





# **IMPLEMENTATION PLAN**

CONCRETE STEPS TO REALIZE THE NATIONAL GUIDING FRAMEWORK FOR STANDARDS AND TECHNICAL REGULATIONS FOR THE GREEN RECONSTRUCTION OF UKRAINE





# **Acknowledgements**

The publication has been prepared by the United Nations Industrial Development Organization (UNIDO), jointly with the Ministry of Economy of Ukraine, and the Ukrainian Standardization Agency (UAS). It is based on the work of international and national experts.

The work has been realized with the support of Switzerland, through the State Secretariat for Economic Affairs (SECO) and the Federal Ministry for Economic Cooperation and Development of Germany (BMZ).

2024 United Nations Industrial Development Organization. This document has been produced without formal United Nations editing. The designations and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as "developed", "industrialized" and "developing" are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of company names or commercial products does not constitute an endorsement by UNIDO. Although great care has been taken to maintain the accuracy of the information presented, neither UNIDO nor its member states assume any responsibility for consequences which may arise from the use of the material.

# **Contextualization**

The Implementation plan has been developed to translate the National Guiding Framework (NGF) into concrete actions on how to use Standards and Technical Regulations for Green reconstruction of Ukraine. The goal is to strengthen Ukraine's quality infrastructure system, particularly promoting standards, and guiding on technical regulations in the post-war reconstruction projects.

Ukraine finds itself at a crossroads between rebuilding the infrastructure the way it has been done in the past, or in a sustainable manner, using green standards, the most advanced practices, and state-of-art technologies. This would contribute enabling the Country to use the massive reconstruction efforts as a springboard for sustainability. Indeed, if based on sustainability principles, reconstruction can overcome a major carbon footprint, reducing potential climate impact and improving energy and resource efficiency.

Following the growing global awareness of the impacts of climate change, improved international expertise, knowledge and best practices on circular economy, carbon neutrality and decarbonization have been codified into international standards. When these standards are used as a basis for or to support technical regulations, they are a key element in defining the specifications for public and private investment projects, public procurement, operations of services and their management.

UNIDO, together with the Ministry of Economy of Ukraine, developed a "National Guiding Framework of Standards and Technical Regulations for the Green Reconstruction of Ukraine" (NGF). The NGF effectively contribute to the green reconstruction of essential infrastructure, facilities, services and their management, by incorporating sustainability principles into national standards and binding technical regulations. Working towards this goal will, at the same time, contribute to the alignment of Ukraine with the European market and its requirements.

# **Table of contents**

COI	NTEXTUALIZATION
EXE	ECUTIVE SUMMARY
1.	MAIN DEVELOPMENTS AND NEEDS IN STANDARDS AND TECHNICAL REGULATIONS FOR UKRAINE GREEN RECOVERY 6
1.1.	Highlights on the developments in the regulatory policy on the technical regulations and standards 6
1.2.	Introducing the National Guiding Framework for Green Reconstruction of Ukraine
1.3.	Key gaps and opportunities for green reconstruction in terms of technical regulations and standards
2.	IMPLEMENTATION PLAN: VISION, OBJECTIVES AND ACTIONS
2.1.	Overall strategy for addressing sustainability issues in standards and technical regulations
2.2.	Action and objectives of the NGF implementation plan
	2.2.1. Pillar 1 Mapping and prioritisation with identification, structuring and setting up the full inventory of stan-
	dards and TRs for Ukraine Green Reconstruction
	2.2.2. Pillar 2 Gaining engagement and awareness raising on these standards among key national counterparts
	and stakeholders with support of relevant international organizations and donors
3.	ALIGNMENT OF THE IMPLEMENTATION PLAN WITH OTHER POLICIES AND INITIATIVES
2.2.	Other relevant national and sectoral programmes and initiatives in the field of standards and green reconstruction
	in Ukraine
2.2.	Programmes of UNIDO and other international organizations (and donors) facilitating Green reconstruction in
	Ukraine (esp. Related to QI/TR and standards)
GLO	OSSARY OF TERMS
ANI	NEX A: LIST OF STANDARDS WITHIN THE NATIONAL GUIDING FRAMEWORK
ANI	NEX B: LIST OF TECHNICAL COMMITTEES IN PRIORITY SECTORS FOR TRAINING AND PROFESSIONAL DEVELOPMENT29



This document presents an **Implementation plan** for the **National Guiding Framework on Standards and Technical Regulations for the Green Reconstruction of Ukraine (NGF)**. The purpose of the Implementation plan is to guide the Government of Ukraine and relevant national and international stakeholders on the implementation of the high-level agenda set up in the NGF.

The Implementation plan builds on 3 sections (see Figure 1):

Figure 1 Outline of the National Guiding Framework for the Green Reconstruction of Ukraine

Section 1 recaps the main developments and needs in standards and technical regulations for Green Reconstruction in Ukraine. It also presents the National Guiding Framework with the indication of the main components and guidelines.



Section 2 presents the overall implementation strategy for addressing sustainability issues in standards and technical regulations, including guiding through the detailed list of short-term and medium-term actions, as well as identifying the key institutions involved and the specific objectives to be achieved. The section concludes with specific sub-actions per priority sector.



3 Alignment of the implementation plan with other policies and initiatives

**Section 3** introduces synergies, key national documents and programmes implemented by UNIDO and other donors in Ukraine that support with Green Reconstruction in Ukraine especially minding the focus on quality infrastructure in Ukraine.



It is important to note that the Implementation plan is part of the series of complementary documents to be used collectively to effectively guide the national stakeholders in Ukraine on leveraging standards and technical regulations for Green Reconstruction in Ukraine.



# 1.1. Highlights on the developments in the regulatory policy on the technical regulations and standards

Ukraine is a modern Eastern European country that since February 24, 2022, started to face immense pressure on multiple facades of its economic, political and social life due to full scale invasion of Russia. Following World Bank (2024)1 the Third Ukraine Rapid Damage and Needs Assessment report (RDNA3), covering period between February 24, 2022, and December 31, 2023, direct damage in Ukraine has reached almost US\$ 152 billion, with housing, transport, commerce and industry, agriculture, and energy the most affected sectors. Thus, as of December 31, 2023, recovery and reconstruction needs are estimated at almost US\$ 486 billion considering an (ambitious) 10-year period to meet them (WB 2024). These needs include critical steps for short-term recovery as well as medium-term reconstruction that builds back better to modern, low-carbon, and climate-resilient standards, and that—where relevant and possible—excludes needs already met through the Ukraine state budget or through partners and international support.

Following the outbreak of war, Ukraine has put forward a Recovery Vision for Ukraine Recovery and Reconstruction (The Vision) that aims to capitalize on the reconstruction efforts and make sure that these are guided by and serve as a springboard for sustainability and green transition supporting its integration processes with the EU. The Vision was first presented at the Ukraine Recovery Conference (URC) 2022<sup>2</sup> in Lugano in July. This vision has been further backed up by the international partners in the form of the 'Lugano Declaration'. The document created a framework for the political process guiding Ukraine's reconstruction3. This was an important momentum steering the focus towards the future, the process of reconstruction and the needed investment. The outcome document4 of the URC2022 highlighted a number of actions, specifically welcoming innovative approaches to recovery, such as green energy transition, digital transformation, national and international innovative and sustainable financing, including harnessing possible reparations, contributions by private donors and the private sector. In such, the vision based on Green Reconstruction principles can help Ukraine overcome large carbon footprint, reduce climate impact and climate-related effects from the war, improve energy and resource efficiency and address current bottlenecks in standards and technical regulation helping the country to speed its integration with the EU.

To achieve this goal of Green Reconstruction in Ukraine, it is crucial to adopt and effectively implement new green practices, which have been codified into international standards. When incorporated into technical regulations, they are key in defining specifications for public and private investment projects, services and their management. Therefore, adhering to established norms and best practices in green standards Ukraine will be able to rebuild as a stronger, more

resilient country, that can be better equipped to withstand any of the future challenges.

