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INDUSTRIAL DEVELOPMENT ORGANIZATION
Progress by innovation



GREEN INDUSTRIAL RECOVERY PROGRAMME UKRAINE 2024-2028

CREATING OPPORTUNITIES FOR PEOPLE
SUPPORTING BUSINESSES AND ATTRACTING INVESTMENT
FOSTERING A GREEN ECONOMY

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LIST OF ACRONYMS

DAC	Development Assistance Committee
EIB	European Investment Bank
EU	European Union
FAO	Food and Agriculture Organization
GCF	Green Climate Fund
GDP	gross domestic product
GEF	Global Environment Facility
ICT	information and communications technology
IDP	internally displaced person
IFI	international financial institution
ILO	International Labour Organization
IOM	International Organization for Migration
IRPF	integrated results and performance framework
MSMEs	micro-, small and medium-sized enterprises
MTPF	medium-term programme framework
MVA	manufacturing value added
NCB	National Coordination Body
OCHA	Office for the Coordination of Humanitarian Affairs
OECD	Organisation for Economic Co-operation and Development
PMU	Programme Management Unit
RDC	Regional Development Coordinator
RDNA	Rapid Damage and Needs Assessment
RPTC	regular programme of technical cooperation
SDG	Sustainable Development Goal
TF	Transitional Framework
UNCT	United Nations Country Team
UNDP	United Nations Development Programme
UNDSS	United Nations Department of Safety and Security
UNEP	United Nations Environment Programme
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations International Children's Emergency Fund
UNIDO	United Nations Industrial Development Organization
UNRCO	United Nations Resident Coordinator Office
UNSDCF	United Nations Sustainable Development Cooperation Framework
VNR	Voluntary National Review
WHO	World Health Organization

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EXECUTIVE SUMMARY

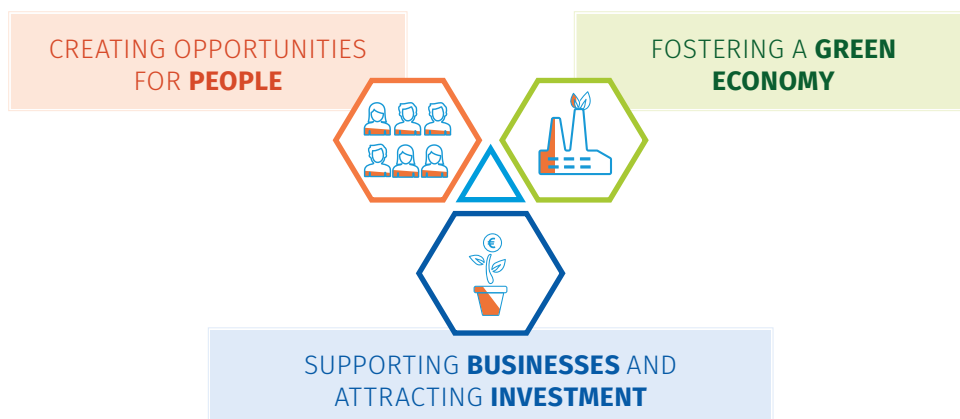
The **green industrial recovery programme for Ukraine 2024-2028** is a strategic framework of the United Nations Industrial Development Organization (UNIDO) to support the response of the Government of Ukraine to the socioeconomic impact of the war in Ukraine, which started on 24 February 2022. The programme sets out a strategic vision for a multi-stakeholder and cross-dimensional partnership to create a transformative and resilient recovery of Ukraine's industry and foster sustainable industrial development.

The UNIDO green industrial recovery programme is guided by the objectives of the 2030 Agenda for Sustainable Development and, in particular, the targets of Sustainable Development Goal (SDG) 9 and is aligned with the Government's early recovery priorities, policy reform vision and national sectoral strategies. All interventions planned under the green industrial recovery programme build on strong cooperation and partnership with line ministries and other national counterparts in Ukraine. The programme was further developed in close consultation with development and funding partners, whose support is indispensable for the programme's operationalization.

The green industrial recovery programme is further synergetic with the strategic frameworks of the United Nations in Ukraine, including the Transitional Framework (TF) 2022-2024. The TF serves as a bridging document between the previous United Nations – Ukraine Partnership Framework 2018-2022 and the upcoming United Nations Sustainable Development Cooperation Framework (UNSDCF) for Ukraine 2025-2029. UNIDO has been an active member and contributor of the United Nations Country Team (UNCT) in Ukraine, cooperating closely with the United Nations Resident Coordinator Office (UNRCO) and sister agencies.

UNIDO envisions a **resilient, green and sustainable industry in Ukraine** and promotes a **strategic and integrated approach**, focusing on the below key inter-connected impact areas.

FIGURE 1: UNIDO IMPACT AREAS FOR THE GREEN INDUSTRIAL RECOVERY OF UKRAINE



The green industrial recovery programme and interventions under it have a funding requirement of **USD 250 million**. Funding will be leveraged through cooperation with development and funding partners under the strategic leadership of the Government of Ukraine.

2 INTRODUCTION

The UNIDO green industrial recovery programme was requested by the Government of Ukraine in June 2022 in response to the repercussions of the war in Ukraine that started in February 2022. The request was further reiterated throughout 2023. The programme was developed in line with the country's strategic priorities, needs and capacities, as well as UNIDO's mandate, service offer and strategic vision.

The programme is further based on the [UNIDO strategy for post-conflict/-crisis situations](#). As the United Nations specialized agency mandated to advance inclusive and sustainable industrial development, UNIDO leverages its technical know-how to restore livelihoods, strengthen employability, support environmental sustainability and build resilient communities out of ones that have been affected by crises and conflicts.

Over the past decade, UNIDO's work in post-conflict/-crisis settings has become increasingly relevant. UNIDO has been active in addressing the needs of vulnerable peoples and communities, including forcibly displaced persons. UNIDO has also supported post-crisis rehabilitation efforts by securing, restoring and developing livelihoods and productive capacities. UNIDO's approach to post-conflict situations is founded on the following principles:

Promotion of participatory processes: Following the logic that participation creates ownership and increases the efficiency of industrial strategies and policies by capitalizing on context-based knowledge and institutions, the approach applies UNIDO's convening power to bring relevant stakeholders together.

Opportunities for short-term successes in support of longer-term impact: Overambitious objectives can hamper the achievement of development goals. While long-term thinking and vision at the industrial level is a core element of national industrial strategies also in post-conflict situations, delivering sustainable industrial development quick wins in rehabilitation and job creation facilitates a positive impact in the longer term for inclusive growth. UNIDO thereby aims to build bridges between industrial rehabilitation and development activities through a combination of quick interventions and longer-term support.

Integration and scale-up: In light of the volatility of post-conflict environments, multi-disciplinary sustainable industrial development approaches encompass analysis, formulation of policies and action plans and the implementation, demand for replication and expansion of successful practices and policies.

The programme therefore will take a staged approach to recovery and development, building around the below three phases.

FIGURE 2: UNIDO PHASED APPROACH TO THE GREEN INDUSTRIAL RECOVERY OF UKRAINE



Acknowledging the current high degree of uncertainty and fluidity of the situation in Ukraine, the programme provides an overarching strategic planning direction for UNIDO's operations in the country while remaining adjustable as the situation evolves.

As part of the **preparatory phase** undertaken in 2023, UNIDO carried out extensive analytical and research activities consolidated in a comprehensive industrial diagnostic study and other knowledge products, addressing the cross-sectoral nature of the impact of the war on Ukraine's industry. Some pilot emergency response activities have been launched. UNIDO prepared the necessary groundwork for the green industrial recovery programme and established strong networks of partners in Ukraine and beyond, allowing for swift and efficient scale-up.

During the **early recovery phase**, UNIDO will deliver response actions focusing on the provision of the best available business practices, knowledge, modern technology, training and capacity-building for ensuring that people in Ukraine have access to jobs and income-generating opportunities, resilience to continuous shocks is strengthened and key industrial processes are maintained for the stabilization of Ukraine's economy and industry.

The **reconstruction phase** will target medium- and long-term objectives of the country's development around the identified strategic areas based on the results achieved in the preceding period. During this phase, UNIDO will work to foster the country's continuous recovery, resilience building and development based on the identified high-potential industrial sectors, evolving needs and newly developed policy frameworks.

3 COUNTRY CONTEXT

NATIONAL VISION AND DEVELOPMENT GOALS

Prior to the start of the war in 2022, Ukraine had been on the path of reforming its governance system and transforming the economic model towards greater efficiency and sustainability with certain challenges along the way. According to Ukraine's 2021 Voluntary National Review (VNR), since 2015, a series of reforms have been launched in Ukraine, aiming to implement socioeconomic transformations and strengthen its democratic system. The SDGs are integrated into the state policy on a "leave no one behind" basis. According to the VNR's results, Ukraine has generally achieved progress in 15 of 17 SDGs. A key success is poverty reduction – from 58.3 per cent in 2015 to 43.2 per cent in 2018.

The outbreak of the war drastically changed the country's set of priorities and needs, reversing some of the previous achievements and trends. Ukraine is committed to building back better and reforming its socioeconomic and industrial systems with a future orientation towards resilience and sustainability. European Union (EU) integration has become one of the key processes informing Ukraine's national vision in development goals. On 14 December 2023, the European Council decided to open negotiations with Ukraine on EU membership. The Government of Ukraine further started exploring its needs in terms of meeting the requirements of the EU *acquis*, which is the collection of common rights and obligations that constitute the body of the EU law and are incorporated into the legal systems of all EU members.

POLICY FRAMEWORK

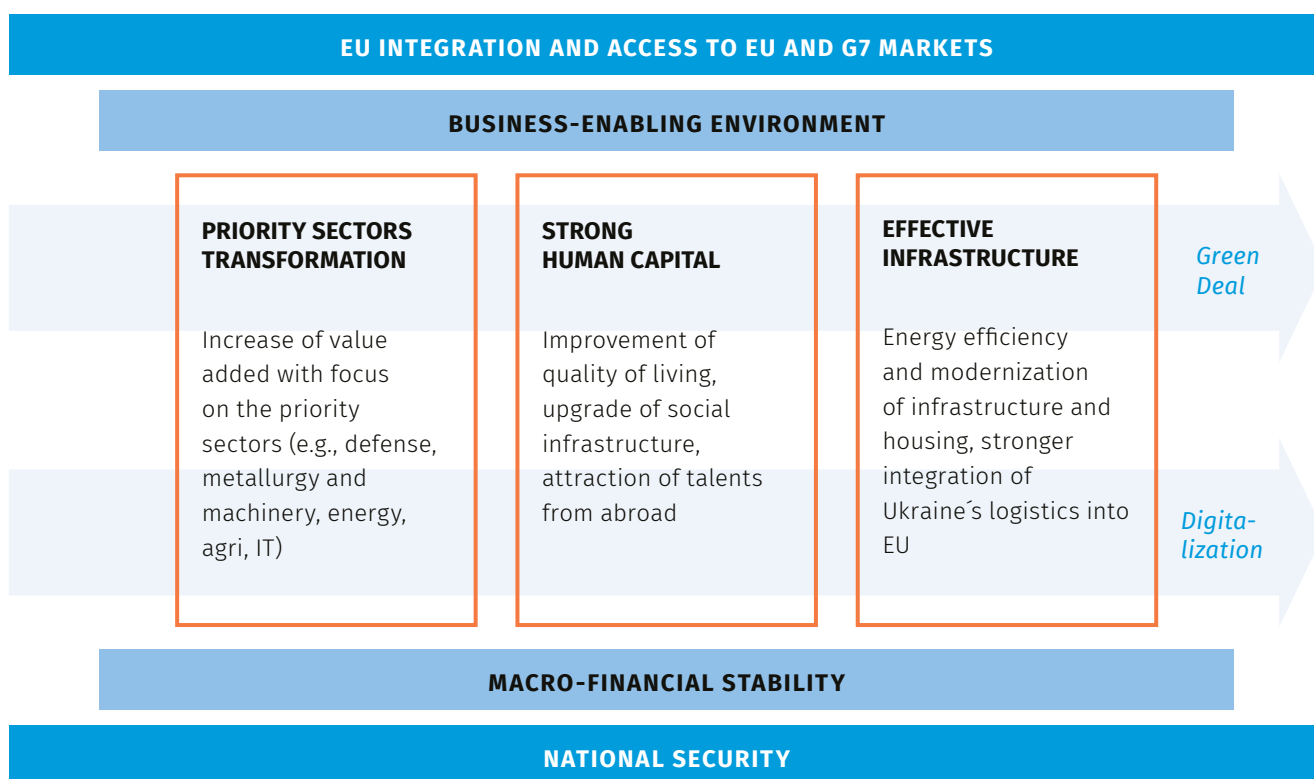
Ukraine does not have a formalized industrial development policy. The most recent draft was developed in 2017 by the former Ministry of Economic Development and Trade (currently, the Ministry of Economy) and was structured around the following three pillars: inclusive and sustainable industrial development, strengthening the integration of global production networks and increasing the resource efficiency of industry.

The [Sustainable Development Strategy for Ukraine until 2030](#) was also drafted in 2017 but has not been adopted. In 2019, the SDGs and their achievement were officially incorporated into the national agenda by the [Decree of the President of Ukraine "On the Sustainable Development Goals of Ukraine for the period up to 2030"](#) taking into account the National Report „Sustainable Development Goals: Ukraine“. In 2020, the [Cabinet of Ministers of Ukraine](#) stipulated the need to achieve the SDGs in the process of formulating and implementing the state policy of Ukraine.

The strategic document that outlines Ukraine's vision for economic and industrial development until 2030 is the [National Economic Strategy](#) adopted in 2021. The expected results of the National Economic Strategy include the establishment of a favourable environment for business development and investment, achievement of competitiveness in the international market, development of innovations, modernization of economic sectors and development of human potential, as well as ensuring equal opportunities for women and men. The National Economic Strategy will be reviewed in 2024 and 2027, taking into account the results of its implementation.

However, the ongoing war has challenged the relevance of national strategic documents through the major disruption of economic activity and damage to the infrastructure, environment and livelihoods of the Ukrainian people. As a response, the draft National Recovery Plan was developed and presented at the Ukraine Recovery Conference 2022 in Lugano (Figure 3) and further adjusted to meet the country's evolving needs.

FIGURE 3: RECOVERY VISION OF UKRAINE, 2022



In 2024, the Government of Ukraine prepared a draft strategy for the recovery, sustainable development and digital transformation of small and medium-sized enterprises for the period up to 2027. This strategy is consistent with and complements the Ukraine Plan (replacing the National Recovery Plan), a comprehensive document setting out a programme of actions and specific reforms for the next four years to be implemented through the mechanisms provided by the EU's Ukraine Facility – a major financing mechanism for the reconstruction of Ukraine.

The main documents that contain provisions on environmental policy in Ukraine are the Law “On the Basic Principles of the State Environmental Policy of Ukraine until 2030”, the National Environmental Action Plan until 2025 and the National Economic Strategy 2030. The former covers environmental issues as part of broader economic policy, and the National Economic Strategy 2030 addresses “green” goals at the sectoral level (e.g. energy, industry and mining). To strengthen the country's energy systems, the Government of Ukraine approved the National Energy Strategy of Ukraine (Order of the Cabinet of Ministers of Ukraine dated 21 April 2023 No. 373-p). Support for innovation is outlined in the Strategy for the Development of the Innovation Sector until 2030 and the Action Plan for its Implementation for 2021-2023.

INDUSTRIAL CONTEXT

Before the war, in 2021, [Ukraine's gross domestic product \(GDP\) growth](#) was comparatively low (3.4 per cent year-on-year) when compared to that of Central Europe and the Baltics, which was 6.5 per cent year-on-year. Like its neighbours, Ukraine also experienced COVID-19-related contractions of GDP at a rate of -3.8 per cent, compared to the average of -3.4 per cent for Central Europe and the Baltics as a whole.

In the last decade, the [national economic structure of Ukraine](#), previously heavily focused on the export of goods, progressively shifted towards the service economy with an emphasis on information and communications technology (ICT) services, which made up 39 per cent of service exports in 2021 (compared to 14 per cent in 2014). The service sector employed most of the workforce in 2021 and accounted for half of GDP. In contrast, [agriculture](#) made up only 11 per cent of national GDP in 2021 and 14 per cent of employment but a large proportion of total exports (43.9 per cent). As one of the major grains and vegetable oil producers, Ukraine played a critical role in ensuring global food security.

The [labour market had structural weaknesses](#), such as a relatively high and persistent unemployment rate (10.1 per cent for women and 9.5 per cent for men in 2021), a sustained gender gap, as well as a shrinking labour force due to an ageing population and outflow migration. The International Labour Organization (ILO) also highlights [elevated youth unemployment](#), inactivity and a notable skills mismatch. In addition, there was a high degree of informality in the labour market (21 per cent of the workforce in 2019), mainly in the agriculture, wholesale and trade, as well as the construction sector.

Before the war, Ukraine was characterized by [increasing inequalities](#) with Kyiv city, central regions (oblasts) (Dnipropetrovsk, Poltava) and some eastern oblasts (Kharkiv, Zaporizhzhia) seeing faster economic growth than western and central parts of the country. While the cities of Kyiv and Kharkiv attracted most of the ICT and financial service activities, eastern oblasts had higher concentrations of industrial activities. Therefore, regional centres in those oblasts attracted most of the national and international investment. This led to growing income disparities between those areas and the rest of the country, further exacerbated by increased labour migration from western oblasts to neighbouring countries.

