



ANALYTICAL REPORT ON SUSTAINABLE PUBLIC PROCUREMENT PRIORITIZATION AND MARKET READINESS IN UKRAINE

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LIST OF TERMS AND ABBREVIATION

Association Agreement	The Association Agreement between Ukraine and the European Union, the European Atomic Energy Community and their Member States
AMCU	The Antimonopoly Committee of Ukraine
AU NGO	All-Ukrainian Non-Governmental Organization
BI ProZorro	Business Intelligence module ProZorro
BMZ	German Federal Ministry for Economic Cooperation and Development
CA	Contracting Authority
CAS	Centre of Administrative Services
CMU	Cabinet of Ministers of Ukraine
СРО	Centralized Procurement Organization
DBN	Ukraine's National Building Code
Derzhspozhyvstandart	State Committee for Technical Regulation and Consumer Policy
DSTU	State Standard of Ukraine
EaP GREEN	The European Union funded Programme "Greening Economies in the European Union's Eastern Neighbourhood"
EC	European Commission
Eco-labelling	Eco-labelling type I (according to ISO 14024)
EGC/EGD	European green course/European Green Deal
EN	European Norm in the meaning of European Standard
EPS	Electronic procurement system
EU	European Union
EU4Environment	The European Union for Environment Action
EEPP	Energy Efficiency Public Procurement
FSC	Forest Stewardship Council
GMO	Genetically Modified Organism
GPP	Green public procurement
HACCP	Hazard Analysis and Critical Control Points. System for analysis and control of risks during any manufacturing process related to food
ITA	International technical assistance
ISO	International Organization for Standardization
LCCA	Life-cycle cost analysis
Lifecycle	Consecutive and interconnected stages of a product lifecycle system from acquisition or
	production from natural resources or raw materials to final disposal
Minenvironment	The Ministry of Environment and Natural resources of Ukraine ¹
Mineconomy	The Ministry of Economy of Ukraine ²
Mineducation	Ministry of Education and Science of Ukraine
MOH	Ministry of Health of Ukraine
NCO	National Coordinating Organization
NSB	National Standardization Body, SE "Ukrainian Research and Training Center for
0505	Standardization, Certification and Quality Assurance"
OECD	Organisation for Economic Co-operation and Development
ProZorro	Electronic procurement system of Ukraine
SC	State Classifier
SDGs	Sustainable Development Goals

¹ Successor of the Ministry of Energy and Environmental Protection of Ukraine since May 27, 2020.

² The Ministry of Economic Development, Trade and Agriculture of Ukraine until May 21, 2021; the Ministry for Economic Development and Trade of Ukraine, until September 03, 2019.

SE	State Enterprise
SEA	State Ecological Academy of Postgraduate Education and Management
SES	Social and Environmental Standards
SMGP	Single Market for Green Products
SPP	Sustainable public procurement
TC	National Technical Committee for Standardization
UN	United Nations Organization
UTC	United Territorial Communities
UNEP	United Nations Environment Program
UNECE	United Nations Economic Commission for Europe-
UNIDO	United Nations Industrial Development Organization
WTO	World Trade Organization

SUMMARY

EU4Environment project

The analytical report was prepared in the framework of the EU4Environment program, funded by the EU. The program helps partner countries: Armenia, Azerbaijan, Georgia, the Republic of Moldova and Ukraine to preserve their natural capital and improve the quality of the environment for people by supporting measures related to protection environment, demonstrating and uncovering opportunities for sustainable growth and creating mechanisms for better management of environmental risks and consequences.

As part of the EU-funded EU4Environment programme, UNEP aims to strengthen Ukraine's capacity to implement SPPs and increase the use of eco-labelling. This will be achieved through technical assistance, development and support of implementation tools and training for government officials, public procurement officials, businesses and industry associations, as well as non-governmental organizations and other stakeholders.

Beneficiaries in Ukraine

- The Mineconomy³ in term of the SPP implementation within the framework of the unified procurement policy and the implementation of the Public Procurement Reform Strategy ("road map")⁴;
- The Minenvironment⁵, in terms of implementing requirements for the ecological characteristics of products, promoting the development of ecological labelling and the green market.

Analytical Report on SPP Prioritization and Market Readiness consists of three (3) chapters, conclusions and six (6) annexes.

Chapter I of the report outlines the goals, objectives, methodology, and methodological base of the study, the purpose of which is to determine the 2 most priority categories of goods, works, or services for the development of new criteria for the SPP within the framework of the EU4Environment SPP project in Ukraine. Connections with previous studies conducted within the framework of the EaP GREEN and EU4Environment SPP projects have been established.

Chapter II of the report presents the factors influencing the prioritization of categories of goods, works and services for SPP in Ukraine are defined, in particular:

- resource and economic potential;
- international agreements and obligations, the status of their implementation;
- national policies, strategies, action plan, updated legislation and other documents (for example, analysis of the provisions of the new Law on Public Procurement and the status of its implementation);
- other factors influencing the SPP and the results of surveys of customers and suppliers;
- the results of the preliminary determination of priority categories of goods, works and services for the SPP are given.

Chapter III of the report provides information on the results of the analysis of market readiness regarding the potential of applying the SPP approach in Ukraine in relation to previously defined priority categories.

Analysis of market readiness made it possible to identify specific areas that, without personal complications (availability of a more sustainable market offer available at a price, alternative products, suppliers or subcontractors, etc.) respond to the use of sustainability criteria in public procurement.

Based on the results of the analysis of market readiness in Ukraine, the following were defined and substantiated:

the available opportunities to implement the SPP approach to select priority categories based on risk assessment;

³ https://www.me.gov.ua/

⁴ Approved by CMU Resolution of 24.02.2016 № 175-p jointly with the Implementation Plan: https://zakon.rada.gov.ua/laws/show/175-2016-%D1%80#Text

⁵ Official web-site of Minenvironment: https://mepr.gov.ua/

- the main factors of ecological and socio-economic influence at all stages of their life cycle;
- recommendations for the implementation of the SPP approach for the identified 2 most priority categories of goods, works and services.

The conclusions based on the results of the research are a prerequisite for the development of sustainability criteria for SPP and methodological recommendations (they are among the tasks of the SPP project EU4Environment in Ukraine).

The following categories have been proposed for the development of SPP criteria as part of the EU4Environment SPP project in Ukraine:

- 1) maintenance, reconstruction and construction of new roads;
- 2) catering services and food products.

The results of the research on prioritization can also be used to determine the categories of goods, works and services for the development of new or revision of existing criteria of the SPP, GPP, EEPP and eco-labelling standards.

I. ANALYTICAL REPORT STRUCTURE

1.1. Aim and objectives

The report was prepared according to the results of an analytical study to identify the most priority products, works and services to develop new SPP criteria within the EU4Environment SPP project in Ukraine.

The results of the study substantiate the feasibility of applying the SPP criteria to the identified national priorities, taking into account the most important factors of influence related to the subject of procurement and the readiness of the market to provide more stable goods, work and services for the needs of the state, territorial communities and united territorial communities.

The application of the new SPP criteria will strengthen the influence of the public sector on the formation of the European green market and compliance with the principles of sustainable consumption and production in priority sectors of the economy.

Accordingly, the *objectives* of the study are as follows:

Objective 1: Conduct situational analysis in the context of SPP.

Outcome: Clarification of potential impacts on the further development of SPP as of the beginning of the second half of 2021.

Objective 2: Conduct initial prioritization.

Outcome: Priority goods, works and services with the highest potential for SPP have been identified for further research.

Objective 3: Conduct market readiness analysis.

Outcome: The market potential to satisfy the public sector with more sustainable goods, works or services in the defined priority categories is determined.

Objective 4: Assess risks and benefits.

Outcome: The research is conducted and the positions of interested parties are studied, to be taken into account in the final determination of priority categories.

Objective 5: Final prioritization.

Outcome: the two (2) most priority categories of goods, works and services have been determined for the development of new SPP criteria within the framework of the EU4Environment SPR project in Ukraine.

1.2. Methodology

The study is based on the United Nations Environmental Programme (UNEP) methodological approach set out in the Sustainable Public Procurement Guidelines⁶ (hereinafter – UNEP Methodology) and performing logical sequential steps to achieve research goals.

⁶UNEP Guideline on SPP implementation <u>https://www.ecolabel.org.ua/images/page/UNEP_ImplementationGuidelines_RUS.pdf</u>

Situational Analysis

Situational analysis is an important initial stage of the study. It allows to estimate various influencing factors on the application of the SPP approach in Ukraine and to evaluate changes that took place during 2019 - the first half of 2021, in particular regarding:

- 1. Resource and economic potential of Ukraine.
- 2. International agreements, in particular Ukraine's obligations and the status of their implementation in accordance with the Association Agreement, World Trade Organization (WTO) Agreements, European Green Deal provisions.
- 3. National policies, strategies, action plans, updated legislation and other documents and factors, including analysis and status of implementation of:
 - policies, that determine the economic, social and environmental priorities in the state;
 - strategies and action plans aimed at solving problems and supporting the development of economic sectors and budget support for their implementation.
- 4. The study also includes the assessment of other factors affecting SPP:
 - new legal acts, which may have an impact on the setting of priorities, taking into account previous studies conducted;
 - within the framework of the EaP GREEN SPP project⁷;
 - new methodological recommendations/guidelines in the field of public procurement;
 - public procurement stakeholders, their powers and interaction;
 - introduction of professionalization in the field of public procurement;
 - results of questionnaire of CAs and suppliers.

In the process of research, the available data on the categories of goods, works and services was evaluated, which:

- potentially meet the requirements of the SPP policy (taking into account the resource and economic potential, the effects of international agreements and obligations and national policies, strategies, action plans, updated legislation and other documents and factors); have special strategic importance for the state;
- can become more sustainable;
- the most purchased in the public sector (public procurement has a significant impact on the market);
- they meet the criteria of SPP, while there are no problems with their supply (according to the results of previous studies); demonstrate the availability of methodological documents in the field of public procurement (typical technical specifications, non-price criteria, life cycle assessment methods, training programs, etc.);
- are mentioned in the position of stakeholders (according to the results of Survey No. 1 conducted as part of the research).

A comparative analysis of the goods, works and services with the highest number of points was carried out regarding the available SPP criteria, the need to update them due to the influence of the factors identified in the situational analysis.

Questionnaire N°1 SPP participants⁸ was carried out by using the Google Form, which allowed to quickly collecting and aggregation of the data used at all stages of the study are available at the link. CAs and Suppliers were questionnaire separately. The survey was conducted for:

- identifying the level of awareness about the SPP approaches and the status of the EPS;
- identifying barriers or issues that respondents face when participating in public procurement;
- getting feedback on the most relevant areas and tools for improvement;
- identifying the volume and frequency of purchases of the most purchased goods, works and services;
- assessing the availability of the current criteria recommended for SPPs considering the need in their revision;
- identification of which SPP criteria have been applied and in what format: as part of technical specifications and / or non-price criteria;

⁷ Final report on SPP prioritization in Ukraine prepared by SEA in accordance with SSFA with the UNEP within the implementation of the EU-funded EaP GREEN project (Kyiv, Ukraine, August 2014).

⁸ CAs, bidders, suppliers, service providers and works executors.

• determination of criteria and practices for applying eco-labelling requirements (and which ones) from those recommended by the EC for GPP.

Information about the questionnaire was conducted by disseminating information of relevant content through:

- e-mails from the Public Procurement Department of the Mineconomy (using the ProZorro database of CAs and suppliers);
- web-sites of the NGO Living Planet, Minenvironment, platform for sustainable business development GREEN MIND;
- web-site and social networks of the NGO Living Planet and in 17 target groups of CAs, suppliers, experts and non-governmental organizations.

The analysis of the market readiness of public participants was carried out in relation to the categories of goods, works and services previously defined as priority for the SPP. For each of the categories, an assessment of the industry policy, the scope of technical regulation, the application of standards and markings and other tools necessary for the evaluation of more sustainable alternative proposals was carried out, in particular:

- 1. Strategic documents, action plans and other acts regulating the development of the industry.
- 2. Technical regulations and other documents in the field of state regulation.
- 3. The level of application of voluntary standards necessary for the implementation and maintenance of the effectiveness of management systems, for example: quality (ISO 9001), environmental management (ISO 14001), environmental management and audit (EMAS), occupational health and safety management (OHSAS 18000), energy management and audit (ISO 50001), analysis of risks, dangerous factors and control of critical points (HACCP) and others.
- 4. Standards, eco-labelling programs and declarations (taking into account the research results given in the Analytical report on the practice of ecological labelling in Ukraine.⁹
- 5. Other standards and regulatory documents that can be used as tools of the SPP.
- 6. LCCA methods, in particular for certain types of goods, works or services.

According to data from available electronic sources of information, market offers of more durable products were evaluated in comparison with the average price of a regular offer.

Assessment of risks and benefits includes the study of goods, works and services determined by the results of the analysis of market readiness, taking into account the possible risks and benefits that can be obtained from the acquisition of those that meet the conditional criteria of sustainability. The study involves assessing the environmental and socio-economic impacts of previously prioritized categories.

Questionnaire N°2 of the participants of public procurement was conducted using the Google Form as part of a public discussion of the proposed preliminary research results within 10 days after the webinar "Promoting sustainable public procurement and environmental labelling in Ukraine. Priority for sustainable public procurement categories of goods, works and services "held on July 20, 2021. Call for Questionnaire was posted on the website of the NGO Living Planet and other resources. CAs and suppliers were questionnaire separately. Information about the Questionnaire was disseminated by means of e-mailing of SE "ProZorro" and via groups of buyers and CAs in social networks.

The recording of the webinar broadcast, presentations by project experts and additional materials for the analytical study are available on the website of the NGO "Living Planet" 10. The list of participants of the webinar and those of them who took part in the Questionnaire, the results of the Questionnaire are attached to the report on the results of the event.

According to the results of the analysis of the data obtained during the research, the conclusion was made on:

⁹ Analytical report on the practice of eco-labelling in Ukraine, prepared by the NGO "Living Planet" in accordance with the SSFA with the UN Environment Program (UNEP) dated January 27, 2020 No. SB 013764-03-02-14AC0006-11236M99 within the framework of the EU4Environment project in Ukraine, financed by the EU (Kyiv, Ukraine, July 2020). https://livingplanet.org.ua/proekty/otsinka-progresu-vprovadzhennya-stalikh-publichnikh-zakupivel-i-praktiki-zastosuvannya-eko-markuvannya-v-ukrajini 10

- 1. Determination of the most priority goods, works and services for the SPP;
- 2. Justification of the recommendations regarding the development of new or revision of the previously developed criteria of SPP and regulatory documents establishing the criteria base.

Final prioritization defines the two most priority categories of goods, works or services for the development of new criteria for the SPP within the framework of the EU4Environment SPP project in Ukraine.

1.3. Research base

The following documents and data were analysed:

national legal framework, national fund of standards, methodical recommendations and other normative documents; State Budget of Ukraine¹¹ within 2019-2021¹²;

- ProZorro system data (via BI ProZorro analytics module) and its analytical platforms;
- open statistical and other data;
- eco-labelling standards established for various categories of products within the framework of Ukrainian and European internationally recognized eco-labelling programs of type I ¹³;
- International Register of Environmental Product Declarations EPD Portal¹⁴;
- results of GIZ projects "EU-Ukraine Association Advisory Fund" (EU Lab non-price criteria, EIA), "Promotion of energy efficiency and implementation of the EU Directive on Energy Efficiency in Ukraine" and "Energy Efficiency in Communities II" (SES criteria and recommendations for CA);
- reports and recommendations within the WP GPP project; Unified EIA register and regulatory support ¹⁵; sectoral regulatory and legal base on EIA procedure;
- technical reports on green procurement criteria recommended by the EC; research results and publications on the UNEP platform One Planet¹⁶;
- reports on the results of successful SPP practices ¹⁷;
- results of surveys and questionnaires within the study; affordable price offers (electronic catalogues and procurement sites); scientific and analytical research, other open data on the research topic.

1.4. Linkage with previous stages, joint activities and research on SPP

The study was conducted based on data obtained from previously conducted research in the framework of implementation:

- 1. EU-funded EaP GREEN project, component on SPP (2014-2017):
- Final report on the prioritization of product categories for SPP in Ukraine, prepared by the SEA under supervision of UNEP in the framework of the EU-funded EaP GREEN project (Kyiv, Ukraine, August 2014).
- Market readiness analysis prepared by the SEA under supervision of the UNEP in the framework of the EU-funded EaP GREEN SPP project (Kyiv, Ukraine, February 2015).
- Guidelines for the implementation of SPP prepared by the SEA under supervision of the (UNEP) in the framework of the EU-funded EaP GREEN project (Kyiv, Ukraine, 2016).
- 2. EU-funded EU4Environment project, component on SPP (2019-2023):
- Analytical report on the implementation of SPP in Ukraine in the period 2017 2019, prepared by the AU NGO the Living Planet under supervision of the UNEP in the framework of the EU-funded EU4Environment project (component on SPP) in Ukraine (Kyiv, Ukraine, July 2020).

¹¹ https://mof.gov.ua/uk/budget

¹² https://openbudget.gov.ua/

¹³ Register of eco-labelling bodies with the designation of those who have passed certification under the GENICES program and are a party to the international agreement on mutual trust and recognition: https://www.globalecolabelling.net/gen-members/gen-full-members-list/

¹⁴ https://www.environdec.com/home

¹⁵ https://mepr.gov.ua/content/ocinka-vplivu-na-dovkillya-ediniy-reestr.html

¹⁶ https://www.oneplanetnetwork.org/

¹⁷ Website of the SPP Resource Center https://sustainable-procurement.org/resource-centre/

 Analytical report on the practice of eco-labelling in Ukraine, prepared by the AU NGO the Living Planet under supervision of the UNEP in the framework of the EU-funded EU4Environment project (component on SPP) in Ukraine (Kyiv, Ukraine, July 2020).