In terms of the context for technical regulation and standards related to green transition, Ukraine inherited its NQI from the Soviet Union, but since its independence in 1991 began to in line with the changing political, social and economic structure driven by international trade agreements. In such, according to the World Bank's Gap Assessment of Ukraine's NQI (from 2017), the structure of Ukraine's NQI was consistent with accepted international practices and had no major problems regarding international recognition of its various elements.

However, there are still a number of needs that are being faced by Ukraine in terms of using relevant TRs and standards. Some of the maim bottlenecks related to **standards and TRs** has to be viewed from the perspective of, on one hand, post-soviet infrastructure, where many standards and regulations were guided by governmental regulations; and on the other hand, by the wave of recent developments, such as compliance and alignment with the EU regulations, incorporation and adoption of many international and European (voluntary) standards from ISO, IEC, CEN and CENELEC. However, the rapid adoption still needs to make sure that the standards are widely available and implemented in practice, which would require efforts in capacity building and awareness raising, as well as translated into the Ukrainian language.

In such, the development of the Implementation plan of Standards and Technical Regulations for the Green Reconstruction of Ukraine, which is based on the National Guiding Framework (developed as a basis for mapping the opportunities on standards and technical regulations for green reconstruction of Ukraine), is taking place in the overall context that of three main pillars (see also Figure 2):

- EU Integration and the need to consider current European and global best practices in "Green Construction" for Guidance and where needed their recognition,
- Ukraine Recovery Plan that establishes the main pillars for building industrial strengths through resilience, recovery, modernization and growth, and
- Standards and Technical Regulations seeing as a basis for reconstruction initiatives supporting with Green Reconstruction.
- 1 https://documents1.worldbank.org/curated/en/099021324115085807/pdf/P1801741bea12c012189ca16d95d8c2556a.pdf
- 2 https://www.urc-international.com/urc-2022
- 3 https://www.technopolis-group.com/opportunities-for-green-recovery-in-ukraine/
- 4 https://www.eda.admin.ch/content/dam/eda/en/documents/aktuell/dossiers/urc2022\_lugano-declaration.pdf

Figure 5 Overall context of the current initiative on green reconstruction in Ukraine

# EU Integration

Aim is for future Membership of EU — Focus on alignment with and adoption of EU Directives and CEN/CENELEC standards



## Overal Recovery Plan

- Resilience
- Recovery
- Modernization and growth

Develop a modernization plan to ensure expedited sustainable economic growth and wellbeing of the people



## Standards and Technical Regs

Development of a national Guiding Framework of Standards and Technical Regulations to support "Green reconstruction".



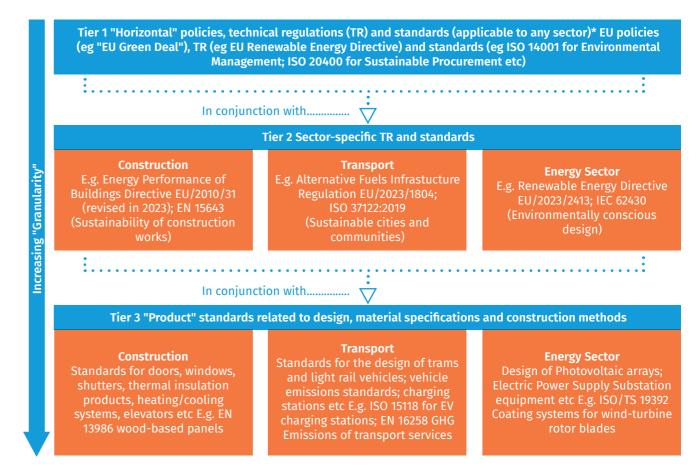
# **1.2.** Introducing the National Guiding Framework for Green Reconstruction of Ukraine

Given a huge number of technical regulations and standards that are applicable to the Green Reconstruction of Ukraine, the first step was to systematically structure and illustrate them. This is what have been done (systematically structuring) minding the above presented context. This has resulted in the development of the National Guiding Framework for Green Reconstruction of Ukraine, which is to serve as a framework on using standards and technical regulations as a mean to support Ukraine and its institutions in their efforts towards Green Reconstruction. Implementation plan also sets its principles on the NGF. Therefore, before going into the vision and specific actions for the Implementation plan,

the short review of the NGF is done with the more details presented in the document on the NGF itself.

The core stone of the NGF is represented in Figure 3, which frames "green" related standards and regulations. The Framework is also suited for the **primary two first scenarios** that Ukraine faces as part of Green Reconstruction and Green Transition, namely: complete reconstruction of infrastructure that has been destroyed and the renovation/reconstruction of partially destroyed infrastructure (not considering the upgrading of infrastructure that has been unaffected by the war).

## Figure 3: Proposed Framework for Technical Regulations and Standards for the "Green reconstruction" of Ukraine



<sup>\*</sup> Legeslative basis: Law of Ukraine "On technical regulations and conformity assessment"; "On standardization"; Order of Ministry of Economic Development, Trade and Agriculture Nº 125 Approval of the "Rules for the formation of lists od national standards (2021)"

The NGF consists of several dimensions: (I) Level of granularity, (II) Hierarchy of requirements, (III) Sectoral priority and (IV) Sub-groups for some of the sectors.

### **Level of granularity:**

First, the framework is structured in terms of level of detail (granularity) from more generic technical regulations and standards included in Tier 1 to more sector and even product related ones – Tier 2 and 3:

- Tier 1 refers to standards and technical regulations that are generic in nature and can be applied to any sector that is included in the reconstruction effort.
- Tier 2 relates to the standards and technical regulations that are applicable in specific sectors. Figure 3 provides some examples for the three sectors that are currently being prioritized in this initiative, but a similar approach could be adopted for just about any sector.
- Tier 3 is more specific still and relates to the standards and technical regulations for the sub-groups, such as design, material ("product") specifications and construction methods (see point on sub-groups below) to be used during the reconstruction process.

### **Hierarchy of requirements**

Second, the tiers shown in Figure 3 are cumulative in nature, but superimposed on each tier are different hierarchies of standards and technical regulations that may or may not apply. These can be summarized as follows:

- "Mandatory requirements". The starting point, of course, is that any reconstruction ("Green" or otherwise) has to be carried out in accordance with the prevailing Ukrainian technical regulations and associated standards.
- "Desirable requirements" meaning the development of the NGF takes into account the fact that "Green" initiatives are themselves a relatively fast-moving target even within the EU itself. For example, to boost the energy performance of buildings, the EU established a legislative framework that includes the Energy Performance of Buildings Directive EU/2010/31 (revised in 2023) and the Energy Efficiency Directive EU/2023/1791. It is possible that some of these EU Technical Regulations might not have been formally adopted by the time the reconstruc-

Page 7 | 29

tion process begins. Nevertheless, it would be prudent to take them into consideration, even though they may not, strictly speaking, be "mandatory".

"Voluntary" requirement and/or guideline standards that might not be mandatory in themselves (and might not necessarily be made mandatory by reference in technical regulations). Nevertheless, it can be prudent to apply, refer to and incentivize the use of these standards (for all three "Tiers" mentioned above) during the Public Procurement approach that will be vital if the reconstruction initiative is to be truly "green". Once again, however, it is likely that difficult decisions and "Trade-offs" for the deployment of these standards will need to be made, taking into account the availability of suppliers who can meet them within the urgent schedules and scales involved.

