.

The top 18 shortlisted teams received a three-day extensive boot camp to fine-tune their pitching skills and business plans. The winning teams received $100,000 in prize money and almost a quarter of a million dollars from Arab investors. Overall, 106 letters of intent were signed at the Summit with an estimated investment value of $22 million.

---

**UNIDO IN GENEVA**

The UNIDO Office in Geneva plays a crucial role in strengthening the strategic positioning of the Organization in the city, which hosts many United Nations and other international organizations, and is a major venue for intergovernmental meetings and an operational hub for the implementation of the 2030 Agenda. The Office also maintains close contacts with the Permanent Missions to UNIDO based there and promotes cooperation with other Geneva-based international organizations.

In 2019, UNIDO participated in the following major conferences and intergovernmental meetings: the Belt and Road Davos Forum, the Aid for Trade Global Review, the e-commerce week, the World Summit on the Information Society, the International Labour Conference, the World Cotton Day, the World Free and Special Economic Zones Summit and the Global Refugee Forum. Several side events and panel discussions were organized as well, notably at the Aid for Trade Global Review, which had a special focus on industrialization.

The UNIDO Office also continued to promote IDDA III in 2019, by strengthening partnerships with Geneva-based sister agencies and by working closely with the Permanent Missions of African countries in Geneva.
Indonesia wants to be the biggest producer and exporter of seafood in the Association of Southeast Asian Nations (ASEAN). The Sustainable Market Access through Responsible Trading of Fish (SMART-Fish) programme aims at transformational change in the fisheries sector towards the achievement of the SDGs through improved competitiveness, sustainability and better livelihoods in the seaweed, pangasius aquaculture and one-by-one wild catch tuna value chains. The programme is funded by the Government of Switzerland and jointly implemented by the Ministry of Marine Affairs and Fisheries and UNIDO.

Starting with seven initial seaweed demonstration farms run by local farmers groups, and using mobile phone applications, more than 850 farmers have introduced new practices for improved farming, harvesting and processing practices, which result in larger yields and higher product quality. The programme also taught and disseminated new drying methods and practices to improve the quality of seaweed, significantly reducing costs. As a consequence, the farmers improved their productivity by 41 per cent on average and increased profits by up to 50 per cent.

At just four seaweed processing plants, the INSPIRED approach, focusing on energy and water efficiency, productivity and quality, resulted in savings of $953,000 a year. Abu Harto, a seaweed farmer from Sumene, says, “Before I produced 800 kilograms per harvest and now I can harvest one ton of seaweed, of a much better quality and at a better price”.

Overall, SMEs in the seaweed sector, mostly operated by women, developed more than 18 value added products and increased productivity by 40 per cent, adding an annual sales value of $1.5 million.

In pangasius demonstration farms, the programme introduced ways of producing better quality and cheaper self-made feed using locally available raw materials. It also taught farmers to measure ammonia and oxygen levels in the ponds regularly to produce a better quality of fish. Using probiotics resulted in healthier fish that grow more quickly, and reduced water consumption by half. Azam Bahur, Secretary General of the Indonesian Catfish Industry Association, says: “Pangasius farmers have seen reduced production costs and improved quality, which has strengthened the competitiveness of the sector”. Indonesia has now for the first time exported

---

**INVESTMENTS**

- **Government:** $4.4 million (direct investment for feed machines, seeds, feed raw materials, promotion)
- **Processors:** $6.9 million (for efficiency improvements, new lines, new facilities)
- **Pangasius farmers:** $353,000 (for implementing standard operating procedures and pond expansion)

**BENEFITS FROM INSPIRED APPROACH**

- **benefits of $910,000 per year for 5 companies implementing the approach**
- **$953,000 savings per year (less energy and water use, and improved efficiency) in 4 seaweed processing plants**
- **Pangasius farmers: $353,000** (for implementing standard operating procedures and pond expansion)

**IN ADDITIONAL PROFITS PER YEAR FOR 1,362 FARMERS ADOPTING STANDARD OPERATING PROCEDURES**

- **$2.3 million**
- **Pangasius farmers: $318,000 per harvest**
- **70 small-scale feed producers: feeding costs reduced by 30%**

**IN 37 DISTRICTS, 16 PROVINCES**

- **$36 million**
- **857 seaweed farmers: additional profits $1.98 million per year**
- **435 pangasius farmers: $318,000 per harvest**

**POTENTIAL SALES PER YEAR**

- **$1.86 million**
- **397 participants were trained on INSPIRED approach**

---

FISHERIES PROGRAMME INCREASES EFFICIENCY AND SUSTAINABLE PROFITS
pangasius steaks to Saudi Arabia and Gulf countries, while programme partners also increased sales by $8 million a year through contracts between pangasius farmers and fillet processors, retailers and restaurant chains.

For pole-and-line tuna fishing, local fishermen typically operate from small vessels. They experience high costs and an inconsistent availability of wild bait, which in turn affects the processing industry when supplies become unreliable. To address this issue, farmed milkfish were piloted in two regions of Bitung and Maumere as an alternative bait, which is improving the catch rate, as well as the sustainability of supplies and the bait fisheries.

To comply with seafood safety and sustainability requirements, traceability from farm to fork has to be established. The programme has introduced software applications that help farmers conduct this tracking, improve resource efficiency during farming and processing, and link with buyers in local supply chains. Three brands were established for the country’s seaweed and fish, and serve as a powerful marketing tool to promote the uniqueness of Indonesian fisheries products. They also stimulated unity among producers to penetrate overseas markets.

The programme leveraged an additional $11.8 million worth of investment by local farmer groups, processors and Government, generated efficiency gains worth more than $13 million, and established new contracts between 1,300 farmers and their buyers in the pangasius and seaweed processing industry.

The innovative cooperation with the Ministry of Marine Affairs and Fisheries and the private sector established a sustainable programme that can continue beyond the project. Almost 6,000 people have been trained, 22 digital platforms now provide standards of good practice and 1,400 enterprises adopted improved business practices. The improved curriculum of Jakarta Fisheries University provides the next generation with the necessary knowledge and skills for a sustainable fisheries sector, while the university’s iPride4Fish has become a centre of excellence bridging the gap between academia and industry. The linkages between the university and industry have already generated benefits of $9.5 million through business solutions developed within a thematic internship programme.
SAFEGUARDING THE ENVIRONMENT

Climate change, depletion of finite resources and extreme events, such as hurricanes, floods and fires are a growing threat for humanity. While industry is among the largest sources of GHG emissions, it is also a leading provider of climate technology solutions and inclusive and green jobs. UNIDO is at the forefront of efforts to build a more resilient, greener and circular economy for sustainable growth and prosperity. It does this by assisting Governments, institutions and industry to adopt innovative industrial technologies and sustainable energy solutions that reduce the environmental impact of industrialization, while creating economic and social benefits.
Between 1970 and 2017, GDP has grown fourfold while the global extraction of materials increased from 27 billion tons to 92 billion tons, with the use of materials projected to rise to 167 billion tons by 2060. Today’s manufacturing takes materials from the supply chain and turns them into products. Most of these products are used once and then discarded. This “take-make-use-discard” model, known as the linear economy, is enormously inefficient. It depletes the planet’s limited resources and creates a multitude of waste, pollution and health issues. Natural resource extraction and processing is also responsible for about 50 per cent of GHG emissions and for about 90 per cent of resource-related impacts on water stress and biodiversity loss.

UNIDO assists its Member States to improve resource efficiency by closing the loops with circular economy practices to achieve climate change-, biodiversity-, water-related and other environmental targets of the Paris Agreement and the SDGs. The UNIDO RECP programme assists firms to improve resource productivity and efficiency, thereby saving costs and preventing pollution. It also introduces circular economy practices and advises Governments on policies that create favourable environments for firms to implement these practices. Firms that join the Transfer of Environmentally Sound Technologies (TEST) programme are assisted in identifying and deploying new resource saving technologies and management systems.

Reducing resource utilization during rapid urbanization in the Southern Mediterranean region

The Southern Mediterranean region’s growing economy comes with rapid urbanization that creates challenges such as water scarcity, rising energy costs and growing waste generation. UNIDO is helping this region decouple economic development and job creation from environmental degradation.

The four-year SwitchMed programme, funded by the European Union, led by UNIDO and implemented in collaboration with the Economy Division of the United Nations Environment Programme, the UN Environment Mediterranean Action Plan and its Regional Activity Centre for Sustainable Consumption and Production, ended in 2019. The programme assisted 125 firms in eight countries (Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, the State of Palestine and Tunisia) to identify and deploy cost-effective and environmentally sound technologies. The results achieved have triggered national green financing in Algeria, Israel, Jordan and Lebanon.
The SwitchMed programme also opened up opportunities for women in this region, where women’s ownership of firms is only 13 per cent and the female labour force participation rate is 25 per cent. Women’s participation at workshops on TEST practices reached up to 39 per cent, providing a strong base for careers and professional growth.

The follow-up SwitchMed II, also funded by the European Union, was launched in 2019, includes a component on the blue economy. Under SwitchMed II, taking into account the region’s specific needs, UNIDO is supporting Algeria, Jordan, Lebanon and the State of Palestine in improving manufacturing resource efficiency with qualification schemes for service providers, domestic financial support, RECP academic curricula, and information and communication to raise awareness and stimulate industry demand for RECP services. In Egypt, Israel, Morocco and Tunisia, UNIDO is expanding the focus to help the textile and plastics manufacturing sectors recover waste from producers and consumers, and improve local capacity to maintain environmental standards during production.

Beyond the region, the EU4Environment programme continues RECP capacity-building programmes for SMEs in Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine, where UNIDO collaborates with OECD, UN Environment, United Nations Economic Commission for Europe and the World Bank.

Transitioning to eco-industrial parks for green industries

The first phase of the Viet Nam Eco-industrial parks programme, implemented in partnership with GEF and the United Nations Development Programme (UNDP), concluded in 2019 with impressive results on electricity, fossil fuels, GHG emissions, water, raw materials and chemicals savings, while triggering investments of €9 million.

RECP results achieved in the Viet Nam Eco-industrial parks programme

Website: SwitchMed
The Global Eco-Industrial Parks Programme, funded by the State Secretariat for Economic Affairs of Switzerland continued in Colombia, Peru, Ukraine and Viet Nam, and expanded to Egypt in 2019. The programme supports RECP/TEST, industrial symbiosis within industrial parks and with nearby urban areas, and collective actions and investments catalysed by park managements.

In 2019, UNIDO support funded by the European Union led Colombia, Ghana, Kyrgyzstan, the Philippines and the United Republic of Tanzania to launch their Health and Pollution Action Plans, most of which incorporate RECP/TEST and solid waste management, including plastic waste components.

**Reducing the risks of chemicals while improving business performance**

Traditionally, chemical suppliers have been financially rewarded for selling as much as possible, which has led to inefficient use of chemicals and risks to human health. Chemical leasing, a model pioneered by UNIDO 15 years ago with funding from Austria, is an alternative approach that turns the business model upside down: profit does not depend on more volume sold, but less, since it is linked to co-creation of jointly developed resource-efficient and innovative solutions, and fair profit-sharing. By substituting safer products and using better methods of handling and managing chemicals, the approach can reduce the use of chemicals, energy, water and packaging materials, as well as CO₂ emissions, by up to 40 per cent.

For example, UNIDO together with the Colombian National Cleaner Production Centre helped textile companies reduce chemical consumption by 63 per cent in the sizing and weaving processes, saving $150,000 per year. Production managers learned about new and more efficient chemicals and chemical leasing. As a result, low solid synthetic polymers replaced the modified starches, polyvinyl alcohol, acrylates, fatty acids and various additives they had previously used.

The UNIDO Chemical Leasing Global Programme fosters broad awareness of this business model, advocates for its use, stimulates and promotes pilots and scaling-up, and facilitates market penetration in specific sectors in selected countries. The programme also encourages women-led initiatives through its biennial Global Chemical Leasing Award with a women-specific category.

**Addressing marine plastic litter**

To contribute to the marine plastic litter debates held under the Japanese G20 presidency in 2019, UNIDO published *Addressing the challenge of marine plastic litter using circular economy methods* and launched a project funded by the Government of Japan that focuses on developing biodegradable or alternative materials for single use plastics in South Africa.
Close to 850 million people are without access to electricity and three billion people, principally in parts of Africa and the LDCs, remain unable to access clean cooking technologies and fuels. UNIDO addresses this challenge by enhancing coordination among regulators, investors, utilities, standards bodies and businesses, and by promoting better-functioning markets. In particular, the Organization provides technical and policy advice to Governments in order to develop strong policies and build the requisite infrastructure, while also supporting investors and businesses to pilot and scale up clean, accessible energy solutions.

In 2019, UNIDO began supporting developing countries in their attempts to access funding for clean energy projects under a new Readiness Framework Agreement with the Green Climate Fund (GCF). The Organization also reached the milestone of
mobilizing $1.5 billion in private sector investments for clean energy through the Private Financing Advisory Network (PFAN). Co-hosted by UNIDO and the Renewable Energy and Energy Efficiency Partnership (REEEP), the network provides free business coaching and investment facilitation to entrepreneurs in emerging markets.

UNIDO, in cooperation with the International Network on Small Hydropower, also brought together the international community of standards bodies to agree and endorse a world-first comprehensive suite of technical guidelines for small-scale hydropower (SHP) development. SHPs are a cost-effective method to provide energy with minimal to no environmental impact, particularly in rural areas. UNIDO is currently implementing SHP projects in 12 countries, and planning umbrella regional programmes in Africa, Latin America and the Caribbean, and Asia and the Pacific.