According to the UNIDO industrial diagnostic study, Ukraine's industrial production is facing profound challenges, preceded by a series of shocks that have had an impact on the growth rate of the country's GDP (Figure 4) and industrial production (Figure 5) over the last 15 years.

FIGURE 4: DYNAMICS OF UKRAINE'S GDP GROWTH, 2000-2022

Data source: World Development Indicators, World Bank

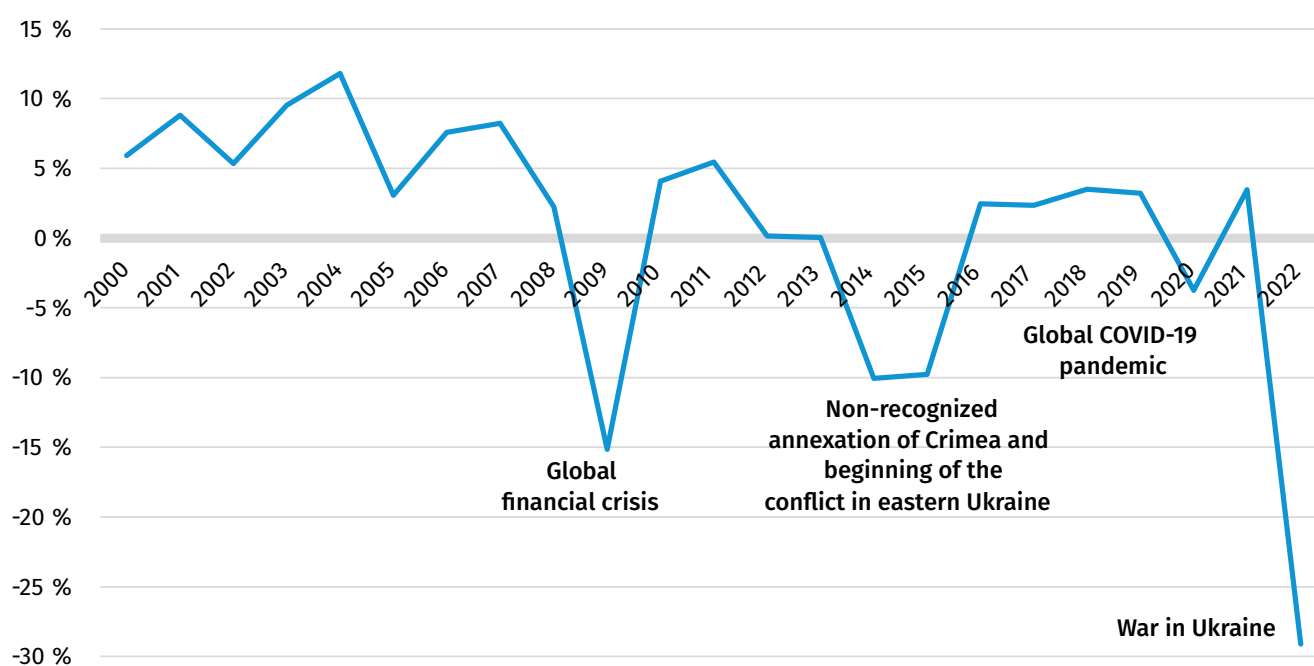
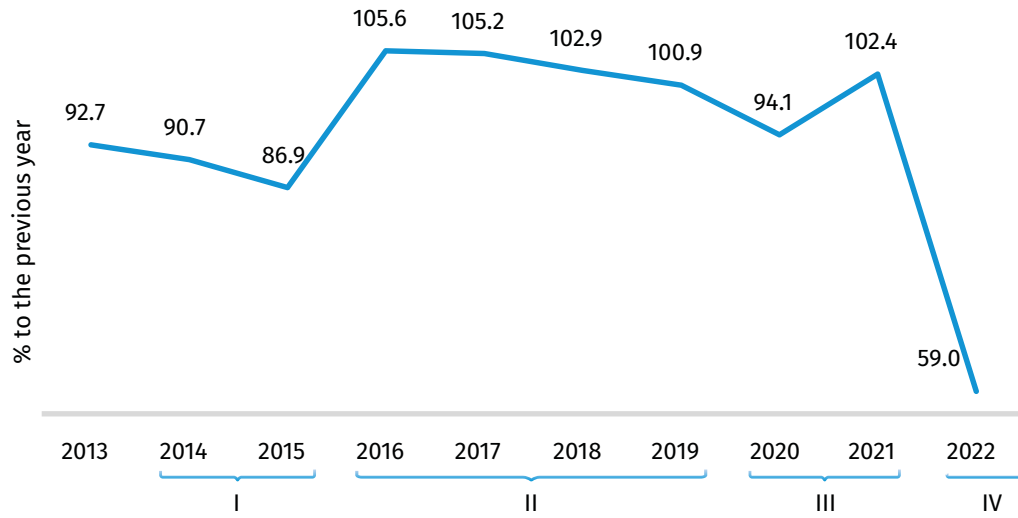


FIGURE 5: UKRAINE'S MANUFACTURING INDUSTRIAL PRODUCTION INDEX, 2013-2022

Data source: State Statistics Service of Ukraine



Note: I – non-recognized annexation of Crimea and beginning of the conflict in eastern Ukraine; II – continuation of the conflict in eastern Ukraine; III – continuation of the conflict in eastern Ukraine and spread of the COVID-19 pandemic; IV – war in Ukraine

Despite Ukraine's relatively strong performance in the ranking of the SDGs (38th of 166 economies), a concerning trend in the country's industrial development indicators is evident, namely a decreasing share of manufacturing value added (MVA) in total GDP (Figure 6) and a decline in industry employment (Figure 7). Moreover, industry's environmental footprint presents a challenge, with the intensity of Ukraine's industrial water use (Figure 8), raw material consumption (Figure 9) and CO₂ emissions (Figure 10), considerably surpassing the EU's average. Hence, there is a pressing need to prioritize policy initiatives aimed at advancing Ukraine's industrialization in alignment with the SDG targets.

FIGURE 6: SHARE OF MVA IN GDP, 2010-2022

Data source: National Accounts, United Nations Statistics Division

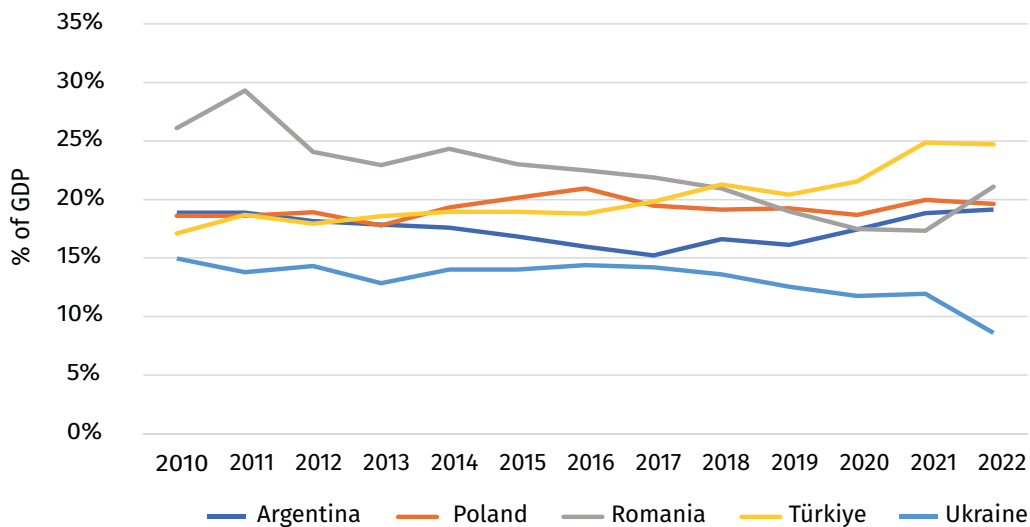


FIGURE 7: SHARE OF INDUSTRY EMPLOYMENT, 2010, 2015 AND 2021

Data source: World Development Indicators, World Bank

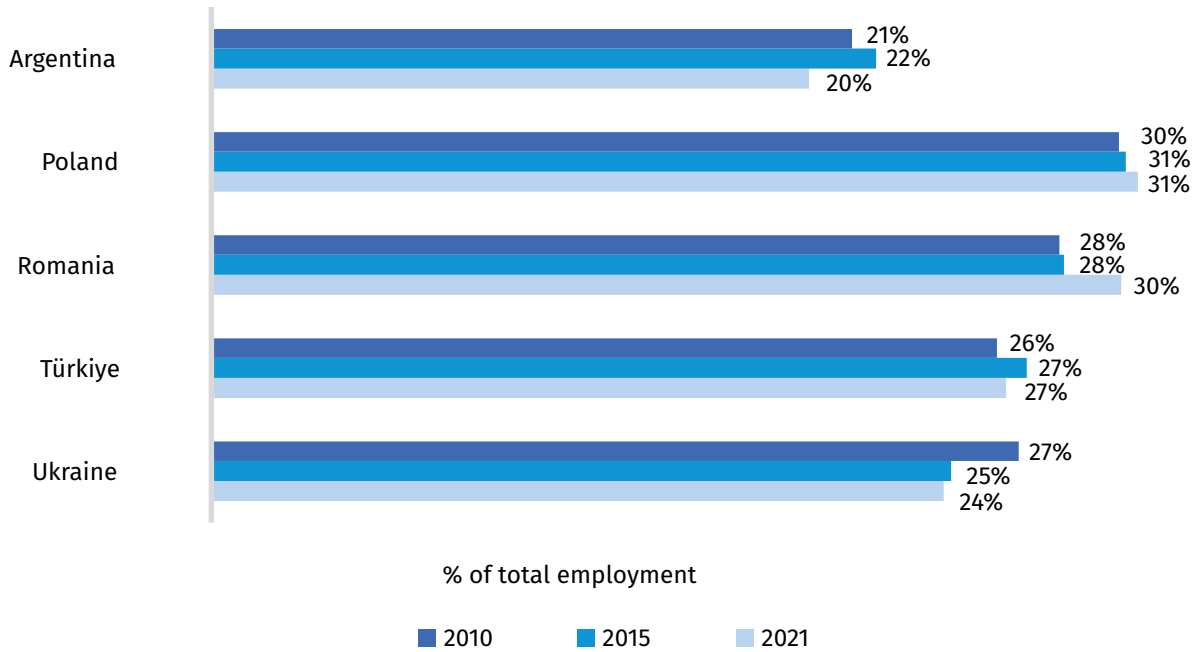
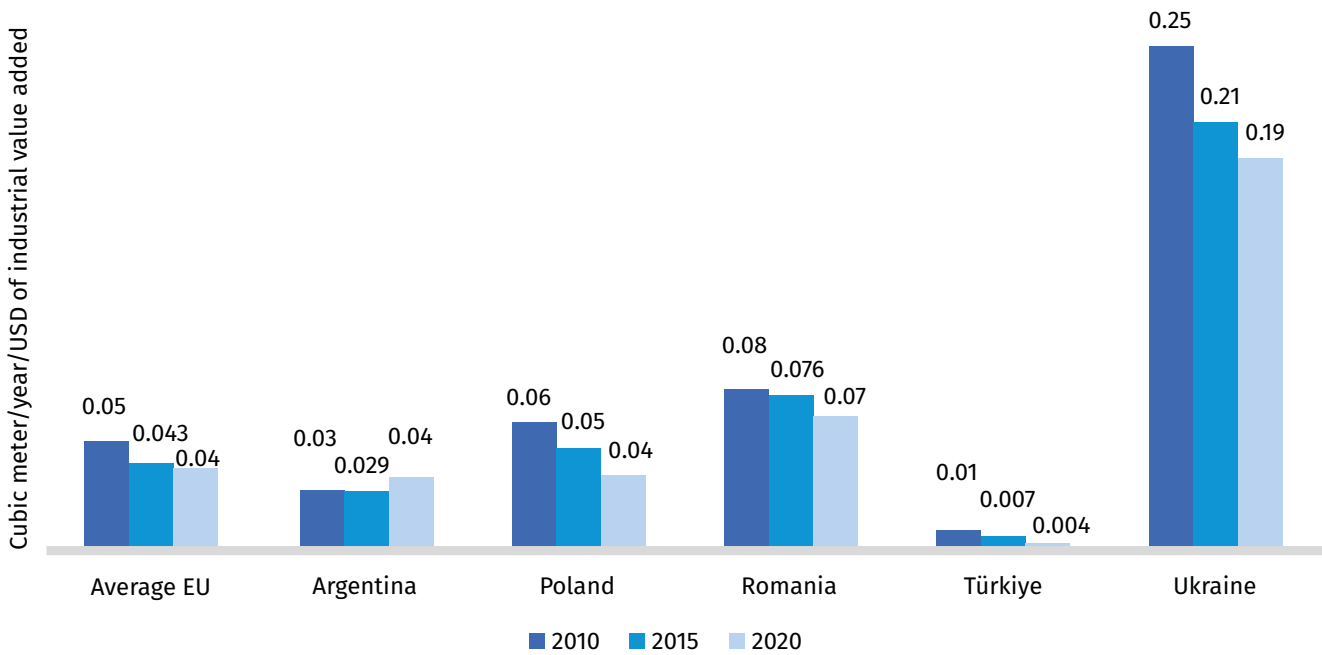


FIGURE 8: INDUSTRIAL WATER USE INTENSITY, 2010, 2015 AND 2020

Data source: UNIDO elaboration based on AQUASTAT, Food and Agriculture Organization (FAO) (industrial water withdrawal) and World Development Indicators, World Bank (industry value added)



Note: The average of the EU for this specific indicator corresponds to all European countries

FIGURE 9: RAW MATERIAL CONSUMPTION INTENSITY, 2010, 2014 AND 2018

Data source: UNIDO, based on Hotspot Analysis Tool for Sustainable Consumption and Production, Vienna University of Economics and Business (raw material consumption) and World Development Indicators, World Bank (GDP)

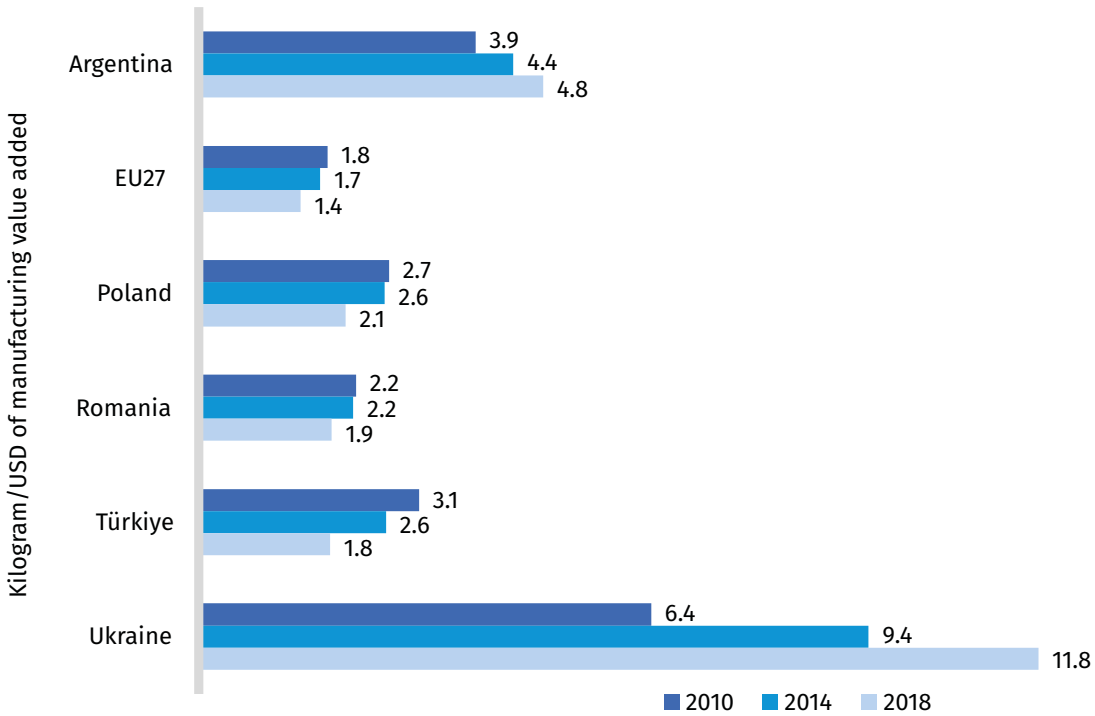
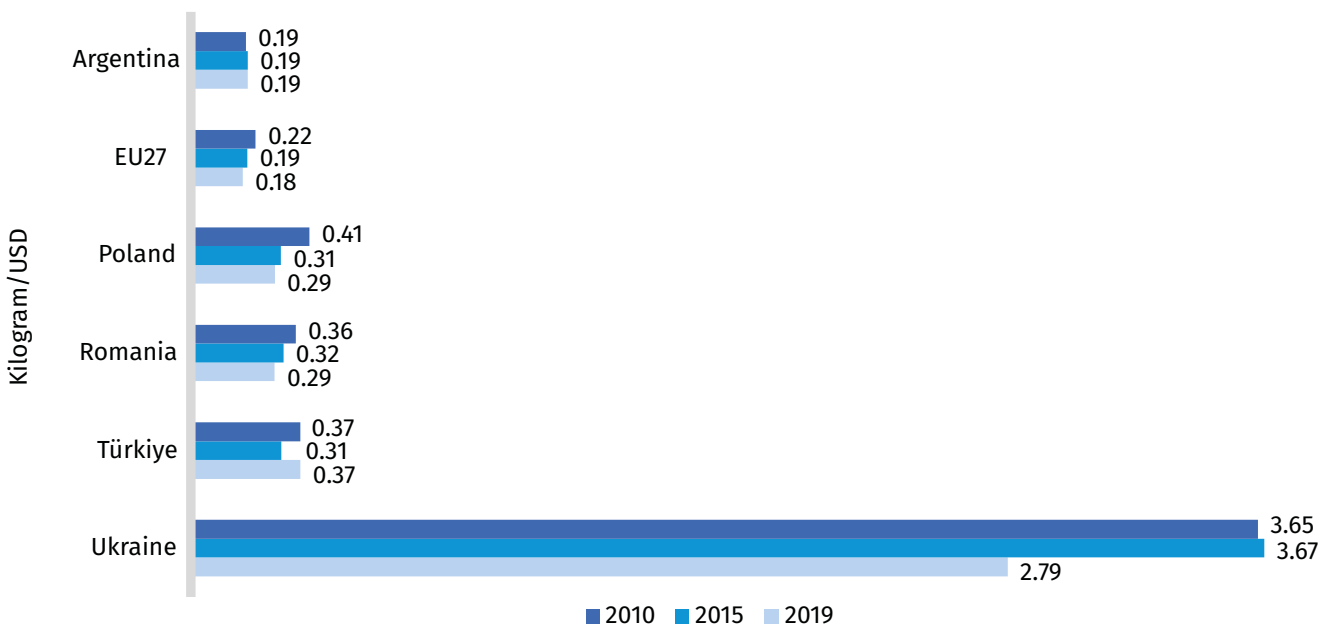