## **Sectoral priority**

Third, NGF focuses on the 3 main sectors and then product groups. The sectors for the scope of the NGF have been selected through **deep consultations with national and international stakeholders**, complemented by evidence through the **desk research**<sup>5</sup>. The selected sectors are the following (see Annex B for more details):

#### 1) Construction and Housing:

- Construction works regulations (compulsory) and voluntary provisions which may be applied to construction works. This also includes obligations arising from the Energy Performance of Buildings Directive of the EU;
- Construction products, sub-divided into product performance declarations covering thermal performance, environmental performance and dangerous substances content/ release, and energy efficiency in the production process;
- Appliances/equipment used in buildings, with analysis of the consequences of Ukraine approximating or transposing the collection of regulatory requirements regarding eco-design and energy labelling;

- 2) Energy: Renewable energy, sub-divided into larger-scale generation for Ukraine as a whole (under the Renewable Energy Directive in the EU), and local generation associated with individual buildings as relevant for the definition of near-zero and zero-energy buildings of the Energy Performance of Buildings Directive;
- 3) Transportation and machinery: Urban transportation, considering the adoption of requirements from the Energy Efficiency of Buildings Directive of the EU, together with more general measures aimed at promoting more sustainable urban transport.

It does not mean that other sectors should not be considered for the Green recovery and reconstruction in Ukraine. On contrary, the sectoral focus can be expanded further. However, minding the above, the developed NGF focuses on the 3 above mentioned sectors.

### **Sub-groups**

Lastly, within Tier 3, design for construction sector is probably the most important element to be considered, since it forms the starting point for the incorporation of green initiatives into the reconstruction process. There are many global initiatives, including codes, regulations, international, regional and national standards as well as Voluntary Sustainability Standards and good practices directed towards the design of sustainable housing, transport, and energy generation / distribution systems. However, it is important to take into consideration the feasibility of sourcing for the effective implementation of the various project designs, principally in terms of available human, material and financial resources within the necessary timeframes. The Hierarchy of requirements mentioned above might be a useful guide in prioritizing the requirements that are applied in practice.

As part of the NGF, the comprehensive list of standards and technical regulations supporting green reconstruction in Ukraine has been developed. These standards and regulations are presented in the Annex A. It lists some relevant international (ISO and IEC) and regional (CEN/CENELEC) standards as well as some Voluntary Sustainability Standards (VSS) that do not fall under the umbrella of National Standards Bodies such as UAS. The list is by no means an exhaustive one, but it does provide a starting point to frame green standards for Ukraine Green Reconstruction.

# 1.3. Key gaps and opportunities for green reconstruction in terms of technical regulations and standards

Following the development of the NGF it has been seen that there is a wide array of international and regional standards relevant to the Green Reconstruction of Ukraine. Most of these are, however "strategic level" or "horizontal" standards that cover a wide range of disciplines. These include:

- General sustainability-related standards such as ISO 26000 (Social Responsibility), ISO 20400 (Sustainable Procurement) and more specific ones such as ISO 21928-2 Sustainability indicators for civil engineering works
- Management System Standards such as ISO 9001 (Quality), ISO 14001 (Environmental) and ISO 50001 (Energy efficiency)
- Following documents were central in the review: World Bank report on UKRAINE Rapid Damage and Needs Assessment February 2022 February 2023 https://documents1.worldbank.org/curated/en/099184503212328877/pdf/P1801740d1177f03c0ab180057556615497.pdf; Ukraine Development Fund (the UDF), https://global-uploads.webflow.com/621f88db25fbf24758792dd8/64931249dc66515444cf9379\_BlackRock\_FMA\_Ukraine\_evelopmerFund\_DFI\_for\_the\_reconstruction.pdf and priority areas listed in Annex III of the EU-Ukraine Association Agreement.

 Standards related to the measurement of environmental impacts and other relevant issues, such as IWA 42:2022 (Net Zero Guidelines), ISO 14044 (Environmental Life cycle assessment), EN ISO 14067 (Quantification of carbon footprint)

Not mentioned specifically here, but likely to be relevant from the financial (donor) perspective are standards that relate to "Green Financial Instruments" as in the ISO 14030 series<sup>6</sup>

However, there are several significant gaps.

- First of all, in product standards that describe the criteria for specific materials and production methods that will be needed for the reconstruction of Ukraine (for example what constitutes "Green cement, concrete, steel" etc). This poses a dilemma for UAS the development of such "prescriptive" standards is not usually considered as Good Standardization Practice (and much less so in terms of Good Regulatory Practice if these were to be incorporated into Technical Regulations).
- Beyond that, there are gaps in monitoring and insufficient coordination in the adoption of harmonized standards for the purposes of applying priority technical regulations.
- And finally, as already mentioned in sharing and raising awareness among the national stakeholders (esp. export oriented) on application/using of these standards and TRs.

Therefore, the NGF proposed several **recommendations** to be considered:

 To include sustainability considerations into all Public Procurement Contracts, and specify the materials, construction methods and environmental impact criteria to be used. For Central executive authorities: to provide monitoring of adoption standards in priority sectors, based on the NGF, by also developing and setting monitoring procedures based on the best European practices.

For UAS or another interested national partner to provide Training material based on the NGF that describes how sustainability issues can be incorporated into the reconstruction initiative, and how the various standards mentioned in this report can contribute

It will be important to conduct a **needs assessment** for metrological, accreditation, conformity assessment and market surveillance capabilities to support the green reconstruction initiative. These are likely to include the following:

- TCs developing standards
- Testing and calibration laboratories accredited for the applicable scopes
- Accredited Validation and Verification Bodies for environmental declarations (such as carbon footprint; energy efficiency etc)
- Certification bodies recognized for VSS such as Forestry Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC) and others
- Reinforcement of Market Surveillance capabilities to ensure that reconstruction efforts comply with all relevant technical regulations
- Inspection Bodies with the appropriate accreditation scopes to support the above Central executive authorities need to intensify efforts to compile lists of national standards for the purposes of applying technical regulations and submit relevant proposals to the national standardization body for the development of such national standards.

**Page** 9 | 29

<sup>6</sup> ISO 14030-1 Environmental performance evaluation — Green debt instruments — Process for green bonds; ISO 14030-2: Process for green loans; ISO 14030-3: Taxonomy (of investment categories) and ISO 14030-4: Verification programme requirements



# Implementation plan:

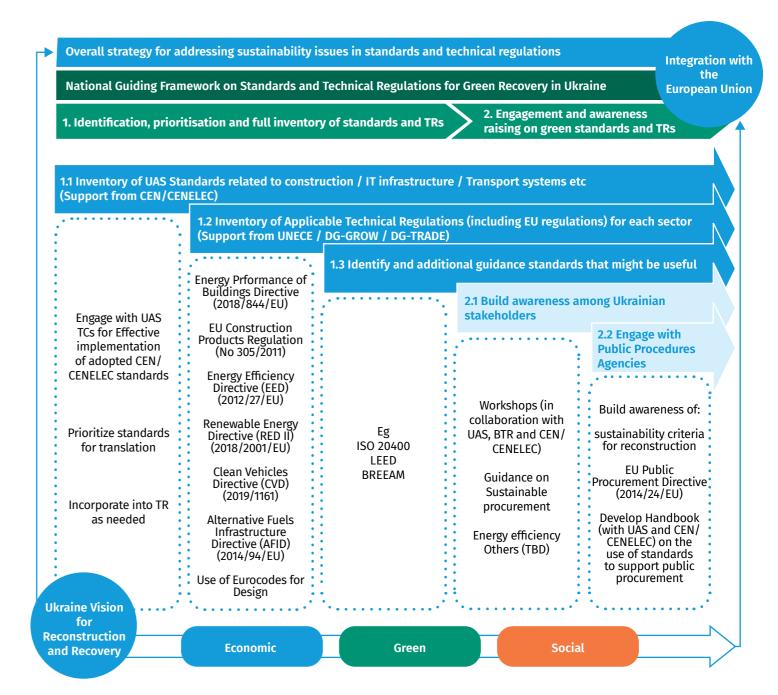
vision, objectives and actions



# 2.1. Overall strategy for addressing sustainability issues in standards and technical regulations

As a result, the NGF has also proposed a number of future activities to support national stakeholders in Ukraine with the implementation of standards and technical regulations related to Green Reconstruction in Ukraine. These activities have been set as two main components/pillars (with sub-steps) forming the **Overall strategy** for Green Reconstruction efforts in standards and technical regulations in Ukraine (see Figure 4)