To meet the objectives of the Paris Agreement and the 2030 Agenda, direct transport emissions must decrease by over nine per cent by 2030. To this end, UNIDO is working to help establish clean energy infrastructure in cities, where 55 per cent of the global population lives, through its work targeting the electrification of mobility. With GEF funding, UNIDO implemented electric mobility programmes in China, Malaysia and South Africa, fostering policy frameworks and enhancing knowledge transfer and innovation. In 2019, an expert group reviewed the lessons learned in these countries, with the outcomes having been developed into recommendations and a best practice publication for wider dissemination.

To assist Colombia in improving cooling and heating efficiency in buildings and city infrastructure, UNIDO began the second phase of a project to develop energy districts in up to 10 cities in 2019. The project is bringing stakeholders together to design and implement new technologies as well as assisting the Government to improve and implement its national and subnational policy and regulatory frameworks.

A pilot project in South Africa funded by the European Union and implemented in cooperation with REEEP and the Government of South Africa helped two municipalities replace aging infrastructure with energy-efficient pumps and water management systems. This allowed them to reduce costs, distribute water more efficiently and strengthen system monitoring. Policy recommendations arising from this project have been presented to the South African Government and will initially be applied nationwide, with the objective of further expansion to a regional level.

Through the UNIDO bioenergy programme, three national industry associations and knowledge centres were established in Cambodia, the Lao People’s Democratic Republic and South Africa to promote the bioenergy sector. As a result of this initiative, several countries introduced national guidelines and technology standards to capture the valuable biogas fuel and fertilizer generated from organic waste.

UNIDO is helping Brazil seize the untapped opportunities offered by biogas production, while safeguarding the environment. The GEF-funded project, which is implemented with the Ministry of Science, Technology, Innovations and Communications, the Ministry of the Environment, the Ministry of Agriculture, the Ministry of Mines and Energy of Brazil, CiBiogas and Itaipu Binacional, attracted $52 million in public and private co-funding. By developing the biogas value chain and supporting
the conversion of organic waste into energy and fuel for transportation, it is helping reduce dependence on fossil fuels and greenhouse gas emissions. The project also supports innovative financing schemes and assessment tools to improve the business environment. This multi-stakeholder endeavour is also contributing to agro-industry development as, for instance, a biogas plant in the southern town of Castro has the capacity to generate 1 MWh of energy and meets the requirements of a local meat processing plant.

**Accelerating the use of clean technologies**

In developing countries, SMEs and start-ups can play an important role in catalysing innovative clean technologies. The UNIDO Global Cleantech Innovation Programme (GCIP) helps create innovation and entrepreneurship ecosystems, thereby supporting SMEs to develop and commercialize their ideas. The GCIP advises the Governments of Armenia, India, Malaysia, Morocco, Pakistan, South Africa, Thailand, Turkey and Ukraine on high-impact areas through a regular review of existing policies, regulations and guidelines. One tool used is the Global Cleantech Innovation Index, which details country capacity and potential. In 2019, country profiles of the eight partner countries identified gaps and areas to be strengthened.

Three GCIP-supported Cleantech enterprises were selected as part of the 100 Mission Innovation Solutions for their potentially high impact on the prevention of CO₂ emissions, and were showcased at the fourth Mission Innovation Ministerial in Vancouver, Canada. The Vienna Cleantech Week and GCIP Forum brought together entrepreneurs, policymakers and investors from Austria, Kazakhstan, the Republic of Moldova, South Africa, the State of Palestine and Ukraine to share solutions and expertise.

To increase its accessibility, the UNIDO GCIP places special emphasis on supporting women innovators and entrepreneurs, with specific prizes and follow-up support for women-led start-ups offered in some countries. GCIP also works with youth organizations to interest them in the field and improve youth employability.

**SMALL ISLAND DEVELOPING STATES**

UNIDO has been supporting small island developing States (SIDS) in addressing their vulnerabilities, such as remoteness from major markets, excessive dependence on international trade and fragile environments, by mobilizing knowledge, expertise, technologies and funding. The newly formulated SIDS strategy 2019–2025 is aimed at streamlining UNIDO support to SIDS Member States and implementing the commitments UNIDO has made under the SIDS Accelerated Modalities of Action (SAMOA) Pathway. As an immediate follow-up to the adoption of the SIDS strategy by the General Conference, UNIDO has started formulating a project to support the operationalization of the SIDS strategy and its roadmap. The project will aim to facilitate regional partnerships, multidisciplinary interventions, enhanced resource flows and innovative approaches to SIDS coverage in the context of the move towards multi-country offices by the United Nations.

On the sidelines of the SAMOA Pathway Mid-term Review during the high-level week in September in New York, UNIDO organized a high-level event with SIDS DOCK and the United Nations Office of the High Representative for the Least Developed Countries (UN-OHRLLS) to review progress in the establishment and operation of the Network of Regional Sustainable Energy Centres for SIDS. This best practice example for a genuine and durable SAMOA Pathway partnership plays a key role in accelerating the energy and climate transformation in SIDS. The event was attended by several Heads of Government.
In 2019, a ten-year evaluation of the programme documented the acceleration of close to 1,000 SMEs. GCIP is now expanding and will support Cambodia, Indonesia, Kazakhstan, Morocco, Nigeria, the Republic of Moldova, South Africa, Turkey, Ukraine and Uruguay. With $20 million from GEF and $140 million in co-funding from public and private actors, GCIP 2.0 will offer advanced commercialization and investment facilitation to selected high-impact enterprises.

**Integrating water, land and energy data to improve waterway management**

To plan and develop the infrastructure for clean energy solutions, government policymakers need data on water, land, food and climate. However, these are often collected and analysed separately. UNIDO has helped integrate these fields within a nexus framework, which provides a more holistic picture and reduces global costs by approximately 40 per cent compared to separate studies.

Working with the International Institute for Applied Systems Analysis (IIASA), the Integrated Solutions for Water, Energy and Land project used open source models to assess vulnerabilities in 275 major river basins across the world. UNIDO is fostering cost-effective solutions and tools to jointly meet water, land and energy challenges through this model framework for forecasting scenarios and mapping different socioeconomic and climate warming conditions. With this knowledge, policies, investments and socioeconomic development are being targeted to reduce vulnerabilities.

To test the approach on a regional scale, models were applied to the Zambezi and the Indus, two large transboundary basins facing multiple developments and environmental challenges. The Indus Basin is a key resource shared by 215 million people living along its waterways in Afghanistan, China, India and Pakistan. It is under increasing stress due to rapid population growth and economic development.

The Zambezi watercourse, home to around 32 million people, is challenged with competing hydropower expansion and new irrigation projects. Cooperation among the countries is essential to ensure an integrated and coordinated development approach and thus reduce conflicts on water sharing and resource management.

As part of this project, baselines were established to plan and improve basin management. Workshops were held to train stakeholders on the tools, with feedback received on the model and scenarios produced. The project partners are also looking into identifying ways to use the model in other applications.

Building capacity on nexus research and engaging stakeholders are key elements to ensuring the sustainability of this approach. Doctoral students from the countries along the waterways also received research grants, and an online tool was developed that allows stakeholders to explore interlinkages, synergies and trade-offs. Dozens of research articles were published and numerous workshops provided training. Forums also ran different scenarios and identified policy solutions and investment strategies.
As part of the global action to contain man-made environmental degradation, countries agreed on strong multilateral environmental agreements and related targets. UNIDO assists developing countries and economies in transition, home to most of the world’s industrial production and consequent environmental degradation, to implement these agreements and combat climate change.

**Montreal Protocol on Substances that Deplete the Ozone Layer**

UNIDO is a major implementing agency of the Multilateral Fund for the implementation of the Montreal Protocol, established to help developing countries meet their obligations related to the Montreal Protocol and the phase-out targets of ozone-depleting substances. The Montreal Protocol has completed the phase-out of chlorofluorocarbons (CFCs) and is currently phasing out hydrochlorofluorocarbons (HCFCs). Since 1992, UNIDO has helped eradicate over a third of these dangerous chemicals from the developing world and is assisting industries to replace substances used in manufacturing processes and products with others that have no impact on the ozone layer. Additionally, UNIDO provides training to improve industrial gas management in a sustainable way through the recovery and reuse of ozone-depleting substances and to ensure proper methods for the installation and maintenance of refrigeration and air-conditioning equipment.

The Kigali Amendment to the Montreal Protocol, which came into force in January 2019, calls for reducing the use of hydrofluorocarbons (HFCs), which are predominantly used in the foam, refrigeration and air-conditioning sectors. HFCs were originally designed and used as replacements for the CFCs and HCFCs, but they are potent greenhouse gases with a high global warming potential. The Kigali Amendment is designed to prevent up to a 0.4°C increase in global temperature by the end of the century.

UNIDO is implementing HCFC phase-out management plans in 68 countries, preparing 31 countries for ratification of the Kigali Amendment, and building institutional capacity in 14 countries. In addition, UNIDO is implementing four stand-alone investment projects on HFC phase-out in industries with the overall objective of defining related incremental costs.

In 2019, 10,044 people received training in refrigeration servicing, maintenance and installation, and cumulative CO$_2$ emissions reductions from Montreal Protocol activities in the year amounted to 42.3 million tons CO$_2$-equivalent.

**Stockholm Convention on Persistent Organic Pollutants**

The Stockholm Convention came into force in 2004 and has been ratified by 184 countries to protect human health and the environment from the impacts...
of persistent organic pollutants (POPs). These chemicals have been used in industrial processes for decades in everything from pesticides to automobiles. They are highly toxic to humans and wildlife and remain in the environment for long periods.

UNIDO is an implementing agency of the Convention, helping countries adopt appropriate legal frameworks and encouraging industries to safely dispose and eliminate the use of these toxic chemicals while providing safe alternatives. As of mid-2019, UNIDO led the elimination or discontinuation of 11,668 tons of polychlorinated biphenyls (PCBs), pesticides and dichlorodiphenyltrichloroethane.

Incineration has been the standard process for destroying stockpiled POPs waste, but UNIDO opened the market for the use of non-combustion technologies, allowing firms and countries to select the most appropriate and practical solution according to their inventory. Non-combustion technologies are being used to destroy PCBs, typically present in transformer oils.

At the country level, UNIDO assisted 69 countries in formulating or updating their Stockholm Convention National Implementation Plans, including approval of 231 environmental policies and regulations. UNIDO also provides assistance to industries to minimize releases of unintentional POPs (uPOPs). To date, around 4,700 firms have adopted best available techniques and best environmental practices to improve process efficiency, thereby reducing the releases of uPOPs.

In Côte d’Ivoire, UNIDO is assisting in reducing emissions from polybrominated diphenyl ethers in electrical and electronic products, as well as second-hand vehicles from more advanced countries. In China and Turkey, hexabromocyclododecane used in the foam industry is being phased out with UNIDO assisting in testing appropriate alternatives and developing public-private partnerships to facilitate private-sector capital investments in switching to the alternatives.

UNIDO is assisting Ghana to develop a circular economy framework and policies for the plastics sector that manage the plastics waste and reduce the production of single-use plastics by encouraging the private sector to use alternative materials.

**Minamata Convention on Mercury**

Mercury is one of the most toxic substances in the world, particularly dangerous for children as well as for pregnant and breastfeeding women. UNIDO helps developing countries meet their obligations under the Minamata Convention on Mercury by promoting circular economy practices in mercury use and mercury waste management. In 2019, UNIDO conducted 25 initial assessments in Africa, Asia and the Pacific, and Latin America and the Caribbean, a first step in identifying gaps and prioritizing areas for future interventions.

The treaty calls for reducing by half the mercury use in vinyl chloride monomer (VCM) production, a substance used to produce polyvinyl chloride (PVC) found in everyday objects such as water pipes, bottles and clothing. In China, where half the global mercury usage for VCM occurs, UNIDO is working closely with the Government to develop innovative solutions that use less mercury while safely disposing of the used mercury, ultimately making a significant impact globally.
In parallel, policies were updated to integrate mercury-related measures across the national regulatory framework. Low-mercury catalysts and new methods for recovering 90 per cent of the mercury from catalyst waste have been successfully tested in the four largest coal-based PVC plants. In 2019, five additional firms were included, with a total of 15 conversions planned. Contaminated sites were also identified, and a technical guide was produced on how to recycle and dispose of mercury, strengthening the sustainability of the ongoing management of this hazardous waste.

As a result of the project, mercury use in VCM production was cut by half, corresponding to a reduction of 360 tons of mercury from the industry. UNIDO is further aiming at developing mercury-free technologies by bringing together researchers and industry representatives. Dedicated training for women was designed to upgrade technological capabilities and provide them with new opportunities.

China also produces around 60 per cent of the world’s cement, another industrial sector that generates large quantities of mercury. Hence, UNIDO is conducting baseline estimations of mercury emissions to help meet new emissions limits, and increase capacity to better control and reduce mercury emissions. Feasibility assessments of new technologies to reduce mercury in cement production are paving the way for future dissemination and investment.

Artisanal gold mining uses mercury and currently offers a livelihood to 12 to 15 million people. In a regional intervention in Burkina Faso and Senegal, UNIDO delivered training on and installed mercury-free processing facilities, and supported the Governments in strengthening their legal frameworks to sustain this transition. With funding by GEF, a “planetGOLD” programme is now expanding to eight countries.
REDUCING POLLUTION THROUGH CLEAN STOVES: HELPING A BURGEONING INDUSTRY TO REALIZE ITS POTENTIAL IN AFRICA

Approximately three billion people depend on wood-based fuels used in inefficient cook stoves, which produce up to 25 per cent of total black carbon emissions, exposing household members to indoor air pollution that contributes to several million premature deaths every year. In addition to health impacts, families struggling to meet their basic needs can pay as much as one third of their income to purchase fuel to cook their daily meals.