II. SPP PRIORITIZATION BASED ON SITUATIONAL ANALYSIS

2.1. Resource-economic potential

Resource potential

Despite economic and social losses ¹⁸, caused by military aggression of Russian Federation against Ukraine and the negative impact of COVID-19¹⁹, **Ukraine has the potential for development growth due to natural resources, geographical location and the quality of human capital** ²⁰. Outdated approaches to natural resource management lead to their devastating depletion. The slow pace of approximation of European norms and development of legislative instruments to approach EU markets, creation of predictable regulatory policy, approval of national standards, setting requirements for the quality of ready-made products at the European level, the insufficient potential for the high-tech component in production processes still leaves Ukraine at the level of raw material supplier for mass-produced goods manufacturing outside Ukraine. Mass-produced waste as a resource is also underestimated by the Ukrainian economy. The European Green Deal provides a sustainable approach to the use of resources, including the use of secondary resources and renewable materials. Ukraine is taking the first steps in this direction, but these efforts are not enough.

Economic Potential

The main macro indicators for 2021 according to the Ministry of Finance of Ukraine ²¹ reflect national consumer potential as available:

- nominal GDP UAH 4,505.9 billion, real GDP 4.6% year-over-year (yoy);
- consumer price index (December to December of the previous year) 7.3%, producer price index (December to December of the previous year) 8.7%;
- average monthly salary UAH 13,632 (EUR 419); the unemployment rate of the population aged 15-70 according to the ILO methodology 9.2% of the economically active population.

The course announced by the President and the Government to achieve the SDGs and the signing of the economic part of the Association Agreement with the EU can give an additional impetus to the provision of products on the SMGP through the application of the SPP approach in Ukraine, which can positively affect:

- forest use (reduce the content of wood materials from primary sources in finished products);
- water use (reduce pollution with phosphates, pesticides and other dangerous chemicals);
- land use (reduction of degradation and desertification of agricultural lands);
- resource efficiency (RECP as an end-to-end line of saving all types of resources and reducing the impact on the environment from production activities);
- Ukraine's proximity to the SMRP with high added value, rather than the raw material base.

2.2. International agreements, in particular Ukraine's obligations and the status of their implementation This section presents data for the period January 2020 - July 2021 and relevant conclusions.

WTO Agreements

¹⁸ Ukraine faced the armed aggression of the Russian Federation, as a result of which 7% of the territory of the state was temporarily occupied, whereas of 2013 13% of the population of Ukraine lived and 13.7% of GDP was formed.

¹⁹ The spread of COVID-19 has exacerbated labour market problems, increased poverty, unemployment and exacerbated violations of workers' rights. By September 1, 2020, 467 thousand people were registered as unemployed. This increases social tensions, individual and collective labour conflicts, provokes mass labour migration of Ukrainians, who, despite the limitations of COVID-19, are at risk of exploitation in search of better wages in the EU, in particular in neighbouring countries.

²⁰ According to the World Bank, Ukraine ranked 50th out of 157 in the quality of human capital.

²¹ https://mof.gov.ua/storage/files/%D0%91%D1%8E%D0%B4%D0%B6%D0%B5%D1%822021.pdf

Since 2016, Ukraine has acceded to the Multilateral Agreement on Public Procurement within the WTO ²² in the status of a developed state. Therefore, there are obligations at the level of EU countries, and there are no state guarantees and other instruments to support domestic producers.

Currently, 46 WTO members are involved in negotiations on the conclusion of the Agreement on Environmental Goods within the WTO²³. Its goal is to remove trade barriers for goods that are important for protecting the environment and combating climate change. The EU has already decided on the list of goods. Joining the advisory group at the stage of preparation of the Agreement on Environmental Goods within the WTO will allow Ukraine to offer its list of goods - both for export and to attract investment in relevant sectors in Ukraine. This step will accordingly allow the state to influence the prioritization of target industries and categories of goods, taking into account national interests.

Association Agreement with EU

The approved Strategy and the government's <u>Action Plan for the Implementation of Association Agreement till 2024</u>
²⁴provide the main directions for the implementation of public procurement reform and adaptation of legislation to EU rules in accordance with the provisions of Chapter 8 "Public Procurement" of the Agreement in 5 steps. ²⁵ Progress on the Agreement²⁶ in removing technical barriers to trade (85%) and public procurement (85%) facilitate potential for the formation of sustainable consumption and production with the Government support for:

- decentralization reforms ²⁷;
- the digital sphere²⁸;
- food safety;
- the health of the nation;
- construction and repair of roads;
- combating climate change and promoting the conservation of the Earth's ozone layer;
- waste management reform within the Association Agreement²⁹.

European Green Deal

Ukraine is a part of the EU Green Course and has a commitment to approximate national legislation to EU law in the framework of free trade zones. The provisions of the Decree of the President of Ukraine "On urgent measures to reform and strengthen the state" 837/2019 correspond to the recommendations of the Joint statement of the Ukrainian delegation and the EU Commission during the EU-Ukraine Civil Society Forum in the framework of a deep and comprehensive free trade agreement (DCFTA). They include the **study of market potential for goods and services Ukraine-EU and identified as one of priorities.**

²² This multilateral agreement regulates the procurement of goods and services by public authorities of the parties to the Agreement on the basis of the principles of openness, transparency and non-discrimination. Today it is already 48 countries, and among them - the United States, Japan, EU countries, South Korea, Australia, New Zealand and others. The total size of the public procurement market covered by this Agreement is estimated at \$ 1.7 trillion annually.

²³ https://www.wto.org/english/tratop_e/envir_e/ega_e.htm

²⁴ Monitoring of Ukraine's implementation of the Agreement is available in the government's information and analytical system "Пульс Угоди".

²⁵ The first stage - January 1 - December 31, 2016, the second stage - 01.01.2017 - 31.12.2018, the third stage - January 1 - December 31, 2019, the fourth stage - 01.01.2020 - 31.12.2021, the fifth stage - 2022.

²⁶ On June 24, 2021, on the occasion of the 7th anniversary of the signing of the economic part of the Association Agreement between Ukraine and the EU, the Government of Ukraine presented a report on the implementation of the Association Agreement cumulatively for 6 years (2015-2020). https://eu-ua.kmu.gov.ua/sites/default/files/inline/files/aa implementation report 2015-2020 eng final.pdf

²⁷ https://decentralization.gov.ua/about

²⁸ The Ministry of Digital Information has been established and each central executive body has an authorized head who implements electronic services in the area of competence of the body. There is a national online platform EcoSystem, which contains up-to-date information on the state of the environment and allows you to obtain permits online. ProZorro's online procurement system, including related platforms and platforms, builds the potential for opportunities for SPP participants and stakeholders.

²⁹ The waste management system has two key levels - national and regional. At the national level, a strategic vision is being introduced together with the key indicators to be achieved. At the regional level, there is a substantive planning of a clear number of objects and subjects of waste management on a cluster basis, ie where and how it is formed and what to do with it. A number of bills aimed at implementing the EU Directives in the field of waste management, prevention of industrial pollution, environmental and chemical safety are already under consideration by the Verkhovna Rada and work is underway with all stakeholders. This reform requires increased awareness-raising among business representatives, as despite the support of the President of Ukraine, the Verkhovna Rada and the Government, there is significant resistance to pollutants. This direction has a huge potential, because by updating the legislative, regulatory and criteria base it is possible to influence the formation of a new sustainable market for waste management and the formation of demand for waste as a resource and commodity.

Recommendations (paragraphs 10-26) of the IV Joint Meeting of the European and Ukrainian Advisory Groups (AG) ³⁰, held on October 22, 2020 in the online format Kyiv-Brussels in the context of the economic dimension of sustainability in accordance with the provisions of Chapter 13 "Trade and Sustainable Development.

2.3. National policies, strategies, action plans, updated legislation and other documents and factors, including status of implementation

The National Economic Strategy for the period up to 2030³¹, contains a coherent vision for the strategic course of Ukraine's economic policy. Target indicators for 2030, incl. provide: growth of real GDP at least twice; GDP growth per capita of at least 10 thousand US dollars. Transformed and highly productive sectors of the economy will be able to compete effectively in the international market of goods and services with foreign countries, which will contribute to the growth of tax revenues and incomes.

The vision of the development of the Ukrainian economy with the definition of directions and strategic goals was prepared on the initiative of the President of Ukraine.³² **Forum Ukraine-30**³³, organized on the initiative of the President of Ukraine and held weekly with his personal participation. **Environmental policy of Ukraine for the period up to 2030**³⁴ came into effect on January 1, 2020. It introduces the environmental norms and standards in public administration, steps towards "greening" the national economy. The goals of the Strategy of the State Environmental Policy of Ukraine may be revised every 5-6 years, depending on the effectiveness of their implementation. **National Environmental Action Plan until 2025 (NAP)**³⁵ strengthens the potential for the implementation of SPP (p.88-91), in particular in terms of incentives:

- introduction of ecological management systems at the enterprises simultaneously with improvement of ecological characteristics of production (p.82-87);
- handling of hazardous chemicals (paragraphs 137-138, 140);
- introduction of environmental management systems, development of voluntary environmental certification, product labelling, environmental audit (p.145-146).

The NAP takes into account the measures recommended by the EU4Environment SPP project in Ukraine. It is based on the results of a study of the state of SPP implementation in Ukraine in the period 2017-2019³⁶, but does not contain a reference to the state funding programs for the planned measures, so currently their implementation will be ensured within the capabilities of the executors or at the expense of the ITA projects.

Budget potential

Data from the Ministry of Finance on the budget ³⁷ and priorities correspond to the CSB and the country's international priorities. National political and economic priorities of the country correspond to the priority of **state budget expenditures for 2021** ³⁸ in several directions:

1) **Reduction of greenhouse gas emissions** (energy efficiency measures in the premises of social security institutions in combination with the requirements³⁹ for substances used in climate technology);

³⁰ https://www.greenmind.com.ua/images/2020/4ta-Spilna-zayava-DH-Ukrayiny-ta-YES-zi-staloho-rozvytku.pdf

 $[\]frac{31}{\text{https://www.kmu.gov.ua/npas/pro-zatverdzhennya-nacionalnoyi-eko-a179?fbclid=lwAR0PQZrkY08DI5Q4zlsp0Q_Q4Qv4jAqEH8Xs8lAkmc9w_RV4YQ5C3uUdRSwardered.}$

³² https://nes2030.org.ua/docs/doc-vector.pdf

³³ https://ukraine30.com/

³⁴ https://zakon.rada.gov.ua/laws/show/2697-19#Text

 $^{{}^{35}\}underline{\text{https://www.kmu.gov.ua/npas/pro-zatverdzhennya-nacionalnogo-planu-dij-z-ohoroni-navkolishnogo-prirodnogo-seredovishcha-na-period-do-2025-roku-i210421-443}$

³⁶ Analytical report on the implementation of SPR in Ukraine, prepared by the NGO "Living Planet" in accordance with the SSFA with the United Nations Environment Program (UNEP) dated 01.27.2020 No. SB 013764-03-02-14AC0006-11236M99 as part of the implementation of the EU4Environment project in Ukraine, which financed by the EU (Kyiv, Ukraine, July 2020).

 $[\]frac{37}{\text{https://mof.gov.ua/storage/files/\%D0\%91\%D1\%8E\%D0\%B4\%D0\%B6\%D0\%B5\%D1\%822021.pdf}}$

³⁸ https://zakon.rada.gov.ua/laws/show/1082-20#Text

³⁹ https://zakon.rada.gov.ua/laws/show/376-20#Text

- 2) **Development of the energy sector, infrastructure** in combination with EU assistance programs, foreign governments, international organizations (for example, public funds for the implementation of government investment projects by UAH 0.25 billion in combination with funds of international financial organizations by UAH 4.6 billion);
- 3) Large-scale digitalization of the economy and public services (UAH 2.2 billion, including UAH 1.3 billion for digitalization measures in public authorities, UAH 0.3 billion for "Portal Diya" 100 public services, 10 digital documents in a smartphone, UAH 0.6 billion for the national digitalization program);
- 4) **Construction** (including: lending for construction / reconstruction / purchase of housing for scientific, scientific-pedagogical and pedagogical workers; construction / overhaul / reconstruction of educational institutions for UAH 1 billion 300 schools; budget support for the "new Ukrainian school" for 1, UAH 4 billion 440 first-graders will receive, including modern furniture, equipping teachers' workplaces with technical means for distance learning to prevent the spread of COVID-19 in schools will be funded by UAH 1.0 billion, housing for servicemen by UAH 2.1 billion UAH 5 thousand families will receive housing, the budget for project documentation of modern hospitals by UAH 0.1 billion, construction / overhaul / reconstruction of medical facilities by UAH 0.5 billion 9 outpatient clinics, 3 cardio centers, development of urban planning documentation by UAH 0.1 billion UAH -50 general plans of communities); construction and staffing of administrative service centers (ASCs).
- 5) **Road construction** for the program "Large construction" for UAH 81.3 billion, convenient transport infrastructure for UAH 3.9 billion, construction of state roads for UAH 31.0 billion and local value for UAH 18.1 billion; local budgets for the development of public roads and UTG streets (due to fuel excise tax) by UAH 8.05 billion);
- 6) **subsidies** from the state budget to **local budgets** for the implementation of measures for socio-economic development of individual territories (31.6 billion UAH / 26% of the budget, at the local level communities are managers of funds and determine priorities in procurement by industry and category).

The given list of articles of expenses, measures and programs of financing of state programs and measures is not exhaustive and is considered together with international and national priorities approved by other legal acts.

In 2021, it is also planned to combine the use of state and local budgets for the implementation of planned activities. The construction sector remains the highest priority, currently increasing the share of measures to combat climate change. The state budget provides tools to support decentralization.

In 2021, it is also planned to combine the use of funds from the state and local budgets for the implementation of planned activities.

Analysis of funding sources

Table 1. Sources of procurement funding in 2020.

Source of funding	Number of	Number of	Expected	The amount of	Share in the total
	organizers	procedures	cost,	the contract,	amount of concluded
			billion UAH	UAH billion	agreements
State budget of Ukraine	5 663,00	57 597,00	233,24	198,12	43,1
Local budget	14 276,00	127 028,00	131,86	117,17	25,5
Own budget (funds from economic activity	3 466,00	56 861,00	107,08	98,67	21,5
of the enterprise)					
Other	2 869,00	22 088,00	27,43	25,80	5,6
Not specified	2 198,00	28 110,00	20,30	17,80	3,9
Credits and loans of international monetary	24,00	39,00	1,37	1,31	0,3
organizations					
Trust budget	268,00	1 286,00	0,47	0,40	0,1
Budget of the Autonomous Republic of	27,00	29,00	0,01	0,01	0,0
Crimea					
Total	28791,00	293 038,00	511,76	459,28	100,0

Analysis of tender procedures

In 2020, information on 3,191,739 contracts (90.03% of the total number of published contracts) concluded without using the ECS by applying the mechanisms of non-competitive sub-threshold procurement procedures "Procedure for reporting on the concluded contract" and "Report on the concluded contract (COVID-19))", while the number of contracts concluded for the amount:

- up to UAH 50,000 increased compared to the corresponding indicator in 2019 by 363% up to 2,943,037 contracts; from 50 to 200 thousand UAH decreased by 26% and amounted to 198,128 contracts;
- from UAH 200 to UAH 1 million decreased by 8% to 39,174 contracts;
- over UAH 1 million decreased by 7% to 11,400 contracts.

So, legislative innovations, primarily related to the expansion of the range of procurement, information about which is entered into the ETS through the publication of the procurement report, led to an increase in 2020 the number of completed tenders to 3.545 million, or 2.307 million (2.9 times).

Reforming the public procurement system in the context of impact on prioritization

In order to implement the updated version of the Law of Ukraine "On Public Procurement":

- 1) By Resolution No. 822 of the CMU dated 14.09.2020, the Procedure for the formation and use of the electronic catalogue⁴⁰ was approved (entered into force on 15.09.2020), which ensures the further development of centralized procurement and expands the range of products that can be purchased through the CPO and electronic catalogues.
- 2) The Ministry of Economy has developed:
 - The procedure for posting information about public procurement ⁴¹, approved by the order of the Ministry of Economy dated 11.06.2020 No. 1082, registered in the Ministry of Justice on 01.07.2020 under No. 610/34893.
 - An exemplary methodology for determining the cost of the life cycle, approved by the order of the Ministry of Economy dated September 28, 2020 No. 1894⁴².
 - Forms and requirements for securing a tender offer⁴³, approved by the order of the Ministry of Economy dated 14.12.2020 No. 2628, registered in the Ministry of Justice on 03.03.2021 under No. 275/35897.

These acts clarify the requirements for the tender documentation and introduce a new methodology for determining the life cycle cost, which can be used by customers during public procurement at the stage of market analysis or as a criterion for determining the most economically advantageous offer. In 2021, the Ministry of Economy plans to develop and approve a number of regulatory documents regarding the revision of the sample tender documentation for the EPS procedures, the procedure for the functioning of the EHS and electronic platforms, and the procedure for testing authorized persons.

Types of public procurement and features of their application affect the ability of the CA to apply the requirements to the subject of procurement or choose the proposed goods. According to the Institute for Development and Freedom of Information (IDFI, Georgia) Report on Public Transparency 2020 published in August 2020, Ukraine ranked first with an overall score of 97.05% among 40 countries⁴⁴, calculated according to a unique method of public transparency procurement⁴⁵. As for the procurement stages, where legislation and process transparency were assessed, Ukraine was assessed at 100% at the pre-tender stage, 98% at the tender stage and 96.15% at the post-tender stage. The only indicator with a relatively lower %age in Ukraine is - Accountability and integrity (88%).