Figure 4: Overall strategy for Green Reconstruction efforts in standards and TRs for Ukraine



The Strategy sets on the NGF on Standards and Technical Regulations for Green Reconstruction in Ukraine (see sections above), that proposes two **main pillars** for the strategy:

- 1) Pillar 1: Mapping and prioritisation with identification, structuring and setting up the full inventory of standards and TRs for Ukraine Green Reconstruction: This would present a quite exhaustive exercise to produce a full inventory of standards and technical regulations that are fully aligned (considering the priority) with the European directives, as well as international standards. For this a strong cooperation with CEN/CENELEC and ISO would be needed. One of the challenges will be adjustments to EU directives leading to the need of constant revisiting of Ukrainian one. However, the opportunity consists in gaining experience, knowledge from leading organization with experience in standards adoption as well as the EU-Ukraine integration process (speeding the transition).
- 2) Pillar 2: Gaining engagement and awareness raising on these standards among key national counterparts and stakeholders with support of relevant international organizations and donors: This will also present a wide task and scope, since application / usage of standards within industry and across regions is a very demanding task but will set a basis for the effective operationalization of standards and real change and green transformation of Ukraine economy. Some of the key steps here would include active information and knowledge sharing campaign, capacity building and cooperation and engagement with key national industry and regional stakeholders, like municipalities.

These pillars are set in the overall NGF that is aligned, on one hand, with the Ukraine vision for Reconstruction and Recovery, and, on the other hand, with the integration of Ukraine in the market of the European Union. Collectively, directly and indirectly the strategy contributes to green, economic and social recovery and reconstruction of Ukraine.

## 2.2. Action and objectives of the NGF implementation plan

Minding the proposed Strategy for addressing sustainability issues in standards and technical regulations, which is based on the NGF, the **Implementation plan** includes following two main pillars.

- Pillar 1: Mapping and prioritisation with identification, structuring and setting up the full inventory of standards and TRs for Ukraine Green Reconstruction
- Output 1: Development of the full repository with comprehensive list of national and international standards and technical regulations and their alignment (or not) with current system of TRs and standards in Ukraine
- Pillar 2: Gaining engagement and awareness raising on these standards among key national counterparts and stakeholders with support of relevant international organizations and donors
  - Output 2: Raised awareness on the key standards and technical regulations for Green Reconstruction among key national stakeholders

The specific objectives and actions under each of the pillars are presented in Table 1. These actions are categories as per:

- Implementation period: short-term (1-2 years), medium-term (3-5 years)
- Stage of situation in Ukraine: Reconstruction (while war is in active phase and Ukraine is considered as a highrisk zone for travel), or Recovery (after the war, during peace or post war negotiations and Ukraine is considered as a low-risk zone for travel)
- Type of institutions involved: from key national and regional public institutions, such as Ministry of Economy
- or/and Ministry of Development of Communities, Territories and Infrastructure of Ukraine, to specific agencies and regional administrations.
- Sectors: in the prioritised areas for construction and housing, energy and transportation
- Areas related to technical regulations and standards

#### Chapter 2 | IMPLEMENTATION PLAN: VISION, OBJECTIVES AND ACTIONS

# 2.2.1 Pillar 1 Mapping and prioritisation with identification, structuring and setting up the full inventory of standards and TRs for Ukraine Green Reconstruction

#### Pillar 1: Mapping and prioritisation

**Output 1:** Development of the full repository with comprehensive list of national and international standards and technical regulations and their alignment (or not) with current system of TRs and standards in Ukraine

#### **Expected outcome:**

- Proposals to the National Standardization Strategy of Ukraine and the Plan for the Development of the Technical Regulatory System for the Period 2025-2030 were submitted,
- · Technical barriers to trade have been removed,
- Ukraine's obligations under the Association Agreement and ACAA agreement have been fulfilled

### Table 1: Implementation plan - Pillar 1

Actions	National / international institutions to be involved	Period/Stage of situation	Sector	Areas	Progress indicator	Expected outcomes
Pillar	1 Objective 1.1: Co	mpile inventory o	f UAS Standards r	elated to constru	ction/ IT infrastru	ıcture/
• 1.1.1 Engage with UAS TC for the most used/purchased standards in the EU and the effective implementation of adopted CEN/CENELEC standards	CEN/CENELEC  UAS  TCs  Min Com and Dev ME  CE&SS UA  DIN  SIS	Short  Reconstruction	ALL	Standards, Stakeholder management	National standards harmonized with the European standards defined in the priority sectors are fully adopted (in accordance with the priority sectors defined by the national priorities of the MoE of Ukraine and the CEN/CENELEC 2030 Strategy)	Technical barriers to trade have been removed,  Ukraine's obligations under the Association Agreement have been fulfilled
• 1.1.2. Priori- tize standards for translation	TCs  UAS  ME  Steering committee of NSB (UAS)	Short  Reconstruction	Priority sectors	Standards	Horizontal and vertical standards in priority sectors are adopted as national standards by translation	the recommendations of the experts of the pre-assessment mission regarding the conclusion of the ACAA Agreement have been implemented,      Ukraine's obligations under the Association Agreement have been fulfilled,      the criterion for Ukraine's full membership in CEN/CENELEC has been met

Page 13 | 29

Actions	National / international institutions to be involved	Period/Stage of situation	Sector	Areas	Progress indicator	Expected outcomes
• 1.1.3. Cancellation of national standards, the provisions of which contradict the provisions of the relevant national standards that are identical to the CEN/CENELEC and ISO standards	• UAS • TCs	Short  Reconstruction	Priority sectors	Standards	Number of repealed national standards in priority sectors whose provisions contradict the provisions of the relevant national standards that are identical to the European CEN/CENELEC standards	technical barriers to trade were eliminated,     recommendations of European experts on the conclusion of the ACAA agreement were implemented,     fulfilment of the requirements of the CEN/CENELEC membership criteria was ensured
1.1.4. Incorporate translated standards into technical regulations as needed      Approval of lists of national standards for the purposes of applying technical regulations developed on the basis of EU legislation	<ul><li>Min Com and Dev</li><li>ME</li><li>CE&amp;SS UA</li><li>UAS</li></ul>	Medium Reconstruction and Recovery	Priority sectors	Standards and technical regulations	Relevant orders were issued by the Ministry of Economy, cen- tral executive authorities, and the Secu- rity Service of Ukraine	technical barriers to trade were eliminated,  compliance with EU legislation was ensured,  fulfilment of Ukraine's commitments under the ACAA and EU membership

Actions	National / international institutions to be involved	Period/Stage of situation	Sector	Areas	Progress indicator	Expected outcomes
• 1.1.5. Training and professional development of stakeholders in priority sectors	• UAS • CE&SS UA • SMES • TCs in priority sectors (See the list of TCs in Annex B Table 4)	Short and Medium Reconstruction and Recovery	Priority sectors	Standards and technical regulations	Number of webinars, trainings, and consultations held	the educational and qualification level of the UAS staff and the level of knowledge of standardization processes were improved,      the effectiveness of the TCs work was increased,      the level of qualification of the authorities in the formation of lists of standards for the application of technical regulations in priority sectors is increased,      awareness of Ukrainian small and medium-sized businesses about the opportunities and benefits of using standards to improve their competitiveness and export potential is improved