FIGURE 10: MANUFACTURING CO₂ EMISSIONS INTENSITY, 2010-2020

Data source: UNIDO based on the Organisation for Economic Co-operation and Development (OECD) (manufacturing CO₂ emission) and World Development Indicators, World Bank (MVA)



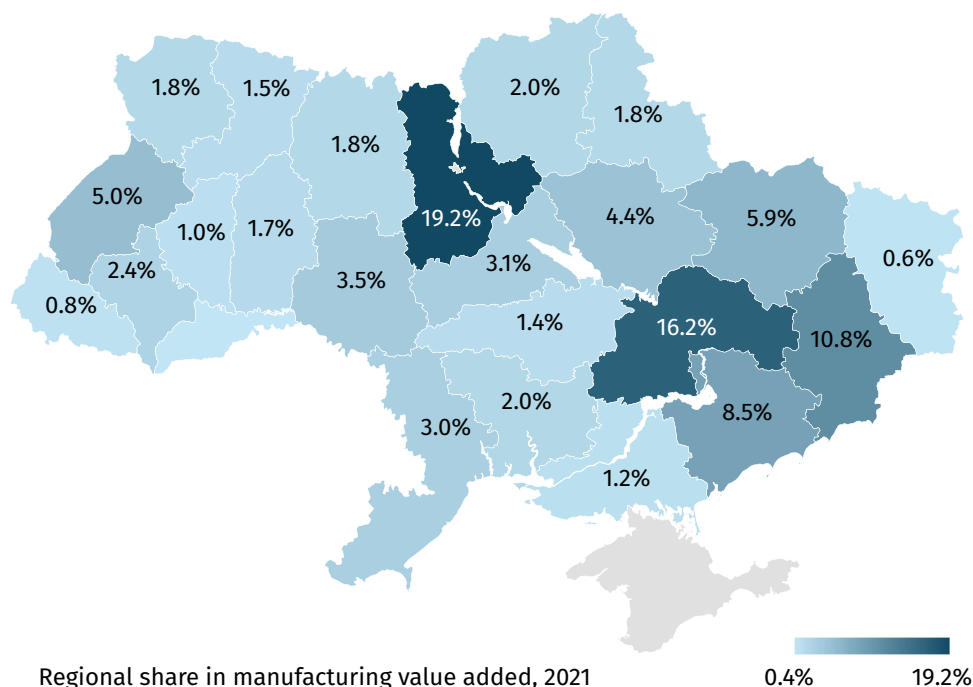
IMPACT OF THE WAR

According to the UNIDO industrial diagnostic study, the ongoing conflict has exacerbated the country's challenges on the path towards inclusive and sustainable industrial development. The generation of MVA is concentrated in five regions (oblasts): Kyiv (19.2 per cent of MVA), Dnipropetrovsk (16.2 per cent of MVA), Donetsk (10.8 per cent of MVA), Zaporizhzhia (8.5 per cent of MVA) and Kharkiv (5.9 per cent of MVA). Together, these regions accounted for 60.6 per cent of the country's MVA and 60.2 per cent of capital investment in 2021 (Figures 11 and 12). The geographic location of these regions in Ukraine's east and southeast, where the armed conflict is concentrated, has rendered the manufacturing sector in these areas particularly vulnerable to the war's impacts.

Figure 13 presents an overview of Ukraine regions' export performance in 2022 compared to the three-year average from 2019 to 2021. The data reveal substantial variations across regions, with exports from non-frontline regions outperforming other regions. All regions with the exception of Ivano-Frankivsk oblast located further away from the frontline witnessed an uptick in their exports in 2022 resulting in an overall increase of 21 per cent in their export volumes. All frontline regions, on the other hand, experienced a significant downturn, with their aggregate exports plummeting by 58 per cent in 2022 relative to the average between 2019 and 2021.

FIGURE 11: UKRAINE'S REGIONAL DISTRIBUTION OF MVA, 2021

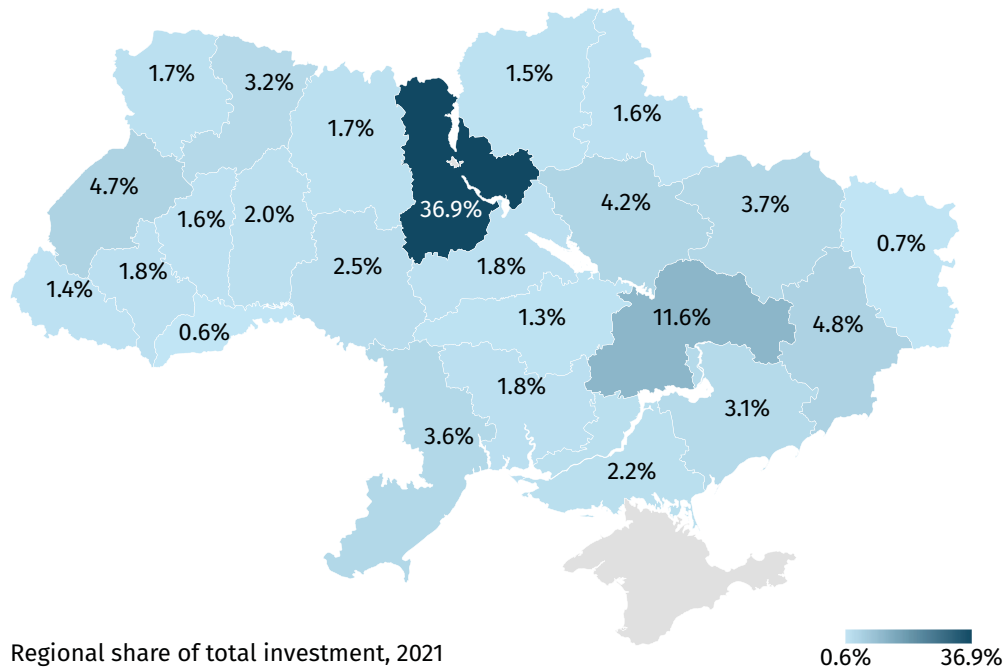
Data source: State Statistics Service of Ukraine



Note: The boundaries, names and designations on this map do not imply UNIDO's official endorsement or acceptance

FIGURE 12: UKRAINE'S CAPITAL INVESTMENT BY REGION, 2021

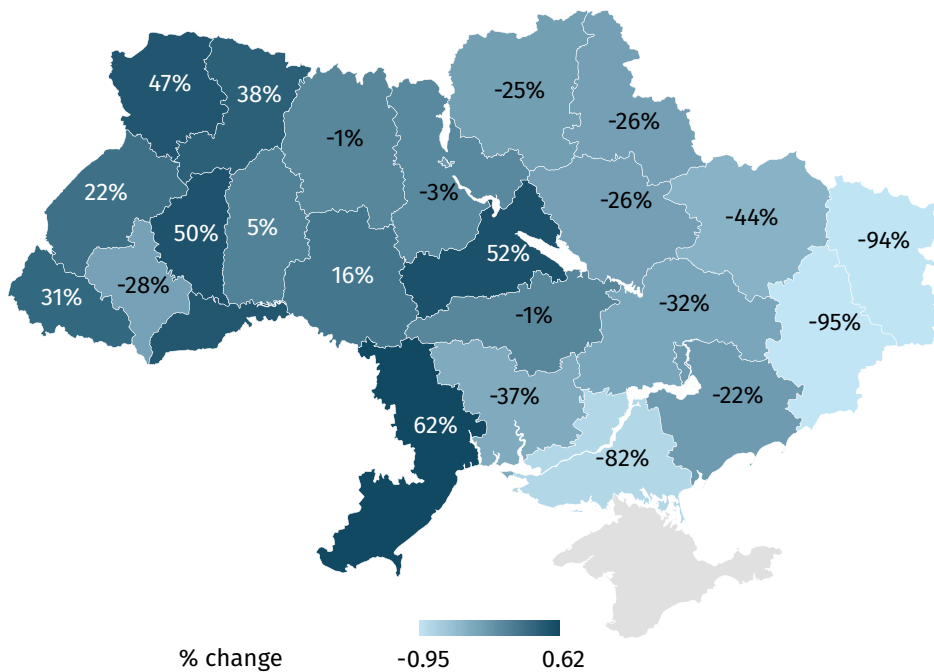
Data source: State Statistics Service of Ukraine



Note: The boundaries, names and designations on this map do not imply UNIDO's official endorsement or acceptance

FIGURE 13: REGIONAL PERCENTAGE CHANGE IN GOODS EXPORTS IN 2022 RELATIVE TO THE AVERAGE BETWEEN 2019 AND 2021

Data source: State Statistics Service of Ukraine



Note: The boundaries, names and designations on this map do not imply UNIDO's official endorsement or acceptance

The war has led to a decrease in the volume of industrial products sold in 15 out of 24 two-digit industries (ISIC classification) with the most significant decline observed in the tobacco industry (53 per cent), followed by machinery and equipment (38 per cent), other non-metallic mineral products (34 per cent), basic metals (29 per cent) and printing and reproduction of recorded media (also 29 per cent). All two-digit manufacturing industries (ISIC classification) experienced a decline in production with basic metals, coke and refined petroleum, as well as non-metallic materials seeing a reduction of over 60 per cent in 2022 compared to the 2019-2021 average. Frontline regions, such as Zaporizhzhia oblast, Donetsk oblast, Kharkiv oblast and the city of Kyiv suffered the most in terms of value-added loss. Donetsk oblast, a frontline region, incurred the highest damage and loss, necessitating an estimated USD 10.5 billion in support.

In terms of trade, Ukraine's aggregate exports and imports in goods declined by 18.8 per cent and 13.3 per cent respectively in 2022 compared to the average of 2019-2021. However, exports to the EU increased by 30 per cent, while non-EU exports decreased by 51 per cent. Ukraine's imports from the EU increased by 1 per cent while imports from non-EU countries decreased by 24 per cent. Regionally, exports from frontline oblasts fell by 58 per cent in 2022 compared to the average exports of 2019-2021. The largest declines in exports were observed in Donetsk oblast (95 per cent), Luhansk oblast (94 per cent) and Kherson oblast (82 per cent). Non-frontline regions experienced an increase in exports of 21 per cent. In many frontline regions, a few sectors account for most of the region's exports. For instance, basic and fabricated metals accounted for 89 per cent of Donetsk oblast's total exports in 2021. These sectors experienced a fall in exports of 99 per cent. In the Kharkiv oblast, food and beverage exports declined by 51 per cent, while machinery exports declined by 58 per cent in 2022. These sectors accounted, respectively, for 34 and 22 per cent of total region exports.

According to the World Bank's third Rapid Damage and Needs Assessment (RDNA 3), the total damage to the commerce and industry facilities between February 2022 and 31 December 2023, is estimated at USD 15.6 billion, a 43 per cent increase above the estimated USD 10.9 billion reported in [RDNA 2](#) as of 24 February 2023. Most of the damage (83.6 per cent) was to industry with the rest to commerce. About half of the damage (56 per cent) occurred to large and medium-sized enterprises, both public and private (USD 8.8 billion). Roughly half of the damage estimate for those firms (USD 4.2 billion) was due to the destruction of two steel plants in Donetsk oblast.

4 PROGRAMME COMPONENTS

IMPACT AREAS

To achieve the long-term industrial recovery of Ukraine, people and businesses need to be supported across the country, including on the local level. To facilitate social cohesion and increase the labour force participation rate, particularly among vulnerable and marginalized groups, skills development and new employment opportunities are required together with strategies to enable the reinsertion of war-affected people into the labour market. Businesses must be supported in getting access to know-how and expertise, upgrading their practices and processes, increasing their competitiveness and value addition, as well as strengthening their access to markets to incentivize investment. All interventions must ensure that production and products are green, energy-efficient and resource-efficient, fostering the advancement of a circular economy.

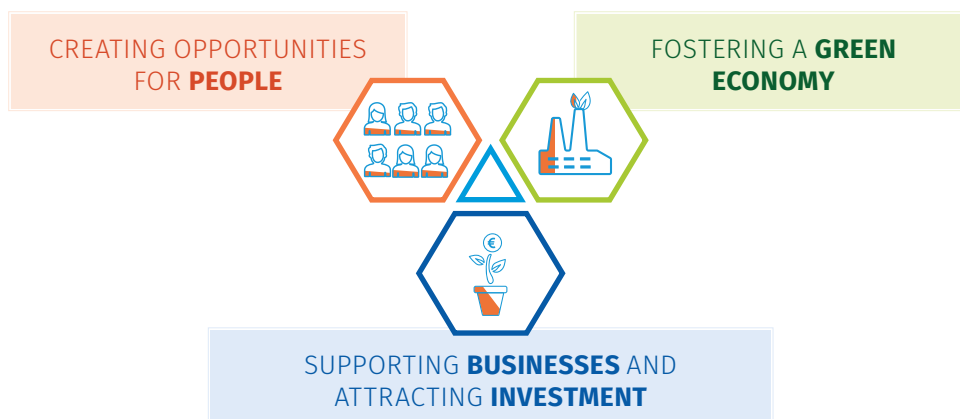
The key recommendations of the UNIDO industrial diagnostic study informing the current programme and UNIDO's cooperation with counterparts in Ukraine are the following:

- Reiterate the industrial policy as a priority in the Government's agenda to reverse the trend of deindustrialization;
- Approve an action plan for recovery and reconstruction;
- Take decisions on industry prioritization, territorial rebalancing of industrial development and product and market diversification to reduce vulnerability;
- Reverse the decline in the production of medium-tech products, innovation and digitalization within Ukraine's industrial economic system;
- Address the collapse of foreign and domestic investment since the outbreak of the war and the limited access of firms to credit by introducing a comprehensive programme of loans, grants and investment promotion initiatives for recovery, expansion and upgrading;
- Provide technical assistance to support micro-, small and medium-sized enterprises (MSMEs), youth and women to promote economic empowerment and improve their technical skills;
- Provide technical assistance to policymakers at the national and local levels to identify priority industrial sectors, products with growth potential and value chains with strong prospects of increased value addition;
- Make technical assistance available to industrial sectors that are heavily affected by the conflict;
- Amend the regulatory framework (reducing administrative burdens, reforming legislation and public procurement) and promote business upgrading initiatives (upgrading production processes, promoting Ukraine's businesses in foreign markets and participating in international exhibitions), as the preliminary findings from the UNIDO survey suggest that tax exemptions or reductions, access to new credit, grant support and preferential loans are identified by businesses as current and future policy instruments that could mitigate the conflict's effects;
- Support access to financial resources, dealing with red tape and finding new international and domestic markets;
- Intensify efforts to increase the relevance of Ukrainian products in the European market and align Ukrainian standards with EU requirements;
- Intensify efforts to increase the relevance of Ukrainian products in the European market and align Ukrainian standards with EU requirements;

- Simplify regulations and improve the business environment;
- Review education; programmes and technical and vocational education and training to improve connections with the industrial system;
- Improve statistics reporting for monitoring;
- Strengthen public-private partnerships;
- Promote sound environmental practices related to circular economy, resources (water and energy), material efficiency and decarbonization to support the green transformation of the industrial sector and of the economy to boost business competitiveness;
- Decarbonize hard-to-abate industries, diversify towards low-emissions intensity products and promote structural transformation towards less emission-intensive sectors;
- Rebuild energy infrastructure and green the energy and electricity systems with a stronger focus on small plants to meet consumer needs (distributed energy);
- Improve governance through capacity development, stringent monitoring of policy measures and effective decentralization.

Taking into consideration the identified needs and long-term industrial recovery and development opportunities, the UNIDO theory of change is built around the below three primary impact areas, corresponding to the Organization's mandate, service offer and comparative advantage.