The extended time spent by women and children within the household often makes them particularly susceptible to household energy health impacts. Where women and girls are responsible for gathering cooking fuel, they are also vulnerable to gender-based violence during fuel collection and transport. Women and children also spend up to 20 hours each week collecting wood, and up to four hours cooking each day, time that could be spent on education, earning money or addressing other needs.

Hence, there is an urgent need for affordable, clean fuel and technology solutions delivered on a mass scale. Past efforts mostly centred around improved cook stoves that rely on traditional fuels, such as woody biomass, that do not burn cleanly. Similarly, weak clean cooking policies and poor consumer awareness of the benefits of clean cooking options have hindered the establishment of robust endogenous clean cook stove industries.

In response, UNIDO is seeking to alter the cook stove industry with a project that supports the use of cook stoves fuelled by clean-burning ethanol. A pilot project in 150 households in Zanzibar, United Republic of Tanzania, in 2015 was so successful that it extended, through a private enterprise, to 1,500 homes as of 2019, saving each family an average of $20–25 a month.

UNIDO is now scaling up the pilot to 500,000 homes in the United Republic of Tanzania. The five-year GEF-funded project, which started in 2018, includes a wide range of partners to update regulations and develop new policies, including stove-manufacturing standards. The project is also helping establish financing schemes comprising a clean cooking social facility and a private sector guarantee facility that can open up a new market for ethanol production and stove manufacturing.

With the aim of helping shift 500,000 households to ethanol-based cook stoves, the clean cooking social facility provides a market-enabling framework to demonstrate the economic savings households can make by switching to clean fuels, in addition to the improvements made to their daily lives by minimizing the need for firewood collection. The private sector guarantee facility works with financial partners and donors to assist private companies in accessing finance, with €4 million already approved by the European Union.

In collaboration with the Tanzania Private Sector Foundation, UNIDO was able to bring together a wide spectrum of stakeholders, including the sugar, sisal and cashew industries, the waste streams of which can be used to produce ethanol, in collaboration with micro-distilleries.
A local distributor, chosen through a competitive bidding process, established an ethanol bottling plant and assembly line for stoves, also undertaking the recruitment and training of new staff and assembly line workers.

The stoves, which are currently manufactured in Durban, South Africa, assembled in Dar-es-Salaam, United Republic of Tanzania, and sold at subsidized prices, will eventually be produced in the United Republic of Tanzania, providing further economic opportunities. By switching 500,000 households with an estimated demand of 90 million litres of ethanol per annum, local producers can confidently invest in their plants and secure deals with fuel distributors, without having to create the market themselves.

Health-related data will be collected by the national institutes, which will also monitor environment-related impacts, along with the partner entity Sustainable Energy for All. This experience will directly feed into the Global Impact Programme for Clean Cooking, in which this approach will be spread across 20 high-impact countries in Africa and Asia and the Pacific, aiming to reach 10 million households and nearly 40 million people with no access to clean cooking fuels.

The programme’s multifaceted approach is an excellent example of how to support the goals of IDDA III, the Paris Agreement, the Geneva Action Agenda to Combat Air Pollution, and the 2030 Agenda. Such programmes contribute to the achievement of an inclusive and sustainable low-carbon industry, opening up new opportunities for small businesses and supporting the economies of low-income countries.

The new stoves burn cleaner, creating a healthier home and planet. The financing scheme and training support make this an industry that can grow sustainably.
REGIONAL PERSPECTIVES

UNIDO pursues its mission globally by providing its full range of services according to the differentiated needs of its Member States. These can include structural transformation, employment creation, environmental management or industrial upgrading, depending on the country’s or region’s challenges. Interconnectedness is essential, which is why UNIDO promotes and supports cooperation between and within regions, paying particular attention to least developed countries, which face some of the greatest development challenges. Another important focus is on strengthening industrial competitiveness and trade, private-sector development and other issues that particularly affect middle-income countries and economies in transition. In close cooperation with Governments, development partners, the private sector and other institutions, UNIDO provides technical cooperation, capacity-building, advice and analysis.
AFRICA

The continent’s economic performance continues to improve, with East Africa remaining the most dynamic region with economic growth rates ranging from five to eight per cent in 2019. In West Africa, growth is continuing to recover from the sharp contraction in 2015–2016. Nigeria, Africa’s largest economy and oil exporter, has gradually recovered from the 2016 recession, helped by rebounding oil prices. Growth in Central Africa is also recovering, but remains below the average for Africa as a whole. Southern Africa’s subdued growth is lower than that of other regions, due to economic stagnation in South Africa and low commodity prices. To continue this dynamic growth and to sustain a minimum level of 7 per cent growth in the region, new policies and structural changes are needed to build more diverse economies that can boost productivity and deliver jobs and skills to a rapidly growing population, particularly the often marginalized urban poor, women and youth.

UNIDO at work in Africa

These challenges are being addressed through the framework of the IDDA III. UNIDO is the lead implementing organization, providing technical assistance through country programmes (CPs) and PCPs, and working closely with the regional economic communities to formulate and implement strategies to develop industrial parks, special economic zones and trade capacity.

The new African Continental Free Trade Area (AfCFTA), which became operational in 2019, removes tariffs to create a continental market that allows companies to benefit from economies of scale. Intra-African trade is expected to increase by 15 to 25 per cent, stimulating employment and GDP growth. In a joint statement at an event organized by the African Union Commission (AUC), the United Nations Economic Commission for Africa (UNECA) and UNIDO to commemorate the thirtieth anniversary of the “Africa Industrialization Day” in 2019, the heads of these organizations called for the removal of supply-side rigidities and infrastructural bottlenecks.
to reduce production and business costs across borders. At the TICAD 7 in Yokohama, Japan, Director General Li Yong also promoted AfCFTA and the need for structural transformation and economic diversification in the continent.

In Ethiopia, which aims to change its economic base from agriculture to industries, the PCP helped establish four pilot integrated agro-industrial parks to attract domestic and foreign investment. In Senegal, the PCP supported the first integrated industrial park by developing a master plan, a business model and incentive package, and finalizing legal, regulatory and institutional aspects related to the management and administration of the park. More than 1,000 jobs have been created so far. UNIDO also mobilized partners to launch comprehensive feasibility studies for the establishment of three regional agro-poles in the northern, central and southern regions of Senegal. These can act as a magnet to attract further investment and generate income and jobs. New PCPs in Côte d’Ivoire, Rwanda and Zambia are now underway.

UNIDO established two new CPs in Ghana and Madagascar in 2019 to boost industrial development, trade and export competitiveness in those countries. The Ghana CP aligns its technical cooperation with the national development strategy towards greater industrialization that includes the “Ghana Beyond Aid” agenda and the “One district, one factory” programme. In Madagascar, the CP strategy is strengthening institutions and governance to compete, innovate and invest. An agro-industry and agroprocessing zone is being developed, industrial parks planned, and renewable energy projects and environmental protection put in place.

In line with the reform of the United Nations development system, all the CPs and PCPs are now aligned in UNSDCF towards assisting countries in addressing their national priorities.
ARAB REGION

The Arab region has great economic diversity, hosting some of the world’s richest and most globally competitive countries, mostly in the Gulf Cooperation Council subregion, as well as countries undergoing migration, conflict and humanitarian crises. However, social and economic disparities contribute to fragility and affect industrial competitiveness across the region. The region also faces high disparities in youth unemployment, from under one per cent to as high as 37 per cent, depending on the country’s social and economic conditions. Harnessing the productive potential of all young people is key to building prosperity in the region.

UNIDO at work in the Arab region

UNIDO developed an Arab regional strategy to increase industrial competitiveness and employment. It focuses on the development and expansion of MSMEs as a potential source of employment for previously excluded groups such as youth and women, as well as agro-industries and renewable energy and energy efficiency.

Working with the wider United Nations system, UNIDO provided data on SDG targets and contributed to the Arab Sustainable Development Report 2019, mainly in the area of SDG 9 on industrial investment in infrastructure and innovation. In Somalia, UNIDO is implementing the UN Joint Programme on Youth Employment to increase the quality of and access to technical vocational skills for underskilled and underemployed youth and women. UNIDO is making substantial contributions to United Nations priority working groups on climate change and how to grow the economy for all in Iraq.

The region has two PCPs to mobilize partners and resources. In Morocco, UNIDO is negotiating with international and bilateral donors to supplement the resources provided by the national Government, and coordinating with AfDB to support industrial zones. In Egypt, UNIDO in close collaboration with the Government and other United Nations agencies, discussed key approaches to define the PCP components. The PCP National Coordination Body, chaired by the Chief of the Prime Minister’s Office and including top representatives from all relevant ministries and authorities participated in the discussion.
UNIDO also has an ongoing CP in Lebanon, aimed at strengthening women’s economic empowerment and enhancing the competitiveness of olive oil and soap producers. The programme was extended to 2020 and includes $14 million for 12 ongoing technical assistance projects and seven regional projects.

A CP is being developed for Kuwait, with the main focus on formulating the National Industrial Strategy 2035. This will be in line with the country’s New Kuwait Vision to achieve economic growth and diversification, transform national resources into sustainable wealth, and create suitable jobs for Kuwaiti youth. A road map and action plan are being developed in partnership with private sector partners and public stakeholders.

A cluster approach creates new industries and jobs

Countries in the southern Mediterranean region depend on micro-, small and medium-sized enterprises (MSMEs) to generate much-needed jobs. With funding from the European Union and the Government of Italy, a five-and-a-half-year UNIDO project was recently completed, improving the competitiveness and sustainable growth in that region.

New clusters of creative industries were established to share resources and build brands together. UNIDO advised Governments on policy and trained 382 SMEs in 13 clusters covering designers, artisans and fine art students. As a result, Egypt and Tunisia developed new policies to support the creative industries and handicrafts clusters. Two new curricula were developed: a Master in Design and Innovation at the Constantine 1 University in Algeria, and a Master in Ceramics at the Higher Institute of Fine Arts, Nabeul in Tunisia. Half of the trainees were 35 years old or younger, and the percentage of women in the project grew from 25 to 40 per cent, opening up employment to previously excluded groups. The training was integrated into SME production, resulting in more than 300 new products per year and 65 new brands and branding strategies. Sales increased by more than €1 million, with the clusters strengthening SME collaboration for long-term sustainability.
ASIA AND THE PACIFIC

The Asia and the Pacific region has had steady economic growth of five per cent on average during the past five years, in part due to the strength of middle-income countries (MICs), which comprise 77 per cent of the region’s population and more than 50 per cent of its GDP. However, long-term prosperity is challenged by rapid urbanization, climate change, natural resource depletion and lack of sustainable energy and competitiveness. Four of the region’s countries, Afghanistan, Bhutan, the Lao People’s Democratic Republic and Nepal, are also landlocked developing countries, which prevents them from reaping the full benefits of international trade and global value chains.

UNIDO supports the region through numerous regional projects and 150 projects in 21 countries. In 2019, UNIDO signed new CP agreements with India, Pakistan and the Philippines, bringing the number of ongoing CPs in the region to 10.

Using events such as the thirty-fifth ASEAN Summit, UNIDO promoted trade and investment in the circular economy and the sustainable industrial city development model. A partnership with the Eastern Economic Corridor in Thailand created regional networks of public and private actors to contribute to the 20-year national strategy for Thailand 4.0, designed to increase innovation and transform the country’s industrial production. As a result of the latest UNIDO-organized Bridge for Cities conference, 15 city mayors adopted a declaration of intent to work with UNIDO to develop “smart cities” with urban innovation hubs and circular economies for achieving the SDGs.

Across the region, UNIDO representatives are leading or co-leading nine United Nations thematic groups to support a coordinated United Nations approach to address key challenges. For example,
UNIDO chairs the Planet Group in Thailand and the Plastic Working Group under the Result Group on Climate Change and Environment in Viet Nam.

In China, UNIDO is spearheading the work of the United Nations system to improve industrial capacity in two poverty-stricken counties, Chengbu in Hunan province and Quannan in Jiangxi province, in an effort to support the country in meeting its 2020 poverty eradication deadline. UNIDO introduced new bamboo processing technologies and dairy production and food safety practices. The Organization also helped local minorities from the Miao people, in particular women, upgrade their traditional handicraft products and increase market access through e-commerce development.

The UNIDO CP in Cambodia is the first in the region that has now converted to a full PCP. New impact monitoring tools were developed and UNIDO provided training to the central Government on how to monitor the development interventions of local governments, the private sector and international development partners. UNIDO also helped the Cambodian Government prepare and present its voluntary national review at the 2019 high-level political forum in New York.

Reducing energy costs and creating transformative new industries

Pacific island countries and territories share the challenges of climate change, limited natural resources and dependence on imported fossil fuels, which create high energy costs. The Pacific Centre for Renewable Energy and Energy Efficiency (PCREEE), established in Tonga in 2017, helps improve access to modern, reliable and affordable energy services adapted to the local environment and social factors. The Centre is part of a global network of regional centres, acting as a knowledge exchange of tools and methodologies to promote economies of scale and integrated and inclusive markets.

Now in its first operational phase, UNIDO is helping PCREEE establish e-mobility solutions in the Pacific, which have the potential to transform island lives by decreasing fossil fuel imports, transport costs, air and noise pollution, and GHG emissions.