 $^{^{40} \} Procedure \ for \ creating \ and \ using \ an \ electronic \ catalogue: \\ \underline{https://zakon.rada.gov.ua/laws/show/822-2020-\%D0\%BF\#Text}$

 $^{^{41}} Procedure for posting information about public procurement: \underline{https://zakon.rada.gov.ua/laws/show/z0610-20\#Text} and \underline{https://zakon.rada.gov.ua/laws/show/z0$

⁴² An exemplary method of determining the life cycle cost: https://me.gov.ua/legislativeacts/Detail?lang=uk-UA&id=32140d03-d5eb-4988-8790-6d60d1c84a93

⁴³ Order of the Ministry of Economy of 14.12.2020 № 2628: https://zakon.rada.gov.ua/laws/show/z0275-21#Text

⁴⁴ https://tapas.org.ua/all-uk/news-uk/opublikovano-zvit-shchodo-rejtynhu-prozorosti-publichnykh-zakupivel-2020-de-ukraina-zajniala-pershist-z-pomizh-40-krainsvitu/;: https://idfi.ge/public/upload/Article/TPPR_Eng_IDFI_01-min.pdf

⁴⁵ Universal methodology for evaluating public procurement legislation with the ultimate goal of identifying the strengths and weaknesses of the relevant legal framework. Public procurement of the represented countries is assessed by 64 indicators and at different stages of procurement. Each indicator included in the methodology is evaluated with a maximum of 1 point (for better visualization and understanding, the points are listed as a %age).

The analysed documents define economic, social and environmental priorities in the state, lay the foundation for creating conditions for successful competition on the world market and attracting investments for reforming and modernizing certain sectors of the economy.

A general overview of political and economic priorities based on the results of the situational analysis for the period January 2020 - July 2021 is given in Annex 1 to this report. National policies, strategies, action plans, updated legislation and other documents and factors, including implementation status, contain detailed information.

Table 2. National priorities in the context of SPP.

Aspects	National priorities for 2021 in the context of SPPs, supported by planned budget funding	Expected benefits of the introduction of SPP criteria
	Modernization of the education system - "New Ukrainian School" (safe furniture for children); - technical equipment of teachers' workplaces for online learning; -construction, overhaul, reconstruction of educational institutions (program "Able school for better results")	-better and safer conditions for training, work, treatment; -inclusive education and education in conditions of quarantine restrictions; -reduction of operating costs for the maintenance of educational institutions, health care and housing;
Social	Food safety and the health of the nation - new nutrition standards for students and servicemen - modernized requirements for food / catering services - centralized procurement of medicines and medical devices (including personal protective equipment and antiseptics against COVID-19) - project documentation for modernization of hospitals - purchase of equipment for support hospitals	-better, safer and more nutritious food for social groups; -achievement of higher social standards.
	Social protection of internally displaced persons, support for participants in the Anti-Terrorist Operation / Joint Forces Operation (housing for servicemen) - increase in the volume of housing construction	
Environment	Environment protection - prevention of climate change; - reduction of industrial pollution; - maintaining the quality of water resources; - a comprehensive approach to planning and rational use of land resources; - promoting sustainable agriculture and rural development; - restoration and preservation of forests; - reform of the waste management system and chemical safety. International cooperation - approaching accession to the EU, industrial visa-free travel, obtaining expert support and technical assistance Sustainable production and consumption Implementation of pollution prevention and waste management systems - introduction of economic mechanisms to stimulate the reduction of industrial pollution; - introduction of more environmentally friendly technologies for waste processing and disposal; - introduction of the system of extended producer responsibility (ERP); - restrictions on the market of plastic products; - implementation of European requirements for eco-design of energy-consuming products	Stimulating the transition to energy- and resource-efficient and cleaner production technologies, the development of green markets for goods and services, which in turn will reduce: -green greenhouse gas emissions; -emissions of pollutants; -volumes of consumption of primary breed resources; -volumes of waste generated; - the level of infusions of the population related to the state of the environment.

State support for regional development - construction and staffing of CASs - development of town-planning documentation of communities and regional development projects - efficiency of procurement taking into account

- support for socio-economic development of individual territories

Road infrastructure development

- development and maintenance of state roads
- construction, reconstruction, repair and maintenance of local roads, communal roads and streets
- road safety
- attracting investment in the development of the road industry
- renewal of railway infrastructure
- support for the development of UTCs
- Large-scale digitalization of the economy

State support for SMEs

- interest compensation on loans for micro and small businesses (available loans 5-7-9%)
- -facilitating the access of SMEs to financial resources by partially guaranteeing their debt obligations by the state

Support to Agro-Industrial Complex

- cheaper purchase of agricultural machinery and equipment
- development of animal husbandry, horticulture, viticulture, hop growing and farms
- support for the development of organic production

Sustainable tourism

- increasing tourist attractiveness (program "Travel across Ukraine")
- restoration of cultural heritage monuments
- raising the standards of service, recreation areas

- -efficiency of procurement taking into account the full cost of its life cycle;
- -reduction of maintenance and repair costs;
- -attraction of additional green investments in the development of priority sectors of the economy;
- -creation of new jobs;
- --economic growth by increasing the competitiveness of Ukrainian producers and their export capacity.

2.4. Initial prioritization of SPP areas and procurement procedures

The priority areas for the SPP of the industry are determined based on the results of the research given in clauses 2.1-2.3 and indicated in Table 3. The results of Questionnaire No. 1, given in Appendix 2 to this report, were also taken into account when determining the priority areas and procurement procedures for the SPP.

Table 3. Categories of goods, works, services that correspond to state priorities for the development of sectors of the economy and can be considered as priority for the application of SPP in the context of this report.

Industry	Area	Categories of goods, works, services relevant to state sectoral priorities
Agro-industrial complex	Production, storage of food	- Food; Canteen/ catering services
Construction and housing and communal complex	Residential, social and industrial construction	-Construction / reconstruction / repair / maintenance of buildings and construction works; -Construction, reconstruction and technical re-equipment in the field of heat supply, centralized water supply and drainage; -Design work and supervision of construction works; -Finishing works, painting and glazing, plumbing and sanitary works; -Shoes and professional clothing; -Green landscaping and maintenance of greenery
	Creation of waste management facilities Energy saving and reduction of emissions of climatic equipment	-Service for household waste management -Electric household appliances; -repair; -equipment maintenance

Machine-	Digitization of the economy and public services	-Development, implementation and maintenance of software
building	Increasing the share of the latest and resource-	products; user training
complex	efficient clean technologies in production	-Machines for data processing (hardware);
	Production of new types of environmentally	-Computer equipment;
	friendly electronic and electrical equipment	
	and machinery, vehicles and other	
Transport	Construction, reconstruction and technical re-	-Cars (including electric); transport service;
infrastructure	equipment in the field of transport	-Construction of pipelines, communication lines and power
	infrastructure	lines, highways, roads, airfields and railways; levelling surfaces;
		-Mainlines, pipelines, pipes, casings, tubing and related
		products;
		-Gravel, sand, rubble and fillers;
		-Repair and maintenance of roads;
		-Design work and supervision of execution
Sustainable	Construction of resort and recreational facilities	-Construction / reconstruction / maintenance of buildings and
management of	and tourist infrastructure.	infrastructure; Landscaping; decoration materials and furniture
state property	Sustainable management of state property.	-Design work taking into account the requirements of
(including resort	Conducting auctions for the sale of property	sustainable tourism and supervision; Auctions
and recreational	applying environmental criteria	
sphere and	11,7 8	
tourism)		
Processing	Creating a sustainable waste management	-Management of hazardous waste, chemicals and equipment
industry	system and chemicals	and containers containing them; biocidal products;
		disinfectants and antiseptics; persistent organic pollutants;
		-Equipment containing polychlorinated biphenyls;
		-Electrical and climatic equipment;
		-Batteries and accumulators;
		-Plastic products;
	Creation of waste management facilities	-Treatment of industrial, medical, hazardous waste;
	(industrial, medical (including medical and	-Recyclables and renewable materials;
	military textiles), plastic and waste generated	
	as a result of extraction and processing of	
	minerals and production of electricity and heat)	
	Sustainable forest consumption	-School furniture; wood and building materials;
		-Office equipment and accessories; goods containing wood;
	1	1

The accession of Ukraine to the European Green Deal will contribute to the green transformation of the economic sectors indicated in Table 3 and will lead to an increase in the efficiency and competitiveness of Ukrainian manufacturers on the international market, which in turn will affect the growth of incomes and tax revenues.

Changes in the legislation regulating the sphere of public procurement because of the next stage of the reform led to the expansion of the range of procurement, and an increase in the number of tenders held in 2020 by 2.9 times compared to 2019.

Data from the Ministry of Finance⁴⁶ and state budget expenditures for 2021⁴⁷ correspond to the SDGs and the country's international priorities and **confirm the availability of national financial capacity for government impact on the industries above via public procurement.**

Further development and improvement of tools for SPP in Ukraine will stimulate business, in particular SMEs, to implement eco-design of products, and resource-efficient and cleaner production technologies, modern management systems and use of eco-labelling.

 $^{^{46}\, \}underline{\text{https://mof.gov.ua/storage/files/\%D0\%91\%D1\%8E\%D0\%B4\%D0\%B6\%D0\%B5\%D1\%822021.pdf}$

https://zakon.rada.gov.ua/laws/show/1082-20#Text

According to the BI ProZorro analytics module, the analysis of data on quantitative indicators by procurement items shows that in 2020 the most often purchased goods. The number of completed contracts: 2,400,838 (67.78%) for goods, 928 289 (26.21%) for services, and 212,762 (6.01%) for works. At the same time, in 2020 the share of competitive procurement was the highest in the procurement of works (20.76%), and relatively 8.17% of goods, and 4.96% of services. The main part of public procurement in Ukraine in terms of quantity and items of procurement are goods - 67.78%.

Table 4. Quantitative indicators for procurement purposes.

Purpose of procurement	Procedures	Servi	ces	Wor	ks	Good	ds
		q-ty	%	q-ty	%	q-ty	%
SUB-PROCUREMENT							
The procedure for reporting on the contract	non-competitive	855 483	92,16	164 416	77,27	2 042 677	85,08
Report on the concluded agreement (COVID-	non-competitive	3 145	0,34	798	0,38	125 228	5,22
19)							
Sub-procurement	competitive	10 151	1,09	6 216	2,92	57 923	2,41
Simplified procurement	competitive	19 198	2,07	23 943	11,25	67 180	2,80
E-catalogues	non-competitive		0,00		0,00	3 225	0,13
Total	Х	887 977	95,66	195 375	91,83	2 296 233	95,61
ABOVE-PROCUREMENT			1	1	1	1	
Open bidding with publication in English	competitive	1 762	0,19	1 195	0,56	4 968	0,21
Open bidding	competitive	14 568	1,57	12 639	5,94	63 944	
Negotiated procedure	non-competitive	13 554	1,46	2 493	1,17	14 880	2,66
Negotiated procedure on an urgent basis	non-competitive	10 081	1,09	881	0,41	18 620	0,62
Negotiated procedure	competitive	233	0,02	148	0,07	1 880	0,78
(for defence purposes)							
Procurement under a framework agreement	competitive	86	0,01		0,00	360	0,01
Competitive dialogue	competitive		0,00	33	0,02		0,00
Competitive dialogue with publication in	competitive	1	0,00		0,00		0,00
English							
Subtotal	Х	40 285	4,34	17 389	8,17	104 605	4,36
Total	Х	928 262	100,00	212 762	100,00	2 400 838	100,00
including	competitive	45 999	1,96	44 174	20,76	196 208	8,17
	non-competitive	882 263	95,04	198 588	79,24	2 204 630	91,83

The most used procedures are simplified procurement and open tenders, which are further recommended to be considered as more promising for the application of the SPR approach, with an eye on the possibilities of applying a multi-criteria approach to these types of procurement.

2.5. Analysis of legislative and regulatory potential in the priority industries areas for the application of SPP Construction (industrial and public, road, pipelines, infrastructure), related works and services

Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine Concerning Optimization of Road Construction and Improvement of Legislation in the Sphere of Urban Development" provides for the simplification of the procedure for obtaining the right to perform construction works on the reconstruction and capital repair of roads (the class of consequences (responsibility) belongs to objects with medium and significant consequences).

Law of Ukraine "On Amendments to the Budget Code of Ukraine" allows attracting additional budget funding for repair and construction works on public highways, ensures the formation and implementation of state policy in the field of construction, town planning and architecture.

⁴⁸ http://w1.c1.rada.gov.ua/pls/zweb2/webproc4 1?pf3511=67791

⁴⁹ https://zakon.rada.gov.ua/laws/show/677-20#Text

Draft Law "On Amendments to Certain Legislative Acts of Ukraine Concerning the Determination of the Pricing System in the Construction of Public Roads" 50, allows ordering specific kilometres of roads, but not each component of the road separately.

Law of Ukraine "On the provision of construction products on the market" 51 determines the legal and organizational basis for the introduction into circulation or provision of construction products on the market by introducing significant changes in the field of technical regulation of materials and products to comply with European standards. This law complies with the requirements of EU Regulation 305/2011 / Regulation (EU) No 305/2011 of the European Parliament and of the Council "On the establishment of harmonized conditions for the marketing of construction products and the repeal of Directive 89/106 / EEC⁵².

Energy Efficiency

The Law of Ukraine "On Amendments to Certain Laws of Ukraine on Settlement of Certain Issues in the Sphere of Housing and Communal Services"⁵³, regulates the issue of the transition period of the Law of Ukraine "On Housing and Communal Services"⁵⁴ on organization of contractual relations with utilities on the supply and distribution of electricity and natural gas). This choice is necessary to ensure the participation of associations of co-owners of apartment buildings (hereinafter - condominiums) and housing cooperatives (hereinafter - HBC) in the implementation of measures for energy conservation, reconstruction and modernization of apartment buildings⁵⁵ under the program "Program 70/30 Energy Efficiency"⁵⁶. The introduction of these laws and programs has significantly increased the demand for materials used in energy-efficient improvements to pipelines, roofs, walls of residential buildings, metal-plastic windows and doors and related materials / works / services.

The Law of Ukraine "On Energy Efficiency"⁵⁷ defines the legal, economic and organizational foundations of relations arising in the sphere of ensuring energy efficiency during production, transportation, transmission, distribution, supply and consumption of energy.

Sustainable wood/timber processing.

Production of timber products is one of the priorities of the **National Economic Strategy until 2030**⁵⁸. Decree of the President of Ukraine Nº228 / 2021 "On some measures for the preservation and reproduction of forests" provides for additional funding in 2022 and subsequent years of measures for the protection, conservation, use and reproduction of forests. Decree of the President of Ukraine Nº511 / 2019 "On some measures for forest conservation and rational use of forest resources" including the sale of wood on a competitive basis.

The Law of Ukraine "On the peculiarities of state regulation of the activities of business entities related to the sale and export of timber" introduces monitoring of internal consumption of unprocessed domestic timber, as well as control

⁵⁰ http://w1.c1.rada.gov.ua/pls/zweb2/webproc4_1?pf3511=67032

⁵¹ https://zakon.rada.gov.ua/laws/show/850-20?fbclid=lwAR3GOVcmsIz0kHRj9x3eiE0QGw_8LJF8HUTIKlyCF4apk_sv_zwFCqzfApI#Text

http://www.icgc.eu/userfiles/File/REGULATION%20EC%20305.pdf

⁵³ https://zakon.rada.gov.ua/laws/show/677-20#Text

⁵⁴ https://zakon.rada.gov.ua/laws/show/677-20#Text

⁵⁵ According to item 22 of part 1 of article 26 of the Law of Ukraine "About local government in Ukraine", the Civil code of Ukraine, laws of Ukraine "About energy saving", "About association of co-owners of the apartment house", "About features of realization of the property right in the apartment house", The order of development of city target and complex programs, monitoring and reporting on their implementation, approved by the order of the mayor from November 8, 2016 N

 $^{^{56}~\}mathrm{h}\underline{ttps://teplo.org.ua/programs/programa-7030-energoefektivnist}$

⁵⁷ Law of Ukraine «On energy efficiency»: https://zakon.rada.gov.ua/laws/show/1818-20#Text

⁵⁸ https://www.kmu.gov.ua/npas/pro-zatverdzhennya-nacionalnoyi-eko-a179?fbclid=lwAR0PQZrkY08DI5Q4zIsp0Q_Q4Qv4jAqEH8Xs8lAkmc9w_RV4YQ5C3uUdRSw

https://zakon.rada.gov.ua/laws/show/511/2019#Text

⁶⁰ https://zakon.rada.gov.ua/laws/show/2860-15#Text

over the volume of internal consumption of unprocessed domestic timber, including through the introduction of electronic wood accounting.

Food safety, food / catering services

Law of Ukraine "On Amendments to the Law of Ukraine" On the State Budget of Ukraine for 2020 "61 on the continuous provision of food to military" provides for increased funding and increases the requirements for food standards for military staff.

The Law of Ukraine "On Information for Consumers Regarding Food Products" 62 establishes requirements for the use of labelling of natural food products.

Decree of the President of Ukraine No. 894/2019 "On urgent measures to improve the health of children" was another prerequisite for the introduction of healthy nutrition, preservation and strengthening of the health of the younger generation.

Waste and hazardous chemicals management

Introduction of a sustainable management system for waste and hazardous chemicals is required by Ukraine's international obligations and national legislation, including a number of decrees of the President of Ukraine⁶⁴ and the Framework Law on Waste Management⁶⁵, requires the development of sectoral legislation, the development and implementation of new standards, the financing of projects and the introduction of economic incentives.

Privatization as a restructuring of the state property management system

Management of state property is carried out in accordance with the Law of Ukraine "On the State Property Fund of Ukraine"66. The expenditure part consists of expenditures for construction, reconstruction and maintenance of stateowned facilities (including the areas of construction of resort and recreational facilities and tourist infrastructure facilities). The income part is formed at the expense of receipts from rent and sale of objects of state property. Decree of the President of Ukraine "On urgent measures to ensure economic growth, stimulate regional development and prevent corruption"⁶⁷ gave impetus to the search for ways to sustainably manage state-owned facilities and increase rental and privatization revenues. Sustainable management of state-owned facilities in order to increase rental and privatization revenues requires the development and adoption of a number of legislative acts, sustainable construction standards, environmental protection conditions for investors participating in property auctions and requires a separate analysis of the industry's readiness to implement sustainable standards in tourism. Public and private real estate, hotel business, recreation areas, landscaping and rehabilitation, related services and works do not fully meet the purpose and objectives of this project and require additional human, time and financial resources, but may be a promising area of separate research within the framework of the Sustainable Tourism Program "One Planet" 68 aimed at accelerating sustainable consumption and production in the field of tourism and recreation to solve pollution problems 69, biodiversity loss, climate change and the protection of marine and terrestrial ecosystems in line with the implementation of the SDGs 12, 13, 15.