**Page** 15 | 29

Actions	National / international institutions to be involved	Period/Stage of situation	Sector	Areas	Progress indicator	Expected outcomes
Pillar 1 Obje	ective 1.2: Compile	inventory of ava	ilable technical re	egulations (Incl El	U regulations) for	each sector
• 1.2.1. Engage with relevant international and national institutions to map available technical regu- lations	<ul> <li>UNECE</li> <li>DG GROW</li> <li>DG TRADE</li> <li>ME</li> <li>CE&amp;SS UA</li> <li>NAAU</li> <li>Dakks</li> <li>Swedac</li> </ul>	Short Reconstruction	ALL	Technical regulations, Stakeholder management	Full compli- ance with national tech- nical regula- tions with EU regulations	technical barriers to trade were eliminated,     compliance with EU legislation was ensured,      fulfilment of Ukraine's commitments under the ACAA and EU membership
• 1.2.2. Make a list of syn- ergies and gaps between Ukraine and the EU techni- cal regulations	• ME • CE&SS UA	Short Reconstruction	ALL	Technical regulations	Full compli- ance national technical regu- lations with EU regulations	proposals to the Plan for the Development of the Technical Regulatory System of Ukraine for the Period 2025-2030 were submitted     technical barriers to trade were eliminated,     compliance with EU legislation was ensured,     fulfilment of Ukraine's commitments under the ACAA and EU membership
	Pillar 1 Ol	ojective 1.3: Ident				
• 1.3.1. Engage with relevant international and regional institutions to map remaining relevant for Ukraine Green Reconstruction standards	• ISO • LEED • BREAM • CEN, CENELEC • ISO • IEC • ETSI • ME • CE&SS UA • DIN • SIS	Medium Reconstruction and Recovery	ALL	Standards and technical regulations, Stakeholder management	Adopted all relevant for Ukraine Green Reconstruction standards	the recommendations of the experts of the pre-assessment mission regarding the conclusion of the ACAA Agreement have been implemented,     Ukraine's obligations under the Association Agreement have been fulfilled,     the criterion for Ukraine's full membership in CEN/CENELEC has been met     increased competitiveness of SMEs

2.2.2 Pillar 2 Gaining engagement and awareness raising on these standards among key national counterparts and stakeholders with support of relevant international organizations and donors

Pillar 2: Engagement and awareness raising on green standards and TRs

Output 2: Raised awareness on the key standards and technical regulations for Green Reconstruction among key national stakeholders

### **Expected outcomes:**

- Proposals to the National Standardization Strategy of Ukraine and the Plan for the Development of the Technical Regulatory System for the Period 2025-2030 were submitted
- Technical barriers to trade have been removed
- Ukraine's obligations under the Association Agreement have been fulfilled

Table 1: Implementation plan – Pillar 1

Actions	National / international institutions to be involved	Period/Stage of situation	Sector	Areas	Progress indicator	Expected outcomes
	Pillar 2 Object	ive 2.1: Built awar	eness on "Smart	cities" for Ukraind	e stakeholders	
• 2.1.1. Conduct awareness-building on the concept and standards related to "Smart Cities"	• CE&SS UA • CEN/CENELEC • UAS	Short Reconstruction	Construction and Housing	Awareness raising	The workshop was held	technical barriers to trade were eliminated,     compliance with EU legislation was ensured,     the recommendations of the experts of the pre-assessment mission regarding the conclusion of the ACAA Agreement have been implemented,     Ukraine's obligations under the Association Agreement have been fulfilled,     the criterion for Ukraine's full membership in CEN/CENELEC has been met     increased competitiveness of SMEs

**Page** 17 | 29

Actions	National / international institutions to be involved	Period/Stage of situation	Sector	Areas	Progress indicator	Expected outcomes
• 2.1.2. Conduct webinar on standards and technical regu- lations related to Design of Smart Build- ings	• CE&SS UA • CEN/CENELEC • UAS	Short Reconstruction	Construction and Housing	Awareness raising	The workshop was held	technical barriers to trade were eliminated,  compliance with EU legislation was ensured,  the recommendations of the experts of the pre-assessment mission regarding the conclusion of the ACAA Agreement have been implemented,  increased competitiveness of SMEs
	Pillar 2 Objective	2.2: Built awarene	ess on green stan	dards among Ukra	aine stakeholders	
• 2.2.1. Conduct workshop on key topics related to NGF, which maybe include Guidance in Sustainable Procurement	• ME • CE&SS UA • CEN/CENELEC • UAS	Short Reconstruction	ALL	Awareness raising	The workshop was held	technical barriers to trade were eliminated,     compliance with EU legislation was ensured,     the recommendations of the experts of the pre-assessment mission regarding the conclusion of the ACAA Agreement have been implemented,     Ukraine's obligations under the Association Agreement have been fulfilled,     the criterion for Ukraine's full membership in CEN/CENELEC has been met     increased competitiveness of SMEs

Actions	international institutions to be involved	Period/Stage of situation	Sector	Areas	Progress indicator	Expected outcomes
• 2.2.2. Conduct workshop on key "horizon- tal" topics related to NGF, related to Carbon foot- print, Energy efficiency	• CE&SS UA • CEN/CENELEC • UAS	Short Reconstruction	Construction and Housing	Awareness raising	The workshop was held	technical barriers to trade were eliminated,     compliance with EU legislation was ensured,      the recommendations of the experts of the pre-assessment mission regarding the conclusion of the ACAA Agreement have been implemented,     increased competitiveness of SMEs
	Pi	llar 2 Objective 2.	3: Engage with Pro	ocurement agenci	ies	
• 2.3.1. Meeting with procurement agencies to build awareness on sustainability criteria for reconstruction	• CE&SS UA • CEN/CENELEC • UAS	Medium Reconstruction and Recovery	ALL	Awareness raising, Stakeholder management	Meetings were held, Analysed the proposals	technical barriers to trade were eliminated, compliance with EU legislation was ensured
• 2.3.1. Meeting with procure-ment agencies to build awareness on sustainability criteria for reconstruction	• CEN/CENELEC • CE&SS UA	Medium Reconstruction and Recovery	ALL	Awareness raising	Workshop was held	• awareness of Ukrainian small and medium-sized businesses about public procurement was improved
• 2.3.3. Develop handbook on the use of standards to support public procurement	• CEN/CENELEC • ME • CE&SS UA • UAS	Medium Reconstruction and Recovery	ALL	Material	Handbook on the use of standards to support public procurement has been de- veloped	technical barriers to trade were eliminated,     compliance with EU legislation was ensured,     increased competitiveness of SMEs

National /

**Page** 19 | 29



## 3.1. Other relevant national and sectoral programmes and initiatives in the field of standards and green reconstruction in Ukraine

Implementation plan is developed minding the central national strategies and regulations. This section will present the overview of related policy documents (beyond only standards and technical regulations) but high relevance to green reconstruction and recovery in Ukraine. Key documents are listed below.

- National Economic Strategy until 20307 The implementation plan will contribute to the strategy's priorities, such as the development of industry, mining, infrastructure, transport, energy, information and communication technologies, creative industries and services. The strategy also takes into account important cross-cutting areas - digitalization, the green course, business development and balanced regional development, which are also a part of the project.
- Ukraine's National Recovery Plan, National Recovery Council July 20228 - The implementation plan will contribute to 3 main objectives for the recovery: 1) Resilience - provide economic, social and environmental resilience in the marathon to victory, 2) Recovery - Find efficient solutions for the soonest recovery of the crucial economic and social processes, and natural ecosystems. and 3) Modernization and growth. The project will also follow most of the guiding principles of the National Recovery Plan, such as Start now - ramp up gradually, Grow prosperity in equitable way, Integrate into EU, Build back better (for the future) and Enable private investment & entrepreneurship.
- National Strategy for Regional Development 2021-20279 - The implementation will contribute to the strategy that recognizes the need to support regional development in order to increases competitiveness of key strategic sectors, where priority sectors are included.
- Ukraine Innovation Development Strategy 2030<sup>10</sup> The implementation will contribute to Innovation Development Strategy, where priority sectors are listed and should support with the high potential for integration of innovation technologies for modernization of products, processes and services, increasing processing capacity.
- The Strategy of the Development of the Innovative Activity Sphere for the Period up to 2030<sup>11</sup> - The main goal of the Strategy is to build a national innovation ecosystem to ensure rapid and high-quality transformation of creative ideas into innovative products and services, increasing the level of innovation of the national econ-

omy, which would feed by engaging with VC related business and sector organizations. The implementation plan will contribute to achieving its goals by development the capacity on the level of standards and technical regulations.