Under the GEF-funded GCIP, UNIDO is bringing stakeholders together to develop a regional e-mobility policy that expands renewable energy power generation and electrical storage. Training is helping entrepreneurs, manufacturers and under-served groups take advantage of these growing markets and jobs.
EUROPE AND CENTRAL ASIA

The majority of Member States in this region are high- and middle-income countries with diverse geographic, economic, social and demographic backgrounds. Climate change, transformative technologies and digitalization, migration and ageing populations are critical challenges in some countries, while others face problems of brain drain, outdated and uncompetitive production technologies, depopulation of rural areas and insufficient numbers of qualified workers.

UNIDO at work in Europe and Central Asia

The work of UNIDO in the region aims at balancing economic and social progress stemming from industrial transformations with environmental sustainability, while capitalizing on emerging opportunities associated with the Fourth Industrial Revolution.

To respond to the evolving environment of development cooperation in the region and promote the model of multi-stakeholder partnerships, UNIDO continues to strengthen its relations with emerging donors in the region. The main topics for UNIDO projects in the region encompass technology and innovation, resource-efficient and low-carbon production, clean energy access, environmental compliance and circular economy, agribusiness, and cluster and value chain development.

UNIDO also works in synergy with the broader United Nations system to support 11 countries in the region starting a new round of UNSDCFs. At the country level, UNIDO supported the formulation of the National Strategy for Sustainable Industrial Development 2019–2023 of Kyrgyzstan and its complementary action plan, which the Government adopted in 2019. The strategy serves as the guiding document for the PCP in the country.

UNIDO has been implementing CPs in Montenegro and the Republic of Moldova. The CP for the Republic of Moldova was launched at a high-level event in Chisinau in May 2019. During the first year, a project on Cleantech innovations and on an entrepreneurship programme for SMEs was designed and approved by donors. The CP Montenegro entered its second year of implementation with intensified efforts to mobilize funds. A draft CP Albania focusing on industrial transformation in priority sectors was finalized and is scheduled to be signed in 2020.
Focus on green industry

A major focus of the Organization’s work in the region is to help industries become more resilient in the face of climate change. This means supporting industries to apply circular economy and green industry principles, including new approaches to production and consumption that take into account system-wide effects. Based on this, UNIDO is working in increasingly closer cooperation with Governments and institutions to design the right policies and strategies for a sound environmentally sustainable framework.

Funded by the European Union and implemented by five organizations, the EU4Environment project was launched in Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine in 2019. Building on the achievements of its predecessor programme, during which 350 participating SMEs demonstrated the effectiveness of the RECP approach of UNIDO, the Organization continues to support national capacity-building to enable SMEs to adopt greener production practices while applying circular economy principles.

Advancing women’s economic empowerment

With the financial support of the Russian Federation, UNIDO has been implementing a project since 2018 to promote the empowerment of women in the economic life of the region and beyond. The project focuses on sharing knowledge, forging partnerships and building capacities. It facilitated the creation of a robust interregional network of stakeholders representing Governments, the private sector and civil society organizations. In the context of this project, UNIDO engaged with prominent advocates of women’s economic empowerment from all over the world at the twenty-third “St. Petersburg International Economic Forum” and the “GMIS 2019”.

In 2019, UNIDO started developing an e-learning training course to help women entrepreneurs strengthen their knowledge and skills in the area of modern digital technologies, allowing them to benefit directly from new market opportunities.
LATIN AMERICA AND THE CARIBBEAN

The incidence of poverty and unemployment has decreased in the region, but important challenges remain. The region has the highest inequality levels in the world, with the Plurinational State of Bolivia, Chile, Ecuador, Peru and the Bolivarian Republic of Venezuela experiencing political uncertainty and social protests. These factors, combined with weak productivity performance, could have a negative impact on social stability as well as future GDP growth.

UNIDO at work in Latin America and the Caribbean

UNIDO is working to increase economic competitiveness and safeguard the environment. By strengthening and diversifying regional value chains and implementing regional cooperation mechanisms, UNIDO is contributing to the region’s efforts to reduce inequality and promote decent work and innovation.

In 2019 UNIDO and the Central American Integration System launched the Regional Centre for Renewable Energy and Energy Efficiency in El Salvador. The Centre is part of a broader network to accelerate energy and climate transformation by creating economies of scale, equitable development and spill-over effects between countries. Moreover, UNIDO provides the opportunity for regional exchanges of information through the Industrial Knowledge Bank, a platform for a range of actors to disseminate and share knowledge efficiently. The common operating space has fostered networks and strategic alliances to engage in initiatives aligned with SDG 9 and the 2030 Agenda.

At the country level, UNIDO is supporting the development of industrial zones and parks in several countries, boosting industrial capacity and productivity and creating jobs. The PCP Peru is supporting the Ministry of Production to develop its National Strategy for the Development of Industrial Parks, and implementing a GEF-funded project to develop sustainable industrial zones in the country. A project in Cuba is providing extensive training to build capacity to develop industrial growth strategies, implement new practices and monitor their effectiveness.
To strengthen the capacities of the Ministry of Economy of El Salvador to implement the country’s Productive Promotion, Diversification and Transformation Policy, UNIDO is helping develop strategies and a centre of innovation and technological development. Also under development are systems to reduce pollutants and consolidate markets in the Plurinational State of Bolivia, and expand the export potential of the Bolivarian Republic of Venezuela by integrating seven agricultural value chains of white and yellow maize, caraota and beans, rice, sugar cane, soybean, coffee and cocoa.

Regional cooperation improves the productivity and competitiveness of the shrimp value chain

The shrimp farming sector represents an important source of income for Colombia, Cuba, the Dominican Republic, Ecuador, Mexico and Nicaragua. To exploit its potential fully, UNIDO has been working to increase productivity, competitiveness and compliance with international quality and environmental standards.

The five-year project was successfully completed in 2019. UNIDO brought together various actors involved in aquaculture value chains to share their experiences on the best organizational structure and strategy development formulation, farming techniques, quality infrastructure, systems and resource efficiency, and cleaner production methodologies. This information was integrated into tools covering commercialization, regulatory frameworks, technology, financing and the efficient use of resources. The project benefited small shrimp farmers, shrimp cultivating companies, input and feed providers, processors, transporters and marketers. It fostered synergies and partnerships between the public, private and research and development-based institutions, and improved linkages of local businesses to national, regional and global markets.

For project participants in Cuba, total shrimp production increased by 76 per cent, water consumption decreased by 30 per cent and salaries of workers and technicians increased by up to 90 per cent in the participating enterprises. In the Dominican Republic, post larvae shrimp production is expected to quadruple. In Colombia, 14 small and medium-sized pond farms were reactivated, and shrimp production jumped from 100 to 450 kilograms per hectare. In Nicaragua, UNIDO and its development partners established quality infrastructure, trained staff in good laboratory practices, and validated protocols to identify shrimp viruses. In Ecuador, production increased by 5 per cent and photovoltaic machinery was installed to reduce energy costs. In Mexico, use of water was reduced by 40 per cent, productivity doubled and female employment increased by 70 per cent in the participating enterprises. Following the first phase of the project funded by the Trust Fund for Latin America and the Caribbean and the OPEC Fund for International Development, a second phase will start in 2020 with funding from the Trust Fund, China and Mexico.
Diverse in size, income and population, middle-income countries (MICs) are home to five billion people, including 73 per cent of the world’s poor. MICs also account for a third of global GDP, making them important engines of growth. A total of 100 UNIDO Member States fall into the category of MICs.

In 2019, the first UNIDO Strategic Framework for Partnering with MICs was adopted, focusing on three main pillars: the Fourth Industrial Revolution; the circular economy; and the future of industrial skills.

UNIDO will implement this strategy by expanding financing opportunities and increasing South-South and triangular cooperation. New sources of finance will be explored, including multi-stakeholder approaches, private industry, traditional and emerging donors, and scaled-up self-financing in MICs. To expand cooperation and help Member States build on successful experiences, UNIDO will promote southern solutions, share technology transfer best practices and foster cross-learning and technical cooperation.
CROSS-CUTTING PRIORITIES

The development approach and research-based services provided by UNIDO cut across the Organization’s strategic priorities of creating shared prosperity, advancing economic competitiveness, safeguarding the environment, and strengthening knowledge and institutions. Two areas are particularly important and shared across UNIDO activities in all fields: to achieve higher and lasting impact, partnerships with Governments, the private sector, civil society and development finance institutions are crucial. Partnerships help innovate, mobilize resources and exchange know-how. Another important area affecting all aspects of the Organization and vital for promoting inclusiveness is gender equality and women’s empowerment. UNIDO implements a gender mainstreaming strategy across all programmes, projects and policies.
GENDER EQUALITY
AND WOMEN’S EMPOWERMENT

Gender equality and the empowerment of women (GEEW) lie at the heart of the Organization’s mandate. UNIDO is committed to challenging the discrimination faced by women and girls, addressing gender inequalities in industry and harnessing women’s full potential as leaders and agents of economic change, thereby transforming economies and generating inclusive growth.

In 2019, UNIDO updated its Policy for Gender Equality and the Empowerment of Women to strengthen its organizational gender architecture and accountability framework. Gender was one of the main themes at the General Conference, with discussion on the challenges and opportunities for advancing gender equality through the Fourth Industrial Revolution. Member States adopted a related resolution, and a side event launched the Strategy for Gender Equality and the Empowerment of Women 2020–2023.

UNIDO works closely with partners in the United Nations system on gender issues. The 2019 Enabling Environment Guidelines for the United Nations System featured UNIDO measures as best practices, such as extending parental leave to local consultants, conducting harassment awareness workshops for all employees, and the Gender Equality Mobilization Award. UNIDO was also the coordinator of the Vienna Hub of the International Gender Champions initiative in 2019, bringing together heads of entities committed to ensuring panel parity and promoting gender equality. Working with UN Women, the Global Programme for the Economic Empowerment of Women in Green Industry was launched to advise policymakers and practitioners on how to establish and implement policy frameworks that integrate gender and green industrial policies.

UNIDO continues to use the gender marker tool to measure its contribution to GEEW, and to track and monitor gender-related financial resource allocation. Throughout 2019, personnel in Headquarters and the field were trained on how to assign the gender marker and carry out analyses, including using the gender tool of EQuIP, an evidence-based industrial policymaking toolbox funded by Germany. UNIDO also strengthened its focus on research and statistics activities through publications such as Inclusive and Sustainable Industrial Development: The Gender Dimension; Gender and Standards; and Gender Equality in the Sustainable Energy Transition.

UNIDO advocates for gender equality at national, regional and international events to raise awareness and bring together partners. In 2019, this included contributions to the twenty-third “St. Petersburg International Economic Forum”, the sixty-third session of the “Commission on the Status of Women”, the “European Development Days”, and the “Vienna Discussion Forum 2019” on ending violence against women.

To increase regional awareness and capacities to incorporate gender analyses in development programmes, UNIDO and ITPO Bahrain trained government officials, associations and regional...
The General Assembly declared 2016–2025 the Third Industrial Development Decade for Africa (IDDA III), in recognition of the importance of industrialization to Africa’s future. UNIDO is charged with developing, operationalizing and leading the implementation of this framework. It seeks to achieve this goal by fostering strong partnerships with other United Nations entities and public-private partnerships, mobilizing resources and providing technical assistance in Africa.

In 2019, the new IDDA III Championship initiative, comprising seven African Heads of State and Government, continued to promote IDDA III during the high-level week of the General Assembly in September and at the UNIDO General Conference to leverage high-level political leadership and promote and increase the visibility of the mandate.

UNIDO worked with the IDDA III focal points, who represent 28 institutions including the AUC, regional economic communities, United Nations organizations, development finance institutions and business associations, to develop a joint roadmap to enhance coordination in the implementation and funds mobilization for programmes and projects.

A comprehensive overview of current programmes and projects supporting Africa’s industrialization by international organizations and donors is underway to identify gaps and additional efforts needed. Stakeholders will be able to use these data for analysis and planning in a new database and associated information system.

UNIDO increased awareness and built support for IDDA III by co-organizing global events at the General Assembly and the seventh “Tokyo International Conference on African Development” (TICAD 7) in Yokohama, Japan. UNIDO also worked with the AU to organize the “Africa Industrialization Week”, and with stakeholders to commemorate “Africa Industrialization Day” under the theme “Positioning African industry to supply the AfCFTA market”.

UNIDO memorandums of understanding with the AUC, AfDB and Afreximbank help utilize the synergies emanating from joint planning and support. This has increased access to finance and trade, and supported UNIDO country and regional projects to develop agro-industry and the circular economy, and establish eco-industrial parks.

organizations from the Middle East and North African region on the links between gender inequalities and industrial development.

PARTNERSHIPS AND SOUTH-SOUTH COOPERATION

Cooperation with financial institutions helps leverage resources and facilitates larger flows of public and private investment, thereby triggering a stronger development impact. With this understanding, UNIDO continued expanding the scope and depth of its partnerships, including with the World Bank, the African Development Bank (AfDB), the European Investment Bank, the Asian Infrastructure Investment Bank and Afreximbank. At the operational level, the Organization signed an agreement enabling a tripartite partnership between UNIDO, the Government of Ethiopia and the AfDB. This will enable UNIDO to assist in the implementation of the AfDB-financed IAIP projects.
With the seventh replenishment cycle of GEF well underway since July 2018, the Facility funded more than 55 UNIDO projects in 2019 and will contribute more than $50 million annually to UNIDO delivery in the 2020–2021 biennium. As a delivery partner of the Green Climate Fund (GCF) for readiness and preparatory support since December 2018, UNIDO is assisting over 10 countries respond to climate change, by limiting or reducing GHG emissions and helping vulnerable societies adapt to its impacts.