⁶¹ https://zakon.rada.gov.ua/laws/show/548-20#Text

⁶² Excerpt from the Law of Ukraine "On Information for Consumers Regarding Food Products": https://www.naturproduct.org.ua/zakon

⁶³ Decree of the President of Ukraine No. 894/2019 "On urgent measures to improve the health of children https://zakon.rada.gov.ua/laws/show/894/2019#Text

⁶⁴ Decree of the President of Ukraine 37837/2019 "On urgent measures to reform and strengthen the state" (1a) on waste management and industrial pollution. Decree of the President of Ukraine Nº111 / 2021 "On the decision of the National Security and Defence Council of Ukraine of March 23, 2021" On challenges and threats to national security of Ukraine in the environmental sphere and priority measures to neutralize them "contains instructions to government agencies to intensify reform waste management mechanism https://www.president.gov.ua/documents/1112021-37505 Presidential Decree Nº104 / 2021 On the Decision of the National Security and Defence Council of Ukraine of March 19, 2021 "On Measures to Improve the Level of Chemical Safety in Ukraine", including a list of instructions to state bodies in the field of the Draft Objective https://www.president.gov.ua/documents/1042021-37417

⁶⁵Law of Ukraine «On waste Management»: https://zakon.rada.gov.ua/laws/show/2320-20#Text

⁶⁶ https://zakon.rada.gov.ua/laws/show/4107-17#Text

⁶⁷ https://www.president.gov.ua/documents/7132019-29789

⁶⁸ https://www.oneplanetnetwork.org/sustainable-tourism/covid-19-how-tourism-can-recover-responsibly

⁶⁹ https://www.oneplanetnetwork.org/global-tourism-sector-should-continue-fight-against-plastic-pollution-during-and-after-covid-19

Standards and guidelines in the field of public procurement of initially prioritized industries areas

The state obliges manufacturers to put into circulation only safe products, ie products that meet the requirements for product safety established by law or, in the absence of the latter, meet national standards harmonized with European and international standards.

From January 1, 2019, all outdated standards adopted before 1992 have been cancelled in Ukraine (mostly these are interstate standards of the former USSR - GOST), and they must be replaced by new DSTU harmonized with EN or, in the absence of such, with international standards ISO.

Environmental criteria of eco-labelling type I are considered as the most transparent and reliable standards for assessing the life cycle and environmental characteristics of the subject of procurement. Their use as selection criteria or the criteria (non-price) is recommended by the European Commission for the implementation of SPP, the UNEP Guidelines for the implementation of SPP, recommendations on sustainable procurement according to ISO is recommended by the guidelines of the UNEP, the EC and the Sustainable Procurement Guidelines according to ISO 20400⁷⁰. The certificate of LCCA compliance of products of a certain category, and the eco-label logo on the packaging confirm the compliance of the purchased item with the requirements of such criteria.

Construction (industrial and public, road, pipelines, infrastructure), related works and services (design, repair and maintenance)

Any operation, process or calculation in construction production is regulated by state construction regulations and standards, thus forming a standardization system. The main provisions of the norming and standardization system in construction are set out in DBN 1.1-1:2009⁷¹.

Energy Efficiency

The GIZ project "Promotion of energy efficiency and implementation of Directive 2012/27/EU on energy efficiency in Ukraine" implemented with the support of the Government of Germany and the Secretariat for Economic Affairs of Switzerland (SECO) issued the guide "Criteria for energy efficient procurement - Recommendations on energy efficiency requirements for the purchase of products by public bodies» 72, which offers customers a tool for understanding the legal framework, norms and standards for the implementation of EEPP.

Food safety, food / catering services

The government has introduced a program to bring children's food establishments into line with European standards. In 2020, there were changes in the legislation that allowed the reform of the child nutrition system to begin, in particular:

- approved sanitary regulation for general secondary education institutions⁷³;
- new hygienic requirements for the production and circulation of food products at facilities located in general secondary education institutions were approved⁷⁴;
- methodical recommendations have been developed regarding the methodology of procurement features in the field of food organization in educational institutions⁷⁵;
- on the basis of the HACCP, methodical guidelines were developed for compliance with the requirements of the legislation of Ukraine regarding the safety of food products at the production enterprises of the consumer cooperative of Ukraine⁷⁶;

⁷⁰ DSTU ISO 20400: 2018 Steel procurement. The guide (ISO 20400 valid until: 2017, IDT) provides guidance to organizations, regardless of their activity or size, on the integration of sustainability in procurement, as described in ISO 26000. It is intended for stakeholders involved in procurement decisions and processes or they are affected

⁷¹ DBN 1.1-1:2009: https://www.minregion.gov.ua/wp-content/uploads/2016/12/DBN-A.1.1-1-2009.pdf

⁷² EEPP criteria(UKR): https://iem.org.ua/images/librery/purchase_template_18.02.2021_web.pdf

⁷³ Sanitary regulations for general secondary education institutions: https://zakon.rada.gov.ua/laws/show/z1111-20#Текст

 $^{^{74}}$ Hygienic requirements for the production and circulation of food products at facilities located in general secondary education institutions: https://zakon.rada.gov.ua/laws/show/z1275-20#Tekct

⁷⁵ Methodological recommendations regarding the methodology of procurement features in the field of food organization in educational institutions

⁷⁶ Methodological guidelines for compliance with the requirements of the legislation of Ukraine regarding the safety of food products at the production enterprises of

- by Resolution No. 305 of the CMU dated March 24, 2021, the norms and procedure for the organization of meals in educational institutions and children's health and recreation institutions were approved⁷⁷:
- the Order of the Ministry of Economy of October 30, 2020 No. 2208 approved Methodological recommendations on the methodology of procurement in the field of food in educational institutions⁷⁸.

The President of Ukraine instructed the Government to develop and approve standards for the content of polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans in food products and environmental objects, as well as methods of their determination, within a six-month period.

International standard ISO / TS 19657:2017 Definitions and technical criteria for food ingredients to be considered as natural (Definitions and technical criteria for food ingredients to be considered as natural) was adopted as DSTU in May 2018 by confirmation method. The standard offers mechanisms for the exchange of information between enterprises about food ingredients that are considered natural, which should contribute to the spread of honest business practices and compliance with the requirements of the Law of Ukraine "On Information for Consumers Regarding Food Products".

Chemical safety

On the initiative of the Minenvironment, the Government approved changes to the Technical Regulations of detergents regarding limiting the content of phosphates.⁷⁹

The Cabinet of Ministers of Ukraine approved the Technical Regulation on limiting the use of lead in paints and varnishes and raw materials⁸⁰, which minimizes the risks of negative effects of this element on human health and the environment. According to the regulation, such products containing lead will be removed from the market and will be subject to further monitoring.

By its order, the Ministry of Economy approved the Technical Regulation on Limitation of Emissions of Volatile Organic Compounds Due to the Use of Organic Solvents in Paint and Paint Materials for the Construction and Repair of Wheeled Vehicles⁸¹.

The procurement of services for the disposal of medical waste is carried out in accordance with the resolution of the CMU "Some issues of procurement of goods, works and services necessary for the implementation of measures. The Resolution aims at preventing the occurrence and spread, localization and elimination of outbreaks, epidemics and pandemics of the acute respiratory disease COVID-19 caused by the coronavirus SARS-CoV-2, on the territory of Ukraine»⁸².

2.6. Initial prioritization of categories of goods, works, services

The initial prioritization was carried out based on the research results set out in paragraphs 2.1 - 2.5, taking into account the opinions of interested parties.

According to the results of Survey No. 1, public procurement participants identified the categories of goods, works and services that have the greatest potential for improvement and application of the SPP approach. The results of the survey are shown in Table 5.

Table 5. Priority of the categories with the greatest potential for improvement for procurement participants.

	Priority level of categories of goods, works, services that have the greatest
CPV -class and type of goods, services,	potential for improvement of characteristics (from 1 to 5) for the category of

the consumer cooperative of Ukraine: https://moz.gov.ua/uploads/2/12337-metodicni_nastanovi.pdf

^{77&}lt;sub>CMU</sub> Regulation of 24.03.2021 №305: https://zakon.rada.gov.ua/laws/show/305-2021-%D0%BF#Text

⁷⁸ Order of Mineconomy of 30.10.2020 № 2208

⁷⁹ CVE Regulation of 02.06.2021 № 574: https://www.kmu.gov.ua/npas/pro-vnesennya-zmin-do-tehnichnogo-reglamentu-mijnih-s20621

⁸⁰ CMU Regulation of 28.04.2021 № 432: https://zakon.rada.gov.ua/laws/show/432-2021-%D0%BF#Text

⁸¹ Order of Mineconomy of 02.10.2018 № 1394 (registered in the Ministry of Justice on 30.10.2018 № 1228/32680: https://zakon.rada.gov.ua/laws/show/z1228-18#Текст

⁸² CMY Regulation of 20.03.2020 № 225: https://zakon.rada.gov.ua/laws/show/225-2020-%D0%BF#Text

works	goods in% of the total number of respondents (100% in total split by categories)								
	Coormite	Ouslik.		Efficienc	T				
	Security	Quality	Environmenta 	у	Others, taking into account the available market offers quantity				
34110000-1 Cars	30	10	20	30	10				
44160000-9 Trunks, pipelines, pipes, casings, tubing and related products	20	10	40	20	10				
39160000-1 School furniture	0	10	50	10	30				
30230000-0 Computer and climate equipment	0	30	20	20	30				
03410000-7 Wood	0	0	90	10	0				
30190000-7 Office equipment and accessories are different	10	10	30	40	10				
14210000-6 Gravel, sand, rubble and fillers	0	20	60	20	0				
18810000-0 Professional footwear is different, except for sports and protective	0	80	10	0	10				
39710000-2 Electrical appliances (including air conditioning)	30	10	20	20	20				
18110000-3 Uniforms	0	50	40	10	0				
15890000-3 Food	0	40	20	0	40				
19520000-7 Plastic products	10	10	60	20	0				
18130000-9 Special work clothes	20	40	20	20	0				
63710000-9 Land transport services	40	20	20	10	10				
50530000-9 Equipment repair and maintenance services	30	20	20	20	0				
50230000-6 Repair, maintenance of road infrastructure and related equipment and related services	10	50	10	20	10				
90610000-6 Street cleaning and sweeping services	0	40	50	10	0				
71520000-9 Construction supervision services	20	30	10	30	10				
55510000-8 Canteen services	10	40	10	20	20				
55520000-1 Catering services	0	40	50	10	0				
90510000-5 Disposal / disposal and waste management	0	10	50	10	30				
77310000-6 Services in landscaping and maintenance of greenery	0	20	50	30	0				
45230000-8 Construction of pipelines, communication lines and power lines, highways, roads, airfields and railways; levelling surfaces	30	20	30	10	10				
45450000-6 Other final construction works	10	40	40	10	0				
45210000-2 Construction of buildings	10	20	40	20	10				
45440000-3 Painting and glazing	10	30	50	10	0				
45330000-9 Plumbing and sanitary works	10	40	20	20	10				
	L		<u> </u>	<u> </u>	<u> </u>				

In order to gradually narrow the categorical base of the study, the categories of goods, works, and services that are most often purchased were analysed compared to 2019-2020 (15 categories of goods; 10 categories of services; 5 categories of works). The results of the study are given in Annex 4 to this report.

Table 6 (master table) shows the consolidated data based on the results of the initial prioritization of the categories of goods, works and services for the development of the SPP criteria within the framework of the EU4Environment project. The results of the survey were taken into account when determining the priority categories as the opinion of the interested parties.

Description of the Master table (consolidated)

- 1. CPV class and type of goods, services, works according to the state classifier DK 021:2015 Unified procurement dictionary. It is according to this classifier that state customers determine the code of goods, works or services when announcing electronic tenders for their purchase. It is easy for the participant to find and find his way around a specific tender. The initial prioritization of goods, works and services was carried out in points from 1 (less) to 5 (more) based on the previous prioritization, in particular:
- 2. Potential compliance with the requirements of the SPD policy (up to 5 points), based on previous studies conducted as part of the EaP GREEN SPP project and EU4Environment SPP project;
- 3. Strategically important for the state (up to 3 points) based on situational analysis;
- 4. The most purchased (categories) (up to 5 points) based on data research obtained through the use of BI ProZorro, taking into account the frequency of purchases, their monetary value, the rating of purchases at the national level;
- 5. Application of the criteria of SPP (up to 3 points) based on the analysis of the results of customer surveys conducted as part of the study, taking into account the application of one or more criteria that can be attributed to sustainability criteria. For example, "energy efficiency class A for energy-consuming products", "phosphate-free detergents", "content of slag materials in the road surface at least 25%", etc. The availability of data on the use by customers of individual criteria of the SPP and the results of the survey indicate their readiness to apply additional criteria to improve procurement, and indicate the potential for the use of a multi-criteria approach to the SPP in the presence of appropriate methodological recommendations;
- 6. Availability of methodological documents in the field of public procurement (up to 4 points) based on the analysis of regulatory acts, documents and standards that are available and recommended to customers. For example, typical specifications and non-price criteria posted on ProZorro resources, methodological recommendations, in particular those approved by orders Ministry of Economy, letters clarification, recommended criteria of SPP developed within the framework of EaP GREEN, criteria of SPP, EEPP and other information about which is given in this section of the report;
- 7. The opinion of interested parties (up to 5 points) based on the analysis of the results of customer surveys that were conducted as part of a study on the readiness to apply a multi-criteria approach to SPP under the conditions of having developed methodological recommendations approved by the orders of the Ministry of Economy;
- 8. The total number of points, the maximum of which is 30. The presence of recommended SPP criteria (scope) and the need for renewal.

Lines 9-12 provide information on the availability of relevant recommendations for various sections of the tender documentation, the need for revision, and some clarifications regarding the categories, in particular:

- 9. Qualification requirements according to Article 16 of the Law of Ukraine "On Public Procurement";
- 10. Technical characteristics (conditions) in accordance with Article 23 of the Law of Ukraine "On Public Procurement";
- 11. Non-price criteria according to Article 29 of the Law of Ukraine "On Public Procurement";
- 12. Life cycle cost assessment method according to Article 29 of the Law of Ukraine "On Public Procurement".
- 13. Existence of the criteria of PPE recommended by the European Commission.
- 14. Note additional information on the potential of applying the SPP approach to the category and which has an impact on the prioritization result.

Table 6. Master table: Initial prioritization of goods, works and services.

	Initial prioritization of goods, works and services (scores)						Total scores	, , , , , , , , , , , , , , , , , , ,				Availabilit y of EC- recomme nded green procurem ent criteria	Note
CPV -class and type of goods, services, works	Potentiall y meet the requireme nts of SPP policy (from 1 to 5, where "5" is the highest score)	Strategically important for state (from 1 to , where "3" is the highest score)	Most purchased (max. 5) [1]	Application of SPP criteria (from 1 to, where "3" is the highest score)	Availabilit y of methodic al document s in the field of PP (max. 4)	Opinion of stakehol ders (from 1 to 5, where "5" is the highest score)	(max. 30 scores)	Qualific ation require ments	Technical specificati ons (condition s)	Non-price criteria	Life cycle cost estimatio n method		
1	2	3	<u>4</u>	5	6	7	8	9	10	11	12	13	14
45210000-2 Constructio n of buildings	5	5	4	3	3	5	25	No	Yes (for schools and kindergart ens)	No	At the stage of adoption	Yes	This category was not considered within the framework of this task of the UNEP project. This work is carried out within the framework of the GIZ project "Promotion of energy efficiency and the implementation of the EU Energy Efficiency Directive in Ukraine" (according to the European Energy Efficiency Directive 2012/27/EU with the support of the German Government and the Swiss Secretariat for Economic Affairs (SECO)).
55510000-8 Dining room services	5	5	4	2	3	5	24	No	Yes	Yes, to be updated	No	Yes (furniture fittings) +	Customers use ecolabel requirements for detergents, detergent

													effectiveness and
												eco-	dispensers. This category may be considered
												labelling	further for the
													development of an
													ecolabel standard.
45230000-8													This category is promising
Constructio													for the development of
n of													SPP criteria in the future.
pipelines,													Currently, the
communica													requirements according to the Technical
tion lines													regulations on eco-design
and power	5	5	5	2	2	4	23	No	No	Yes, to be	No	Yes	are applied. In the future,
lines,										updated			these requirements may
highways, roads,													be supplemented with
airfields and													ecolabelling criteria,
railways;													which requires the
levelling													development and implementation of new
surfaces													standards.
													The most purchased
													service for the needs of
55320000-9													educational institutions,
Food	5	5	3	2	3	5	23	No	No	No	No	Yes	the army and hospitals,
catering services													which has a good potential for
services													implementing the SPP
													criteria.
50230000-6													
Repair,													Approximately 12% of the
maintenanc e services of													total road network on the
road													balance sheet of the state
infrastructu	5	4	5	2	2	5	23	No	No	No	No	Yes	agency "Ukravtodor"
re and													(more than 5,000 km) is scheduled for repair as
related													part of the "Big
equipment													construction" program.
and related services													
55520000-1	5	5	2	2	3	5	22	No	No	No	No	No	The most purchased
Catering													service for the needs of
services													educational institutions,
													the army and hospitals,
													which has a good
													potential for implementing the SPP
													implementing the 3PP

													criteria.
90610000-6 Street cleaning and sweeping services	5	5	4	2	1	4	21	No	No	No	No	Yes	The categories of waste disposal and hazardous chemicals management should not be explored in the framework of this
90510000-5 Disposal / disposal and waste manageme nt	5	5	3	2	2	4	21	No	No	No	No	Yes	UNEP project task, as it requires the completion of state reform and legislative progress.
39160000-1 School furniture	3	4	4	1	2	4	18	No	No	No	No	Yes (furniture fittings) + eco- labelling	This category has a good potential to be used as FSC and eco-labelling criteria for SPP.
30230000-0 Computer equipment	3	2	4	2	2	5	18	No	No	Yes	No	Yes	These categories were not considered within the
3000000-9 Office and computer equipment, electronic- electrical equipment, hardware and accessories, except furniture and software packages (plastic office equipment)	3	2	4	2	2	5	18	No	No	Yes, to be updated	No	Yes	framework of this task of the UNEP project. This work is carried out within the framework of the GIZ project "Promotion of energy efficiency and the implementation of the EU Energy Efficiency Directive in Ukraine" (according to the European Energy Efficiency Directive 2012/27/EU with the support of the German Government and the Swiss Secretariat for Economic Affairs (SECO)).
30190000-7 Office equipment and	4	2	4	2	2	4	18	No	No	Yes, to be updated	No	Yes	This category is promising for the development of SPP criteria in the future. Now, the Technical