FIGURE 1: UNIDO IMPACT AREAS FOR THE GREEN INDUSTRIAL RECOVERY OF UKRAINE

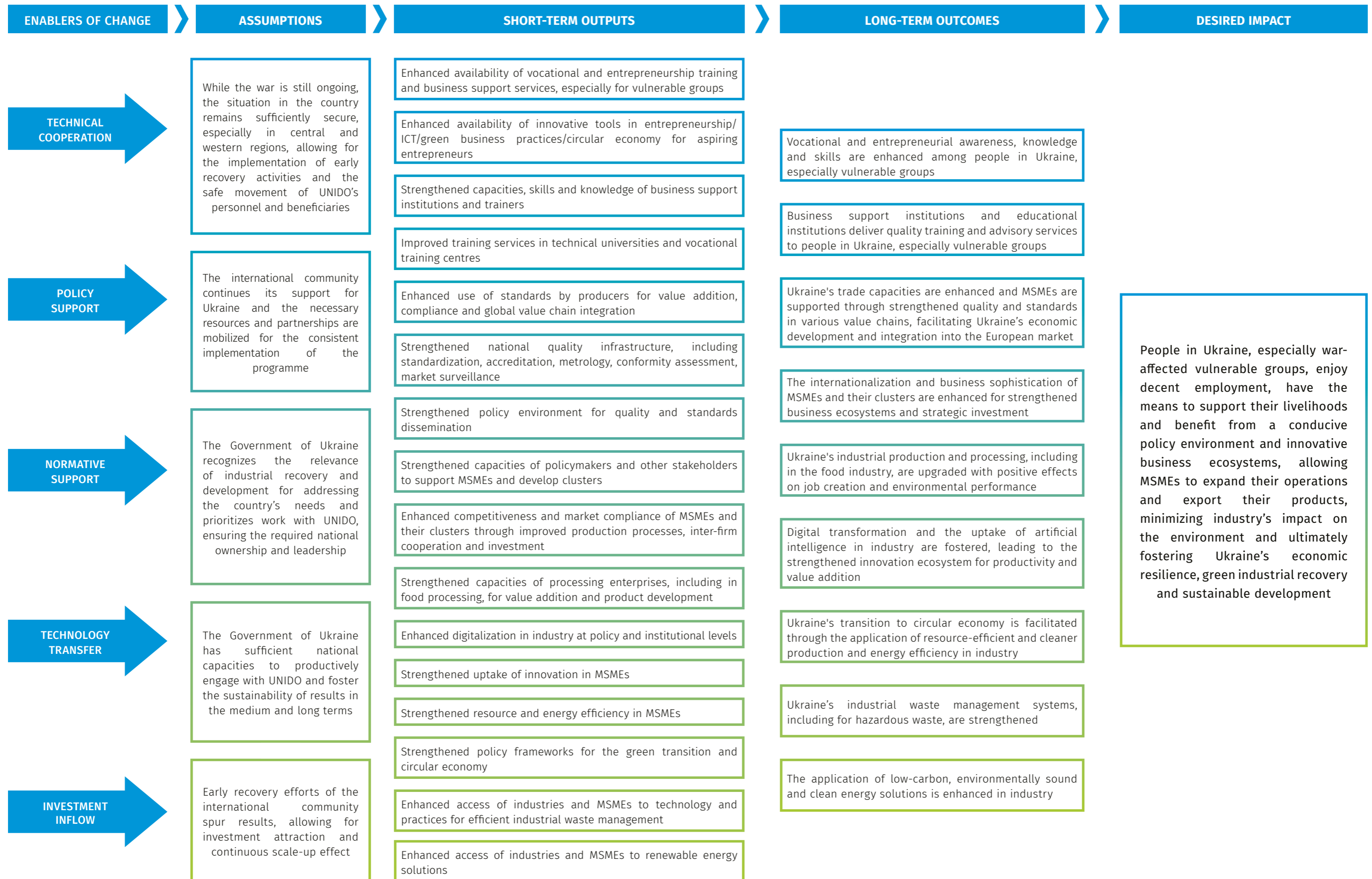


Each of these impact areas will be explored further based on the evolving situation in Ukraine, the Government's emerging needs and priorities, opportunities for partnerships and resource mobilization and with due consideration given to the work of other United Nations sister agencies, development agencies, international financial institutions, humanitarian organizations, civil society and the private sector.

UNIDO's overarching strategic vision for Ukraine is contained in the below theory of change, reflecting the chain of impact and necessary preconditions for the development of durable solutions and long-term results.

THEORY OF CHANGE

FIGURE 14: THEORY OF CHANGE OF THE GREEN INDUSTRIAL RECOVERY PROGRAMME



5 STRATEGIC FRAMEWORK

RATIONALE FOR THE PROGRAMME

UNIDO's response to the war in Ukraine is part of the Organization's long-standing commitment to the country's sustainable industrial development, economic growth, social well-being and environmental sustainability. For many years, UNIDO has been contributing towards improving and greening the productive capacities of Ukraine through industrial policymaking, technical cooperation, capacity-building, peer learning, knowledge transfer and private sector engagement, among others.

As of the beginning of 2024, UNIDO has a network of 39 national experts deployed in Ukraine and implements a diverse portfolio of projects with a total budget exceeding USD 25 million. While the majority of projects started in Ukraine before the war and adapted their activities to address the emerging country's needs, new initiatives were launched in 2023 as pilot activities under the framework of the green industrial recovery programme to address the acute needs of Ukraine and its people in response to the war. All UNIDO projects contribute to the overarching objectives of the green industrial recovery programme and complement each other with a vision of the theory of change presented in Figure 14.

An overview of the UNIDO project portfolio in Ukraine covering the years 2023 and 2024 is provided below.

FIGURE 15: UNIDO PROJECT PORTFOLIO IN UKRAINE

<p>Introduction of energy management system standards in Ukraine's industry</p> <p>Donor: Global Environment Facility Budget: USD 5.5 million</p>	<p>Environmentally sound management and final disposal of polychlorinated biphenyls (PCBs)</p> <p>Donor: Global Environment Facility Budget: USD 5.2 million</p>	<p>Global Cleantech Innovation Programme (GCIP) for start-ups in Ukraine (phases 1 and 2)</p> <p>Donor: Global Environment Facility Budget: USD 2.9 million</p>
<p>Global Eco-Industrial Parks Programme (GEIPP) in Ukraine (phase 1)</p> <p>Donor: Switzerland (SECO) Budget: EUR 2.2 million</p>	<p>Global Quality and Standards Programme (GQSP) in Ukraine (phases 1 and 2)</p> <p>Donor: Switzerland (SECO) Budget: EUR 2.1 million</p>	<p>EU4Environment programme</p> <p>Donor: European Union Budget: EUR ~1.3 million</p>
<p>Accelerating investment for climate and clean energy SMEs in Ukraine (PFAN)</p> <p>Donors: Sweden (Sida), Norway (Norad) Budget: USD ~800,000</p>	<p>Women and youth economic empowerment in western Ukraine for inclusive and sustainable recovery</p> <p>Donor: Austria Budget: EUR 600,000</p>	<p>Industrial capacity-building, policy advice and diagnostics for the green recovery of Ukraine</p> <p>Donor: Germany (BMZ) Budget: EUR 3 million</p>
<p>Strengthening the resilience and competitiveness of Ukraine's quality infrastructure</p> <p>Donor: Germany (GIZ) Budget: EUR 750,000</p>	<p>Emergency assistance for 3D-printed prosthetics and job creation in Ukraine</p> <p>Donor: Japan Budget: USD 1 million</p>	<p>Emergency assistance for job integration of disabled people through 3D-printing technology in Ukraine</p> <p>Donor: Japan Budget: USD 730,000</p>

In addition, there are four UNIDO hard pipeline projects under development for Ukraine as a part of the green industrial recovery programme.

FIGURE 16: UNIDO HARD PIPELINE PROJECTS IN UKRAINE



Furthermore, in order to allow a swift and efficient scale-up of the UNIDO project portfolio in Ukraine and based on the vast knowledge and networks established in the country, the below 14 initial project proposals have been requested by the Government of Ukraine and developed by the Organization in close cooperation with relevant stakeholders for further discussion with funding partners.

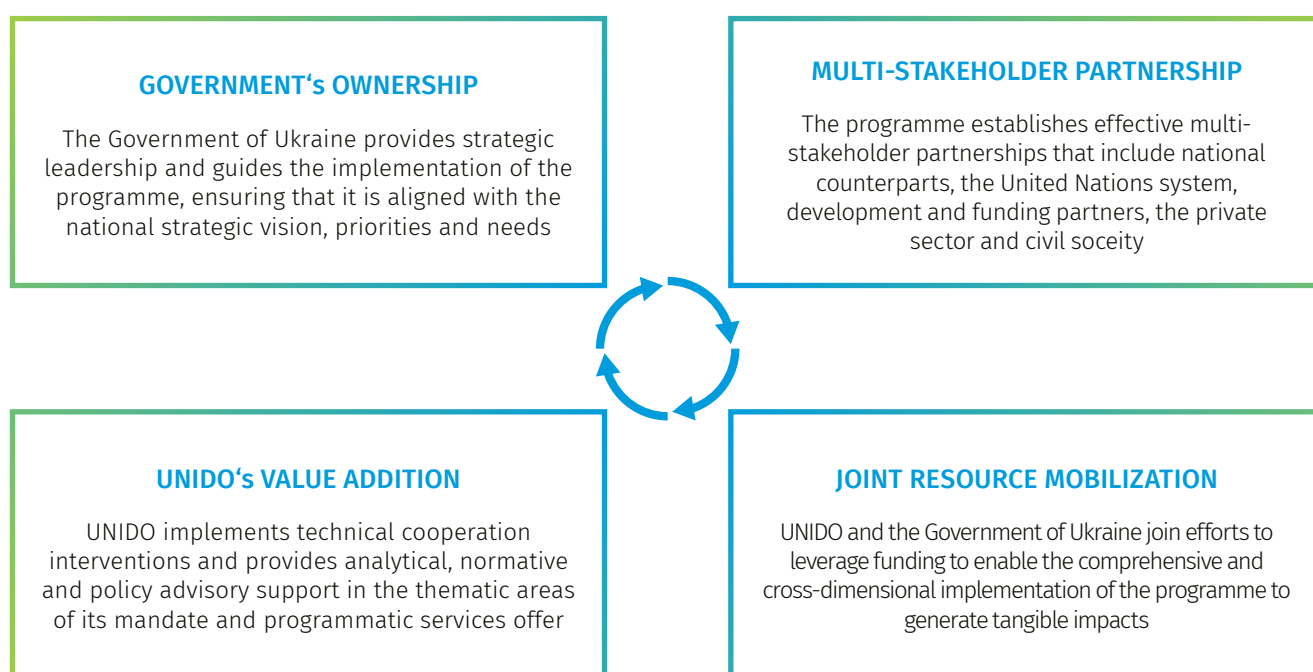
1. Job creation for disabled individuals in Ukraine;
2. Women's economic empowerment in Ukraine;
3. Skills development for a sustainable recovery in Ukraine;
4. Scale-up of social and impact entrepreneurship to enable a just energy transition;
5. Supporting the reconstruction and development of industrial sectors in Ukraine through fostering digital transformation and innovation ecosystem;
6. Accelerating Ukraine's green recovery through municipality-driven cluster development with micro-, small and medium-sized enterprises;
7. Private sector transition to a green and circular economy in Ukraine;
8. Initial revitalization of the food processing industry of Ukraine;
9. Leveraging quality and standards for the green recovery of Ukraine;
10. Industrial Energy Efficiency and Decarbonization Transformation Facility for Ukraine;
11. Building the manufacturing capacity and supply chain for the decarbonized and energy-efficient reconstruction of housing in Ukraine;
12. Supporting Ukraine's green hydrogen transition for low-carbon industrial reconstruction and development;
13. Fostering blue economy activities in Ukraine;
14. Support for a new, green, innovation-driven industrial policy for Ukraine.

The key **strategic objective of the programme**, therefore, is to allow for the integration and scale-up of the UNIDO project portfolio in Ukraine, including technical cooperation, technology transfer, capacity-building and policy advisory services in order to contribute considerably to the country’s green industrial recovery, resilience building, as well as inclusive and sustainable industrial development in a coordinated, coherent and synergetic manner.

KEY BUILDING BLOCKS

The UNIDO green industrial recovery programme can only be successful if its key principles are upheld. An overview of these major building blocks is provided below.

FIGURE 17: KEY BUILDING BLOCKS OF THE GREEN INDUSTRIAL RECOVERY PROGRAMME FOR UKRAINE



LEAVING NO ONE BEHIND

Ukraine’s industrial development process must be built on inclusiveness, ensuring equal opportunities for all. Vulnerable groups have already faced structural bottlenecks before the outbreak of the war and are currently experiencing significant setbacks. Therefore, leaving no one behind will be the key principle, underpinning UNIDO’s work in Ukraine in response to the war. Its main elements are outlined below.

Community-based initiatives on the local level

UNIDO emphasizes the importance of supporting initiatives at the grassroots level, acknowledging that sustainable recovery and development should be rooted in and benefit local communities.

Direct benefits to people, especially vulnerable groups

The primary focus of the UNIDO green industrial recovery programme is to directly benefit individuals with a particular emphasis on those who are considered vulnerable or marginalized.

Special support for women

UNIDO recognizes the unique challenges faced by women and, therefore, aims to tailor its interventions. This includes single mothers, acknowledging the additional responsibilities they may bear.

Inclusive support for people with disabilities

UNIDO fosters inclusivity by providing targeted support for people with disabilities. The goal is to ensure equal access to economic opportunities and reintegration into the labour market.

Assistance for displaced persons and returnees

Considering the challenges faced by displaced persons and returnees, UNIDO seeks to contribute to their economic stability and integration into local communities, either in a place of displacement or return.

Support for the economic reintegration of veterans

UNIDO recognizes the unique circumstances of veterans and aims to assist them in reintegrating into the labour market and generating income.

Amplification of the voices of youth, especially young women

UNIDO places a specific focus on empowering youth with special attention to young women. This recognizes the importance of their contribution to local recovery and long-term development.

LOCAL APPROACH

The reform of local self-governance and the strengthening of municipality-based economic and administrative autonomy in decision-making became an important factor in the robust state-supported community-based response to the war. In Ukraine's large cities, MSMEs often have better access to business support services, while MSMEs in smaller communities are often left behind. In these small communities, access to know-how, finance, equipment, technology and markets is limited. Local municipality administrations therefore have limited capacities to support green industrial recovery and economic growth. These municipalities must be enabled to offer a conducive environment for business development and human-centred recovery. In addition, they are at the forefront of European integration, where shared values and compatible approaches, mindsets and social networks form the basis of sustainability.

To address the challenges on the local level, UNIDO will engage in area-based, integrated and multi-sectoral programming engaging local authorities and communities. This will also support decentralization endeavours and bolster local capabilities. In order to effectively target the most vulnerable areas, UNIDO will enable the alignment of efforts, ensuring that interventions are coherent and complementary with all relevant stakeholders, including local administrations. Local liaison and coordination mechanisms in municipalities will be reinforced with a particular emphasis on supporting MSMEs.

The geographical focus of the programme will be on the regions which are under the control of the Government of Ukraine. In order to better target interventions on the local level, the established UNIDO network of regional development coordinators (RDCs) will be broadly utilized. This network was informed by the understanding that resource generation for investment and economic activity, in particular in industry, is centred in municipalities. The network works as follows:

- The work of RDCs will be initially limited to twelve western-located oblasts of Ukraine given that in these oblasts, local conditions are conducive to the facilitation of economic development, whereby as the situation improves, further oblasts can be added;
- RDCs are responsible for a defined geographic area (i.e. one oblast) and municipalities in it;

- RDCs limit their work to municipalities between 10,000 and 400,000 inhabitants as in larger municipalities (e.g. Kyiv and Lviv) different conditions prevail, which suggest varying needs and methodologies;
- RDCs collect information about the economic situation and development-related factors in each of the municipalities they are responsible for, including, but not limited to information on existing industries, available population that is ready to work, skills needs, etc.;
- RDCs further establish contacts with local municipal administrations, businesses, their associations, industries, non-governmental organizations, academia, etc.

EVIDENCE-BASED AND DATA-DRIVEN APPROACH

As referred to in the previous chapters, UNIDO already conducted a comprehensive industrial diagnostic study, paving the way for an informed, evidence-based and data-driven approach to the Organization's interventions. Industrial diagnostics have been carried out to extrapolate a strategic direction for the country's future industrialization and green recovery. This assessment builds on the existing policies of the Government of Ukraine and the EU Ukraine Plan, as well as proposes solutions in response to existing challenges related to economic growth, modernization of the economic system, and integration with the EU to foster recovery, reconstruction and reform at all levels (i.e. macro-, meso- and micro-level).

Based on UNIDO's approach, consolidated through years of experience and research, the diagnostic study is structured around the following four chapters informed by quantitative data and consultations with stakeholders and experts in Ukraine:

Chapter 1 provides a macro-level analysis and examines the economic, social and environmental dimensions to capture the key thematic areas that require policy action.

Chapter 2 contains a meso-level analysis of industrial sectors to gauge their potential and highlight those that deserve increased attention due to the impacts of the war.

Chapter 3 involves a micro-level analysis of Ukrainian firms based on 501 survey responses and focuses on identifying critical bottlenecks in their business operations. This information is useful for designing effective projects under the green industrial recovery programme.