UNIDO partners with the business sector through projects, the PCPs and multi-stakeholder platforms, such as PFAN and the Learning and Knowledge Development Facility. The SwitchMed II project attracted eight new partnerships with industry associations and seven partnerships with the textile sector in 2019 to advance circular economy practices.

UNIDO operationalized its collaboration with the United Nations Global Compact in areas of mutual interest, including by co-organizing the “Private Sector Forum” in September, which gathered more than 350 high-level participants, including CEOs and Heads of State and Government, to make commitments towards the global sustainability agenda. UNIDO also co-signed the United Nations Global Compact campaign “Business Ambition for 1.5 °C – Our Only Future”, calling for businesses to set targets limiting the global temperature rise.

In line with the outcome document of the second High-level United Nations Conference on South-South Cooperation (BAPA+40), UNIDO promulgated its Policy on South-South and Triangular Industrial Cooperation to further support networking, partnerships, knowledge sharing and capacity-building through a broad portfolio of projects and activities. UNIDO is also actively engaged in the Belt and Road Initiative to leverage the potential of South-South cooperation for industrial development. One pilot project with a budget of $2 million has been approved by the South-South Cooperation Assistance Fund (SSCAF) of China. The UNIDO flagship event “BRIDGE for Cities 4.0” in September focused on connecting cities through the Fourth Industrial Revolution.
MANAGING UNIDO SERVICES

Delivering quality technical cooperation, policy advice and other services to Member States requires a wide range of effective managerial and administrative services. These include human and financial resource management, evaluation and oversight, procurement, legal advice, buildings management and technology support. To ensure the best possible support and fast and efficient delivery, UNIDO undertakes regular reviews for further improvement. The continuing high demand for these services testifies to the quality, efficiency and effectiveness of the broad range of administrative and managerial operations that underpin the work of UNIDO.

The Vienna International Centre, also known locally as “UNO City”, celebrated its fortieth anniversary in 2019.
FUNDING AND FINANCIAL CONTRIBUTIONS

Funding for technical cooperation activities

Increased demand for UNIDO services continued to be matched by the support of Member States and funding partners. This led to an unprecedented portfolio of projects and programmes for future implementation amounting to $586.6 million in 2019, enabling the Organization to increase further its contributions towards the SDGs. At the same time, the delivery of UNIDO technical cooperation services increased to $190.3 million and remained well above the average of $183.9 million over the preceding five-year period 2014–2018.

As a result of a cyclical drop in funding from GEF, which coincided with a decrease of new approvals from the MLF, the overall volume of voluntary contributions allocated for implementation reached $154.7 million. The level of funds mobilized, however, remained high at $198.5 million.

Contribution from Governments and institutions, including the European Union, almost reached the record of the preceding year with $105.6 million, of which $70.7 million were contributed by UNIDO Member States. This underscores the importance of Member States as the largest contributor to the Organization’s technical cooperation activities. Contributions from the European Union remained significant at $25.2 million, and the overall trend of increased support coupled with thematic and geographical diversification was maintained.

Seventeen governmental donors provided contributions exceeding $1 million net of programme support costs.

The thematic focus of funding partners remained similar to previous years, with safeguarding the environment attracting the largest share of overall funding at $73.9 million, to which GEF again contributed significantly with $26 million, while creating shared prosperity received $42.4 million and advancing economic competitiveness and cross-cutting services attracted $29.2 million and $9.2 million respectively.

In geographical terms, voluntary contributions from funding partners amounting to $45.7 million were allocated for programmes and projects in Africa, and $37.6 million in Asia and the Pacific. These were followed by $29.8 million for the Arab region, $22.4 million for global and interregional initiatives, $13.8 million for Latin America and the Caribbean, and $5.5 million for Europe and Central Asia.

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

Despite a cyclical decrease in voluntary contributions from GEF in 2019, resulting in net approvals of $28.2 million, the fifty-sixth and fifty-seventh GEF Council Meetings held in 2019 again resulted in a
solid pipeline of strategic UNIDO proposals supporting 15 beneficiary countries. The GCIP, for instance, will develop functioning ecosystems for clean technology entrepreneurship, targeting more than 1,000 businesses.

UNIDO has expanded its portfolio of Green Climate Fund readiness proposals to assist 10 beneficiary countries. Facing increasing demand in the area of climate change, UNIDO also submitted an accreditation proposal to the Adaptation Fund.

As a major implementing agency of the MLF, UNIDO is currently implementing projects in 75 countries to phase out hydrochlorofluorocarbons and phase down hydrofluorocarbons. In 2019 alone, UNIDO activities avoided the potential emission of over 42.3 million tons of CO₂-equivalent. With funding amounting to $16.1 million from the MLF in 2019, the pipeline of proposals approved by the MLF for 2019 amounted to $23.7 million. Complementing the UNIDO MLF portfolio, funding from the GEF will enable UNIDO to support non-article 5 parties under the Montreal Protocol.

UNIDO further pursued its cooperation with the Kigali Cooling Efficiency Programme and Sustainable Energy for All on linking circular economy approaches and energy efficiency initiatives to provide sustainable cooling solutions.

**Funding from the United Nations, multi-partner trust funds and UNIDO-managed trust funds**

The increased cooperation between UNIDO and other United Nations entities led to a further growth of their contributions towards UNIDO-implemented activities, which reached $5.8 million. Considering the commitments made by United Nations Member States in the context of the Funding Compact to double the levels of resources channeled through development-related inter-agency pooled funds and single-agency thematic funds, these instruments are expected to gain in relevance.

Contributions towards UNIDO thematic trust funds remained generally modest despite their significant importance for the technical cooperation activities of UNIDO.

---

**UNIDO IN BRUSSELS**

The UNIDO Office in Brussels provides strategic advisory services and policy advocacy to reinforce the vision and objectives of UNIDO at European Union institutions, including the European Council, the European Commission, the European Parliament and the European Investment Bank, as well as the Secretariat of the African, Caribbean and Pacific Groups of States, major European think tanks, the International Organisation of La Francophonie, and Belgium and Luxembourg.


The UNIDO Brussels Office maintains close ties with the European Commission, supporting a 40-year relationship that has resulted in a high volume of diverse technical cooperation, conducted among the many European Union partners throughout the regions and sectors. The impact of this relationship was documented in the 2019 publication, *UNIDO and the EU: State of the International Partnership 2020*, which details joint initiatives and projects and will be published biennially.

The Partnership Trust Fund, designed as an enabling instrument towards blending resources from the private sector and development finance institutions, in particular in the context of PCPs, benefitted from the continued support of the Government of China with allocations of $2,250,000. The Trust fund for Trade Capacity-Building was supported by the Government of Germany with
contributions of €300,000 and enabled the Organization to leverage significant programmes funded by the European Union in West Africa. The Governments of China and Mexico contributed to the Trust Fund for Latin America and the Caribbean with $500,000 and €118,441, respectively.

**STAFFING**

In 2019, almost 160 vacancy announcements for staff and non-staff positions were filled with due regard to competence, gender and geographical balance, and the appointment and promotion process was substantively streamlined.

UNIDO signed seven new partnership agreements with national academic institutions on the internship programme and four agreements on the Partner Expert Programme. During the year, the Organization hosted 193 interns, six partner experts and 14 junior professional officers.

Staff capacity and professional and personal skills were strengthened through training and learning opportunities, including webinars, and the UNIDO mentoring programme, which included 30 enthusiastic pairs of mentors and mentees.

Efforts at creating an enabling working environment continued through upgrading and enhancing human resources policies on UNIDO core values and key competencies, the prohibition, prevention and resolution of harassment, including sexual harassment, as well as gender equality and parity. UNIDO also provided support to staff selected for the United Nations Resident Coordinator Assessment Centre.

**QUALITY MONITORING AND PROGRAMME APPROVAL**

Quality monitoring is a continuous, evidence-based, objective function. It supports operationalizing and monitoring the newly promulgated UNIDO Quality Assurance Framework (QAF), the policy for an integrated quality and results management system. The QAF streamlines the understanding and application of requirements for results orientation and quality management of all UNIDO products, services and processes.

The quality monitoring function provides tools and advice to ensure adherence to the quality requirements specified in the QAF, such as key results-based management principles and quality criteria. It systematically collects and analyses data on the quality of UNIDO technical cooperation initiatives before their entry into the portfolio. Thus, it informs strategic decision-making and contributes to the Organization’s IRPF.
Correspondingly, quality monitoring also provides secretariat support to the UNIDO Executive Board for the approval of technical cooperation initiatives. In 2019, a total of 225 submissions were processed for internal review and approval, with an approval rate of 100 per cent. The Executive Board approved 157 new programmes and projects, of which 66 per cent were subject to conditions to assure adherence to requirements for quality and results-based management.

EVALUATION AND INTERNAL OVERSIGHT

In March 2019, the revised Charter of the Office of Evaluation and Internal Oversight (EIO) was issued, thus implementing the decision of the IDB to establish an effective and independent office covering the distinct but complementary functions of independent evaluation and internal audit and investigation.

The independent evaluation function provides findings on results and practices, which inform programmatic and strategic decision-making processes. In 2019, the Synthesis of UNIDO Independent Evaluations from 2015 to 2018, the Impact Evaluation of UNIDO’s Industrial Energy Efficiency Programme, and the Independent Evaluation of the UNIDO Field Network were issued. Additionally, around 25 project evaluations were carried out and the first terminal evaluation of a pilot PCP, the PCP Ethiopia, was initiated.

The internal audit function implemented significant improvements in 2019, aligning its procedures, risk methodology and work plans with the MTPF. The function received an external quality validation from the International Standards for the Professional Practice of Internal Auditing with the highest possible rating as “generally conforms”. Audit reports were issued on business continuity management and the country offices in Côte d’Ivoire and Jordan. A synthesis engagement addressed 168 outstanding internal audit recommendations and ended with eight management action plans.

The Audit Advisory Committee (AAC) strengthened UNIDO governance and oversight, and advised on the implementation of the recommendations of the external auditor and the Joint Inspection Unit (JIU) and on internal controls and risk management. Revised terms of reference to expand the scope of the AAC to cover the three functions of audit, investigation and evaluation, as recommended by a recent JIU review, are underway.

LEGAL SERVICES

The Office of Legal Affairs is mandated to assist the Organization in achieving its goals by ensuring that all activities and programmes are conducted in accordance with the external and internal aspects of the Organization’s legal framework. The Office advises all major programmes and organs of UNIDO, defends the interests of the Organization in litigation matters, and plays a proactive role in protecting the legal status and the privileges and immunities of UNIDO. In 2019, the Office again responded to numerous requests for assistance and advice, and reviewed the drafts of legal instruments and other documents. In particular, the Office assisted in the conclusion of agreements and arrangements in support of the Organization’s delivery of technical cooperation, convening and other functions, as listed in appendix G to this report. Furthermore, the Office provided effective legal assistance in connection with the thirty-fifth session of the PBC, the forty-seventh session of the IDB and the eighteenth session of the General Conference, as well as the Independent Audit Advisory Committee.
INFORMATION TECHNOLOGY SERVICES

The Information Technology Services Division (ITS) is responsible for the full life-cycle of corporate information technology services. It provides secure, reliable, effective and efficient services to UNIDO, adopting best practices.

Throughout 2019, ITS introduced numerous system-wide improvements and innovations, including new data centre equipment, desktops, a new email system, and tools for collaboration and messaging, as well as new features on the UNIDO corporate website. The enterprise resource planning (ERP) system was enhanced through new mobile applications, new dashboards, digitization and automation of contracts, invoices and grant closure, and support to key initiatives such as full cost recovery and resource optimization in technical cooperation.

The UNIDO Executive Board provisionally endorsed the UNIDO Corporate ICT Strategy 2019–2021, drafted by the ICT Working Group with the support of experts from the United Nations International Computing Centre, and consultations with stakeholders.

UNIDO and the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) hosted the UN ERP Special Interest Group meeting in Vienna, which attracted more than 150 professionals from United Nations agencies and industry. UNIDO also contributed to the 2019 Cybersecurity Awareness Days event of the Vienna-based organizations, which attracted over 500 participants.

PROCUREMENT

With over 8,500 purchase orders, the overall procurement volume was in excess of $147 million. To further improve efficiency and coherence, UNIDO published a Procurement Handbook, which provides a step-by-step guide for conducting decentralized procurement activities. Various long-term agreements were established for regularly required goods and services related to training and workshops, gender and industrial development, material testing and analysis, and engineering and architectural consultancy services. In line with the new edition of the Procurement Manual, efforts continued to operationalize project execution arrangements. Within the context of the United Nations development system reform, UNIDO participated actively in the Business Innovation Group and in the Sustainable Procurement Working Group of the High-level Committee on Management.

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 continues to explore innovative approaches and techniques to improve cost effectiveness and create a welcoming and healthy working environment for all personnel and visitors.

In 2019, the VIC Rotunda was converted into a digital space with three large-format displays. The outdated low voltage distribution system in Buildings B and E, and the transformers in Buildings D and E, were replaced with newer, more energy-efficient systems. The time recording and attendance system for UNIDO personnel was renewed in cooperation with ITS. Modern videoconference technology has been installed in a renovated UNIDO meeting room allowing for remote meetings to be facilitated directly from the Headquarters.

The Organization continued its track record as a climate-neutral United Nations Headquarters, receiving the certificate of climate neutrality of the United Nations Framework Convention on Climate Change for the fourth consecutive year. Following a sustainability analysis documenting standards of environmental management, Building M earned the Austrian Eco Label and was certified as a “Green Conference Centre”.