supplies miscellaneo us													Regulations of eco-design that comply with EU law have been implemented. In the future, the requirements of the Technical Regulations may be supplemented with eco-labelling criteria, which requires the development and implementation of new eco-labelling standards.
03410000-7 Wood	5	5	4	1	1	1	18	No	No	Yes, to be updated	No	No	This category has good potential for use as SPP criteria of the standards of the Forest Steering Committee - FSC.
5440000-3 Painting and glazing	5	5	3	2	2	1	18	No	No	No	No	Yes (windows and door structures) + Ecolabel	This category has a good potential for application as SPP criteria of the ecolabel standards (paint materials; window and door structures). The current environmental criteria for paints and varnishes (developed in 2016 as part of EaP GREEN) are recommended for revision to take into account changes in the criteria for this category of Ecolabel.EU (October 2021).
45330000-9 Plumbing and sanitary works	4	5	4	2	1	2	18	No	No	No	No	Yes (for equipmen t)	This category is promising for the development of SPP criteria after the review of the outdated recommendations of the European Commission for GPP for plumbing equipment.
19520000-7 Plastic products	5	5	3	1	1	3	18	No	No	No	No	No – eco- labelling	This category has the potential to be used as criteria for the SPP of the eco-labelling standard for products made of

													polymeric materials.
													Implementation of the standard requires support for the development of environmental criteria harmonized with the criteria of leading European programs that have international recognition.
77310000-6 Services in landscaping and maintenanc e of greenery	5	5	3	2	2	1	18	No	No	No	No	Yes (sanitary fittings)	This category is promising for the development of SPP criteria after the planned revision of the state rules for greening and landscaping, taking into account the updated recommendations of the European Commission for GPP on the maintenance of public areas (2019).
71520000-9 Constructio n supervision services	5	5	2	1	2	1	16	No	No	No	No	Yes (in main criteria for building constructi on and constructi on supervisio n)	This category has the potential to apply the requirements of international standards for management systems, standards of sustainable or green construction as criteria for the SPP). Implementation of sustainable and green construction standards at the national level requires ITA. This category has the potential to apply ecolabelling standards as SPP criteria for building materials and finishing materials
45450000-6 Other building completion and	4	4	5	1	1	1	16	No	No	No	No		This category has a good potential for application as SPP criteria for requirements for building materials and finishing

finishing													materials according to eco-labelling standards.
34110000-1 Cars	3	4	5	2	1	1	16	No	Yes	Yes	No	No	This category has a good potential for applying as SPP criteria the requirements for fuel standards (category E 5), as well as the technical requirements for electric or hybrid motor vehicles and the life cycle cost assessment method.
18110000-3 Uniforms	3	4	4	1	1	2	15	No	Yes	Yes	No	Yes (for textiles)	This category has a good potential to be used as SPP criteria for the textile requirements of the Oeko Tex standards or the ecolabel standard for textiles and textile products.
63710000-9 Land transport services	4	4	2	1	2	1	14	No	Yes	Yes	No	Yes	This category is promising for the development of SPP criteria, taking into account the updated recommendations of the European Commission for GPP on public transport (2021).
18130000-9 Special work clothes	3	3	3	1	1	2	13	No	No	No	No	Yes (for textiles)	This category has a good potential to be used as SPP criteria for the textile requirements of the Oeko Tex standards or the ecolabel standard for textiles and textile products.
44160000-9 Trunks, pipelines, pipes, casings, tubing and related products	4	3	5	3	1	1	12	No	No	No	No	No	This category has the potential to apply the requirements of the ecolabelling standard for polymer products, nonprice criteria, and the LCCA method as criteria for the SPP.
30210000-4 Data processing	2	2	5	1	1	1	12	No	No	No	No	No	This category is promising for the development of SPP criteria taking into

machines (hardware)													account the updated recommendations of the European Commission for GPP on data centers, server rooms and cloud services) (2020).
50530000-9 Repair and maintenanc e services of machinery	3	4	2	1	1	1	12	No	No	No	No	No	This category has good potential for using non-price criteria (warranty conditions, availability of replacement components, etc.) as SPP criteria.

The results of Questionnaire No. 2 of public procurement participants confirm the identified priorities and are taken into account as the opinion of interested parties. An analysis of the results of survey No2 is provided in Annex 3 to this report.

Summarizing this chapter, according to the analysis and final scores and data displayed in Table 6, it is recommended to define the following categories as priorities for the development of SPP criteria within the EU4Environment SPP project:

1) 55320000-9 Food provision services; 55520000-1 Catering services

The catering sector, in addition to political and budgetary support, has already made the most progress in approving food quality and service requirements. The joint efforts of the Ministry of Education and the Ministry of Health are gradually raising the level of public awareness about more sustainable consumption of food products with greater attention to its quality and storage conditions. In addition, the Government and society are already showing readiness to resolve the issue of reducing food waste and even prevent their generation. In 2020, for the first time, a state subvention was allocated for schools, which was used for the purchase of equipment and modernization of food units in 1908 institutions. The Ministry of Education and Science spent UAH 44,437 thousands to pay for goods (works, services) in 2019, and UAH 27,082 thousand in 2020. Catering services and services for the organization of children's nutrition - one of the most common items of procurement annually in August - early September, is cyclical. The cost of the announced tender in the ProZorro system ranges from UAH 3,000 to UAH 1 million depending on the CA's category. Usually such purchases are announced: educational institutions (schools, preschools, schools, technical schools, universities); sanatoriums; orphanages; executive committees; city councils; education departments; health care facilities; military institutions and formations.

EU criteria for food, catering and vending machines⁸³ note the following effects on the environment during its life cycle:

- fossil fuel combustion and energy use for various activities,
- land use or change of land us purpose, water use and water pollution.

However, there are other environmental impacts associated with certain categories of food. They include:

• production and use of pesticides and chemical fertilizers related to food groups such as meat, milk and cheese, eggs, fruits and vegetables, bread and cereals, oil and fats, and hot and cold beverages;

⁸³ EU criteria for food, catering and vending machines https://ec.europa.eu/environment/gpp/pdf/190927 EU GPP criteria for food and catering services SWD (2019) 366 final.pdf

- soil degradation associated with product groups such as fruits and vegetables, bread and cereals, oils and fats; methane and nitrate emissions are environmental impacts associated with different product groups;
- depletion of fish stocks or production of fish feed and use of antifouling treatment in fish cages related to fish and seafood.

With regard to catering services, the use of energy and water is an important factor in the overall impact on the environment, as well as the generation and management of food and packaging waste and containers. It should be noted that the reduction of food waste is crucial to reduce the overall environmental impact of the catering service. Therefore, in terms of criteria, there is a need for additional criteria of naturalness, sustainable use of resources and waste prevention.

Table 7. Study-case of the SPP approach to the announcement of the purchase of food and food services as a priority.

Procurement stage	Example of SPP criteria						
Exclusion	Exclusion for violation of the law or non-payment of tax or social security						
Selection - Services and the serve products are available on the market							
	- Operation of the environmental management system in the catering enterprise, including, for example, energy and waste management.						
	- Previous experience in managing environmental and social aspects of food production or service contracts.						
	- Booking contracts for companies that employ workers with disabilities or socially protected companies.						
	- Certificate of food safety and procedures (eg HACCP).						
Technical	- Providing food and beverages of organic, ecological or natural origin.						
specification	- Use of packaging from recycled or renewable sources that can be reused or recycled after use.						
	- Use of detergents and equipment (eg dishwashers) that meet certain environmental standards.						
	- Availability of tap water, half portions and vegetarian dishes.						
Criteria	- Providing a menu that is healthy, varied and includes sustainable foods such as seasonal fruits and vegetables.						
	- Higher %age of food from organic agriculture than specification.						
	- Consumption of tea, coffee, sugar or other products that meet the criteria of fair trade.						
	- Approach to reducing the amount of food and packaging waste.						
Execution of the	- Staff training to support sustainable practices.						
contract	- Achieving goals to reduce waste or increase the level of recycling.						
	- Payment of the subsistence minimum and registration that respects family life.						
	- Data transfer to ensure the transfer of obligations (if necessary).						

2) 45230000-8 Construction of pipelines, communication lines and power lines, highways, roads, airfields and railways; levelling surfaces; 50230000-6 Repair, maintenance services of road infrastructure and related equipment and related services

Legislative and regulatory basis, budget support of programs in the field of construction, repair and maintenance of roads, adopted Methodical recommendations and recommended non-price criteria⁸⁴, which contain guideline and examples of the application of non-price criteria, including secondary raw materials and industrial waste as a part of raw materials, prove the long-term intentions of the state regarding further steps to "green" the industry and increase the level of sustainability at each stage of construction works.

The waste of the metallurgical industry, man-made and renewable materials have a huge potential as raw materials for the construction of roads and the development of the area adjacent to them. Therefore, the new criterion base should be reviewed for adaptation to the existing raw material base in Ukraine and European standards.

The EU approach is proposed⁸⁵ to the design, construction and maintenance of roads includes:

- Design and construction to reduce road rolling resistance (within technically acceptable safety parameters) and low associated fuel consumption and emissions on motorways and highways by optimizing the macro texture (measured as the average depth of the profile) and controlling it at the stage of use roads;
- Use of by-products and materials as substitutes for natural mineral materials;
- Use of building materials with eco-labelling (for the purpose of efficient use of resources, improvement of chemical and radiation safety indicators);
- Design, specification and management of the site for maximum on-site reuse of excavated materials and soils (including topsoil), maximization of reuse / recycling of construction and dismantling waste (C&DW) and waste from other industrial processes and use of construction materials with a high content of recycled or reused, including by-products;
- Actions aimed at the reducing noise emissions at the stage of construction, use and maintenance;
- Increasing the durability of the material and reducing maintenance needs;
- Maintenance and rehabilitation strategies, including a monitoring plan and a maintenance plan;
- Availability of the prevention plan, which includes solutions such as alternative routes, supply and inflow lanes and rigid shoulders, assessed by life cycle analysis;
- Introduction into the drainage system of water pollution control components and rainwater retention components, including engineering solutions (eg natural solutions), including the potential to create a habitat, in particular to reduce runoff into storm sewers and the total amount of water entering the local stormwater sewage or surface water, thereby significantly reducing flood damage.
- Priority for the development of new editions of environmental criteria of the eco-labelling program type I.

The updated SPP recommended by the EC⁸⁶ for the design, construction and maintenance of roads provide for the following to be taken into account during the evaluation of the proposal:

- 1. Life Cycle Assessment (LCA): Conduct a life cycle assessment (see Exhaustive Criterion B14). This requires participants to assess the life cycle the impact of the main elements of the road.
- 2. Carbon footprint (CF): Carbon footprint monitoring (see Criterion B14). This requires participants to assess the life cycle:
- potential of global warming;
- basic road elements.
- 3. Requirements for secondary and renewable materials as raw materials: This requires participants to provide information on the minimum content of secondary and / or renewable raw materials in the composition of materials / products / contents in the main road elements (see criterion B15). 4. Requirement for reduced emissions from the

⁸⁴ Non-price criteria constructor: https://nk.prozorro.ua/

⁸⁵ https://publications.jrc.ec.europa.eu/repository/handle/JRC102168

 $[\]frac{86}{\text{https://ec.europa.eu/environment/gpp/pdf/GPP\%20criteria\%20Roads\%20(2016)\%20203.pdf}}$

transport of heavy loads / equipment: This adds points for low CO₂e emissions during the transport of equipment / loads used for the main road elements (see criterion B16).

III. ANALYSIS OF THE MARKET READINESS

This section presents the results of the research, which was conducted on the basis of a comprehensive analysis of the market offers of goods, works and services, which were previously identified as priority for the SPP according to the results of the initial prioritization (category by category with conclusions made under each). The prices are taken from open sources, indicated in hryvnias for the period April-June 2021 and can be considered indicative and listed in the currency archive of the NBU as of June 30, 2021⁸⁷. With more detailed information on price offers for:

- catering services and the main set of products can be found in Appendix 5 to this report:
- construction, repair, reconstruction and maintenance in the field of road management in Appendix 6 to this report.

3.1. Food provision services (Catering services and Canteen services)

55320000-9 Food provision services (including 55520000-1 Catering services and 55510000-8 Canteen services)

The organization of food provision is an invariable subject of purchases from many CAs, first - budgetary institutions. In 2021, the Government will allocate a subvention of UAH 1 billion and about UAH 100 million will be allocated from local budgets, so there is financial potential for the services to be improved in a sustainable way. In addition to budget financing, paragraph 197.1 of Article 197 of the Tax Code of Ukraine establishes a number of **tax benefits**, namely the exemption from VAT of transactions related to the supply of food services or certain products **what provides incentive for criteria application**.

In terms of food and catering services, the most purchased according to the national platform ProZorro are:

CPV-class services	% of all services in the category of food and catering services for 2020
15894210-6 School meals	64
55510000-8 Canteen services	18
55520000-1 Catering services	18

According to the analysis of ProZorro the most purchased products as a part of the services in educational institutions are dairy products, buckwheat, oatmeal, cooking oil, bread, "borscht" vegetable set (beets, potatoes, cabbage, carrots, onions, tomatoes).

Analysis of the products that make up the approximate school menu and their availability on the market proves that the lowest price for organic products in most cases does not exceed 10-25% compared to the price of conventional products. Prices for natural products are comparable to the highest price for conventional goods.

It should be noted that the sales of conventional goods significantly exceed the sales of organic and natural products (by similar product groups), so there is a potential possibility of downward revision of selling prices, which confirms the data of official statistics about the growing potential of organic production.

In addition to the requirements of the updated legislation in the field of safety and quality of food products, customers have enough tools to apply additional requirements as criteria of SPR, increasing the requirements for safety, environmental friendliness, nutritional value of natural food products in combination with the resource efficiency requirements and waste reduction. As for the risks and advantages, in connection with the accession of Ukraine to the Paris Agreement, the development of organic food production and the provision of catering services with improved ecological characteristics is quite relevant due to a number of obvious ecological, economic and social advantages:

⁸⁷ Official currency rate NBU of 30.06.2021: https://index.minfin.com.ua/ua/exchange/archive/2021-06-30/

- helps to reduce emissions of carbon dioxide, nitrogen oxide and methane, which contribute to global warming;
- reduces the risk of loss of health of agricultural workers, as they are the most vulnerable to pesticides and other chemicals used in traditional production;
- organic and natural products are more nutritionally beneficial for consumers due to the minimization of health effects from toxic and persistent chemicals;
- especially useful organic and natural products for children, since the child's body is more vulnerable to residues of pesticides, nitrates, heavy metals and antibiotics in food;
- reduce the cost and shelf life of disposable dishes, energy consumption, volumes and cost of generating organic waste, plastic, paper;
- factors of influence and areas for improvement are known, measurable and achievable.

The advantage of organic agriculture in the social sphere is a high potential for ensuring the livelihood of the rural population and revitalizing the work of small farms, employment of the local population, since organic agriculture is less mechanized and requires more manual labour.

Organic production has state support through:

- allocation of a budget subsidy per unit of arable land and/or one head of cattle;
- reimbursement of up to 30% of costs for organic certification;
- reimbursement of up to 30% of the purchase price of plant protection products and fertilizers, seeds, planting material and feed allowed by organic standards.

The difference between the profit and the cost of organic production, which includes all the above components, will be the % that the producer will receive when switching to farming methods in accordance with organic standards.

Natural products are more accessible both in terms of assortment and in terms of price. They are an alternative to products with an extended shelf life that contain preservatives, as well as semi-finished products that may contain unwanted food additives (thickeners, sweeteners, dyes, etc.).

The implementation of the SPP criteria in the field of food and catering will contribute to increasing the share of organic and natural products in the total volume of gross agricultural products and providing the population with food products that are more nutritious and safe for health and the environment. This in turn implies:

- rejection of the use of GMOs and restriction of the use of dangerous chemical substances/products;
- use of production processes that do not harm the environment, human and animal health;
- processing of waste and related products of plant and animal origin for further use in production;
- reducing the use of non-renewable resources;
- taking into account when choosing breeds the level of adaptation of animals to local conditions, their viability and resistance to diseases;
- production of organic animal husbandry products from animals that have been raised in organic farms from birth throughout their lives;
- exclusion of the use of artificially bred polyploid animals;
- preservation of biological diversity of natural aquatic ecological systems, continuous protection of the aquatic environment and the quality of the surrounding aquatic and surface ecological systems during the production of fishery products;
- creation of additional jobs, activation of entrepreneurship related to organic production; creating chains of added value.

An important role in the promotion of organic and natural food products can be played by local and regional authorities, which within the limits of their own budgetary resources have a real opportunity to support producers through the purchase of such products for the needs of children's educational and medical institutions.

Hence, it can be concluded that there are alternative products, manufacturers and suppliers in the market which otherwise have the potential to grow with proper institutional support and market awareness.

3.2. Services of construction of pipelines, communication lines and power lines, highways, roads, airfields and railways; levelling surfaces

45230000-8 Services of construction of pipelines, communication lines and power lines, highways, roads, airfields and railways; levelling surfaces (including 50230000-6 Repair, maintenance of road infrastructure and related equipment and related services)

Analysing the most purchased works in the field of road construction, it is possible to conclude about the presence of legislative requirements and regulatory documents. These documents can be used when establishing the criteria of the SPP when ordering the repair, reconstruction or new construction of roads, their maintenance services, requirements for building materials, chemical products, filler materials (fly ash and metallurgical slag).