Chapter 4 entails a product analysis to capture key strategies for Ukraine's economic diversification.

In addition, analyses and mapping were conducted in 2023 across other areas pertaining to sustainable industrial development, including the following:

- Assessment of gaps and needs of local industries and MSMEs and mapping of support institutions, initiatives and programmes for each oblast;
- Mapping of entrepreneurship support institutions and the diagnostics of the entrepreneurship support and technical and vocational education and training ecosystem;
- Analysis of circular economy implementation with exploratory foresight for available circular economy practices and potential projects;
- In-depth assessment of the packaging sector of Ukraine.

Throughout the implementation of the programme, UNIDO will continue conducting analyses, diagnostics and assessments across various critical thematic areas of its mandate to continuously generate high-quality

primary data pertaining to opportunities and needs in the industrial recovery and development of Ukraine. The data will be accompanied by qualitative and quantitative indicators that allow for tracking and disaggregation by geographical area, various target groups and other relevant characteristics.

INSTITUTIONAL CAPACITY DEVELOPMENT

During the development of this programme, UNIDO began working with national institutions and policymakers in Ukraine to build their capacities in a number of relevant areas, including industrial policymaking, circular economy, quality infrastructure, food processing industry, job creation, MSME support and digital transformation.

UNIDO has already supported the policymaking process in Ukraine by developing the following key inputs:

- Circular economy roadmap for Ukraine;
- Roadmap for the revitalization of Ukraine's food processing industry through green recovery;
- National guiding framework of standards and technical regulations for the green reconstruction of Ukraine;
- Inputs to the draft law of Ukraine on robotics and robotization, as well as the draft programme for the use of artificial intelligence in priority sectors of the economy for the period until 2026.

UNIDO, through its work in the areas of quality infrastructure, strengthened the institutional capacity of the Ukrainian Standardization Agency/National Standards Body in the areas of good standardization practices. UNIDO also strengthened the online services of the National Accreditation Agency of Ukraine and enhanced the country's conformity assessment capacities, including through the in-depth assessment of national laboratory capacities, provision of test equipment, capacity-building of staff, establishment of an operational quality management system, cooperation between laboratories and producers of priority products and transfer of national standards, which are adapted to the European ones.

Throughout programme implementation, UNIDO will continue supporting national institutions to further strengthen their capacity and adapt to the new challenging context with the ultimate objective of preparing a comprehensive and results-oriented industrial development strategy for Ukraine. UNIDO will help strengthen the Government's response and support the process of building resilience, as well as provide assistance linked to fulfilling conditions under the EU *acquis* with a special focus on Chapter 20.

6 **CREATING OPPORTUNITIES FOR PEOPLE**

RATIONALE FOR ENGAGEMENT

People in Ukraine have been impacted in diverse ways by the ongoing war. Some are still contending with significant humanitarian needs as they host a large number of displaced individuals who may not have a safe and suitable place to return to in the near future. These communities struggle to provide housing and essential resources while maintaining social cohesion. Others are ready to embark on recovery and reconstruction efforts, creating conditions for voluntary returnees, both from within the country and abroad, to reintegrate and rebuild their livelihoods.

One immediate consequence of the war was large-scale population displacement. According to the United Nations High Commissioner for Refugees (UNHCR), as of November 2023, there are around [6 million refugees](#) from Ukraine recorded in Europe and 392,100 refugees from Ukraine recorded beyond Europe. According to the International Organization for Migration (IOM), there are more than [3.5 million internally displaced persons \(IDPs\)](#) in Ukraine. According to the [RDNA 2](#), high levels of displacement, especially outside Ukraine, have heightened already existing demographic concerns about Ukraine's shrinking skilled labour force, especially as 2 million children have left Ukraine and are expected to remain abroad.

As a result of the war, Ukraine is likely to have more female-headed households, a larger proportion of single-earner households and increasing numbers of households with individuals with disabilities. Between February and March 2023, the Office for the Coordination of Humanitarian Affairs (OCHA) estimated that nearly [18 million people](#) in Ukraine were in need (6.3 million IDPs located throughout the country, 6.9 million people who remained in their homes and 4.4 million returnees). Out of these, 11.1 million were in urgent need of humanitarian assistance and protection.

On 1 January 2022, there were approximately [500,000 veterans](#) in Ukraine. According to the Ministry of Veterans Affairs of Ukraine, by May 2023 this number had grown to 770,000. The projected number of veterans (including persons with disabilities resulting from the war), family members and families of fallen soldiers that will need support in the post-war period is estimated at between 3 million and 5 million people (10-15 per cent of the total population of Ukraine).

According to the FAO, [rural households](#), which accounted for 30 per cent of the population before the war, in general, were more socially disadvantaged in livelihoods and living conditions. Although they were more food secure as they could consume their own farm produce, they tended to experience higher unemployment rates, lower access to social services and a more acute gender gap.

The war has aggravated existing gender inequalities in the country, especially impacting vulnerable women who face disproportionate disruptions. According to the State Employment Service of July 2022, [61 per cent of the registered unemployed](#) in Ukraine are women. Employed women are predominantly in low-paid sectors with a lack of opportunities to develop professionally. In terms of [entrepreneurial activities](#), women own only 11 per cent of Ukraine's 330 largest enterprises. The [Global Gender Gap Index 2023](#) ranks Ukraine number 66 out of 146 countries. Women's position during wartime has been aggravated in view of the lack of access to economic resources and skills demanded by the labour market, domestic work burdens and psychological stress.

Since February 2022, changes in the labour market have reflected both the outflow of the working-age population and the economic difficulties directly linked to the war. The ILO estimates that [employment](#) is now 15.5 percentage points lower than during the pre-war level. The OECD national business survey showed that in the fourth quarter of 2022, the [sectors with the highest wage contractions](#) on an annual basis were construction; agriculture, forestry and fishing; transportation and storage; and manufacturing. In contrast, wages in wholesale, retail trade and repairs; information and communication; and human health and social

work, have largely followed inflation trends, increasing by about 27 per cent.

Most [Ukrainian refugees abroad](#), according to UNHCR monitoring, are highly employable, resulting in shortages of highly skilled workers within Ukraine. These workforce demographic changes will be particularly important when looking ahead to labour market recovery, which will need to account for the loss of highly skilled workers and help facilitate the integration of IDPs into local labour markets.

Households nationwide have experienced decreases in income, with the south-eastern region particularly affected. This is also reflected in national [poverty levels](#), which increased from 5.5 per cent to 24.1 per cent in 2022 (based on the poverty line of USD 6.85 per person per day). According to the UNDP, the [decrease in income](#) was derived mainly from job loss, salary cuts and reduced working hours.

The [General Population Survey](#) of the IOM found that 57 per cent of IDP and 64 per cent of non-IDP respondents sought employment after February 2022. The top challenges cited by these groups while searching for a job included a lack of jobs in their areas matching their interest and expertise (mentioned by 91 per cent of IDPs and 84 per cent of non-IDPs) a lack of work due to the war in a location (82 per cent of IDPs and 76 per cent of non-IDPs) and low offered salary (45 per cent of IDPs and 76 per cent of non-IDPs). Safety and security concerns also inhibited livelihoods.

Ukraine's labour market has been facing an oversupply of higher education graduates amidst industry-specific skill shortages. In addition, the mismatch between skills supply and the requirements of modern jobs for the green and digital economy is growing. According to a World Bank survey, 40 per cent of companies in four key sectors (agriculture, food processing, ICT and renewable energy) report a [significant skills gap](#) in their workforce, hindering their business goals. Claims lie in the education system that often fails to equip individuals with the necessary practical skills, appropriate expertise and up-to-date knowledge.

UNIDO SERVICE OFFER

In order to address the above-outlined challenges, it is crucial to design and implement targeted programmes to empower economically women, youth, disabled individuals, IDPs, as well as veterans, including tailored initiatives to improve their access to education, vocational training and skills development, with a specific focus on fostering innovative industrial entrepreneurial skills.

Drawing from its strategy for post-conflict/-crisis situations, UNIDO has extensive experience in implementing technical assistance projects targeting the most vulnerable, including refugees, IDPs and returnees in numerous conflict-affected and post-conflict countries. Building on these experiences, UNIDO will promote industrial development and economic recovery by triggering a [structural transformation](#) geared towards strengthened industrial sectors to leverage the positive externalities associated with this expansion, including innovation and productivity growth, knowledge spillovers, skills development, employment generation, the creation of forward and backward linkages and technological upgrading.

UNIDO will continue fostering the [economic empowerment of women and youth](#) in sustainable industries and focus on promoting future socio-economic inclusivity and resilience throughout its technical cooperation portfolio. The primary focus of UNIDO's activities in this area is on the knowledge, skills, technologies and business support services required to enable women and youth to engage in productive activities, thereby generating income. UNIDO's portfolio comprises projects in entrepreneurship and enterprise development, including support for youth and women to seize opportunities of digital technologies and promote digital transformation. UNIDO has experience in managing [skills development](#) programmes and facilitating public-private development partnerships to address the industrial skills mismatch. This includes reforming technical

and vocational education and training (policies and enhancing the capacity of local business support and educational institutions).

UNIDO will also stimulate the **creation of quality jobs**, particularly in more labour-intensive sectors with strong potential for value addition and differentiation, including the food and wood products industries, the manufacturing of energy equipment and agricultural machinery, as well as the construction industry. To support **income generation**, UNIDO will focus on developing market-driven skills among various groups of the population with a focus on vulnerable groups. This includes offering vocational and technical education and training, as well as entrepreneurship programmes to align individuals' skills with the demands of the modern job market, particularly in green and digital economy sectors.

A comprehensive approach to the promotion of an entrepreneurial culture is needed to strengthen the entrepreneurial environment. UNIDO has extensive experience in improving the institutional infrastructure to promote competitive entrepreneurial activities in the formal sector, including through skills training and curriculum development programmes for **entrepreneurship education**. Comprehensive curricula should be developed at different levels of education to inspire and cultivate an entrepreneurial mindset in society. These programmes should focus not only on cognitive skills, such as digital, financial and management skills but also on key non-cognitive skills, such as teamwork and active learning.

As civilian and military casualties continuously increase in the disabled population of Ukraine, UNIDO will also support the **economic reintegration of disabled individuals** and help businesses in creating inclusive work environments, providing accommodations and encouraging private sector engagement to advance recovery and expand opportunities for the disabled population. To address the local demands for prosthetics and assistive products, UNIDO will continue modernizing the domestic supply chain to increase the local availability of such items and foster a more inclusive society.

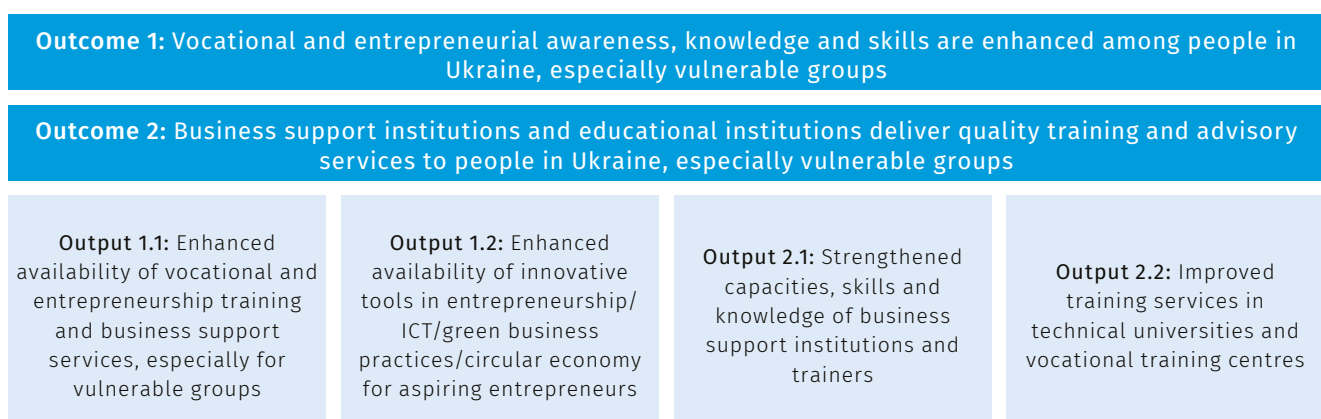
3D-PRINTED PROSTHETICS AND JOB CREATION PROJECT

BEST PRACTICE

UNIDO provides technology transfer for 3D-printed prosthetics from Japan to Ukraine and supports job creation for people with disabilities. The adoption of this innovative technology will make prosthetics more accessible and affordable in the long term with at least 100 people to be supported in 2024.

RESULT CHAIN

FIGURE 18: RESULT CHAIN OF IMPACT AREA “CREATING OPPORTUNITIES FOR PEOPLE”



7 SUPPORTING BUSINESSES AND ATTRACTING INVESTMENT

RATIONALE FOR ENGAGEMENT

The impact of the war on the MSME population in Ukraine has been massive and is expected to deepen further as the conflict continues. Based on the results of the [quantitative and qualitative analysis](#) conducted by the European Bank for Reconstruction and Development (EBRD) in 2023, only 57 per cent of MSMEs in production and services maintain operation while 37 per cent reduced output and 6 per cent suspended operations. Further, those MSMEs still in operation saw a significant reduction in the volume of activity. According to the Government-backed poll data, 8 per cent of enterprises completely stopped their activities, and 18.5 per cent worked at less than half capacity. Only 50.1 per cent of enterprises experienced a 40-90 per cent workload, similar to the pre-war levels. MSMEs are trying to adapt to the challenging operational conditions, relocating, transitioning online, reducing the geography of activities and resuming production at lower capacities.

UNIDO has identified several key bottlenecks for Ukrainian businesses as a result of the war, including liquidity issues (difficulty in securing operating capital), availability and cost of energy, availability and cost of materials, availability of personnel, decrease in purchasing power and increases in the cost of production. Material destruction is likely to have an impact on MSME operations well beyond the end of the war and it may possibly lead to changes in the structure of the country's productive capacity.

Conversely, the impact of workforce displacement on MSMEs may be limited to the short term, as people may progressively return, with the exception of businesses located in the cities and villages suffering a high level of destruction, which impedes the return of the local population. Much depends on the course of the war, since the longer people are displaced from certain places, the less likely they may be to return. Further, it is clear from the needs of Ukrainian businesses that a future workforce will need reskilling as there are not enough skilled workers to meet the needs of industry and returnees may not return to the same job as before.

The impact of the disruption of the internal and external supply chains on MSMEs' operations is difficult to assess at this stage. Supply chains continue to operate (albeit at lower levels) in large parts of the country and may return to close to normal operations once the fighting ends, excluding the areas that have suffered the highest level of war damage. However, export infrastructure remains a key challenge, with a decrease in the volume of air transportation of 100 per cent, sea transportation of 85 per cent, rail freight transportation of 52.1 per cent and road freight transportation of 21.7 per cent. As a result, the logistics leverage increased, which led to an increase in the waiting period for transshipment, as well as an increase in costs due to additional logistics operations.

An additional risk is that a continuation of the war and the high level of uncertainty about the reliability of supplies from Ukraine may induce foreign companies to review their economic relations with Ukrainian suppliers. The war has caused a loss in revealed comparative advantage in the food and beverage sector and the wood and wood products sector. If these trends continue, Ukraine may no longer be seen as a key import partner or attract adequate overall investment. Furthermore, Ukraine played an important role in the European automotive sector, producing cables and mechanical components. Shortages in components made in Ukraine have started to disrupt production in EU car plants and will require the establishment of new value chains in the region.

However, one of the biggest threats to MSMEs operating in Ukraine is coming from the collapse of domestic demand and traditional export markets. MSMEs, particularly in eastern regions, no longer have access to their normal export markets, finalizing a trend that began in 2011. With GDP expected to drop by over 30 per cent, the [loss of income](#) may only partly be compensated by foreign aid, a surge in remittances from Ukrainian workers in EU countries (estimated to increase by 20 per cent in 2022) and increased trade with EU countries.

The war has further compromised Ukraine's agricultural production, which is vital for the country's economy

and global food security. Three major types of damage – physical degradation, widespread chemical pollution, as well as exploded ammunition – have severely impacted millions of hectares of Ukrainian farmland. According to the FAO, [damage to small-scale farming](#) has been extensive. The lack of access to usable land, including contamination of at least part of that land by unexploded ordnances, mines, bombshells and debris, destruction of agricultural equipment and facilities, damage to livestock and crops, stolen farm inputs and outputs, and the need for re-cultivation of land. The economic downturn combined with displacement has also led businesses to close and self-employed individuals to lose their productive assets. Additionally, the level of innovation and investment in creating value addition with food products has traditionally been low. Local producers lack the capacity to create high-value-added products that meet European standards.

At the same time, activity in the fast-expanding ICT sector appears to be less affected. Internet connectivity and services have continued to operate through the first phase of the war, excluding the zones affected by the most intense fighting, and staff employed by ICT companies could relocate to areas less touched by the war and continue working. At the beginning of May 2022, the sector was estimated to operate at [80 per cent of its capacity](#). In 2021, Ukrainian ICT exports grew 36 per cent year-on-year to total USD 6.8 billion, representing 10 per cent of the country's total exports. Meanwhile, the number of Ukrainians employed in the ICT industry increased from 200,000 to 250,000 across start-ups, MSMEs and large firms. At the beginning of 2022, the ICT sector provided [export earnings of USD 2 billion](#) (+28 per cent on the previous year).