- The Deep and Comprehensive Free Trade Area (DCFTA) as part of Association Agreement between the European Union and Ukraine was signed in 2014 and represents an important agreement for trade in agriculture (and other sectors) between the two parties. The European Union opened tariff rate quotas for duty-free imports for Ukraine's principal agro-food products, such as grain, meat and milk products, and sugar, and grants free access for the others. Ukraine reduced import duties for a number of goods imported from the European Union. About 40 percent of agriculture-related import duties were reduced to zero immediately after the Agreement entered into force, and around a half of import duties will be eliminated during the transition period. It is especially important now in light of Ukraine receiving the EU Candidate status in 2022. Ukraine has also signed (on 24 June 2010), a Free Trade Agreement (FTA) with the European Free Trade Association (EFTA12) (in force since 1 June 2012)13. The FTA considers the priority sectors from the Implementation plan and NGF.
- National Action Plan for Environment Protection until 2025: The strategy defines support and protection of the environment, energy efficiency and construction sector.
- Strategy 2030 CEN/CENELEC14 that covers a time horizon of ten years, from 2021-2030, allowing us to tackle longterm, disruptive strategic challenges. At the same time, the Strategy 2030 is conceived as a living document, allowing CEN and CENELEC to adapt and react to changing stakeholder and market needs in an agile, responsive manner. The implementation of the present Strategy will therefore follow a modular, incremental approach, with ample provisions for regular review, evaluation and, if necessary, reprioritization.
- The 'Blue Guide' on the implementation of EU product rules 2022<sup>15</sup>
- Order of the Cabinet of Ministers of Ukraine dated 22.09.2021 No. 1145-r "On Approval of the Action Plan for the Development of the Technical Regulation System for the Period up to 2025"16
- https://www.kmu.gov.ua/en/news/denis-shmigal-uryad-zatverdiv-nacionalnu-ekonomichnu-strategiyu-do-2030-roku https://global-uploads.webflow.com/621f88db25fbf24758792dd8/62c166751fcf41105380a733\_NRCpercent20Ukrainepercent27spercent20Recoverypercent20Planpercent20blueprint\_ENG.pdf
- https://decentralization.gov.ua/en/news/12680
- https://zakon.rada.gov.ua/laws/show/en/526-2019-p?lang=uk#Text
- https://zakon.rada.gov.ua/laws/show/526-2019-p#Text
- EFTA is the intergovernmental organisation of Iceland, Liechtenstein. Norway and Switzerland
- https://www.efta.int/free-trade/free-trade-agreements/ukraine
- https://www.cencenelec.eu/media/CEN-CENELEC/Publications/cen-clc\_strategy2030.pdf
- https://eur-lex.europa.eu/legal-content/EN/TXT/?toc=0J%3AC%3A2022%3A247%3ATOC&uri=uriserv%3A0J.C\_.2022.247.01.0001.01.ENG
- https://zakon.rada.gov.ua/laws/show/1145-2021-%D1%80#Text

- Order of the Cabinet of Ministers of Ukraine of February 9, 2024, No. 133-r "On Approval of the Action Plan for the Implementation of the Recommendations of the European Commission Presented in the Progress Report of Ukraine within the framework of the European Union Enlargement Package 2023"17
- Resolution of the Cabinet of Ministers of Ukraine of October 25, 2017, No. 1106 "On the Implementation of the
- Association Agreement between Ukraine, on the one hand, and the European Union, the European Atomic Energy Community and their Member States, on the other hand"<sup>18</sup>
- ORDER of the Cabinet of Ministers of Ukraine of February 16, 2024, No. 137-r "On Approval of the Government's Priority Action Plan for 2024",19 clause 11 on standards related to Ukraine facility

# 3.2. Programmes of UNIDO and other international organizations (and donors) facilitating Green reconstruction in Ukraine (esp. related to QI/TR and standards)

The section summarizes key programmes and developments from UNIDO and other international donors active in Ukraine with relevance to this implementation plan on standards and technical regulations, as well as sectors of focus for the implementation plan.

#### **UNIDO:**

Ukraine has been a member of UNIDO since 1966 with a Country Focal Point in Kyiv placed in the premises of Ukraine ME since 1999. UNIDO has experience in designing and implementing a number of technical assistance projects in the country, as well as in the region. UNIDO is currently implementing the following project in Ukraine:

- Emergency assistance for 3D-printed prosthetics and job creation in Ukraine, Japan Trust Fund (2023-2024)
- Women and youth economic empowerment in Western Ukraine for inclusive and sustainable, EURO IDF (2023-2027)
- The Global Cleantech Innovation Programme for SMEs in Ukraine, GEF (2016-2024)
- Introduction of Energy Management System Standards in Ukrainian Industry, GEF (2023)
- Environmentally Sound Management and Final Disposal of Polychlorinated Biphenyls (PCBs), GEF (2014-2023)
- Low-carbon economy of Ukraine for climate change prevention: Facilitating investment to scale up innovative cleantech solutions for low-carbon economy and climate action, GEF (2020-2026)
- Global Eco-Industrial Parks Programme Ukraine, under Component of the Global Eco-Industrial Park Programme (GEIPP), SECO (2019-2024)

- Industrial capacity-building, policy advice and diagnostics for the green recovery of Ukraine), EURO Trust Fund (2023)
- Global quality and standards programme Ukraine, phase II. Better trade for smarter recovery: strengthening quality and standards compliance of berries and nuts, SECO (2023-2027)
- Strengthening the resilience and competitiveness of Ukraine's quality infrastructure, EURO Trust Fund (2023-2024)
- Green Industrial Recovery Project for Ukraine through Technology Transfer from and Co-creation of New Businesses with Japan's Private Industries, Japan (2024-2029)
- Introduction of Energy Management System Standard in Ukrainian Industry» UKR IEE 120321, UNIDO.

#### Other

- EU4Environment<sup>20</sup>: Green Economy in Eastern Partner Countries. The programme aims to help the six partner countries preserve their natural capital and increase people's environmental well-being, by supporting environment-related action, demonstrating and unlocking opportunities for greener growth, and setting mechanisms to better manage environmental risks and impacts. Implementing partners: OECD, UNECE, UNEP, UNI-DO, the World Bank (2019-2024)
- Swiss-Ukrainian "Higher Value-Added Trade from the Organic and Dairy Sector in Ukraine" program (QFTP)<sup>21</sup>: Overall goal is to increase value added trade from the organic and dairy sector, both domestic and export markets, by strengthen product quality and safety in the organic and dairy sector and increasing trade capacity in the domestic and export markets with consumer products from the organic and dairy sector.