There are about 35-36 billion tons of accumulated waste in Ukraine. They cover 7% of the country's territory, more than 50 thousand tons per km². The volume of slag materials accumulated in dumps from thermal power plants is more than 244 million tons, metallurgical slag - more than 100 million tons and it is constantly increasing. Mass-produced waste is a source of dust pollution, pose a danger to human health, flora and fauna of the surrounding areas. Ukraine has reserves of sand and rubble. This natural resource is widely used in road construction and repair. The volume of this type of work increases every year, which directly proportionally increases the extraction of minerals and depletes their reserves. The use of slag materials as a substitute for natural mineral materials (crushed stone, sand) already has adequate demand on the market. Any construction, carrying out the EIA procedure (in some cases OVD), availability of permits, management of environmental aspects during construction in accordance with environmental legislation. Therefore, one cannot underestimate the impact on improvement due to the proper application of the SPP approach when establishing qualification requirements, technical conditions for the design and implementation of projects in the field of road construction, repair and reconstruction.

Calculation of the life cycle cost according to DSTU ISO 15686-588 is especially relevant for public sector customers, for whom the absence of any forecasts of income from the built assets/facility can complicate the usual task of evaluating investments.

State and municipal budget support in accordance with long-term national programs provides sustainable potential for improvement in the field of road construction and favourable conditions for increasing the number of manufacturers with valid environmental certificates (management systems, eco-labelling).

As for the socio-economic impact, roads and other transport facilities are public capital, which is mainly built at the expense of budget funds. Sectors of the economy that will benefit from the increase of state capital in the field of road construction: transport industry - 75% of the capital is roads; the sector of postal and courier services - 5% of the capital is accounted for by road transport; tourism sector - 1% of capital belongs to roads. Efficiency advantages:

- general labour productivity (estimated to be at least 0.007% per year);
- productivity in the field of transport, postal and courier transport and tourism increases significantly;
- transport services will receive a 5% increase in productivity with the improvement of the road fund in the next 5 years, as well as postal and courier services; the service sector may become even more important due to the emergence of new routes, expansion and the emergence of new businesses due to new roads, which we estimate at 10%;
- fuel savings and repair increasing the productivity of vehicles up to 12.5%, which can be achieved due to the full cycle of road construction in 2020-2023.

⁸⁸ DSTU ISO 15686-5:2022 (ISO 15686-5:2017, IDT) Buildings and constructed assets – Service life planning – Part 5: Life-cycle costing.

Hence, it can be concluded that there are alternative products, manufacturers and suppliers in the market which otherwise have the potential to grow with proper institutional support and market awareness.

CONCLUSIONS

The results of the research based on the situational analysis, the market readiness analysis and the study of the opinion of the interested parties made it possible to determine the 2 most priority categories for the development of new SPP criteria within the framework of the EU4Environment SPP project in Ukraine:

- 1) Repair, reconstruction and construction of new roads;
- 2) Catering services and food products.

The data from the research results can be used in the future to justify the feasibility of developing a definition of priority categories for the implementation of the SPR approach and developing or revising regulatory documents that establish requirements for the sustainability criteria of various categories of goods, works or services. In particular, standards in the field of eco-labelling, green and sustainable construction, as well as recommendations for CAs.

In accordance with the provisions of the Law of Ukraine "On Public Procurement", the criteria of SPP can be applied:

- a) when establishing requirements for technical specifications of production or conditions for providing services or performing works (Article 23);
- b) in the evaluation of the proposal due to the establishment of a non-price criterion (Clause 3 of Article 29);
- c) through the assessment of the cost of the life cycle of the subject of purchase in the case of determining the cost of the impact of external environmental and other factors when applying the LCCA method (Clause 4 of Article 29).

The results of the study of the opinion of interested parties, which took place within the framework of the study (Survey No. 1, 2), prove the readiness of customers to apply the criteria of the SPP when conducting competitive bidding, subject to the approval of methodological recommendations for their application by order of the Ministry of Economy. Taking this into account, it is recommended that the criteria of the SPP developed as part of the SPP project EU4Environment in Ukraine and methodological recommendations for their application be implemented through the adoption of changes to the orders of the Ministry of Economy:

- Order of the Ministry of Economy dated August 17, 2020 No. 1572 "On the approval of methodological recommendations regarding the peculiarities of procurement in the field of road management" ⁸⁹;
- Order of the Ministry of Economy dated 30.10.2020 No. 2208 "On the approval of Methodological recommendations regarding the peculiarities of procurement in the field of catering in educational institutions" ⁹⁰.

The next step is the development and implementation of the digital fields of the application of environmental criteria in the conditions of the tender documentation. The possibility for participants to respond to such criteria in a machine-readable format in the electronic fields of the ITC ProZorro in combination with the BI ProZorro within the framework of the EU4Environment SPP project in Ukraine (tasks 4, 5) will contribute to the application criteria of SPP. It will also ensure monitoring and assessment of customers' compliance with methodical recommendations.

The implementation of new criteria of the SPP requires informational support and training of customers, suppliers and controlling bodies in the field of public procurement.

⁸⁹ Order of Mineconomy of 17.08.2020 № 1572

⁹⁰ Order of Mineconomy of 30.10.2020 № 2208

ANNEXES

Annex 1. Stakeholders in the sphere of SPP, their impact on SPP prioritization.

The ecosystem that made the ProZorro e-procurement vision a reality consists of government agencies, international financial organizations, educational institutions, the business community, civil society organizations and many other public procurement reform partners. The success of ProZorro was made possible thanks to the interaction of a large number of participants, the list and weight of which in the field of public procurement is shown in Fig. 1.1.

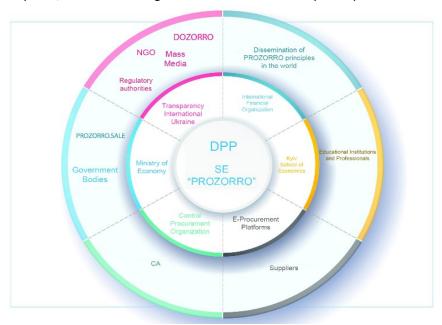


Figure 1.1. SPP Ecosystem

Government bodies and UTCs act in in accordance with the national legislation of Ukraine within the limits of their powers.

The CA's right to conduct preliminary market consultations is defined in Part 4 of Article 4 of the Law of Ukraine "On Public Procurement" (conforms to EU best practice). The competitive dialogue procedure is defined in Section V of this Law. Currently, such consultations are available through the electronic procurement system or by organizing open meetings with potential bidders prior to the announcement of the tender.

Professional Procurement Training

The field of training of authorized persons of suppliers remains less covered by the professionalization of the SPP. To improve the quality and manageability of the process of organizing procurement procedures of the Ministry of Economy in 2020:

- in cooperation with 39 institutions of higher education introduced 5 educational programs, 30 educational disciplines or modules for the first and second educational levels; started in the 4th year preparing for the introduction of training from the 2021 academic year; disseminated information about the introduction of the updated legislation in the field of public procurement for higher education institutions to take into account changes in educational programs;
- **disseminated information**, letters of recommendation, educational materials and series of videos regarding the updated procurement legislation on the Facebook network, on the web portal of the Authorized Procurement Authority in the section "**Public Procurement**" (subsection "Professionalization"), and on the Prozorro TV YouTube channel;

• **developed together with other bodies and published on** the information resource of the Authorized Body on Procurement the **methodology regarding the peculiarities of public procurement** in various spheres.

Annex 2. Results of Questionnaire Nº 1.

- 1) Regarding the satisfaction of e-Procurement system ProZorro (EPS), the benefits of the EPS were assessed by a larger number of CAs (49.1% satisfied and 32.7% completely satisfied) compared to suppliers (29.3% satisfied and 19.5% completely satisfied). All respondents
- <u>2)</u> unanimously note significant changes in the SPP system. However, it is noted that frequent administrative and structural changes in the country do not contribute to the preservation of institutional heritage, and decentralization reform requires strengthening the level of training on the ground.

2) Regarding barriers and difficulties related with SPP:

Mostly, CAs have difficulties in preparing technical specifications / conditions (60%), conducting appeal procedures (17%) and in determining non-price criteria and their share (11%). It should be noted that the %age of CAs who identified problematic application of non-price criteria decreased significantly compared to the survey of NGO "Living Planet" in 2018 (98% of CAs had difficulty applying non-price criteria and did not apply them).

Competitive bidders / suppliers have almost the same problems: during the preparation of documents confirming the qualification requirements (28%) and compliance with technical specifications / conditions (21%), during the participation in the tender / at the stage of the appeal procedure); during the preparation of documents confirming compliance (16%).

34% of suppliers would like to participate in the SPP and consider the most significant main barriers to the application of this approach:

- Signs of corruption factors;
- Possibility of discriminatory requirements to participants, which bear the signs of collusion of a potential participantsupplier and customer;
- Biased attitude of the customer in the formulation of the Terms of Reference for a particular supplier; young companies with specialists are not allowed on the market;
- Lack of professional procurement training programs;
- Uncertainty of the AMCU position; lack of methodological recommendations, "uniform qualification criteria are required, according to the law, not invented by the customer";
- Lack of methodical recommendations, "unified qualification criteria are needed, according to the norms of the law, and not invented by the customer";
- Lack of a separate procedure "Transparent Market Service" for small service providers (because the general system in their opinion is cumbersome and inefficient when the service costs several thousand UAH, and the procedure is the same as for tenders for billions);
- Cases of conspiracy of participants.

3) In terms of areas for improvement, CAs and suppliers focus somewhat on other indicators:

CAs consider the most important: demonstration projects (successful procurement with the use of recommended selection and approval criteria (reviews and publications) 46%); professional procurement training and confirmation of qualification of buyers with the application of the multicriteria approach of a choice (29%); recommended non-price criteria, if they are set (11%); recommended methods for assessing the life cycle of the product (9%).

CAs most need practical support in improving the level of training in the areas of multi-criteria approach and method of estimating the cost of the life cycle.

Suppliers need more: the presence of established standard selection criteria (technical conditions or specifications) for different categories of goods/works/services (56% of which are most in-demand by order of the Mineconomy and integration into electronic fields ProZorro, as well as individual fields ProZorro tied to electronic documentation and meet

the sustainability criteria); approved existing standard selection criteria (technical conditions or specifications) of goods/works/services of different categories are regularly updated/expanded taking into account changes in priorities and market readiness (18%) and; availability of Methodical recommendations/Guidelines on the development and application of sustainability criteria in the SPP, approved by the order of the Mineconomy (has a recommendatory nature) 6%). The questionnaire of suppliers shows the need for a wider range of support, which can be divided into:

- Methodical recommendations/Guidelines on development and application of sustainability criteria, other standard selection criteria fixed at the legislative level;
- Integrated electronic fields ProZorro;
- professional education.
- 4) **Regarding the requirements for the subject of procurement**, there are three main requirements for compliance: technical regulations and other legal acts (48%), national standards DSTU (28%), state building codes (DBN, 20%).
- 5) Regarding the application of quality criteria in the formation of conditions for the subject of procurement, the main availability of the certificate: quality management ISO 9001 (53%), food safety HACCP (21%); environmental management ISO 14001 (11%).
- <u>6)</u> Regarding the practical application of a multi-criteria approach to the subject of procurement, the requirement for compliance by the service provider or contractor with the requirements of environmental protection legislation is applied (41%), the subject of purchase must be ecological/have an eco-labelling certificate (25%), compliance with the energy class for energy-consuming products (13%), the subject of purchase must be organic/have a certificate compliance with organic standards (6%), water consumption indicator (1%), recycled material/waste content indicator (1%).

Unfortunately, a rather large %age of the respondents do not use any requirements for the subject of procurement (12%), which confirms the previous comment about the need for professional training and the dissemination of success stories of the application of SPP criteria.

7) As for the practical application of the multi-criteria approach to the subject of procurement, in practice, purchasers manage to apply the following requirements to the following categories: electronic and electrical equipment (23%), construction works and current construction repairs (21%), food products and canteen/catering services (20%), furniture and waste disposal and waste management - services for the removal, disposal or removal of wood waste, wood sawdust (14%), plastic products and constructions containing plastic (8%), repair of highways, roads (12%).

According to a survey of suppliers, the planned volume of sales for the needs of the state, territorial communities, and united territorial communities in 2021 may amount to an average of 14% of the planned revenue. This proves that participation in public procurement in the long term can be and is an economically justified benefit both for suppliers (for example, socio-economic benefits, image effect) and for buyers (for example, savings, influence on the formation of the sustainable consumption market, health of the nation).

Annex 3. Results of Questionnaire Nº2.

The survey was conducted in March 2021 by the NGO "Living Planet" in partnership with SE "ProZorro", as part of the situational analysis for this report. 164 respondents took part, of which 42 were customers, 86 were suppliers and contractors, of which 58 were SMEs, 36 were representatives of national expert organizations, institutes and other interested parties.

1) Regarding the most purchased goods, works and services

CPV-class and type of goods, works or services

Food and canteen/catering services

15000000-8 food and related products, 15612500-6 bakery products, 15500000-3 dairy products, 15220000 fish and seafood, 15613100-9 oatmeal, 15625000-5 semolina, 15884000-8 baby food, 15894200-3 food, 15894210-6 school meals, 15894220-9 hospital meals

55300000-3 restaurant and catering services, 55500000-5 canteen and catering services, 55510000-8 canteen services, 55520000 catering services, 55523100-3 school catering services, 55524000-9 school catering services

Goods containing wood and related services

39000000-2 furniture (including office furniture), furniture and decorative articles, household appliances (except lighting equipment) and cleaning products), 03410000 wood, timber products, wood waste, 39160000-1 school furniture and 39161000-8 furniture for kindergarten, 39134000-0 computer furniture

2400000-4 chemical products (in the context of wood processing)

90510000-5 waste disposal and waste management, including services for the removal, disposal or removal of wood waste, sawdust;

Electronic and electrical equipment and related services

5000000-5 repair and maintenance services;

30000000-9 office and computer equipment, electronic-electrical equipment, hardware and accessories, except furniture and software packages (plastic office equipment)

Road construction and related services

4500000-7 construction works and current repairs;

44000000-0 structures and construction materials, auxiliary construction products (except electrical equipment);

34000000-7 transport equipment and accessories

45233142-6 road repair, 45233140-2 road works, 45233100-0 construction of highways, roads

44113000-5 materials for road construction, 44113900-4 materials for road maintenance

Products containing plastic

19640000-4 plastic bags and garbage bags

44160000-9 polyethylene pipes, polyvinyl chloride pipes, fittings

44220000-8 Joinery (windows and doors of metal), 44221000-5 structures and parts thereof (windows, doors and related products - plastic windows and doors)

19520000-7 plastic products

39222110-8 Disposable tableware and plates, 39222100-5 disposable tableware for catering establishments

From the selected list of the most purchased goods, works and services, buyers are already beginning to apply a multi-criteria approach to the following categories:

CPV-class and type of goods, works or services

30000000-9 Office and computer equipment, hardware and accessories, except furniture and software packages (plastic office equipment)

15000000-8 food and related products, 15500000-3 dairy products

50000000-5 repair and maintenance services;

34000000-7 transport equipment and accessories

4500000-7 construction works and current repairs;

39000000-2 furniture (including office furniture), decorative furniture, household appliances (except lighting equipment) and cleaning products), 39134000-0 computer furniture, 39160000-1 school furniture

44000000-0 structures and construction materials, auxiliary construction products (except electrical equipment);

90510000-5 waste disposal and waste management - services for the removal, disposal or removal of wood waste, sawdust;

Structures and parts thereof (windows, doors and related products - plastic windows and doors)

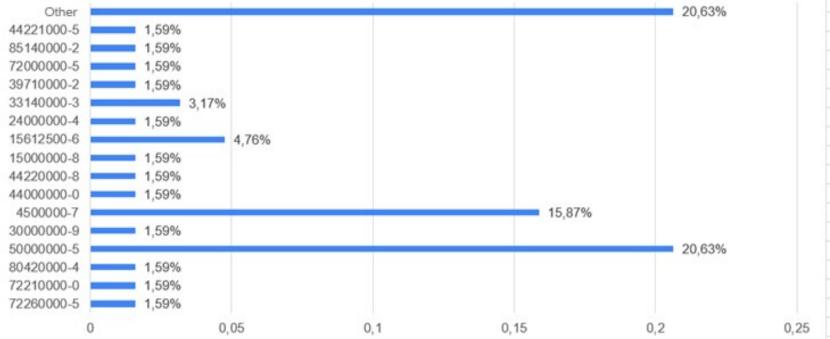
45233100-0 construction of highways, roads

45233142-6 road repair

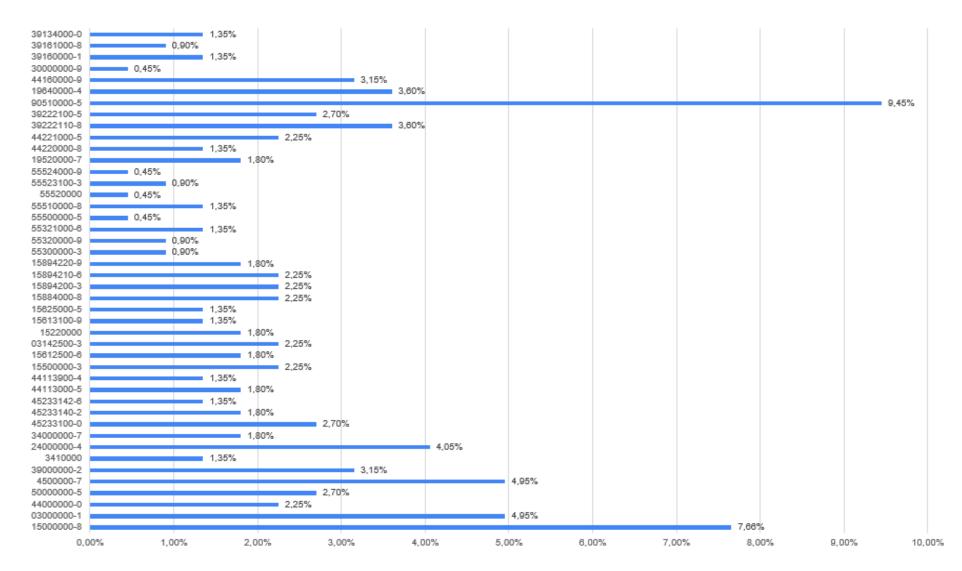
55510000-8 canteen services

19520000-7 plastic products

The suppliers who participated in the survey, the most important for their business are the following categories of goods, works and services in the context of SPPs: 50000000-5 repair and maintenance services; 4500000-7 construction works and current repairs; food and services included in the column "other" and 15612500-6 bakery products; 3314000 medical materials.