Despite its relatively low economic performance, Ukraine possesses strong economic potential due to its large labour force, geographic size and strategic location. Many of the export products are produced within Ukrainian industrial agglomerations and territorial structures, creating an enabling business ecosystem for the development of local business connections, including clusters.

UNIDO SERVICE OFFER

Ukraine's MSMEs account for more than 99 per cent of all registered businesses but they face significant challenges, including the lack of the needed business support ecosystem. This ecosystem is necessary to enable MSMEs to effectively overcome the challenges associated with the war and to play a key role in economic recovery and growth in the future. Developing an internal ecosystem involves creating support networks, providing access to training and resources and creating an environment that encourages innovation and sustainability.

Businesses need support in upgrading their practices and processes, increasing their competitiveness and value addition, as well as strengthening their access to markets and investment attractiveness. The labour force participation rate needs to increase, particularly among disadvantaged groups. Skills development, in turn, needs pairing with suitable opportunities and supportive framework conditions.

Rebalancing the [distribution of productive activities](#) across Ukraine's regions will contribute to reducing vulnerability, increase resilience and ensure that industrialization becomes more regionally inclusive. Despite the growing focus on governance decentralization, both private sector actors and policymakers underrate the significant role municipalities can play in industrial development. Further, many enterprises in smaller communities lack the support needed to take advantage of existing assistance schemes set out by the Government. To address these issues, UNIDO will raise awareness about the relevance of the local approach to development and strengthen policy capabilities on a local level to support the development of the private sector for sustainable recovery.

To rebalance the sub-sectoral level, the structural transformation process should be intensified by improving existing medium-high technology industries and diversifying towards emerging industries, considering the

positive externalities these can generate. UNIDO will work to strengthen resource-based sub-sectors such as **food processing**, in which the country has a comparative advantage and which plays a pivotal role in achieving other policy objectives, such as food security, employment generation, value-added creation and access to export markets.

UNIDO will improve the **competitiveness and value-added of industry** by enhancing capacities within processing enterprises for further value addition and product development, as well as improved product quality, safety and packaging for the EU Single Market readiness. For improved processing technology and efficiency, UNIDO will help enhance energy efficient practices, automation and the adoption of renewable energy and utilization of bio-waste in the transition to green low-carbon growth. UNIDO will further help Ukraine strengthen its trade with the EU and align industrial products with EU requirements.

Accelerating the recovery of the manufacturing industry is crucial for advancing the **diversification and sophistication of Ukraine's production**. Pursuing an export diversification strategy that increases the number of products for export to enter new markets, while further deepening trade relations with existing partners, will be crucial to intensifying the country's industrial development, reducing vulnerability to external shocks and bolstering resilience. UNIDO will therefore help Ukraine align its industry with the EU *acquis* in relevant areas, support businesses in finding new markets and suppliers, and help build resilience and adapt their supply chains to withstand the threat of disruption.

Ukraine's efforts to restore its competitiveness and strengthen its capacity to produce and export manufactured goods must be underpinned by commitment and coordinated support from both the **public and private actors**, especially in the aspiration for EU integration. Several challenges must be addressed, however, to harmonize Ukraine's legislation with that of the EU *acquis*.

At the industry level, UNIDO will enable producers to make the best use of **standards** to add value to their productive capacities. UNIDO will work to foster their **compliance capacity** for engagement in global value chains and ensure green and sustainable production practices, modernize production and increase quality, enhance entrepreneurship and the internationalization of MSMEs through the application of new technologies and collective activities, as well as strengthen inter-firm and inter-cluster cooperation creating concrete linkages with importers of high-value products in Europe and other markets.

GLOBAL QUALITY AND STANDARDS PROGRAMME (GQSP)

UNIDO enabled wooden window producers to measure the thermal performance of their products, optimize design and be more energy efficient. Standardization, accreditation and testing services have been strengthened for a conducive business environment, ultimately promoting exports.

BEST PRACTICE

Furthermore, UNIDO will provide **guidance to MSMEs** in manufacturing, ICT, agribusiness and other selected pilot clusters by establishing public-private partnerships, assisting in developing joint supply chain management and marketing strategies, promoting innovation and start-up development, ensuring up-skilling and re-skilling, contributing to the implementation of collective business upgrading, quality improvement and fostering internationalization initiatives such as MSME export consortia.

At the institutional level, UNIDO will support the **national quality infrastructure** (standardization, accreditation, metrology, conformity assessment, market surveillance) and cluster support institutions (business development services, collection centres, sectoral and business associations, financial institutions and academia) in providing state-of-the-art and tailored services in line with industrial capacities and needs, fostering the adoption of international standards and their dissemination among industry and promoting international best practice and linkages with more advanced institutions, facilitating the development of customized financial

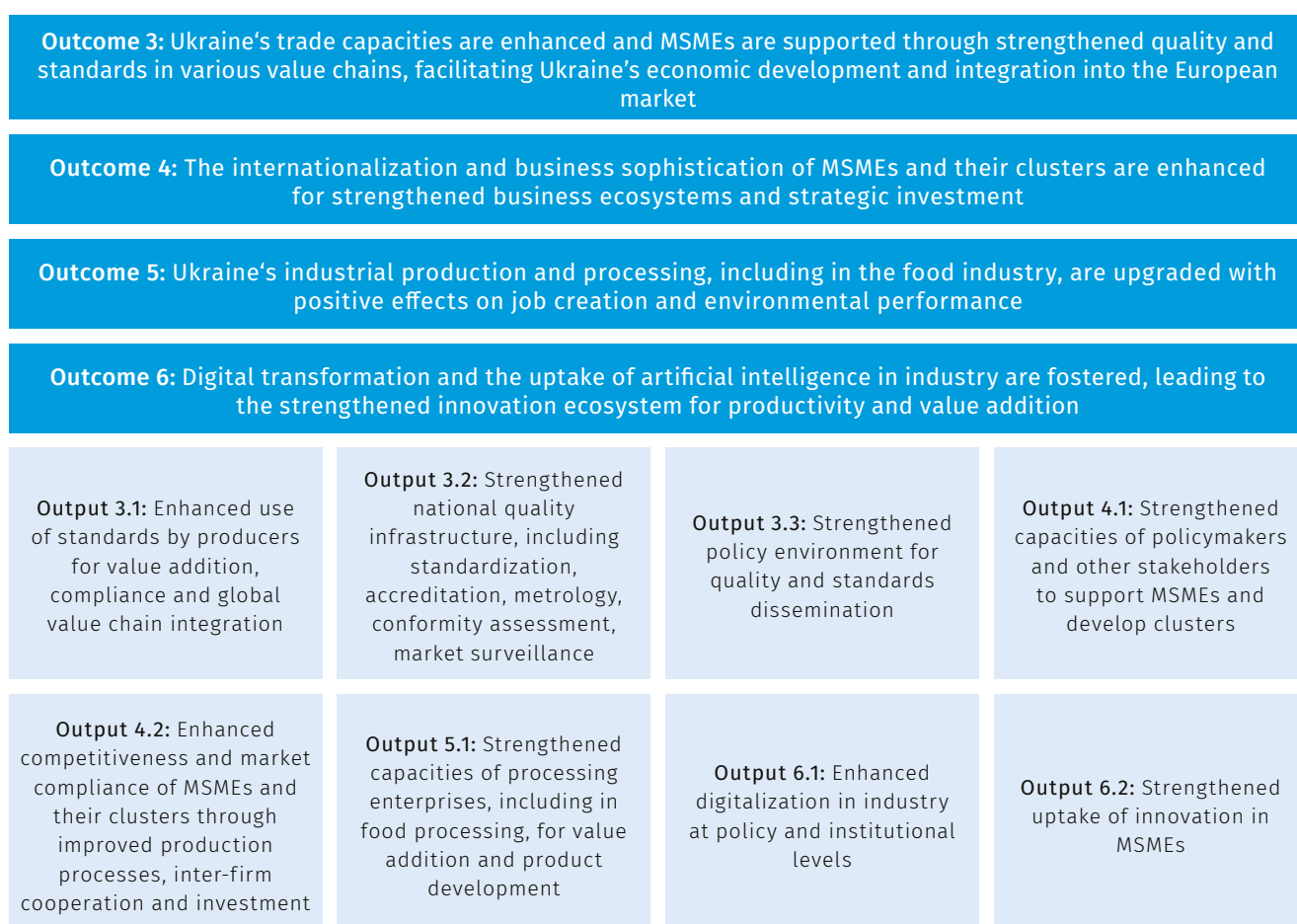
and business services and products, and promoting the internationalization and integration of Ukrainian clusters into European cluster networks.

At the policy level, UNIDO will create a **conducive policy environment** for accelerated MSME and cluster development, as well as quality and standards dissemination through strengthening the capacities of policymakers and support institutions to identify and develop clusters and the formulation of cluster support policy frameworks, reforming and strengthening the quality infrastructure, providing incentive schemes, improving access to finance among MSMEs, as well as by expanding cross-border business relationships and economic policy networks.

Boosting **innovation in industry** requires concerted efforts from both public and private sector actors, in particular reinvestment of revenues in business development, joint innovative efforts by the Government of Ukraine, research institutes, universities and businesses, the creation of research and development centres, as well as the promotion of competitive and innovative technological solutions. Technology transfer from other countries, especially those with advanced innovation ecosystems, will be crucial to fostering resilience building in Ukraine. UNIDO will thus support Ukraine to re-establish a robust digital infrastructure, foster the development of digital skills and strengthen digitalization in businesses. Incentives will be needed to prevent brain drain and encourage ICT experts to return to Ukraine.

RESULT CHAIN

FIGURE 19: RESULT CHAIN OF IMPACT AREA “SUPPORTING BUSINESSES AND ATTRACTING INVESTMENT”



8 FOSTERING A GREEN ECONOMY

RATIONALE FOR ENGAGEMENT

Ukraine faces multiple challenges due to the ongoing war and a legacy of inadequate environmental and climate-sensitive planning with impacts on critical infrastructure, food systems, human health, ecosystems and the broader environment. The war has led to the destruction of environmental monitoring infrastructure, accelerated ecosystem degradation, industrial pollution and waste accumulation.

According to EcoZagroza, as of 18 July 2023, there have been [2,450 reports \(2,317 verified\)](#) of military actions with a direct environmental effect. Estimates based on Ukraine's environmental inspections show that the war has inflicted roughly EUR 52.4 billion (UAH 2,071 billion) in environmental damage. This includes EUR 27 billion in air pollution, EUR 23.6 billion in damage from waste pollution, EUR 1.5 billion in damage to water and EUR 0.3 billion in damage to soils.

According to the [preliminary monitoring](#) of the United Nations Environment Programme (UNEP), Ukraine faces a compounded, multi-dimensional environmental crisis that has either exacerbated existing issues or added new ones. UNEP stresses the presence of multiple crises associated with chemicals, munitions and military equipment, the presence of a range of pollutant damage inflicted to fuel storage facilities, industrial infrastructure and critical infrastructure, such as water, energy and waste management systems, urban areas, as well as agricultural and natural areas. It concludes that the country and the region risk being burdened with a toxic legacy long after the conflict ends.

Already before the war, Ukraine's economy has been dominated by resource-intensive production, including energy-intensive technologies. Waste management is one of the leading challenges to environmental safety, and the volume of waste generation, including chemicals and hazardous substances, has grown in the country. Further, data indicates that Ukraine has a high manufacturing raw material consumption intensity, which is about 5-6 times higher than that of its comparators and the EU average. With the stated goal of EU accession, Ukraine will need to comply with requirements associated with the EU's key environmental strategies and plans, including Chapter 27 of the *acquis*.

Limited state-stimulating instruments to transition to a circular economy, including narrow knowledge and capacities among decision makers and the lack of best practices and understanding of applicable business models combined with unavailability of funding, acquisitions for collaborative business projects with the EU, green lending and preferential loans for MSMEs. Additionally, many enterprises lack the financial resources to modernize their production facilities. Lastly, there is a notable lack of information and consulting activities in the field of circular economy.

Furthermore, Ukraine remains one of the most carbon-intensive countries in the world despite a significant industrial decline since 1990. Ukraine's energy consumption and emission level per unit of GDP are much higher than that of the EU and the world average. Energy productivity and production-based CO₂ productivity have shown an upward trend, however, they are still on a low level.

Industry is the [largest final energy consumer](#) in Ukraine. The country has been historically dependent on imports for around 83 per cent of its oil consumption, 33 per cent of its natural gas and 50 per cent of its coal. In 2018, Ukraine imported 8.5 megatons (10.6 billion cubic meters) of [natural gas](#), 13.8 megatons of coal and 10.4 megatons of oil products.

Due to the war, Ukraine's power system remains extremely vulnerable and continues to operate in emergency mode with hardly any safety margin for both power grids and generation. According to the UNDP, [generation capacity](#) has decreased by more than half, from 37.6 gigawatts to 18.3 gigawatts as of 30 April 2023. Manoeuvring capacity in the system has suffered the most and decreased by 68 per cent from 14.3 gigawatts to 4.6 gigawatts, primarily in thermal power plants. Available nuclear generation capacity decreased by 44 per cent from 13.8

gigawatts to 7.7 gigawatts. Available hydro generation capacity decreased 29 per cent from 6.6 gigawatts to 4.7 gigawatts. Available renewable capacity decreased by 24 per cent from 8.1 gigawatts to 6.2 gigawatts. In the transmission network, 42 out of 94 crucial high-voltage transformers have been damaged or destroyed.

According to the [RDNA 2](#), damage to power, gas, heating infrastructure and coal mining exceeds USD 10 billion and is increasing. Short-term priority areas to be included in the emergency response continue to be increasing the resilience of the transmission network and providing backup/generation capacities for critical infrastructure. In the mid-term, the loss of obsolete coal-fired generation opens an opportunity for their replacement using greener alternatives and decentralizing generation capacities. To achieve this, Ukraine will have to increase transparency through energy market reforms and implement good governance practices as critical prerequisites for private and public investments required for sustainable green transformation.

To ensure [energy security and independence](#), Ukraine has been increasing power generation capacities from 108 to 176 billion kilowatt-hours and shifting from energy shortage to a net export of 9 billion kilowatt-hours. Green transition and decentralization are partially achieved through developing carbon-neutral generation capacities and further harmonizing with EU markets to deliver affordable, reliable and modern energy. This is demonstrated by the ongoing construction and installation of 1.4 gigawatts of new high manoeuvring capacities controlling at least 80 per cent of the installed capacity.

UNIDO SERVICE OFFER

In order to advance on the EU accession path, the green industrial recovery of Ukraine must include opportunities to promote the decarbonization of industry and transition to a circular economy, including the promotion of resource-efficient and cleaner production, effective waste management (including hazardous waste), energy efficiency and the introduction of renewable energy sources.

UNIDO will support Ukraine in implementing **greener and circular industrial processes** and diversifying into new products that incorporate low-carbon technologies. Promoting a circular economy will contribute to the country's biodiversity protection and climate change agendas and improve resilience to potential supply chain disruptions. UNIDO will further build the capacity of the Government of Ukraine to comply with the requirements of the EU Green Deal and *acquis*.

EU4ENVIRONMENT ACTION

UNIDO offered support to 15 companies of different sizes, which were forced to relocate operations, including a pet food manufacturer from Kharkiv oblast. UNIDO facilitated the installation of an autonomous solar power plant to ensure an uninterrupted supply of clean energy for their production lines.

BEST PRACTICE

Given that Ukraine's **material efficiency** is currently low, UNIDO will support the country with the development of effective industrial waste prevention and management policies and principles and encourage the associated circular economy practices, including green product design, remanufacturing, refurbishment and recycling, among others. As part of the country's sustainable industrial development agenda, the improvement of material efficiency may result in triple dividends of reducing the dependence on the supply of raw materials, lowering environmental pressure and improving industry's competitiveness. The adoption of circular economy principles and regulations to enforce it will be key, focusing on waste prevention rather than on waste disposal.

UNIDO will further support Ukraine by collecting data and information on **industrial waste generation** and on the composition of waste, reviewing available technologies and treatment methods that can be used to recover value and stimulate industrial symbiosis options. In particular, the processing of industrial waste and its export potential (e.g. rare earth materials) and exploring scarce materials for domestic use, as well as the

creation of circular bioenergy clusters and hydrogen transmission systems infrastructure will be considered. Moreover, special attention must be given to raising awareness and improving capacities to properly separate waste at the source.