ANNEX.
Integrated results and performance framework
The new integrated results and performance framework (IRPF) of UNIDO was adopted in 2019. Using an innovative actor-based, behavioural change model, it complements the medium-term programme framework (MTPF) 2018–2021 by introducing specific results areas and indicators. This Annual Report uses the new results framework for the first time to present a comprehensive and structured set of quantitative and qualitative evidence of the Organization’s contribution to outcomes, ISID impact and the Sustainable Development Goals (SDGs).

The approach recognizes that the contribution of UNIDO to the transformational change brought about by ISID and the SDGs can be credibly explained by the key results that trigger changes in behaviours, practices and measures adopted by key stakeholders. It matches the modus operandi of UNIDO, which is based on hands-on support to individuals, firms, institutions and Governments.

This section summarizes the findings from the first data collection exercise based on the new framework. As such, it represents a first step. The changes in systems, processes and even organizational culture required by the new IRPF will only be absorbed gradually. In addition, retrofitting the new IRPF into the ongoing portfolio faces data availability constraints. This will improve gradually, as the updated IRPF is applied to all new initiatives of the Organization.

The IRPF presentation in this report is therefore inevitably characterized by occasional partial data coverage and absence of baselines and targets. UNIDO counts on the patience of Member States, who have supported the Organization’s transition to a stronger results orientation since the inception of the current MTPF. The expectation for improved UNIDO results reporting, which is shared by Member States, stakeholders and Secretariat alike, will find in this Annual Report a first, tangible measure of fulfilment. Through this IRPF, UNIDO is able to report on the country-level results of its technical cooperation, and normative, advisory and convening interventions.

These results are presented through a combination of data and narratives to create a better understanding of the depth of the transformation triggered by UNIDO. The ultimate objective remains to increase and sustain results and impact on the ground. In this context, the launch of the new IRPF reflects the reinforced commitment to the achievement of ISID by a reinvigorated and strong UNIDO.
We use resources efficiently and program for integration and scale-up of results.

We control:
- Governments
- Global actors

We support:
- People
- Firms
- Institutions

Together we transform behaviours in:
- Knowledge
- Capacity and skills

So they gain:
- Employment
- Efficiency
- Access to products
- SME inclusion in VCs
- Value added
- Productivity
- Exports
- New green products
- Emissions
- Efficiency
- New green products

Contributing to:
- Advancing economic competitiveness
- Creating shared prosperity
- Safeguarding the environment

Strengthening knowledge and institutions:
- Business practices: Practices, products, start ups
- Investments: Proposals, financing, leveraging
- Technology: Development, adoption
- Policy and standards: Development, adoption
- Scale-up: Replication, mainstreaming
- Governance: Institutional building, coordination

Thus advancing:
- Value added
- Productivity
- Exports
- Employment
- SME inclusion in VCs
- Access to products
- Emissions
- Efficiency
- New green products

SUSTAINABLE DEVELOPMENT GOALS

9 ROUTES TO INTEGRATION AND INFRASTRUCTURE
LEVEL 1.  GLOBAL INDUSTRIAL DEVELOPMENT CONTEXT

Strategic priority: Advancing economic competitiveness

SDG INDICATOR 9.2.1: Manufacturing value added as a proportion of gross domestic product
World manufacturing has been facing a steady decline in growth, affecting all regions and country groups, and posing serious challenges to overall economic growth, employment, living standards and commodity markets.

Despite the slowdown, the global share of manufacturing value added (MVA) in gross domestic product (GDP) increased from 16.0 per cent in 2010 to 16.6 per cent in 2019. The share of MVA in GDP in least developed countries (LDCs) grew by 2.9 per cent annually between 2016 and 2019, but this rate remains too low to achieve the SDG target of 9.2 per cent by 2030.

The disparities in manufacturing productivity remain stark. At the global level, MVA per capita in LDCs amounted to only $132, compared with $5,469 in industrialized economies in 2019. Even within the LDCs, growth was driven by LDCs in Asia and the Pacific while the share of MVA in GDP in African LDCs remained largely stagnant.

SDG INDICATOR 9.B.1: Proportion of medium and high-tech industry value added in total value added
Technological upgrading increases industrial competitiveness and reduces environmental impacts. New technologies enable the creation of new goods and the emergence of new industries, which constitute a major source of income and employment.

World manufacturing is producing more sophisticated goods, characterized by higher knowledge content and requiring more advanced and complex production techniques. The share of medium-and high-technology goods in world MVA reached almost 46 per cent in 2017. The production of higher-technology manufacturing goods is dominated by industrialized economies such as Europe and North America with 48 per cent, and eastern and south-eastern Asia, with 46 per cent in 2017.
By contrast, sub-Saharan Africa continues to rely mainly on low-technology manufacturing.

Strategic priority: Creating shared prosperity

SDG INDICATOR 9.2.2: Manufacturing employment as a proportion of total employment
Globally, the share of manufacturing employment in total employment declined from 15.0 per cent in 2000 to 13.9 per cent in 2019, as countries gradually reallocated production factors from agriculture and low value added manufacturing towards high value added manufacturing and services. However, in LDCs, the share increased to 7.5 per cent in 2019 from 5.9 per cent in 2000. In 2019, China accounted for the highest share of global manufacturing employment at 34.2 per cent, compared with 19.2 per cent for industrialized economies.

New technologies may create a divide between workers in sectors with varying potentials for automation. However, job losses due to automation can be mitigated through increases in product demand or foreign direct investment.

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

SDG INDICATOR 9.3.2: Proportion of small-scale industries with a loan or line of credit
Small-scale industrial enterprises are the major sources of employment in developing and emerging economies and therefore fundamental to generating incomes and eradicating poverty.

Credit access encourages entrepreneurship and innovation to exploit market opportunities. It can thus increase the competitiveness of small-scale firms and enable them to integrate into local and global value chains.

In developing countries, 33.6 per cent of small-scale industries benefit from loans or lines of credit, but regions vary significantly. While the proportion of loans or lines of credit received in sub-Saharan Africa is 21.7 per cent, almost half of small-scale industries have access to similar financial services in Latin America and the Caribbean.
Strategic priority: Safeguarding the environment

**SDG INDICATOR 9.4.1: CO₂ emissions per unit of value added**

After three years of stability, global carbon dioxide (CO₂) emissions from fuel combustion started rising again in 2017, reaching 32.9 billion tons. They grew even faster in 2018 with robust economic growth and the slowdown in renewables penetration more than offsetting improvements in energy productivity.

As in the preceding several years, this growth was largely related to emissions in South Asia and the Middle East.

Global CO₂ emissions intensity declined by more than 20 per cent between 2000 and 2016, showing a general decoupling between CO₂ emissions and GDP growth. A similar trend was also observed for manufacturing industries, with global manufacturing intensity dropping at an average annual growth rate of more than 3 per cent from 2010 and 2017.

As a result of shifts to less energy-intensive industries and to cleaner fuels and technologies, industrialized economies achieved their lowest level of manufacturing carbon intensity, 0.22 kg CO₂ per dollar, in 2017. Developing and emerging industrial economies also achieved reductions of 5.0 per cent annually between 2010 and 2017, reaching a value of 0.73 kg CO₂ per dollar.

---

**Strategic priority: Advancing economic competitiveness**

<table>
<thead>
<tr>
<th>Indicator 1.1/</th>
<th>SDG indicator 9.2.1: Manufacturing value added as a proportion of GDP (%)</th>
<th>2010/2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>16.6 %</td>
<td>2019</td>
</tr>
<tr>
<td>Industrialized economies</td>
<td>14.2 %</td>
<td>2019</td>
</tr>
<tr>
<td>Developing and emerging industrial economies</td>
<td>14.0 %</td>
<td>2019</td>
</tr>
<tr>
<td>High income</td>
<td>13.9 %</td>
<td>2019</td>
</tr>
<tr>
<td>Middle income</td>
<td>21.1 %</td>
<td>2019</td>
</tr>
<tr>
<td>Low income</td>
<td>8.9 %</td>
<td>2019</td>
</tr>
<tr>
<td>SIDS</td>
<td>18.5 %</td>
<td>2019</td>
</tr>
<tr>
<td>LDCs</td>
<td>12.4 %</td>
<td>2019</td>
</tr>
<tr>
<td>LLDC</td>
<td>11.9 %</td>
<td>2019</td>
</tr>
</tbody>
</table>

Source: UNIDO MVA 2020 Database

<table>
<thead>
<tr>
<th>Indicator 1.1/</th>
<th>SDG indicator 9.2.1: Manufacturing value added per capita (2005 constant US$)</th>
<th>2010/2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>$ 1,798</td>
<td>2019</td>
</tr>
<tr>
<td>Industrialized economies</td>
<td>$ 4,088</td>
<td>2019</td>
</tr>
<tr>
<td>Developing and emerging industrial economies</td>
<td>$ 4,739</td>
<td>2019</td>
</tr>
<tr>
<td>High income</td>
<td>$ 5,916</td>
<td>2019</td>
</tr>
<tr>
<td>Middle income</td>
<td>$ 1,550</td>
<td>2019</td>
</tr>
<tr>
<td>Low income</td>
<td>$ 62</td>
<td>2019</td>
</tr>
<tr>
<td>SIDS</td>
<td>$ 2,177</td>
<td>2019</td>
</tr>
<tr>
<td>LDCs</td>
<td>$ 132</td>
<td>2019</td>
</tr>
<tr>
<td>LLDC</td>
<td>$ 198</td>
<td>2019</td>
</tr>
</tbody>
</table>

Source: UNIDO MVA 2020 Database
Strategic priority: Advancing economic competitiveness (continued)

Indicator 1.2/
SDG indicator 9.b.1:
Proportion of medium and high-tech manufacturing value added in total value added (%) 2010/2017

Source: UNIDO CIP 2019 Database

Strategic priority: Creating shared prosperity

Indicator 1.3/
SDG indicator 9.2.2:
Manufacturing employment as a proportion of total employment (%) 2010/2019

Source: ILO modelled estimates November 2019

Indicator 1.5/
SDG indicator 9.3.2:
Proportion of small-scale industries with a loan or line of credit (%) 2019

Source: World Bank Enterprise Surveys 2019
Strategic priority:
Safeguarding the environment

**LEVEL 2. COUNTRY AND GLOBAL RESULTS WITH UNIDO SUPPORT**

Level 2 captures the outcomes and ISID impact of the programmatic activities of UNIDO, both at the country and global levels. These activities encompass the Organization’s four core functions: technical cooperation; normative activities and analytical and policy advisory services; standards and quality-related activities; and convening for knowledge transfers, partnerships and networking.

The integration of these functions provides holistic support to Member States towards achieving ISID. At this level, the responsibility for the achievement of expected outcomes is shared between UNIDO, supported Member States and all development partners involved. Level 2 therefore presents credible evidence of the contribution made by UNIDO towards the transformational change entailed by ISID.

The data coverage for this level is will be progressively improved. The information and data in this section provide important evidence of the value added by UNIDO.

### Outcomes

UNIDO’s strong capacity-building vocation is confirmed by the data, with at least 34,574 people being trained by UNIDO in 2019 across its knowledge areas (**KASA.2**). In addition, over 35,000 people gained awareness or specific knowledge of ISID-related issues (**KASA.1**).

More than **34,000 people** received training and gained skills on UNIDO knowledge areas in 2019 (partial estimate).

Capacity-building activities often result in innovation and in changes in business practices: the available data show a contribution in 2019 to significant management changes in approximately 2,000 firms (**BUS.1**), the launch of 114 new products (**BUS.2**) and the creation of 81 start-ups (**BUS.3**).

As these data refer only to selected UNIDO programmes, they are partial but encouraging. Further supporting innovation, these partial data show that UNIDO facilitated the adoption of 78 new technologies (**TEC.1**) in 23 countries (**TEC.2**) in 2019.

Data representing only a fraction of the UNIDO portfolio show that its interventions have triggered
significant changes in governance: more than 140 institutions have been created or strengthened (GOV.1), while almost 5,000 actors now work in enhanced collaboration settings, such as networks or clusters (GOV.2).

The advisory work of UNIDO resulted in notable policy changes in supported countries in 2019: 49 new or revised policies (POL.1), 120 standards (POL.2) and 45 guidelines (POL.3) were adopted in response to selected UNIDO interventions.

Leveraging investments is one important result area for UNIDO: data from the first three pilot PCPs (Ethiopia, Peru and Senegal) show that nearly $2 billion have been mobilized since 2015 (INV.3). Over $250 million in investments were leveraged through the Private Financing Advisory Network (PFAN) and Global Environment Facility (GEF) energy portfolios in 2019. Partial estimates also show that UNIDO support in 2019 led to nearly 300 investment proposals (INV.1), resulting in 238 businesses or projects financed (INV.2).

ISID impact

The above figures explain the contribution of UNIDO to ISID. There is also considerable evidence of a positive environmental impact: in 2019, more than 49 million tons of CO₂-equivalent (ENV.1) and over 90,000 tons of pollutants (ENV.2) were reduced or phased out. Economic gains resulting from the outcomes above, although less well documented at this stage, show a clear pathway towards ISID and the SDGs resulting from UNIDO interventions: partial data from just two departments show that 4,461 firms reported economic gains (ECO.1) with over 1,000 reporting increases in exports (ECO.3). These partial figures indicate the impact potential of the entire portfolio.