In the opinion of suppliers, the following have the greatest potential for improvement (taking into account the available market positions): Food and catering services (the highest indicator); road construction and services; waste disposal and waste management - services for the removal, disposal or removal of polymer waste (small plastic containers used), wood waste, sawdust, other substandard plastic products and scraps of film; construction works and current repairs; timber products and services; products containing plastic.



The rest of the graphs and charts based on the results of Survey No. 2 published on the website of the NGO Living Planet.

2) As for the environmental impacts, the biggest demonstrate:

					Environmental impact				
Category		Emissions into the atmosphere and imnact on climate change	Discharges (water, land)	Waste	Natural resources	Water resources	Toxicity Overall, number of	Total by category, q-ty	The total result by category, q-y
Food and canteen / catering services				Х					
15000000-8 food and related products, 15612500-6 bakery products, 15500000-3 dairy products, 15220000 fish and seafood, 15613100-9 oatmeal, 15625000-5 semolina, 15884000-8 baby food, 15894200-3 food, 15894210-6 school meals, 15894220-9 hospital meals									
55300000-3 restaurant and catering services, 55500000-5 canteen and catering services, 55510000-8 canteen services, 55520000	х			Х					
catering services, 55523100-3 school catering services, 55524000-9 school catering services									
Goods containing wood and related services									
39000000-2 furniture (including office furniture), furniture and decorative articles, household appliances (except lighting					Х				
equipment) and cleaning products), 03410000 wood, timber products, wood waste, 39160000-1 school furniture and 39161000-8									
furniture for kindergarten, 39134000-0 computer furniture									
2400000-4 chemical products (in the context of wood processing)							Х		
90510000-5 waste management, recycling and waste management, including services for the removal, disposal or disposal of wood waste, sawdust;		X		Х		Х	Х		
Electronic and electrical equipment and related services									
50000000-5 repair and maintenance services;									
30000000-9 office and computer equipment, electronic-electrical equipment, hardware and accessories, except furniture and		Х		Х					
software packages (plastic office equipment)									
Road construction and related services									
4500000-7 construction works and current repairs;	х	Х		х		х			
44000000-0 structures and construction materials, auxiliary construction products (except electrical equipment);									
34000000-7 transport equipment and accessories									
45233142-6 road repair, 45233140-2 road works, 45233100-0 construction of highways, roads		Х		х		х			
44113000-5 materials for road construction, 44113900-4 materials for road maintenance				х		х			
Products containing plastic									
19640000-4 plastic bags and garbage bags				Х					
44160000-9 polyethylene pipes, polyvinyl chloride pipes, fittings									
44220000-8 Joinery (windows and doors of metal), 44221000-5 structures and parts thereof (windows, doors and related				Х					

products - plastic windows and doors)				
19520000-7 plastic products		х		
39222110-8 Disposable tableware and plates, 39222100-5 disposable tableware for catering establishments		Х		

	Soc	ial-eco	nomic imp	act
Category	Socio-economic	Health of the	Improving the development of settlements	Overall by category, q-
Food and canteen / catering services				
15000000-8 food and related products, 15612500-6 bakery products, 15500000-3 dairy products, 15220000 fish and seafood, 15613100-9 oatmeal, 15625000-5 semolina, 15884000-8 baby food, 15894200-3 food, 15894210-6 school meals, 15894220-9 hospital meals	Х	Х		
55300000-3 restaurant and catering services, 55500000-5 canteen and catering services, 55510000-8 canteen services, 55520000 catering services, 55523100-3 school catering services, 55524000-9 school catering services		х	х	
Goods containing wood and related services				
39000000-2 furniture (including office furniture), furniture and decorative articles, household appliances (except lighting equipment) and cleaning				
products), 03410000 wood, timber products, wood waste, 39160000-1 school furniture and 39161000-8 furniture for kindergarten, 39134000-0				
computer furniture				
24000000-4 chemical products (in the context of wood processing)				
90510000-5 waste management, recycling and waste management, including services for the removal, disposal or disposal of wood waste, sawdust;			Х	
Electronic and electrical equipment and related services				
50000000-5 repair and maintenance services;		Х		
30000000-9 office and computer equipment, electronic-electrical equipment, hardware and accessories, except furniture and software packages (plastic office equipment)		Х		
Road construction and related services				
4500000-7 construction works and current repairs;	Х	Х	Х	
44000000-0 structures and construction materials, auxiliary construction products (except electrical equipment);			Х	
34000000-7 transport equipment and accessories			Х	
45233142-6 road repair, 45233140-2 road works, 45233100-0 construction of highways, roads	Х	Х	х	
44113000-5 materials for road construction, 44113900-4 materials for road maintenance				
Products containing plastic				
19640000-4 plastic bags and garbage bags		Х		
44160000-9 polyethylene pipes, polyvinyl chloride pipes, fittings		Х		
44220000-8 Joinery (windows and doors of metal), 44221000-5 structures and parts thereof (windows, doors and related products - plastic windows and doors)		Х	х	
19520000-7 plastic products		Х		
39222110-8 Disposable tableware and plates, 39222100-5 disposable tableware for catering establishments		Х		

Annex 4. The most purchased categories of goods, works, services, in comparison 2019-2020. Below there are presented 15 of goods; 10 of services; 5 of works.

The most frequently purchased goods, works and services in 2020

CPV-class and type of product	Expected purchase price (UAH)	Share of total goods (%)	Total number of lots (purchase frequency), (units)
2020 Goods (TOP-15)		1	
34110000-1 Cars	6 279 155 178	1,48	2 212
44160000-9 Highways, pipelines, pipes, casings, tubing and related			
products	5 170 170 064	1,22	28 591
30210000-4 Data processing machines (hardware)	3 795 086 198	0,89	17 875
39160000-1 School furniture	2 589 786 295	0,61	12 597
30230000-0 Computer equipment	2 555 378 697	0,60	51 803
03410000-7 Wood	2 174 446 069	0,51	12 572
30190000-7 Office equipment and supplies miscellaneous	1 928 416 256	0,45	113 118
14210000-6 Gravel, sand, rubble and fillers	1 783 408 216	0,42	8 299
18810000-0 Other footwear, except sports and protective	1 082 237 727	0,26	2 867
39710000-2 Electrical household appliances	1 013 666 287	0,24	30 089
18110000-3 Uniforms	962 070 843	0,23	2 909
15890000-3 Food and dried foods are different	888 454 203	0,21	7 641
19520000-7 Plastic products	662 290 723	0,16	11 254
19520000-7 Plastic products	662 290 723	0,16	11 254
18130000-9 Special workwear	495 227 848	0,12	4 213

Top15 goods 2019

CPV-class and type of product	Amount, UAH
34110000-1 Cars	5 967 422 400,05
15890000-3 Food and dried foods are different	4 708 489 107,17
30230000-0 Computer equipment	2 904 008 502,64
35810000-5 Individual uniform	2 557 102 701,53
03410000-7 Wood	2 316 962 675,56
39160000-1 School furniture	2 052 122 493,59
30190000-7 Office equipment and supplies miscellaneous	1 767 841 595,10
14210000-6 Gravel, sand, rubble and fillers	1 749 600 161,39
18810000-0 Other footwear, except sports and protective	1 145 075 194,38
39710000-2 Electrical household appliances	684 592 688,58
18110000-3 Uniforms	660 020 377,91
19520000-7 Plastic products	626 923 852,60
18130000-9 Special workwear	512 216 574,06
39520000-3 Finished textile articles	405 842 780,04
44420000-0 Construction goods	357 570 363,69

TOP 15 goods - 2020 (table type A1)

CPV-class and type of product	Expected purchas	eShare of total goods	Total number of lots
	price (UAH)	(%)	(purchase frequency), (units)
34110000-1 Cars	6 279 155 178	1,48%	2 212
44160000-9 Highways, pipelines, pipes, casings, tubing and related products	5 170 170 064	1,22%	28 591

30210000-4 Data processing machines (hardware)	3 795 086 198	0,89%	17 875
39160000-1 School furniture	2 589 786 295	0,61%	12 597
30230000-0 Computer equipment	2 555 378 697	0,60%	51 803
03410000-7 Wood	2 174 446 069	0,51%	12 572
30190000-7 Office equipment and supplies miscellaneous	1 928 416 256	0,45%	113 118
14210000-6 Gravel, sand, rubble and fillers	1 783 408 216	0,42%	8 299
18810000-0 Other footwear, except sports and protective	1 082 237 727	0,26%	2 867
39710000-2 Electrical household appliances	1 013 666 287	0,24%	30 089
18110000-3 Uniforms	962 070 843	0,23%	2 909
Food products are different	888 454 203	0,21%	7 641
19520000-7 Plastic products	662 290 723	0,16%	11 254
19520000-7 Plastic products	662 290 723	0,16%	11 254
18130000-9 Special workwear/uniform	495 227 848	0,12%	4 213

TOP 10 services - 2019

CPV-class and type of service	Amount, UAH
63710000-9 Land transport services	23 766 201 836
50230000-6 Repair, maintenance services of road infrastructure and related equipment and related services	5 409 621 758
63712200-5 Road maintenance services	5 154 537 788
76110000-7 Gas extraction services	4 475 611 761
65310000-9 Distribution of electric energy	4 099 726 108
50530000-9 Repair and maintenance services of machinery	3 446 440 315
90610000-6 Street cleaning and sweeping services	3 220 915 132
79710000-4 Security services	2 727 481 841
64120000-3 Courier services	2 715 299 448
79110000-8 Legal counselling and legal representation services	1 929 336 559

TOP 10 services - 2020 (table type A1)

CPV-class and type of service	Expected purchase price (UAH)	Share of total goods (%)	Total number of lots (purchase frequency), (units)
63710000-9 Land transport services	52 521 347 698	26,37%	1 653
50530000-9 Repair and maintenance services of machinery	6 825 869 898	3,43%	30 487
55320000-9 Food catering services	6 582 841 245	3,31%	2 226
50230000-6 Repair, maintenance services of road infrastructure and related equipment and related services	6 320 911 167	3,17%	7 013
90610000-6 Street cleaning and sweeping services	3 320 181 630	1,67%	2 052
71520000-9 Construction supervision services	3 260 791 177	1,64%	20 599
55510000-8Canteen services	2 610 986 249	1,31%	3 425
55520000-1 Catering services	2 191 335 329	1,10%	2 438
90510000-5 Disposal /disposal and waste management	2 099 071 199	1,05%	19 962
77310000-6 Services for landscaping and maintenance of greenery	1 720 018 550	0,86%	4 693

TOP 5 works - 2019

CPV-class	Amount, UAH
45230000-8 Construction of pipelines, communication lines and power lines, highways, roads, airfields and railways; levelling surfaces	171 108 550 017,11
45450000-6 Other building completion and finishing	81 095 087 362,25
45210000-2 Construction of buildings	36 712 121 497,46

45440000-3 Painting and glazing	1 215 027 747,88
45330000-9 Plumbing and sanitary works	1 130 028 844,04

TOP 5 works - 2020 (table type A1)

CPV-class and type of service	Expected purchase price (UAH)	Share of total goods (%)	Total number of lots (purchase frequency), (units)
45230000-8 Construction of pipelines, communication lines and power lines, highways, roads, airfields and railways; levelling surfaces	285 082 732 010	65,98%	44 788
45450000-6 Other building completion and finishing	82 106 092 423	19,00%	69 539
45210000-2 Construction of buildings	28 823 622 103	6,67%	3 309
45440000-3 Painting and glazing	1 337 395 310	0,31%	2 654
45330000-9 Plumbing and sanitary works	1 241 904 783	0,29%	12 228

The most purchased goods in 2019-2020 (cost)

The most parenasea goods in 2027 2020 (600t)
34110000-1 Cars
44160000-9 Highways, pipelines, pipes, casings, tubing and related products
30210000-4 Data processing machines (hardware)
39160000-1 School furniture
30230000-0 Computer equipment
03410000-7 Wood
30190000-7 Office equipment and supplies miscellaneous
18110000-3 Uniforms
19520000-7 Plastic products
18130000-9 Special workwear

The most purchased services in 2019-2020 (cost)

63710000-9 Land transport services
50530000-9 Repair and maintenance services of machinery
55320000-9 Food catering services
50230000-6 Repair, maintenance services of road infrastructure and related equipment and related services
90610000-6 Street cleaning and sweeping services
71520000-9 Construction supervision services
55510000-8 Canteen services
55520000-1 Catering services
90510000-5 Disposal / disposal and waste management
77310000-6 Services for landscaping and maintenance of greenery

The most purchased works in 2019-2020 (cost)

45230000-8 Construction of pipelines, communication lines and power lines, highways, roads, airfields and railways; levelling
surfaces
45450000-6 Other building completion and finishing
45210000-2 Construction of buildings
45440000-3 Painting and glazing
45330000-9 Plumbing and sanitary works

55320000-9 Food provision services (including 55520000-1 Catering services and 55510000-8 Canteen services)

The organization of food provision is an invariable subject of purchases from many CAs, first of all - budgetary institutions. According to DSTU 4281:2004 "Restaurants. Classification" (hereinafter - DSTU 4281:2004) item 3.23 DSTU 4281:2004 canteen is a type of restaurant to serve a certain contingent of consumers with a wide range of products of its own production and purchased goods, in which meals can be provided in the form of complete diets. It operates, as a rule, at the place of work of consumers, in educational institutions, military units, medical and health-improving establishments, departments of hospitals, establishments of social support of low-income segments of the population, etc. The canteens can have health, medical and treatment-and-prophylactic halls. Dietary canteens are distinguished as specialized canteens. According to item 3.28 DSTU 4281:2004 restaurant on special orders (catering) aimed to prepare and deliver ready meals and organize customer service in other places by special orders. Such establishments can serve banquets, corporate receptions, business meetings, weddings and other holidays in halls, offices, in nature, under awnings, etc. In addition to budget financing, paragraph 197.1 of Article 197 of the Tax Code of Ukraine establishes a number of tax benefits, namely the exemption from VAT of transactions related to the supply of food services or certain products what provides incentive for criteria application.

In accordance with paragraph 197.1 of Article 197 of the Tax Code of Ukraine are the subject of exemption from VAT transactions, namely:

- supply of baby food and baby products for infants according to the list approved by the Cabinet of Ministers of Ukraine (subparagraph 197.1.1);
- provision of child nutrition services in preschool, secondary and vocational schools and citizens in health care facilities.
 The procedure for providing such services shall be approved by the Cabinet of Ministers of Ukraine (sub-item "d" of sub-item 197.1.7);
- supply of catering services to homeless persons in registration centers, social protection institutions for homeless persons, as well as to persons released from prisons, in centers of social adaptation of persons released from places of imprisonment (subparagraph "c" of subparagraph 197.1.7);
- supply of food services to persons detained in penitentiary institutions, including cooking and food supply (subparagraph "g" of subparagraph 197.1.7).

Official publication "Adviser in the field of public procurement" offers a thorough review of legislation and guidelines governing the organization of food for the budget.

Educational institutions

In terms of food and catering services, the most purchased according to the national platform ProZorro are:

CPV-class services	% of all services in the category of food and catering services for 2020
15894210-6 School meals	64
55510000-8 Canteen services	18
55520000-1 Catering services	18

In this segment, **qualification criteria** are one of the **main requirements in the tender**. To participate in the tender, it is necessary to provide confirmation of compliance with one or more qualification criteria for the availability of:

- equipment and material and technical base;
- employees with appropriate qualifications who have the necessary experience;
- experience in performing a similar (similar) agreement;
- information on the vehicles that will be used to deliver the relevant food;
- constituent documents and grounds for use of the property specified in the information;
- documents confirming the passage of the staff of the participant of the periodic preventive medical examination;

⁹¹ https://radnuk.com.ua/hrupy_zakupivel/pdv-u-zakupivliakh-kharchuvannia/

• the recommended portion sizes and the list of products from which the menu should consist of are approved by the CMU, though the CA can refer to the recommended menu or offer his own version, with reference to the regulations of the Ministry of Health, though this option should be prescribed in the technical specifications that define some particular requirement for the service, ex. HACCP, requirements for energy and resource saving.

In 2021 the Government will allocate a subsidy of UAH 1 billion and about UAH 100 million will be allocated from local budgets. The cost of the new school menu is set at the recommended level of UAH 14.5, but the cost can range from UAH 14.25 to the one approved at the regional level, depending on the cost of products and utilities.

In accordance with Annex 1 of the Resolution of the Cabinet of Ministers of Ukraine "On approval of norms and procedures for the organization of nutrition in educational institutions and children's health and recreation facilities» of 24.03.2021 Nº305 approved norms of consumption of the main groups of food products for breakfast, lunch or dinner in preschool institutions in the case of a five-day stay. According to the recommendations of the Ministry of Education and Science, a typical daily menu may consist of such a set of products.

Table 5.1. Menu sample.

Name of dishes	Energy value for children 6-11 years							
	Output,	525-630	18-21	17-21	73-88			
4th week	g	Energy value, kkl	Proteins, g	Fats, g	Carbohydrates, g			
<u>Monday</u>								
Vinaigrette salad	75	80,80	1,35	4,6	8,6			
Chicken schnitzel	70	148,50	13,10	6,9	11,3			
Rice (crumbly) with cumin	120	164,10	3,70	3,0	30,2			
Milk	150	86,24	4,71	4,22	7,54			
Wholemeal bread	30	71,0	2,0	2,0	10,0			
Total	445	550,64	24,86	20,72	67,64			
Tuesday								
Salad with buckwheat and vegetables	180	157,9	4,1	6,1	24,2			
Lviv cheesecake with carrots	180	363,4	23,1	17,9	27,1			
Sour cream	10	20,6	0,3	2,0	0,3			
Compote of fresh (frozen) berries, mint and	150	33,3	0,4	0,00	7,5			
raisins								
Total	520	575,2	27,9	26,0	59,10			

According to the analytical platform CPV Tool⁹² according to the search terms "school meals" for the best tenders, the average cost of food for one child per day ranges from UAH 20 to UAH 37. This portal also offers examples of specifications and a list of the best tenders for price comparison and a list of potential service providers. The best tenders according to the Spending⁹³ budget expenditure analysis platform offer a range from UAH 16.55 to UAH 19.55.