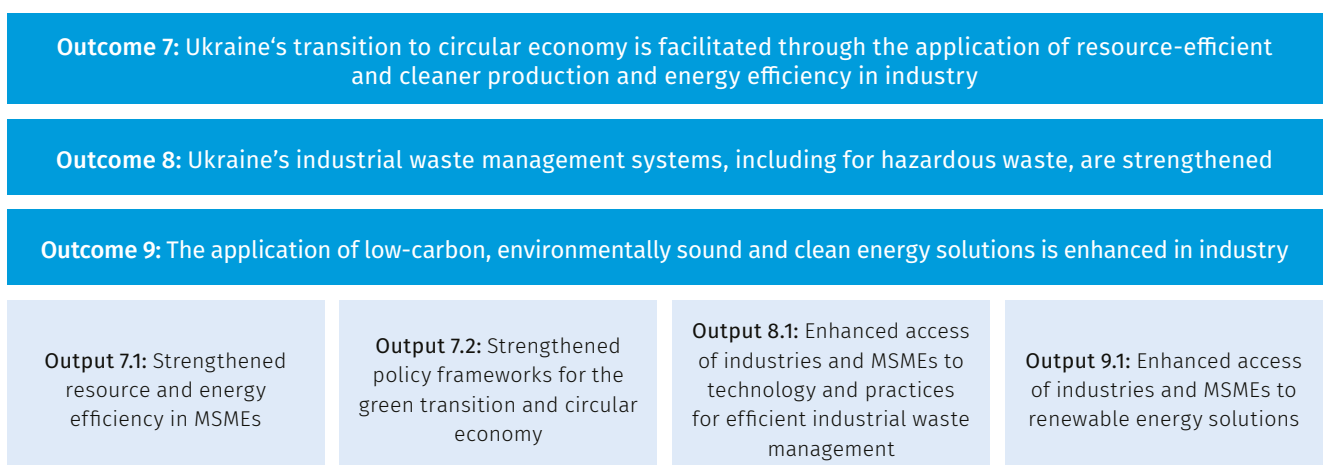
UNIDO will support immediate response actions to ensure the country's **energy security and independence, green transition, decarbonization** and further synchronization with EU energy markets. Key areas of focus where UNIDO can support Ukraine will include distributing generation energy sources nationwide and decentralizing the power system, enhancing manoeuvring capacities in the power system by introducing modern and environmentally friendly generation facilities, increasing the share of renewable energy sources in the national energy mix, gradually reducing coal generation in accordance with Ukraine's commitments to reduce CO₂ emissions, as well as exploring opportunities to improve energy efficiency in industry. Green hydrogen can play a crucial role in the reconstruction and further net zero industrial development of the country, particularly the steel sector and the production of ammonia, which have been affected by the war. In the context of the energy transition, it is critical to ensure that it is "just", meaning that an extensive community engagement is facilitated and attention is given to how vulnerable people are affected so that their daily routines and ability to pay are not disrupted.

Clean technologies, as well as associated support to entrepreneurs to develop and deploy them, have been an important part of UNIDO's operation in the country. Start-ups and MSMEs build the backbone of the Ukrainian economy, providing jobs, contributing to the GDP growth and spurring environmentally friendly and socially inclusive innovation, encompassing both new technologies and business model solutions with positive impact. To this end, UNIDO will continue supporting MSMEs and start-ups on their way to the introduction and dissemination of clean technologies and innovation.

The integration of sustainable practices and technologies is essential for the modernization of the MSME sector in Ukraine, particularly in pursuit of the **EU Green Deal**. Industries that are highly carbon-dependent are likely to face the greatest challenges along the way. To navigate these changes, UNIDO will support MSMEs by assisting the Government in introducing standards and regulations and encouraging national policy alignment with that of the EU. UNIDO will thus strengthen the environmental performance of MSMEs, stimulate the development of green initiatives, foster energy efficiency and circular economy and promote sustainable production management.

RESULT CHAIN

FIGURE 20: RESULT CHAIN OF IMPACT AREA "FOSTERING A GREEN ECONOMY"



9 DELIVERY MODALITIES

RESOURCE MOBILIZATION AND PARTNERSHIPS

On the macro level, UNIDO will work with line ministries of Ukraine, development and funding partners, the UNRCO and sister agencies under the UNCT in Ukraine, as well as international financial institutions and other international counterparts for the integration and scale-up of results as appropriate. On the meso level, UNIDO will work with stakeholders in Ukraine relevant to industrialization, including business support institutions, non-governmental organizations and academia. Furthermore, UNIDO will explore opportunities for engagement with municipal and city administrations in Ukraine, as important enablers of industrial recovery on the level of local communities. On the micro level, UNIDO will directly support firms, with a special focus on MSMEs, and work with people, strengthening their employability and resilience, including vulnerable groups.

The objectives of the programme can be achieved only if sufficient funding is leveraged for the implementation of technical cooperation projects that constitute core interventions within the framework of the programme. The funding strategy for the green industrial recovery programme is therefore to leverage strategic partnerships with bilateral and multilateral donors, including non-traditional donors and the private sector. UNIDO, as part of the United Nations system, is uniquely positioned among development partners in Ukraine, building off its value proposition, geographical coverage, presence on the ground in Ukraine, as well as the wide range of partnerships with national counterparts, local authorities, civil society and the private sector.

The green industrial recovery programme will remain flexible to adapt its focus over time as the Government of Ukraine moves from early recovery priorities to longer-term national development priorities. Through durable solutions tailored to the needs of communities, including restoring livelihoods and improving social cohesion and resilience, investment in resilience and recovery will also ensure that humanitarian needs over time decrease.

The green industrial recovery programme and interventions under it have a funding requirement of **USD 250 million**. To close the existing funding gap, UNIDO will closely work with the donor community and the Government of Ukraine, which assumes ownership of the programme and will lead the resource mobilization work together with the Organization. For efficient resource mobilization and partnership building, inter-ministerial and cross-organization communication and coordination will be required on a daily basis.

The programme gives high priority to establishing close cooperation with development and funding partners, including bilateral and multilateral donors, international financial institutions and other international actors, including sister United Nations agencies. Integrated and coherent resource mobilization for the implementation of the programme will also contribute to the closure of the funding gap for the strategic priorities of the TF and UNSDCF, which are closely linked to UNIDO's strategic priorities in Ukraine. Resource mobilization activities within the programme will be aligned with the resource mobilization approach envisaged under the TF and UNSDCF and will further seek to derive from and complement their respective funding approaches.

To leverage the necessary funding to operationalize the programme, UNIDO will continuously build on its effective coordination within the United Nations development system by engaging with the UNRCO and the UNCT on the ground. Cooperation with sister United Nations agencies will aim at joint partnership building, resource mobilization and programming while capitalizing on existing funding instruments, including multi-partner trust funds to be established in support of United Nations programmatic frameworks.

Among multilateral donors, the EU and its institutions traditionally hold sizeable funding available for development cooperation in Ukraine, contributing above **USD 1.4 billion of gross official development assistance** in 2020-2021. As one of the key strategic partners, spearheading reconstruction efforts, including the Ukraine Plan and the Ukraine Facility, the EU will be crucial for operationalizing UNIDO's green industrial recovery vision.

The EU will pool support to Ukraine into one single instrument, the Ukraine Facility, which will provide EUR 50 billion (EUR 33 billion in loans and EUR 17 billion in grants) to foster Ukraine's recovery, reconstruction and modernization and support its efforts to carry out reforms as part of its accession path to the EU. The Facility has three pillars: Pillar I will be direct budgetary support to the Government of Ukraine in the form of grants and loans based on the Ukraine Plan; Pillar II will support investment in Ukraine in the form of budgetary guarantees and a blend of grants and loans from public and private financial institutions; and Pillar III will provide technical assistance and other supporting measures to help Ukraine align with EU *acquis* and carry out structural reforms on its path to future EU membership. Pillar-assessed United Nations agencies, including UNIDO, will be eligible for grants under Pillar III.

To this end, within the framework of the programme, UNIDO will continue coordinating potential joint activities and building a long-lasting and trustful relationship both at the country level with the EU Delegation to Ukraine and at the Brussels level with the Directorate-General for Neighbourhood and Enlargement Negotiations (DG NEAR) and other institutions. Cooperation opportunities and joint resource mobilization efforts will be also explored within economy recovery programmes rolled out by the EBRD and the European Investment Bank (EIB).

To encourage the application of the Team Europe approach, joint efforts involving the EU, its members and financial institutions will be encouraged through the platform of UNIDO. UNIDO is a Team Europe partner for the programme, with Germany providing funding for the majority of preparatory activities and the Czech Republic and Poland complementing this effort with softly earmarked contributions. Further funding was mobilized from Austria, Bulgaria, Japan and Switzerland for specific country-level interventions.

Cooperation with bilateral donors traditionally active in Ukraine, including the members of the Development Assistance Committee (DAC), as well as emerging donors will be further sought. According to [gross official development assistance disbursement data](#) for 2020-2021, the most active bilateral donors in Ukraine include the United States of America, Germany, Poland, Switzerland, the United Kingdom, Canada, Sweden and Denmark.

For UNIDO, cooperation with Japan will close, to a large extent, the funding gap of the green industrial recovery programme. At the end of 2023, the Ministry of Economy, Trade and Industry of Japan announced its intention to allocate JPY 25.8 billion (USD 188 million) towards UNIDO's work to support Ukraine's green industrial recovery and development through technology transfer from and co-creation of new businesses with Japan's private industries. The activity will be fully developed throughout 2024-2025.

Moreover, UNIDO will seek to contribute to the activities of vertical funds in Ukraine, including the Global Environment Facility (GEF) and the Multilateral Fund for the Implementation of the Montreal Protocol. The Green Climate Fund (GCF) is another vertical fund UNIDO will engage with once Ukraine becomes eligible. For working with these funding instruments, which traditionally entrust UNIDO with a variety of activities to prevent and mitigate the effects of climate change, the Government must play a leading role in prioritizing cooperation areas of the green industrial recovery programme vis-à-vis available funding windows.

In addition to traditional donors, UNIDO will seek to mobilize innovative financing, including through cooperation with the private sector. Should partnerships with the private sector materialize, appropriate due diligence requirements will be identified. When initiating a partnership, the respective procedures of each funding organization shall be applied. The sourcing of goods and services will be aligned with the funding source/donor requirements accordingly. The mobilization and pooling of a multitude of resources, networks, as well as the knowledge and expertise of various partners will considerably strengthen the results of UNIDO's technical assistance within the framework of the programme in the spirit of the multi-stakeholder partnership.

PROGRAMME MANAGEMENT STRUCTURE

In order to ensure that UNIDO's activities respond to the needs of the people of Ukraine and the priorities of the Government, all interventions will be closely aligned and consulted with the country's institutional and strategic frameworks with the close involvement of national counterparts, including on the central and local levels.

To coordinate all the work internally in UNIDO, the Programme Management Unit (PMU) was established to facilitate all activities related to the implementation of the green industrial recovery programme and ensure continuous coordination, monitoring and reporting. Under the overall leadership of the Chief of the UNIDO Regional Bureau for Europe and Central Asia and the Senior Coordinator for Ukraine based at the UNIDO headquarters in Vienna, Austria, the PMU comprises a coordinating team based in the UNIDO headquarters and in Ukraine (Kyiv and Lviv, primarily) and technical leads for separate thematic areas of the programmes and their respective teams. The PMU composition currently includes project managers and experts from the following UNIDO's technical divisions:

- Division of Agribusiness and Infrastructure Development;
- Division of Capacity Development, Statistics and Industrial Policy Advice;
- Division of Circular Economy and Environmental Protection;
- Division of Decarbonization and Sustainable Energy;
- Division of Digital Transformation and Artificial Intelligence Strategies;
- Division of Fair Production, Sustainability Standards and Trade;
- Division of SME Competitiveness, Quality and Job Creation.

The key national coordinating body for the implementation of the green industrial recovery programme nominated by the Government of Ukraine is the Ministry of Economy of Ukraine, which has demonstrated a high level of commitment and ownership towards UNIDO's work in the country. Throughout the programme's preparatory phase, the Ministry of Strategic Industries of Ukraine coordinated the establishment of the National Coordination Body (NCB), which aims to provide the overall strategic direction for the green industrial recovery programme and ensure that it is effectively implemented.

The NCB, as the programme's steering committee, is responsible for ensuring the Government's ownership of the programme and facilitating general coordination between all the partners engaged in its implementation, reviewing the overall progress, undertaking stocktaking and supporting the introduction of the necessary adjustments. The NCB brings together all the line ministries and other national counterparts and partners relevant to the programme to ensure a high level of coordination and national ownership.

The NCB terms of reference were officially adopted on 17 October 2023 by the decree of the Ministry of Strategic Industries, in accordance with national legislation. The decree is currently under the amendment process by the Cabinet of Ministers of Ukraine to stipulate the coordinating role for the programme of the Ministry of Economy of Ukraine. By the decree, the permanent composition of the NCB includes the following ministries:

- Ministry of Economy of Ukraine;
- Ministry of Agrarian Policy and Food of Ukraine;
- Ministry of Energy of Ukraine;
- Ministry of Environmental Protection and Natural Resources of Ukraine;
- Ministry of Strategic Industries of Ukraine;
- Ministry for Communities, Territories and Infrastructure Development of Ukraine.

Meetings of the NCB, either in full or in part, are organized every six months to review progress, endorse work plans and apply corrective actions, as required. Such meetings are organized in a hybrid format, virtually or in person, depending on the circumstances. The NCB is further supplemented by the network of focal points from all relevant counterparts, coordinating operational aspects of the programme with UNIDO on a daily basis. Other entities, including the Ministry of Digital Transformation of Ukraine, the Ministry of Health of Ukraine and the State Agency on Energy Efficiency and Energy Saving of Ukraine, can take part in NCB meetings based on a given agenda, topics of discussion and needs. Projects to be launched under the green industrial recovery programme might establish their respective steering committees, which will consult and coordinate their work with the NCB.

The first NCB meeting for the green industrial recovery of Ukraine was held on 27 June 2023 and established the national coordination mechanism for the green industrial recovery programme by presenting the NCB terms of reference and discussing key short- and medium-term priorities for partnership building and resource mobilization.

The second NCB meeting for the green industrial recovery of Ukraine was held on 12 December 2023 to discuss the progress achieved, present key results and further needs in coordinated and result-oriented partnership building and resource mobilization, as well as identify the way forward for different stakeholders. During the meeting, NCB members endorsed initial project proposals developed by UNIDO for the green industrial recovery programme for further technical consultations with line Ministries and potential donors.

FIGURE 21: GENERAL STRUCTURE OF THE PROGRAMME COORDINATION MECHANISM

UNIDO PROGRAMME MANAGEMENT UNIT (PMU)			NATIONAL COORDINATION BODY (NCB)	
REGIONAL BUREAU FOR EUROPE AND CENTRAL ASIA	SENIOR COORDINATOR FOR UKRAINE	TECHNICAL TASK FORCE ON UKRAINE	CO-CHAIR FROM UNIDO	CO-CHAIR FROM THE GOVERNMENT OF UKRAINE
The PMU is led by the Chief of the Regional Bureau and the Senior Coordinator for Ukraine, and is composed of a group of technical project managers and thematic experts			Members of the NCB include high-level representatives of all key line Ministries, which are appointed by the Government of Ukraine	
Daily work from UNIDO headquarters in Vienna and on the ground in Kyiv, Lviv and other cities of Ukraine			Regular meetings (every six months and additional meetings if need arises) to provide strategic guidance, support resource mobilization and exercise overall oversight	
<p>KEY TASKS:</p> <ul style="list-style-type: none"> • Coordinate and support all programme-related activities, including funds administration, implementation, monitoring, evaluation, coordination, etc. • Maintain partnerships with various stakeholders • Conduct regular communication and outreach activities • Collect and store all the data for result-based management and reporting to the donor/s 			<p>KEY TASKS:</p> <ul style="list-style-type: none"> • Ensure ownership and institutional support required to efficiently achieve the identified objectives • Promote and facilitate inter-ministerial cooperation for the implementation of the programme • Ensure the sustainability, long-term vision and complementarity of all programmatic activities • Facilitate resource mobilization 	

COMMUNICATION AND ADVOCACY

Communication and advocacy activities will be continuously undertaken to widely mainstream the joint effort of UNIDO, the Government of Ukraine and donors of the programme and projects under its umbrella, build multi-stakeholder partnerships and generate the multiplier effect with other technical cooperation activities and development partners, including the United Nations representation on the ground and sister agencies in Ukraine. A dedicated communication strategy has been devised for the green industrial recovery programme and will be duly updated throughout the programme implementation phase.

In order to ensure that the key messages are transmitted correctly and consistently based on the identified key target audiences and that UNIDO activities under the programme are accurately promoted, the PMU will regularly consult and cooperate with the UNIDO Office of Communication, Speeches and the Innovation Lab, as well as the office of the UNIDO Director General and the Chief of Cabinet.

Communication and advocacy activities under the programme aim to provide different target audiences with tailored messages vis-à-vis its activities and UNIDO's general engagement and strategic vision in Ukraine. It includes the dissemination of information through UNIDO's and partners' online platforms and social media channels, as well as national and international media, as appropriate.

In the preparatory phase, the following baseline communication activities have been undertaken and will be further continuously capitalized upon:

- Update of the [UNIDO webpage on the green industrial recovery vision for Ukraine](#), including the publications of impact stories, news articles and knowledge products;
- Maintenance of the established social media accounts on UNIDO's work in Ukraine on [Facebook](#) and [LinkedIn](#) in Ukrainian and English;
- Utilization of the established database of photo and video materials, capturing the results of UNIDO's work and providing references for the programme's impact areas.

GENDER EQUALITY AND EMPOWERMENT OF WOMEN AND YOUTH

The UNIDO gender compliance and marker form has been completed for the programme, and it was assigned gender marker 2A – significant expected contribution to gender equality.

Gender equality and the empowerment of women and youth will be a cross-cutting priority widely mainstreamed throughout the realization of all the programme's activities, supporting the advancement of gender equality and the empowerment of women and youth by encouraging investment in women-/youth-owned/-led businesses, strengthening networks, improving access to markets and providing capacity-building, technology and clean energy solutions to women-/youth-owned/-led enterprises and individual entrepreneurs.

All activities under the programme are and will be set out to ensure gender-balanced participation of target beneficiaries with both women and men having the opportunity to access, participate in and benefit (with a target of at least 40 per cent of whichever gender is underrepresented). Technical cooperation activities specifically supporting the empowerment of women and youth will be implemented and gender experts will be recruited.