- USAID Agriculture Growing Rural Opportunities Activity» (USAID AGRO): Financed by USAID and implemented by Chemonics International. The purpose of USAID AGRO is to accelerate the economic development of rural Ukrainian communities with the greatest need through a better governed agricultural sector that encourages more productive, modern, and profitable agricultural MSMEs that are successfully integrated into competitive markets both in Ukraine and internationally.
- Strengthening the institutional capacity of the Quality Infrastructure of Ukraine, implemented by Swedac (Swedish Accreditation Agency) and SIS (Swedish Institute for Standards). The project objective is to support the institutions of the Quality Infrastructure of Ukraine on the way to the EU Single Market.
- Application and Implementation of the EU-Ukraine Association Agreement in the Field of Trade<sup>22</sup>, implemented by GIZ. The goal of the project is to remove administrative and technical barriers to trade and to increasing the professional capacity of the Ministry of Economy staff on technical regulation, awareness, and communi-

- cation of entrepreneurs on technical regulation, conformity assessment, standardization and market surveillance, improving communication between business and government agencies in the field of technical regulation and approximation to the ACAA in the three identified sectors (machinery, LVD, EMC).
- Quality Standards for Increased Trade in the Eastern Partnership Countries<sup>23</sup>, 2022-2025 implemented by PTB. Goal: To adapt the QI Institutions of the Eastern Partnership (EaP) countries to adapt their activities and processes to promote value creation, productivity and innovation to international and European best practices. Outcomes: 1. The capacity of quality infrastructure institutions to deliver services was strengthened, especially in the areas of the European Green Deal (e.g. circular economy, energy efficiency, agricultural products and processed food). 2. Awareness of the role of quality infrastructure for value creation, productivity and innovation is raised among policy makers, quality infrastructure providers and industry. 3. Countries have established cooperation between quality infrastructure institutions, policy makers and industry.



<sup>8</sup> https://zakon.rada.gov.ua/laws/show/1106-2017-%D0%BF#Text 9 file:///C:/Users/Lenovo/Downloads/65cf913135996125931042.pdf

22 https://www.giz.de/en/worldwide/64066.html https://www.eastern-partnership.ptb.de/about-the-project/

**Page** 23 | 29

https://www.eu4environment.org/about/

<sup>1</sup> https://qftp.org/en/about-the-program/

# **Glossary of terms**

ACAA	Agreement on Conformity Assessment and Acceptance of Industrial Products
CEN	European Committee for Standardization
CENELEC	European Committee for Electrotechnical Standardization
CE&SS UA	Central executive authorities and the Security Service of Ukraine (by agreement), which are responsible for technical regulation in certain areas of activity
CPR	(EU) Construction Products Regulation
Dakks	German accreditation agency
DG-GROW	(EU) Directorate General for Internal Market, Industry, Entrepreneurship and SMEs
DG-TRADE	(EU) Directorate-General for Trade
DIN	Deutsches Institut für Normung (German NSB)
DSTU	Ukrainian NSB (see also UAS)
DTR	Department for Technical Regulations (DTR) of the ME
EA	European Accreditation
EBRD	European Bank for Reconstruction and Development
EFF	(IMF) Extended Fund Facility
EIB	European Investment Bank
EMC	Electromagnetic compatibility
EPS	Expanded polystyrene
ESS	European Standardization System
ETSI	European Telecommunications Standards Institute
EU	European Union
FIEC	European Construction Industry Federation
FSC	Forestry Stewardship Council
GDP	Gross Domestic Product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Development Agency)
GQSP	Global Quality and Standards Programme
IAF	International Accreditation Forum
IEC	International Electrotechnical Commission
ILAC	International Laboratory Accreditation Cooperation
IMF	International Monetary Fund
ISO	International Organizations for Standardization
KfW	German State-owned Investment and Development Bank Group
LO-NMI	Liaison Organization: National Metrology Institute
LVD	(EU) Low Voltage Directive
MADCPU	Multi-Agency Donor Coordination Platform for Ukraine
MD	(EU) Machinery Directive
ME	Ministry of Economy of Ukraine <sup>24</sup>

Note that this is the current name of the Ministry; it was previously called the Ministry of Economic Development, Trade and Agro-Industry, and before that the Ministry of Economic Development and Trade.

	<u> </u>
Min Com and Dev	Ministry of Communities, Territories and Infrastructure Development of Ukraine
MID	(EU) Measuring Instruments Directive
MLA	Multilateral Recognition Arrangement
MRA	Mutual Recognition Arrangement
MSB	Market Surveillance Body
NAAU	National Accreditation Agency of Ukraine
NAWI	Non-automatic weighing instruments
NGF	National Guiding Framework of Standards and Technical Regulations for the Green Reconstruction of Ukraine
NQI	National Quality Infrastructure
NSB	National Standards Body
OIML	International Organization of Legal Metrology
PEFC	Programme for the Endorsement of Forest Certification
РТВ	Physikalisch-Technische Bundesanstalt (National Metrology Institute of Germany)
QI	Quality Infrastructure
R&D	Research and Development
RoHS	(EU) Restriction of Hazardous Substances in Electrical and Electronic Equipment Directive
SDG	(UN) Sustainable Development Goals
SIS	Swedish Institute of standards
SE UkrND- NC	Ukrainian NSB (see also UAS)
SECO	Swiss State Secretariat for Economic Affairs
Swedac	Swedish accreditation agency
TBD	To be defined
ТВТ	(WTO) Technical Barriers to Trade Agreement
TC(s)	Technical Committee(s)
TR	Technical Regulations
UAS	Ukrainian Agency for Standardization
UAS/NSB	Ukraine Standardization Agency/National Standards Body
UK	United Kingdom (of Great Britain and Northern Ireland)
UN	United Nations
UNECE	United Nations Economic Commission for Europe
UNIDO	United Nations Industrial Development Organization
VSS	Voluntary Sustainability Standard
WELMEC	European Cooperation in Legal Metrology
WTO	World Trade Organization
XPS	Extruded polystyrene

**Page** 25 | 29

## **Annex A:** List of standards within the National Guiding Framework

## Table 3:4 List of standards within the National Guiding Framework for Green Reconstruction

Tier 1 "Horizontal" Standards (applicable to all sectors)							
ISO	ISO 20400 Sustainable procurement – Guidelines						
IWA 42 Net Zero - Guidelines							
ISO 900	01 Quality management systems - Requir	rements					
ISO 14001 Environmen	tal Management Systems - Requirements	s with guidance for use					
ISO 14044 Environmental m	anagement — Life cycle assessment — R	equirements and guidelines					
ISO 50001 Energy N	Nanagement Systems - Requirements wit	th guidance for use					
ISO 21928-2 Sustainability indicators	s — Framework for the development of i	ndicators for civil engineering works					
IS	O 26000 Guidance on social responsibili	ty					
ISO 14064-1 Greenhouse gases —Specif	ication with guidance for quantification sions and removals	and reporting of greenhouse gas emis-					
	rironmental issues in product standards, bility in standards, 84:2020climate cha						
EN ISO 14067 Requir	ements and guidelines for quantification	n of carbon footprint					
	EN 60068 Environmental testing						
Ti	er 2 Examples of Sector-specific standar	ds					
Construction/Housing	Transport	Energy					
EN 15643 Sustainability of construction works - Framework for assessment of buildings and civil engineering works	ISO 37106 Sustainable cities and communities — Guidance on estab- lishing smart city operating models for sustainable communities	IEC 62430 Environmentally conscious design (ECD) - Principles, requirements and guidance					
EN 15804 Sustainability of construction works - Environmental product dec- larations - Core rules for the product category of construction products	ISO 37120 Sustainable cities and com- munities — Indicators for city services and quality of life	Renewable Energy Directive (RED II) (2018/2001/EU)					
EN 15978 Sustainability of construction works - Assessment of environ mental performance of buildings - Calculation method	ISO 37122 Sustainable cities and communities — Indicators for smart cities	Energy Efficiency Directive (EED) (2012/27/EU)					
EN 16309 Sustainability of construction works - Assessment of social performance of buildings - Calculation methodology	ISO 20121 Event sustainability manage- ment systems — Requirements with guidance for use	Electricity Directive (2019/944/EU)					
BREEAM (Building Research Estab- lishment Environmental Assessment Method)							
LEED (Leadership in Energy and Environmental Design)							
ISO 16346 Energy performance of buildings. Assessment of overall energy performance							
EN 16247-1 Energy audits - General requirements							
EN 16247-2 Energy audits Buildings							
Energy Performance of Buildings Directive (2018/844/EU)							
Construction Products Regulation (CPR) (EU) No 305/2011	State Agency on Energy Efficiency and Energy Saving of Ukraine	2/construction and housing					