Supporting job creation is an important part of the contribution of UNIDO to social inclusion and the SDGs. Data in this area are hard to obtain, and precise estimates elusive, also in light of the financial constraints on conducting systematic impact assessments. There is evidence from selected projects in one department of the contribution to 3,436 jobs in 2019 (SOC.1). In addition, partial data from two departments show that 4,666 SMEs gained inclusion in global value chains last year (SOC.2).
LEVEL 3. PROGRAMMATIC OFFER AND PROGRAMME MANAGEMENT EFFECTIVENESS

Level 3 measures the typical outputs of the programmatic interventions of UNIDO. These are products and immediate changes delivered within the sphere of control of UNIDO, contributing to the higher-level results of Level 2. This level also assesses the effectiveness of the portfolio and programme management of UNIDO.

Output indicators

Data coverage of UNIDO programmatic output is still not systematic, so full aggregation was not possible for 2019. The available partial data representing approximately two thirds of the UNIDO portfolio nevertheless confirm its role as a strong technical cooperation agency.

TCO.1 shows that at least 1,500 capacity-building activities were organized in 2019, while technology transfer outputs amounted to almost $14 million in assets provided (TCO.2). Over 120 toolkits and guidelines were provided (TCO.3) and 267 business plans produced (TCO.4), demonstrating the strong technical nature of UNIDO interventions. The Organization also continued delivering policy advice, with 26 industrial policy documents prepared (PAO.1), and generating global public goods on ISID, with 68 analytical and statistical publications produced (PAO.2).

The partnership and convening role of UNIDO is demonstrated by over 363 convening events such as workshops, expert group meetings and global forums (CPO.1) organized in 2019, and by 16 United Nations (CPO.2) and 12 non-United Nations (CPO.3) coordination mechanisms and networks in which UNIDO plays a prominent role. The engagement of UNIDO in the United Nations system is further validated by 43 joint interventions with other United Nations entities (CPO.4). Finally, UNIDO is a key convener of the private sector, with over 100 programmes or projects implemented in partnership with business entities and financial institutions (CPO.5).

Portfolio management indicators

UNIDO undertook substantial programme development endeavours in 2019, with 150 projects and seven Country Programmes approved for implementation (POR.1), in addition to new Montreal Protocol projects. Furthermore, the UNIDO Executive Board approved the programming phases of further PCPs, reaching a total of 10 PCPs at different stages of development. In line with the new quality assurance framework (DGB.2019/11), the quality of new submissions is thoroughly monitored, showing reassuring trends for almost all criteria (POR.2). With elements such as relevance and technical design of interventions scoring over 95 per cent, the most significant progress was recorded in the areas of results-based management (+37 per cent over 2016) and sustainability (+40 per cent), confirming the Organization’s efforts towards greater results orientation.

At the end of 2019, UNIDO had an active portfolio of approximately 1,000 projects, half of which were in the area of energy and environment (POR.3), amounting to a total value of over $190 million. In addition to global programmes, UNIDO maintained a particularly strong programmatic presence in Africa and Asia and the Pacific, reflecting, inter alia, the priorities of IDDA III.

UNIDO monitors the quality of its interventions at completion, while recognizing that certain outcomes will only materialize over subsequent years (POR.4). Programmatic evidence shows that the quality of portfolio implementation remains generally strong. Principal areas for improvement include likelihood of sustainability, efficiency, and monitoring and evaluation. Appropriate measures have been put in place to strengthen these elements.

POR.5 shows a high level of attention given to gender in the programmatic work of the Organization, with almost the totality of approved projects satisfying the minimum criteria of the gender marker and about 25 per cent having dedicated activities and results on gender equality and the empowerment of women (GEEW).
**POR.6** shows progress in the transparency activities of UNIDO as per the standards of the International Aid Transparency Initiative (IATI), while **POR.7** demonstrates strong commitment to working with the United Nations development system in the field, with UNIDO participating in 81 of 131 United Nations country teams.

**Level 3. Programmatic offer and programme management effectiveness**

### Output indicators

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCO.1. Number of capacity-building activities provided</td>
<td>Provision of training, workshops, lectures and similar activities delivered by UNIDO with the aim of building capacity</td>
</tr>
<tr>
<td>TCO.2. Value of assets provided</td>
<td>Value in USD of assets (e.g. equipment, technologies) procured for beneficiaries during implementation of UNIDO projects/programmes</td>
</tr>
<tr>
<td>TCO.3. Number of toolkits and guidelines produced</td>
<td>Production of guidelines, training material, checklists, toolkits, software, curricula, platforms, databases and similar material</td>
</tr>
<tr>
<td>TCO.4. Number of business plans developed</td>
<td>Development of new business plans by or for project beneficiaries through UNIDO interventions</td>
</tr>
<tr>
<td>PAO.1. Number of industrial strategies and industrial policy documents drafted/prepared</td>
<td>Preparation of policy and strategy documents by or with UNIDO for submission to policymakers</td>
</tr>
<tr>
<td>PAO.2. Number of analytical and statistical publications produced</td>
<td>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</td>
</tr>
<tr>
<td>NOO.1. Number of standard-setting processes with UNIDO participation</td>
<td>Participation of UNIDO in and contribution to standard-setting processes at national, regional or international level</td>
</tr>
<tr>
<td>CPO.1. Number of global forums, workshops/EGM/side events organized</td>
<td>Organization of events such as expert group meetings, seminars, side events, global forums, conferences and summits</td>
</tr>
<tr>
<td>CPO.2. Number of United Nations interagency mechanisms with UNIDO participation</td>
<td>Active participation of UNIDO in United Nations inter-agency bodies and coordination mechanisms</td>
</tr>
<tr>
<td>CPO.3. Number of international networks and platforms for which UNIDO is providing secretariat functions (ICTN, PFAN, RECP, etc.)</td>
<td>Participation of UNIDO in global networks and platforms, and provision of secretariat functions</td>
</tr>
<tr>
<td>CPO.4. Number of interventions or joint programmes with United Nations System entities</td>
<td>Joint programming (development and/or implementation) between UNIDO and other United Nations System entities</td>
</tr>
<tr>
<td>CPO.5. Number of interventions (projects/programmes) in partnership with non-United Nations institutions</td>
<td>Implementation of projects and programmes in partnership with business sector entities and financial institutions</td>
</tr>
</tbody>
</table>

*Partial figures representing approximately two thirds of the UNIDO portfolio in 2019

### Portfolio management indicators

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>Total number of projects and Country Programme Frameworks approved by the Executive Board per region, excluding Montreal Protocol projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>POR.1. a. Number of project documents approved by the Executive Board</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Africa</td>
</tr>
<tr>
<td></td>
<td>Arab region</td>
</tr>
<tr>
<td></td>
<td>Asia and the Pacific</td>
</tr>
<tr>
<td></td>
<td>Europe and Central Asia</td>
</tr>
<tr>
<td></td>
<td>Global</td>
</tr>
<tr>
<td></td>
<td>Interregional</td>
</tr>
<tr>
<td></td>
<td>Latin America and the Caribbean</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
</tbody>
</table>
### ANNEX 81

#### INDICATOR

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Number of Country Programmes approved by the Executive Board</td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>3</td>
</tr>
<tr>
<td>Arab region</td>
<td>1</td>
</tr>
<tr>
<td>Asia and the Pacific</td>
<td>3</td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>0</td>
</tr>
<tr>
<td>Global</td>
<td>0</td>
</tr>
<tr>
<td>Interregional</td>
<td>0</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Percentage of projects whose design was assessed, at appraisal, either satisfactory or moderately satisfactory under each design quality criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Overall design quality</td>
<td>83%</td>
</tr>
<tr>
<td>b. Relevance</td>
<td>99%</td>
</tr>
<tr>
<td>c. Technical design</td>
<td>98%</td>
</tr>
<tr>
<td>d. Effectiveness and RBM</td>
<td>68%</td>
</tr>
<tr>
<td>e. Scale-up potential</td>
<td>NA</td>
</tr>
<tr>
<td>f. Sustainability likelihood</td>
<td>91%</td>
</tr>
<tr>
<td>g. Efficiency</td>
<td>96%</td>
</tr>
<tr>
<td>h. Implementation arrangements</td>
<td>96%</td>
</tr>
<tr>
<td>i. Gender equality and women’s empowerment</td>
<td>64%*</td>
</tr>
</tbody>
</table>

---

#### POR.2. Percentage of programmes/projects whose design quality was assessed as satisfactory at entry

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Overall design quality</td>
<td>83%</td>
</tr>
<tr>
<td>b. Relevance</td>
<td>99%</td>
</tr>
<tr>
<td>c. Technical design</td>
<td>98%</td>
</tr>
<tr>
<td>d. Effectiveness and RBM</td>
<td>68%</td>
</tr>
<tr>
<td>e. Scale-up potential</td>
<td>NA</td>
</tr>
<tr>
<td>f. Sustainability likelihood</td>
<td>91%</td>
</tr>
<tr>
<td>g. Efficiency</td>
<td>96%</td>
</tr>
<tr>
<td>h. Implementation arrangements</td>
<td>96%</td>
</tr>
<tr>
<td>i. Gender equality and women’s empowerment</td>
<td>64%*</td>
</tr>
</tbody>
</table>

*Partial data as the new gender compliance and marker form was introduced in April 2019

#### POR.3. Number and volume of ongoing projects, CPs and PCPs (by thematic focus area; by region)

<table>
<thead>
<tr>
<th></th>
<th>Creating shared prosperity</th>
<th>Advancing economic competitiveness</th>
<th>Safeguarding the environment</th>
<th>Cross-cutting</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Number of TC by theme and region (count of 2019 unique SAP IDs contributing to 2019 volume of expenditure)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>72</td>
<td>56</td>
<td>143</td>
<td>23</td>
<td>1</td>
<td>295</td>
</tr>
<tr>
<td>Arab region</td>
<td>53</td>
<td>14</td>
<td>84</td>
<td>7</td>
<td>0</td>
<td>158</td>
</tr>
<tr>
<td>Asia and the Pacific</td>
<td>22</td>
<td>40</td>
<td>109</td>
<td>17</td>
<td>1</td>
<td>189</td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>6</td>
<td>15</td>
<td>58</td>
<td>9</td>
<td>1</td>
<td>89</td>
</tr>
<tr>
<td>Global</td>
<td>12</td>
<td>34</td>
<td>46</td>
<td>39</td>
<td>25</td>
<td>156</td>
</tr>
<tr>
<td>Interregional</td>
<td>5</td>
<td>7</td>
<td>9</td>
<td>3</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>6</td>
<td>16</td>
<td>76</td>
<td>6</td>
<td></td>
<td>104</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>176</strong></td>
<td><strong>182</strong></td>
<td><strong>525</strong></td>
<td><strong>104</strong></td>
<td><strong>29</strong></td>
<td><strong>1,016</strong></td>
</tr>
</tbody>
</table>

b. Volume of TC by theme and region (2019 expenditure in US$; adjusted values, rounded to the nearest hundred)

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>15,608,500</td>
</tr>
<tr>
<td>Arab region</td>
<td>13,132,200</td>
</tr>
<tr>
<td>Asia and the Pacific</td>
<td>2,637,300</td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>113,600</td>
</tr>
<tr>
<td>Global</td>
<td>718,600</td>
</tr>
<tr>
<td>Interregional</td>
<td>1,230,500</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>492,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33,932,800</strong></td>
</tr>
</tbody>
</table>

*Source for POR.3.a and POR.3.b: SAP extraction of 3 Feb 2020, corrected/adjusted values
# Level 3. Programmatic offer and programme management effectiveness (continued)

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>c. Number of ongoing Country Programmes by region</td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>11</td>
</tr>
<tr>
<td>Arab region</td>
<td>1</td>
</tr>
<tr>
<td>Asia and the Pacific</td>
<td>10</td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>2</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
</tr>
<tr>
<td>d. Number of ongoing Programmes for Country Partnerships by region</td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>5</td>
</tr>
<tr>
<td>Arab region</td>
<td>2</td>
</tr>
<tr>
<td>Asia and the Pacific</td>
<td>1</td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>1</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
</tr>
</tbody>
</table>

### POR.4. Percentage of programmes/projects whose quality was evaluated as satisfactory at completion

Percentage of projects assessed as highly satisfactory, satisfactory or moderately satisfactory under each quality criteria in the Synthesis of UNIDO Independent Evaluation 2015-2018 (latest available)

- **a. Relevance**: 100%
- **b. Effectiveness**: 98%
- **c. Scale-up**: NA
- **d. Efficiency**: 77%
- **e. Likelihood of sustainability**: 82%
- **f. Programme/project management**: 91%
- **g. M and E design**: 95%
- **h. M and E implementation**: 84%

### POR.5. Percentage of overall number of UNIDO programme/projects per gender marker category

<table>
<thead>
<tr>
<th>Category</th>
<th>2B</th>
<th>2A</th>
<th>1</th>
<th>0</th>
<th>Not evaluated</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Approved in this calendar year; % of project cleared by gender office</td>
<td>1.47*</td>
<td>17.65*</td>
<td>74.26*</td>
<td>5.88*</td>
<td>0.74*</td>
</tr>
<tr>
<td>in 2019 under each gender marker category</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Ongoing (entire portfolio); % of ongoing projects in 2019 under each</td>
<td>1.37</td>
<td>24.36</td>
<td>64.65</td>
<td>3.39</td>
<td>6.23</td>
</tr>
<tr>
<td>gender marker category</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Percentage of programmes/projects with gender-informed design; % of</td>
<td>1.11</td>
<td>25.84</td>
<td>68.34</td>
<td>3.31</td>
<td>1.41</td>
</tr>
<tr>
<td>total budget of ongoing projects allocated under each gender marker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>category</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Compliance with UN SWAP; % of the 17 UN SWAP 2.0 indicators met or</td>
<td>76.43%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>exceeded (UN SWAP 2.0 2018 results, latest available)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Partial data as the new gender compliance and marker form was introduced in April 2019

### POR.6. Transparency (as per IATI standards)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>UNIDO score under each IATI dimensions and overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Timeliness</td>
<td>88%</td>
</tr>
<tr>
<td>b. Comprehensiveness</td>
<td>0%</td>
</tr>
<tr>
<td>c. Forward-looking</td>
<td>70%</td>
</tr>
<tr>
<td>Score</td>
<td>53%</td>
</tr>
</tbody>
</table>

### POR.7. Number of United Nations country teams with UNIDO participation

81
LEVEL 4. ORGANIZATIONAL RESOURCES AND EFFICIENCY

Level 4 measures the performance of the Organization’s internal operations and corporate services. In 2019, UNIDO continued to increase the efficiency and effectiveness of its internal operations to maximize the impact of its interventions.