Any documents prepared under the programme will reflect gender considerations and the equal participation of women and young people while consultations with associated business groups in the drafting process

will be supported. Toolkits and guidelines produced under the programme will include a chapter or section on gender considerations or have gender-responsive content with due consideration to the contribution of young people integrated throughout each publication. In addition, some of the toolkits and guidelines would specifically address the enhancement of the participation of women and youth in a respective subject area.

Analytical and statistical publications produced will present and analyse differences between women and men, including young women and men, in terms of their needs and opportunities as well as in proposed response strategies and recommendations. To the extent possible, publications will present gender- and age-disaggregated data on the individual and enterprise levels. Moreover, capacity-building activities will include gender- and age-responsive substantial content.

The impact of activities on gender equality and the empowerment of women and youth will be measured through gender- and age-sensitive indicators, as well as gender- and age-disaggregated data, both on the individual and enterprise levels. Gender- and age-sensitive qualitative information will be regularly collected, monitored and reported on to track progress.

ENVIRONMENTAL AND SOCIAL SCREENING

As per UNIDO Environmental and Social Safeguards Policies and Procedures, the environmental and social screening template has been completed and this programme has been categorized as “category C”. Although no further specific environmental and/or social assessment is required for “category C” activities, environmental and social aspects will be duly considered and widely mainstreamed in all programme activities. Advisory services and capacity-building activities provided under the programme will consider environmental and social safeguards. Sustainable procurement principles will be followed to the extent possible. All upcoming projects within this programme will be subject to individual environmental and social risk assessments.

SAFETY AND SECURITY

All security-related issues, including travels to/from Ukraine, will be considered in full compliance with the guidance of the United Nations Department for Safety and Security (UNDSS) in Ukraine. The Government of Ukraine will take the necessary measures to ensure the safety and security of UNIDO’s personnel engaged in programme activities in the country. Programme activities are conditional on the safety and security of UNIDO’s personnel, vendors, beneficiaries and other actors involved.

SUSTAINABILITY

The programme is in line with Ukraine’s industrial development needs and will rely on the following operational principles in order to ensure the sustainability of results:

- Ensuring national ownership and leadership through close collaboration with the Government of Ukraine and other relevant stakeholders so that programme activities, lessons learned and best practices become focal areas to build on;
- Ensuring multi-stakeholder coordination and a high degree of participation and engagement of both public- and private-sector stakeholders to secure support and strong commitment;
- Avoiding duplication and capitalizing on other ongoing, pipeline and completed projects and programmes

while building on the existing capacities and networks;

- Adopting a long-term approach and supporting the promotion of policy frameworks for transformational change while utilizing the positive results of the interventions as a reference and benchmarking tool for replication;
- Facilitating the functionality and effectiveness of the coordination mechanism through the NCB;
- Working towards the scale-up and integration of all UNIDO activities with a demonstrative effect;
- Promoting solutions, practices and technologies for sustainability, inclusivity, resilience building and circularity.

RISK MANAGEMENT

In light of the volatility of the situation in Ukraine and the need for comprehensive and consistent support mechanisms, a multi-disciplinary sustainable development approach should encompass analysis, formulation of policies and proposals for intervention, as well as the implementation and expansion of successful practices and policies. All activities in Ukraine should be demand-driven and based on a thorough understanding of the challenging situation in the country and the longer-term development perspectives and associated risks.

Moreover, given the high volume of humanitarian, technical assistance and development cooperation activities undertaken in Ukraine by various international actors, it is necessary to ensure the complementarity and synergetic effect of UNIDO's work, regularly engaging in the international dialogue and, most importantly, responding to the country's acute and evolving needs with a view to longer-term implications.

UNIDO's consistent and continuous engagement with the NCB and the United Nations system in Ukraine, including through the UNCT and the UNRCO, are indispensable for ensuring the complementarity of international efforts, long-term impact and sustainability. Within UNIDO, regular exchanges within the PMU, as the key internal coordination mechanism, with the ad-hoc engagement of various relevant structural units are pivotal for ensuring that UNIDO acts as one in a coordinated and well-structured manner.

Furthermore, in view of the above-mentioned magnitude of international assistance efforts, it is crucial for UNIDO to capitalize on its comparative advantage and offer the services within its unique areas of expertise and value addition to avoid duplication. As the knowledge products and analytical materials produced within this programme should offer first-hand and original primary data in the areas related to industrial recovery, manufacturing, green economy and the use of energy in industry, UNIDO will be well-positioned to further advance its offer and scale up within the scope of its mandate.

An overview of risks and mitigation measures pertaining to the implementation of the programme is presented below.

TABLE 1: MATRIX OF PROGRAMME RISKS AND MITIGATION MEASURES

ASSUMPTION	RISK DESCRIPTION	RISK LIKELIHOOD	RISK IMPACT	MITIGATION MEASURES
While the war is still ongoing, the situation in the country remains sufficiently secure, especially in central and western regions, allowing for the implementation of early recovery activities and the safe movement of UNIDO's personnel and beneficiaries	Escalating hostilities and degrading security situation in the country putting at risk personnel and beneficiaries, damaging critical industrial infrastructure, as well as hindering future sustained partnerships and investment promotion	MEDIUM	HIGH	<ul style="list-style-type: none"> All activities can be implemented while the war is still ongoing and will be primarily located in the ten western oblasts of Ukraine, as well as Kyiv and Cherkasy oblasts On the basis of country circumstances, UNIDO and the donor might decide to adjust and/or interrupt programme activities, as well as modify the delivery modalities in close coordination with national counterparts to ensure the safety and security of personnel and beneficiaries All UNIDO operations will be conducted following the established security protocols, including those of the Government of Ukraine, and guidance of the UNDSS Programme activities will not engage with industrial sites which could be potentially targeted by military attacks The programme will maintain a contingency plan and undertake preventive measures to ensure the safety and security of personnel and beneficiaries
The Government of Ukraine recognizes the relevance of industrial recovery and development for addressing the country's needs and prioritizes work with UNIDO, ensuring the required national ownership and leadership	Lack of national ownership and leadership	LOW	HIGH	<ul style="list-style-type: none"> UNIDO will undertake close coordination and regular discussions with all relevant stakeholders from the outset of the programme, including through the NCB Given the commitment of the Government of Ukraine to the programme, it is expected that intra-governmental coordination and communication are well-sustained UNIDO will work on the side of communication and advocacy to deliver tailored messages to key target audiences to ensure that sustainable industrial development is perceived as an important enabler of the country's green industrial recovery and resilience building

ASSUMPTION	RISK DESCRIPTION	RISK LIKELIHOOD	RISK IMPACT	MITIGATION MEASURES
The Government of Ukraine has sufficient national capacities to productively engage with UNIDO and foster the sustainability of results in the medium and long terms	Lack of institutional absorptive capacities	HIGH	MEDIUM	<ul style="list-style-type: none"> To the extent possible, the programme will attempt to assess the absorptive capacities of all relevant counterparts and adjust activities should challenges arise Given the commitment of the Government of Ukraine to the programme and the availability of the institutional framework of the NCB, there is an opportunity for swift and effective corrective actions in case of challenges
The international community continues its support for Ukraine and the necessary resources and partnerships are mobilized for the consistent implementation of the programme	Lack of donor funding	MEDIUM	MEDIUM	<ul style="list-style-type: none"> UNIDO will maintain a resource mobilization strategy and donor mapping to ensure that all engagements with development and funding partners are result-oriented and based on a clear alignment of development priorities The Government of Ukraine through the NCB will lead resource mobilization work together with UNIDO and prioritize UNIDO's mandate and expertise in its engagements with donors UNIDO will work closely as part of One United Nations in Ukraine and engage in joint resource mobilization and programming with sister agencies
Early recovery efforts of the international community spur results, allowing for investment attraction and continuous scale-up effect	Continuous needs for humanitarian assistance and lack of opportunities for development cooperation	MEDIUM	LOW	<ul style="list-style-type: none"> UNIDO will take a staged approach to engagement in and with Ukraine, analysing the opportunities for integration and scale-up at every step and ensuring that the necessary absorption capacities are in place Given the large-scale funding to be provided to UNIDO from Japan, the transfer of technology and attraction of investment become possible
All counterparts are well engaged in and informed of programme activities, as well as committed to long-standing and sustainable results, informing UNIDO of any challenges in a timely manner	Continued delays and disruptions in programme implementation	MEDIUM	MEDIUM	<ul style="list-style-type: none"> UNIDO will continue maintaining close and regular dialogue with national counterparts and address any arising concerns in a timely manner through the NCB, as well as adjust the programme work plan and priorities based on the changing situation and emerging needs UNIDO will work to articulate the programme's value addition in addressing the country's needs and priorities for green recovery and sustainable industrial development

ASSUMPTION	RISK DESCRIPTION	RISK LIKELIHOOD	RISK IMPACT	MITIGATION MEASURES
UNIDO's interventions are result-oriented and sustainable in the long term	No lasting or sustainable impact emerging from the programme	LOW	HIGH	<ul style="list-style-type: none"> UNIDO will work together with national counterparts to ensure that consideration is given to the long-term sustainability of interventions, and programme activities will be adapted should there be a risk of no impact given the low level of absorptive capacity, lacking national ownership, evidence of the limited uptake of introduced technology or other emerging risks All sustainability considerations will be taken into account through the programme's monitoring, reporting and evaluation activities
Internal administrative capacities are sufficient for the implementation of the programme	Limited administrative resources in UNIDO	LOW	MEDIUM	<ul style="list-style-type: none"> UNIDO will carefully analyse all the administrative needs, including human resources and other internal capacities, and will reflect these needs in a programme work plan to be regularly updated based on the evolving circumstances UNIDO will recruit the necessary personnel to support programme implementation
No unforeseen suspension of the programme or UNIDO's operations in Ukraine occur	Unforeseen circumstances, which are not described in the programme document	HIGH	MEDIUM	<ul style="list-style-type: none"> Should any unforeseen changes in circumstances occur, UNIDO will ensure that the necessary mitigation measures are identified depending on the level and impact of a given risk in close cooperation with national counterparts in Ukraine

10 RESULTS FRAMEWORK

TABLE 2: PROGRAMME RESULTS FRAMEWORK

INTERVENTION LOGIC	INDICATORS AND TARGETS	SOURCES OF VERIFICATION	ASSUMPTIONS
EXPECTED PROGRAMME IMPACT¹			
<p>Impact: People in Ukraine, especially war-affected vulnerable groups, enjoy decent employment, have the means to support their livelihoods and benefit from a conducive policy environment and innovative business ecosystems, allowing MSMEs to expand their operations and export their products, minimizing industry's impact on the environment and ultimately fostering Ukraine's economic resilience, green industrial recovery and sustainable development</p>	<p>ECO.1: Number of firms with economic gains (additional sales, savings) Target: 500, 40 per cent women-led</p> <p>ECO.3: Number of firms with an increase in exports Target: 150, 40 per cent women-led</p> <p>SOC.1: Number of additional jobs created and jobs retained Target: 4,000, 40 per cent women</p> <p>SOC.2: Number of MSMEs with increased inclusion in value chains Target: 200, 40 per cent women-led</p> <p>ENV.1: Cumulative reduction of CO_{2eq} emissions Target: 300,000 tons</p> <p>ENV.2: Cumulative tons of pollutants reduced or phased out Target: 2,000 tons</p>	<p>Programme progress reports</p> <p>Programme mid-term review</p> <p>Programme final self-evaluation</p>	<p>While the war is still ongoing, the situation in the country remains sufficiently secure, especially in central and western regions, allowing for the implementation of early recovery activities and the safe movement of UNIDO's personnel and beneficiaries</p> <p>The Government of Ukraine recognizes the relevance of industrial recovery and development for addressing the country's needs and prioritizes work with UNIDO, ensuring the required national ownership and leadership</p> <p>The Government of Ukraine has sufficient national capacities to productively engage with UNIDO and foster the sustainability of results in the medium and long terms</p> <p>The international community continues its unwavering support for Ukraine and the necessary resources and partnerships are mobilized for the consistent implementation of the programme</p> <p>Early recovery efforts of the international community spur results, allowing for investment attraction and continuous scale-up effect</p>

¹ The programme's impact constitutes a collective cumulative impact of all separate technical cooperation projects initiated under its umbrella.

PROGRAMME OUTCOMES²

Outcome 1: Vocational and entrepreneurial awareness, knowledge and skills are enhanced among people in Ukraine, especially vulnerable groups

Outcome 2: Business support institutions and educational institutions deliver quality training and advisory services to people in Ukraine, especially vulnerable groups

Outcome 3: Ukraine's trade capacities are enhanced and MSMEs are supported through strengthened quality and standards in various value chains, facilitating Ukraine's economic development and integration into the European market

Outcome 4: The internationalization and business sophistication of MSMEs and their clusters are enhanced for strengthened business ecosystems and strategic investment

Outcome 5: Ukraine's industrial production and processing, including in the food industry, are upgraded with positive effects on job creation and environmental performance

Outcome 6: Digital transformation and the uptake of artificial intelligence in industry are fostered, leading to the strengthened innovation ecosystem for productivity and value addition

BUS.1: Cumulative number of firms with improved management practices

Target: 500, 40 per cent women-led

TEC.1: Number of new technologies developed or adapted

Target: 30

POL.1: Cumulative number of new or revised policies adopted by policymakers

Target: 5 (all gender-responsive)

POL.2: Cumulative number of new standards adopted or implemented

Target: 20

POL.3: Number of guidelines adopted by relevant actors

Target: 30 (all gender-responsive)

INV.3: Value (USD) of new investments leveraged

Target: 50 million

GOV.1: Number of institutions established or strengthened

Target: 30

GOV.2: Number of actors participating in enhanced collaboration settings (clusters, networks)

Target: 200

Project reports and evaluations

Programme progress reports

Programme mid-term review

Programme final self-evaluation

All counterparts are well engaged in and informed of programme activities, as well as committed to long-standing and sustainable results, informing UNIDO of any challenges in a timely manner

Line ministries and other counterpart institutions of Ukraine are willing to strengthen cooperation with UNIDO and foster green industrial recovery through a number of cross-sectoral interventions

The programme is strongly supported by UNIDO internally and an efficient coordination mechanism is in place to ensure synergies and scale-up

The security situation in the country allows for the delivery of technical cooperation activities and productive engagement with project beneficiaries

The Government of Ukraine recognizes the relevance of industry in addressing the country's recovery needs and prioritizes work with UNIDO, ensuring the required national ownership and leadership

Ukraine remains high on the international development agenda, allowing for effective partnership-building

Target audiences and development partners are interested in UNIDO's work to support the green industrial recovery programme

²The programme's outcomes constitute a collective cumulative outcome of all separate technical cooperation projects initiated under its umbrella.

<p>Outcome 7: Ukraine's transition to circular economy is facilitated through the application of resource-efficient and cleaner production and energy efficiency in industry</p> <p>Outcome 8: Ukraine's industrial waste management systems, including for hazardous waste, are strengthened</p> <p>Outcome 9: The application of low-carbon, environmentally sound and clean energy solutions is enhanced in industry</p>	<p>KASA.1: Number of actors gaining awareness/ knowledge on UNIDO knowledge areas Target: 10,000, 40 per cent women</p> <p>KASA.2: Number of actors gaining skills on UNIDO knowledge areas Target: 1,000, 40 per cent women</p>		
COORDINATION, RESOURCE MOBILIZATION COMMUNICATION, MONITORING AND REPORTING			
<p>All the elements of the programme are coordinated internally with the engagement of technical units and thematic experts through the PMU</p>	<p>CPO.2: Number of United Nations interagency mechanisms with UNIDO participation Target: 3 (UNCT, results groups)</p>	<p>Project reports and evaluations</p> <p>Programme progress reports</p>	<p>UNIDO has sufficient internal coordination and implementation capacities for the operationalization of the programme</p>
<p>All the elements of the programme are coordinated externally with national counterparts through the NCB, international partners and donors, while sufficient resources for the implementation of projects under its umbrella are mobilized</p>	<p>CPO.4: Number of interventions or joint programmes with United Nations system entities Target: 7 (new interventions over five years)</p> <p>CPO.5: Number of interventions (projects/ programmes) in partnership with non-United Nations institutions Target: 2 (new interventions over five years)</p>	<p>Programme mid-term review</p> <p>Programme final self-evaluation</p>	<p>The Government of Ukraine and other national stakeholders are interested in and committed to cooperation with UNIDO</p> <p>Development and funding partners are willing to cooperate with UNIDO and provide support for the implementation of the programme</p>
<p>The implementation of the programme is diligently monitored and reported against with the identification of gaps and needs, and the final self-evaluation is undertaken</p>	<p>Percentage of projects under this programme whose quality was evaluated satisfactory at completion Target: 100 per cent</p> <p>Percentage of projects under this programme with gender marker category 2A or 2B Target: 50 per cent – 2A, 5 per cent – 2B</p>		<p>The implementation of the programme follows the identified timeframe and activities are undertaken in an efficient and effective manner</p>
<p>External communication and outreach are ensured to foster the visibility of UNIDO's work, fields of expertise and value addition in Ukraine</p>	<p>CPO.1: Number of global fora, workshops/EGM/ side events organized Target: 7 (all gender-responsive)</p>		<p>The external audience is interested in UNIDO's activities in Ukraine and promotional activities lead to increased awareness</p>



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