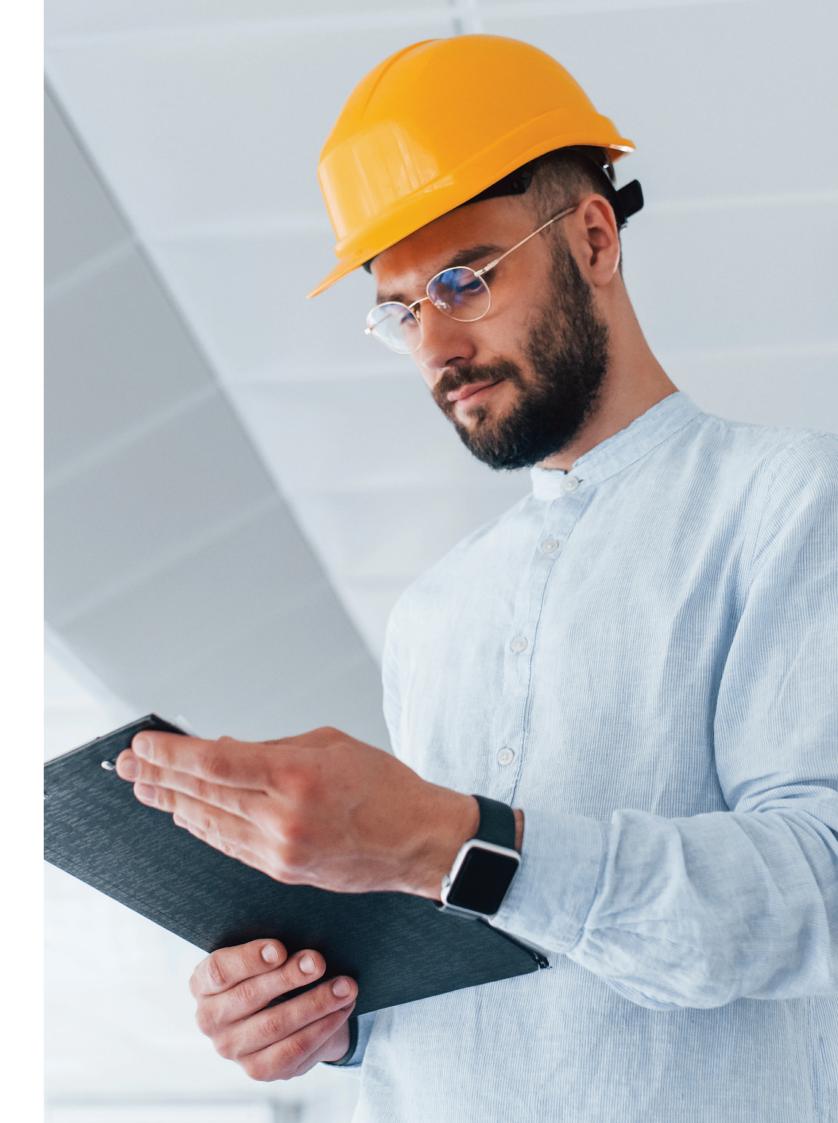
Tier 3 "Product" standards	related to design, material specification:	s and construction methods
Construction/Housing	Transport	Energy
<b>1 – Design</b> EN 16798 Energy performance of buildings. Ventilation for buildings	<b>EN 16247</b> -4 Energy audits – Part 4: Transport	IEC 61400-x Wind energy generation systems
EN 16757. Sustainability of construction works. Environmental product dec- larations. Product Category Rules for precast concrete products	EN 13816 Transportation – Logistics and services – Public passenger transport; Service quality definition, targeting and measurement	EN 50530 Overall efficiency of grid con- nected photovoltaic inverters
EN 16904 Plastics piping systems – Environmental product declarations – Product Category rules complementary to EN 15804, for plastic piping systems inside buildings	EN 16258 Methodology for calculation and declaration of energy consump- tion and GHG emissions of transport services (freight and passengers)	<b>EN 62109</b> Safety of power converters for use in photovoltaic power systems
EN 17610:2022 Building hardware. Environmental product declarations. Product category rules complementary to EN 15804 for building hardware	EN 16157-1 Intelligent transport systems – DATEX II data exchange specifications for traffic management and informa- tion	EN 62446 Photovoltaic (PV) systems. Requirements for testing, documentation and maintenance
EN 17213:2020 Windows and doors. Environmental Product Declarations. Product category rules for windows and pedestrian doorsets	Clean Vehicles Directive (CVD) (2019/1161)	IEC 61683 Photovoltaic systems – Power conditioners – Procedure for measuring efficiency
Forest Stewardship Council (FSC) Certification	Alternative Fuels Infrastructure Direc- tive (AFID) (2014/94/EU)	IEC 61727 Photovoltaic (PV) systems – Characteristics of the utility interface
Programme for the Endorsement of Forest Certification (PEFC)	CO <sup>2</sup> Emissions Performance Stan- dards for Cars and Vans (Regulation (EU) 2019/631)	IEC 62386 Digital addressable lighting interface (DALI) for control of lighting
EN 12831-1 Energy performance of buildings. Method for calculation of the design heat load Space heating load, Module M3-3		
EN 15232-1 Energy Performance of Buildings – Part 1: Impact of Building Automation, Controls and Building Management		
Use of Eurocodes		
2 – Materials related standards for:		
• Construction steel		
• Cement		
• Concrete		
Thermoblocks		
3 – Construction methods		

**Page** 27 | 29

# **Annex B:** List of Technical Committees in priority sectors for training and professional development

Table 4: List of Technical Committees in priority sectors for training and professional development

Pillar	Actions	Sector	TCs
Mapping and prioritisation	Training and professional development of stakeholders in priority sectors	Construction and Housing	TC 165 Safety and resilience of cities and communities, smart urban infrastructures, automated building management systems (inactive) TC 300 Doors and windows TC 301 Metal construction TC 302 Energy efficiency of buildings and structures TC 303 Building structures TC 304 Protection of buildings and structures TC 305 Construction products and materials TC 306 Engineering networks and structures TC 307 Highways and transport facilities TC 308 Engineering surveys in construction TC 309 Construction technologies TC 313 Residential construction TC 314 Planning of territories and settlements (inactive) TC 315 Means of technogenic safety of buildings and structures TC 316 Civil engineering TC 317 Technical aspects of standardization in construction and construction materials industry (inactive) TC 318 Construction of oil and gas production, transportation and storage facilities TC 319 Examination of urban planning and design documentation for construction TC 320 Special purpose objects TC 321 Construction of bridges
		Energy	TC 48 Energy saving TC 197 Hydrogen technologies TC 198 Solid renewable fuels and biofuels
		Transportation (incl Machinery)	TC 16 Cranes, lifting devices and related equipment TC 25 Fire safety and firefighting equipment TC 26 Operation of aircraft (inactive) TC 27 Heavy electrical engineering products (inactive) TC 69 Tractors and agricultural machinery TC 75 Machine tools TC 80 Road transport TC 83 Railcars TC 98 Means and systems for automation of technological processes, packaging and containerization TC 104 Elevators, escalators and passenger conveyors





Vienna International Centre Wagramerstr. 5, P.O. Box 300, A-1400 Vienna, Austria



+43 1 26026-0



www.unido.org



unido@unido.org