Regular financial resources approved for 2019 amounted to €88.3 million (FIN.1). A new mechanism for full cost recovery was piloted in 2019 with promising results. With full adoption in 2020 with selected donors, it is expected to increase operational income from extra-budgetary resources (FIN.3).

Voluntary contributions of $154.7 million were approved (FIN.2) in 2019, adding to the existing pipeline. The fluctuations in recent years largely reflect shifts in the programming and funding cycles of UNIDO and some of its donors. Technical cooperation delivery (EXP.2) reached $190 million, sustaining the rising trend of the previous years despite the existing resource constraints. Further programme efficiencies and effectiveness are expected from process re-engineering and a strengthened focus on managing for results.

UNIDO committed to meeting United Nations system-wide Action Plan (UN-SWAP 2.0) requirements on equal gender representation by 2023. Human resources indicators (HR.1) show that progress is being made in this regard, in line with the new policy (2019) and strategy (2020–2023) on GEEW. Further efforts are needed to close the gender gap, particularly at senior levels, also in view of the limited turnover of core staff. On the other hand, gender balance was achieved for General Service staff, and the representation of women in the junior professional categories largely reached 80 per cent in 2019. Geographical diversity of core staff has increased from 50 per cent in 2018 to 58.2 per cent, while for the total workforce it reaches 79.4 per cent.

The efficiency of operational management remains high. Two thirds of centralized procurement contracts are finalized within 110 days (OPM.1). The implementation of 78 per cent of technical cooperation projects starts within six months from the start date of the trust fund agreement (OPM.2), exceeding the efficiency target by 8 per cent. Starting from 2020, data will be collected for the new IRPF indicator on the efficiency of information technology services (OPM.3 - ICT operational efficiency). For 2019, the previous IRPF indicator remains valid, with the quality of the enterprise resource planning (ERP) system meeting the 70 per cent target, based on client surveys.
Level 4. Organizational resources and efficiency

### Corporate service efficiency

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPM.1. Procurement timeline</td>
<td>Percentage of procurements for open competition under centralized procurement that are finalized within 110 days from the date a requisition is approved</td>
</tr>
<tr>
<td>OPM.2. TC start-up rate</td>
<td>Percentage of TC 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%</td>
</tr>
</tbody>
</table>

### Input and resources

<table>
<thead>
<tr>
<th>FIN.1. Regular financial resources</th>
<th>UNIDO regular financial resources consisting of gross regular and operational budgets, miscellaneous income and voluntary contributions to the Special Account for Core Activities (SAVCCA) approved by the General Conference</th>
<th>million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total approved gross budgets in EUR, including figures for:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular budget</td>
<td>€70.4</td>
<td></td>
</tr>
<tr>
<td>Operational budget</td>
<td>€17.8</td>
<td></td>
</tr>
<tr>
<td>SAVCCA</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Total regular financial resources income approved</td>
<td>€88.3</td>
<td></td>
</tr>
<tr>
<td>Assessed contributions</td>
<td>€68.4</td>
<td></td>
</tr>
<tr>
<td>Income against operational budget</td>
<td>€18.9</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous income against regular and operational budgets</td>
<td>€0.2</td>
<td></td>
</tr>
<tr>
<td>Voluntary contributions against SAVCCA</td>
<td>€0.1</td>
<td></td>
</tr>
<tr>
<td>Total regular financial resources income received</td>
<td>€87.5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FIN.2. Voluntary contributions</th>
<th>Voluntary contributions mobilized based on the amount of trust fund agreements signed and recognized as income</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Net approvals in US Dollars</td>
<td></td>
<td>$154.7</td>
</tr>
<tr>
<td>(2) Percentage increase/decrease from previous year</td>
<td></td>
<td>-24%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FIN.3. Programme support costs recovered</th>
<th>Programme support costs incurred by UNIDO in support of the preparation and implementation of programmes/projects funded from extra-budgetary resources that are recovered</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Programme support costs charged as income to the operational budget in EUR</td>
<td></td>
<td>€17.9</td>
</tr>
<tr>
<td>(2) Average percentage of costs recovered based on PSC, technical and operational services and direct service costs</td>
<td></td>
<td>10.9%</td>
</tr>
</tbody>
</table>

| EXP.1. Regular financial resources budget implementation | Total expenditure in EUR against approved regular financial resources | €84.1 |

### Technical cooperation delivery

| EXP.2. | |
|--------------------------|---------------------------------------------------------------|------|
| (1) Expenditure in US Dollars against voluntary contributions in a given calendar year | | $190.3 |
| (2) Percentage increase/decrease from previous year | | 0.3% |

### UNIDO workforce composition and diversity

UNIDO workforce is composed of core staff, namely individuals serving on regular fixed-term appointments under 100-series of Staff Rules, and non-core personnel, namely temporary personnel recruited as ISA holders, interns, partner experts, goodwill ambassadors, 200-series (L) staff and monthly short-term staff

<table>
<thead>
<tr>
<th>UNIDO workforce composition</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Core staff composition by category</td>
<td>Total</td>
</tr>
<tr>
<td>(P, D, NO, GS)</td>
<td>594</td>
</tr>
<tr>
<td>Total Male/female</td>
<td>346/248</td>
</tr>
<tr>
<td>Subtotal professional (P-2 and above)</td>
<td>Total</td>
</tr>
<tr>
<td>Male/female</td>
<td>208</td>
</tr>
<tr>
<td>Subtotal NO: national officers</td>
<td>Total</td>
</tr>
<tr>
<td>Male/female</td>
<td>136/72</td>
</tr>
<tr>
<td>Subtotal GS: general service staff</td>
<td>Total</td>
</tr>
<tr>
<td>Male/female</td>
<td>34/16</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>Male/female</td>
<td>176/160</td>
</tr>
</tbody>
</table>
UNIDO workforce composition (continued)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Headquarters</td>
<td>Field</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>444</td>
<td>130</td>
</tr>
<tr>
<td></td>
<td>Male/female</td>
<td>Male/female</td>
</tr>
<tr>
<td></td>
<td>258/186</td>
<td>78/52</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Offices away from headquarters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Male/female</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>4/2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ITPO offices</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Male/female</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6/8</td>
<td></td>
</tr>
</tbody>
</table>

Core staff composition by office/location

- **b. Core staff index**
  - Percentage of core staff in the UNIDO total workforce: 27.8%

Core staff ratios

- **d. Core staff ratios**
  - G/P – ratio: 1.62
  - P/D – ratio: 8
  - P2+P3/P1+P4+P5 – ratio: 0.027

Non-core personnel index

- **e. Non-core personnel index**
  - Percentage of non-core personnel in the UNIDO total workforce: 72.2%

Total workforce composition by office/location

- **f. Total workforce composition by office/location**
  - Headquarters: Total 824, Male/female 410/414
  - Field: Total 1227, Male/female 457/770
  - Offices away from headquarters: Total 19, Male/female 11/8
  - ITPO offices: Total 69, Male/female 35/34

UNIDO workforce geographical diversity

- **a. Core staff geographical diversity index**
  - Percentage of Member States whose nationals are active core staff members: 58.2%

- **b. UNIDO workforce geographical diversity index**
  - Percentage of Member States whose nationals are active members of the UNIDO workforce: 79.4%
### ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAC</td>
<td>Audit Advisory Committee</td>
</tr>
<tr>
<td>AFCFTA</td>
<td>African Continental Free Trade Area</td>
</tr>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
</tr>
<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
</tr>
<tr>
<td>AUC</td>
<td>African Union Commission</td>
</tr>
<tr>
<td>CEM</td>
<td>Clean Energy Ministerial</td>
</tr>
<tr>
<td>CFC</td>
<td>chlorofluorocarbon</td>
</tr>
<tr>
<td>CP</td>
<td>country programme</td>
</tr>
<tr>
<td>ECP</td>
<td>Entrepreneurship Curriculum Programme</td>
</tr>
<tr>
<td>EDI</td>
<td>Entrepreneurship Development Programme</td>
</tr>
<tr>
<td>ERP</td>
<td>enterprise resource planning</td>
</tr>
<tr>
<td>EQuIP</td>
<td>Enhancing the quality of industrial policies</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>GCF</td>
<td>Green Climate Fund</td>
</tr>
<tr>
<td>GCIP</td>
<td>Global Cleantech Innovation Programme</td>
</tr>
<tr>
<td>GDP</td>
<td>gross domestic product</td>
</tr>
<tr>
<td>GEEW</td>
<td>Gender Equality and Empowerment of Women Strategy</td>
</tr>
<tr>
<td>GEF</td>
<td>Global Environment Facility</td>
</tr>
<tr>
<td>GHG</td>
<td>greenhouse gas</td>
</tr>
<tr>
<td>GMIS</td>
<td>Global Manufacturing and Industrialisation Summit</td>
</tr>
<tr>
<td>HCFC</td>
<td>hydrochlorofluorocarbon</td>
</tr>
<tr>
<td>HLPF</td>
<td>high-level political forum on sustainable development</td>
</tr>
<tr>
<td>IAIP</td>
<td>integrated agro-industrial park</td>
</tr>
<tr>
<td>IDB</td>
<td>Industrial Development Board</td>
</tr>
<tr>
<td>IDDA III</td>
<td>Third Industrial Development Decade for Africa</td>
</tr>
<tr>
<td>IRPF</td>
<td>integrated results and performance framework</td>
</tr>
<tr>
<td>ISID</td>
<td>inclusive and sustainable industrial development</td>
</tr>
<tr>
<td>ITPO</td>
<td>Investment and Technology Promotion Office</td>
</tr>
<tr>
<td>ITS</td>
<td>UNIDO Information Technology Services Division</td>
</tr>
<tr>
<td>LDC</td>
<td>least developed country</td>
</tr>
<tr>
<td>MIC</td>
<td>middle-income country</td>
</tr>
<tr>
<td>MLF</td>
<td>Multilateral Fund for the implementation of the Montreal Protocol</td>
</tr>
<tr>
<td>MSME</td>
<td>micro, small and medium-sized enterprise</td>
</tr>
<tr>
<td>MTPF</td>
<td>medium-term programme framework</td>
</tr>
<tr>
<td>MVA</td>
<td>manufacturing value added</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PCP</td>
<td>Programme for Country Partnership</td>
</tr>
<tr>
<td>PFAN</td>
<td>Private Financing Advisory Network</td>
</tr>
<tr>
<td>POP</td>
<td>persistent organic pollutant</td>
</tr>
<tr>
<td>QI</td>
<td>quality infrastructure</td>
</tr>
<tr>
<td>QAF</td>
<td>Quality Assurance Framework of UNIDO</td>
</tr>
<tr>
<td>RECP</td>
<td>Resource-efficient and Cleaner Production</td>
</tr>
<tr>
<td>REEEP</td>
<td>Renewable Energy and Energy Efficiency Partnership</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
</tr>
<tr>
<td>SHP</td>
<td>small-scale hydropower</td>
</tr>
<tr>
<td>SIDS</td>
<td>small island developing State</td>
</tr>
<tr>
<td>SME</td>
<td>small and medium-sized enterprise</td>
</tr>
<tr>
<td>STI</td>
<td>science, technology and innovation</td>
</tr>
<tr>
<td>TEST</td>
<td>Transfer of Environmentally Sound Technology</td>
</tr>
<tr>
<td>TICAD</td>
<td>Tokyo International Conference on African Development</td>
</tr>
<tr>
<td>UNSDCF</td>
<td>United Nations Sustainable Development Cooperation Framework</td>
</tr>
<tr>
<td>VCM</td>
<td>vinyl chloride monomer</td>
</tr>
</tbody>
</table>
“UNIDO plays an important role in advancing the 2030 Agenda for Sustainable Development. I commend your focus on harnessing the potential of new technologies. Through your partnerships with Governments and the private sector, you can help drive job creation, technology transfer and investments. Your work also helps to combat the climate crisis, by facilitating the transition to circular economies, low-carbon growth, the greening of infrastructure and the reduction of industrial emissions. Thank you for your commitment to inclusive and sustainable industrial development.”
António Guterres, Secretary-General of the United Nations on the occasion of the eighteenth UNIDO General Conference

“The UNIDO Global Network of Regional Sustainable Energy Centres is a good example for a genuine and durable SAMOA Pathway partnership. It is testimony to the ownership and climate ambition that small island developing States are willing to assume in the global climate and energy transformation.”
Tuilaepa Aiono Sailele Malielegaoi, Prime Minister of Samoa

“The EU-UNIDO cooperation is very important in terms of our strong approach to multilateralism, and UNIDO is an international organization that helps us multiply our efforts in this area. We work together in many areas to address key priorities, such as job creation, renewable energy, climate change, and the empowerment of women. Industrial development is also important to address the root causes of migration.”
Stephan Klement, Permanent Representative of the European Union to the United Nations in Vienna, on the occasion of EU-UN 40 Years TOGETHER, November 2019