Table 5.2. Legal and regulatory documents that can be used in establishing the criteria of SPP when ordering food.

Product	Technical	Application of	Availability of eco-labelling and declaration	Other standards and	Life cycle
	regulations and	voluntary	programs	regulations that can be	costing
	other documents in	standards		used as SPP tools	methods, in
	the field of state	necessary for			particular for
	regulation	the			certain types
		implementation			of goods,

⁹² https://cpvtool.kse.ua/?search=%D1%88%D0%BA%D1%96%D0%BB%D1%8C%D0%BD %D0%B5%20%D1%85%D0%B0%D1%80%D1%87%D1%83%D0%B2%D0%B0%D0%BD%D0%BD%D1%8F

⁹³ https://spending.gov.ua/new/disposers/04590725/agreements/1669720351

		and			works or
		maintenance of			services.
		management			
		systems			
Food and	Basic principles and	Quality	Ecological criteria for evaluating the LC of the	The order (detailed	No
drinks	requirements for	management	type I eco-labelling program ("Green Crane")	rules) of organic	
	food safety and	systems,	are set for:	production and	
	quality according to	environmental	Food:	circulation of organic	
	the legislation	aspects (ISO	Cocoa, chocolate and sugar confectionery	products, other	
		9001, ISO	<u>Natural honey</u>	evaluation systems are	
	HACCP (ISO 22000)	14001)	Fruits and vegetables are processed and	defined by law.	
			<u>canned</u>		
	Regulations of the		Milk and meat processing products	Requirements for the	
	Ministry of Health		Fish, crustaceans and molluscs, processed	naturalness of the	
	establishing safety		and preserved	product according to	
	indicators			the law.	
			and flour products		
			-	Rules of application of	
			<u>Lettuce salads</u>	ecological marking of I,	
			Sauces and mayonnaise	II, III types according to	
			Water and soft drinks	standards of the ISO	
			Packaged drinking water	1420 series.	
			<u>Coffee</u>		
			<u>Tea and tea drinks</u>		
	Basic principles and	Quality	Ecological criteria for evaluating the LC of the	Recommendations for	No
services	requirements for	management	type I eco-labelling program ("Green Crane")	the implementation of	
and	food safety and	systems,	have not been established.	measures on energy	
_	quality according to	environmental		efficiency and	
	the legislation	aspects (ISO		economical production.	
	HACCP (ISO 22000)	9001, ISO			
	Requirements of	14001).			
	legislation in the				
	field of waste				
	management				

In addition to the requirements of the updated legislation and in the field of food safety and quality, CAs have enough tools to apply additional requirements as SPP criteria, increasing the requirements for safety, environmental friendliness, nutritional value of natural food products, combined with resource efficiency and waste reduction requirements.

Table 5.3. Assess the availability of sustainable food on the market, comparing the same measurement indicators.

Conventional product	Price,	Availability on the market of a more sustainable	Price,	Comparison of the	Availabilit
	UAH	alternative (specify which one), price UAH	UAH	difference ⁹⁴	y in th
				between the	regions
				purchase price in %	
Buckwheat TM Skviryanka, 0.8 kg - UAH	66,24	Organic buckwheat TM Skviryanka, 0.8 kg	81,24	18,6	+
52.99. DSTU 7697: 2015 Buckwheat.	AH	- UAH 64.99. Certified for compliance			
Specifications.		with EU Regulation № 834/2007 (on			
1 kg	ins	organic production).			
520 15		649 55			
Oatmeal TM Skviryanka 95 0.5 kg	13,5-	Organic oatmeal TM Kozub of 0,5	29,85	2,8-54	+
DSTU 7698 / GOST 3034	29,0	kg 20.85 ₁₁₁			
Krona sianasa Casanasra		Comment of the Commen			
(4820006111) плицення выший сорт 500 году (482006111) плицення выший сорт 500 году (482006111) плицення выший тору 500 году (482006111) плицення выший тору (482006111) плицення выший сорт (50006111) плицення выший сорт (500061111) плицення выший сорт (500061111) плицення выший сорт (500061111) плицення выший сорт (500061111111111111111111111111111111111		Secret Se			
Wheat bread 0,6 kg	18,0	Organic wheat Мариничний Хліб пшеничний	20,5	12,1	+
DSTU 7517: 2014 Bread from wheat flour. 96		bread TM 20,50 грн			
		Ekolavka, 0,6 kg ХОЙ годиненный Н. «Обраний майстер» — медениайный борошинный внуй в «эспениения в сустанения в корошинный внуй в «эспениения в корошина собы, продукт в везпения вестанения в выдачивающий в пробрам в порядки в перенименный внуй в «эспениения в выдачивающий внуй в «эспениения выдачивающий внуй в эспениения выдачивающий внуй в «эспениения выдачивающий внуй в эспениения в эспениения выдачивающий внуй в эспениения в эспениения выдачивающий внуй в эспениения выдачивающий внуй в эспениения выдачивающий выдачи			
		нередиотить, из доважения почения по			
Milk TM Ferma, 2,5%, DSTU	32,5	Organic milc 2,5% 11	39,9	18,5	+
2661:2010 Drinking cow's milk	02,3	39.19 _m	07,7	10,5	
(34008) 11		(Special parameters ▼			
() () () ()		No mo			
Yogurt TM Rud 2,5%, DSTU ДСТУ	17,20	Natural yogurt 2.5%,	26,00	33,85	+
4343:2004 Yogurts. General		Certified for compliance with the			
technical conditions. 0.5l		criteria of naturalness in accordance			
		with the Law and ISO / TS 19657:2017			
		0,51			
Oil TM Chumak 0.9 DSTU 4492:	70,5	Oil TM Oleyna 0.85 I SOU OEM	74,7	5,6	+
2017 Sunflower oil. Specifications		08.002.03.018:2014 Certified in			
11		accordance to ISO 14024 - eco-			
SOLUTA		labelling type I, 1I			

 $^{^{94}}$ The difference between the average cost price of a more stable offer compared to the average cost price of a regular offer.

⁹⁵ https://zakupki.com.ua/prozorro-market/produkciya-boroshnomelno-krup-yanoyi-promislovosti/krupa-vivsyana-363/krupa-vivsyana-plyuschena-vischiy-sort-dstu-7698-gost-3034-vid-500g/krupa-vivsyana-skviryanka-4820006011147-plyuschena-vischiy-sort-500g-7022

⁹⁶ https://zakupki.com.ua/prozorro-market/hliboprodukti-svizhovipecheni-hlibobulochni-ta-konditerski-virobi/hlib-ta-batoni-265/hlib-z-pshenichnogo-boroshna-dstu-7517-narizaniy-paket-polietilenoviy-600g/hlib-pereyaslav-hlib-pshenichniy-1-g-z-pshenichnogo-boroshna-dstu-7517-narizaniy-paket-polietilenoviy-600g-1691

Beetroot TM Fermer 1 kg (the price for 1 kg 49,5) DSTU- 7033:2009	Буряк нолодий Ферниев 500г 24.90 грк Дайле да помене ▼	5 Beetroot organic, 1 kg	Eyoma oprasivani i sr AG * Listo 5.3 lef * Directions Conteption * Directions Conte	56,0 12	1,6	+
Potato TM Fermove, 1 kg	Картопля Фернове нолода 900г 24,90 грн	Potato organic, 1 kg	FACE PART AND	39,00 28	8,9	+
Carrot TM Fermove, 1 kg	Моркая Фериков нолода 800г 500 24.90 грн Правтий коминя ▼	8 Carrot organic, 1 kg	Mejoras grantina i er AG Organic Liun sa 1 ur Burpottuero des Burpottuero des entreportueros des despresas	56,00 12	1	+
Cabbage METRO, 1 kg	5,6	Cabbage organic, 1 kg	Naments operations for AG Kingston operations for AG a Lights but for Bindingston Offic, C-Magness reconstantiation of	24,00 76	6	+
Tomato, 0,5 kg TM Kalynivka	Throughp Kanadina sa artes 500r	79 Tomato organic ⁹⁷ 0.5 kg	Teachers Teachers	55,0 49	9	+
Chicken eggs DSTU 5028:2008. Technical chicken food eggs, conditions (33861), 10 pieces	SPILE COPPARE NOCESSIGNMA CO SOUT Areas and the same of the same	4 Chicken eggs organic ⁹⁸ ,10 pieces	Silver rypones Origanic Chicken CI 10ur 52.60 rpu Desire de consules ▼ Desire de consules ▼	52.6 2:	1	+
Onion, 1 kg	9,5	Onion organic, 1 kg	Undyna primaces oprawiewa inter 2,100 _{ter}	21,9 56	6	+

According to the results of the analysis, it is possible to conclude that organic products are better than conventional products by more than 25%. The smallest price difference among cereals, flour products, milk and vegetables. With the increase in production and sales volumes, there is a potential opportunity for downward revision of selling prices, which confirms the data of official statistics on the growing potential of organic products production. The register of issued certificates for food products that meet the criteria of naturalness is available on the website of the certification body⁹⁹.

⁹⁷ https://natur-boutique.ua/catalog/ovochi-zelen-frukti

⁹⁸ https://metro.zakaz.ua/uk/categories/eggs-metro/

⁹⁹ Register of certified products that meet the natural criteria: https://www.ecolabel.org.ua/reestr-sertifikativ

Features of pricing for organic or natural products and conventional products

Sales of ordinary goods exceed sales of organic or natural products (for similar groups of goods Organization of healthy, rational and safe nutrition of students and pupils, dissemination of knowledge and skills of "healthy eating" is among the national priorities. During last years, area under organic production has increased (from 270 thousand hectares in 2008 to 420 thousand hectares in 2017 - by 55.5%), the number of certified organic farms increased (from 118 in 2008 to 375 in 2017 - 4.2 times), market for organic products is also actively developing, with a significant increase in its volume - from 0.5 million euros in 2007 to 33.0 million euros in 2018 - 66 times) , number of certified producers of natural products and services also increased and constantly grow.

According to the results of research for the period 2019-2020, conducted jointly by the Federation of Organic Movement of Ukraine and the NGO "Living Planet" within a frame of this report on the growing potential of organic or natural products manufacturing segment, there is a potential opportunity to revise selling prices downwards within the next years as the market constantly grows.

The main specialization of domestic "organic" farms is the cultivation of cereals, legumes, industrial crops, fruits and vegetables and export-oriented products, there is a clear reorientation of producers to the domestic market, as evidenced by the growing trend of actively filling the domestic market setting up the processing of organic raw materials. At the same time, the range of organic and natural products manufacturing is quite diverse - it's vegetables, fruits, dairy and meat products, juices, beverages, honey, flour, oils and more. However, the most common group of goods, which is most widely represented on the shelves of domestic stores, are cereals and flakes. And there is an explanation for this.

Organic or natural products are the result of organic production cycle or application of cleaner sustainable technological methods and, taking into account all the features of their manufacture, it is necessary to take into account certain factors that affect the price:

- when the producer of agricultural products switches to organic or natural manufacture, the cost of it will increase due to the increase in the number of additional operations to ensure the environmental friendliness of raw materials, production and confirmation of all these operations by certificate and appropriate product labelling;
- risks associated with possible changes in the market of organic or natural products over a fairly long (two to four years) conversion period;
- increase the complexity of production, which with proper price formation will also reduce the level of sales, due to lower demand and increase the number of insolvent population;
- the need to purchase new, more advanced equipment and train staff in new production technologies.

In pricing, important aspects are also the product life cycle of the producer (level of processing). Analysis of the experience of European countries shows that with market saturation, improvement of technologies for resource conservation and logistics, government support and orders for the needs of educational and social institutions is organic products - the price of organic products is consistently affordable, and in most cases does not exceed 10-25% compared to the price of inorganic products.

The market of organic products is developing, and for some items, stable deliveries are possible at an affordable price. It is suggested to gradually introduce organic products into the menu, starting with cereals. The rest of the categories will become more affordable over time, given the fact that manufacturers will see the prospect of sales in the public sector, increase in sales volumes and a stable consumer - will gradually begin to increase production volumes and reduce selling prices. The requirement for organic certification of food products at this stage is recommended to be applied in non-price criteria. This will stimulate the supply of organic products, but at the same time does not jeopardize the purchase itself

¹⁰⁰ https://livingplanet.org.ua/pro-nas/publikatsii/pro-perspektyvu-zakupivel-orhanichnykh-produktiv-dlia-potreb-dytiachykh-shkilnykh-medychnykh-ta-inshykh-sotsialnykh-zakladiv

due to the lack of supply of organic products. A non-price criterion with a specific weight of 10-15% will make it possible to compensate for ordering products for supply directly from the manufacturer by reducing costs in supply chains.

According to the results of research by IFOAM and the Federation of the Organic Movement of Ukraine, the volume of the consumer market of organic products in Ukraine increased from 7.9 million euros in 2012 to 38.0 million euros in 2020. The majority of Ukrainian organic farms are located in Kyiv, Odesa, Kherson, Poltava, Vinnytsia, Zakarpattia, Lviv, and Zhytomyr regions. Ukrainian ecologically certified and organically certified farms are of different sizes - from a few hectares, as in most European countries, to several thousand hectares of agricultural land. Domestic enterprises supplying cereals to the domestic market of Ukraine (Firm "Diamant LTD", "Organic Original", "Organic Life", "Agroecology", "Quark", "Zolotyy Parmen", PE "Galex-Agro", "Terra", "Drymil", "Cefey-Group", "Organic Seeds", "Skyrskiy Combine of Bread Products"), offer a fairly wide range: traditional oat, pearl, wheat, buckwheat groats, as well as spelled, durum wheat, various flakes. The annual volume of the domestic market over the past few years is estimated at 500-550 tons of organic cereals and flakes. Most domestic processing enterprises work on purchased raw materials. At the same time, it is worth noting that a number of large organic producers have their own raw material base, in particular, PE "Agroekologiya", PE "Galex-Agro", which recently began to open their own regional specialized stores and have the opportunity to sell products not only in chain stores, but also in own Enterprises certified according to organic standards -Agrofirma "Pole", Ippon, "Adonis Lux", "Galex-Agro", "Deddens Agro", Terra, Skvyrskyi KHP, export the vast majority of their own grain products. On the domestic market, organic grains, sold in small quantities through specialized stores in domestic cities with millions. The vast majority of the mentioned products are sold in large supermarket chains: "Megamarket", "Auchan", "Silpo", "Fur¬shet", "Good Wine", "Wine Time", "ATB". etc. Basic data on producers of organic cereals in Ukraine as of 2020 are given in Table 5.4.

Table 5.4. Producers of organic cereals in Ukraine as of 2020.

No.	Manufacturer's name, region, brand	Name of cereal
1.	PE "Agroecologia", Poltava region.	Oat, buckwheat, buckwheat chaff, corn, pearl barley, oat flakes, wheat, wheat "Artek", millet, barley
2.	PE "Galex-Agro", Zhytomyr region.	Buckwheat parting, buckwheat kernel
3.	LLC "Agrofirm" Pole ", Cherkasy region.	Millet, millet chips
4.	Adonis Lux LLC, Zaporizhia region	Wheat, wheat "Artek", millet; Millet cutting
5.	Deddens Agro LLC, Rivne region	Oatmeal, buckwheat
6.	LLC "Draimil", Kyiv	Oatmeal, uncrushed oatmeal, flattened oatmeal, pea, buckwheat, buckwheat green, buckwheat parting, steamed buckwheat, buckwheat kernels, spelled (spelled), spelled not crushed, spelled crushed, ground wheat, ground corn, corn "Extra ", polished corn, semolina, pearl barley, oat flakes, oat flakes" Creamy ", oat flakes" Original ", buckwheat flakes, spelled flakes, corn flakes, wheat flakes, millet flakes, wheat flakes, barley flakes, ground millet, millet, pearl barley, barley barley, barley
7.	IPPON LLC, Lviv region	semolina
8.	LLC "Quark", Poltava region.	Oatmeal, buckwheat green parting, buckwheat green kernel, roasted buckwheat, corn, rye kutya, wheat kutya, pearl, soft wheat, hard durum wheat
9.	LLC "Organic Life", Kyiv region,	Amaranth crushed, pea crushed, buckwheat parting, buckwheat kernel, rye crushed, rye polished, spelled, spelled polished, semolina, spelled semolina, chickpea crushed, pearl barley, wheat, wheat ground, barley
10.	TM Organic Country	Pea, buckwheat green, steamed buckwheat, spelled, pearl barley, oat flakes cut, whole oat flakes, wheat, wheat "Arnaut", millet, barley
11.	LLC "Organic original", Kyiv region, TM Ekorod	Oatmeal, buckwheat green, buckwheat parting, buckwheat kernel, spelled, corn, pearl, wheat, barley

12.	LLC "Organic Sids", Khmelnytsky region,	Oatmeal, not ground oats, flattened oats, buckwheat parting, buckwheat
	TM All in Foody	kernels, ground wheat, ground wheat, ground, corn, "Extra corn", oat flakes,
		buckwheat flakes, rye flakes, cereal flakes corn, wheat flakes, millet flakes,
		barley flakes, milled millet, spelled not crushed, spelled crushed, pearl barley,
		barley
13.	LLC "Skvyra bakery", Kyiv region, TM	Bulgur, oat, flattened oats, polished corn, oat flakes, rye flakes, spelled flakes,
	Skvyryanka	corn flakes, millet flakes, barley flakes, winter wheat "Terra", spring wheat
		"Terra", millet, spring
14.	LLC "TERRA", Kharkiv region,	Oatmeal, flattened oats, pea, buckwheat, pearl barley, oat flakes cut, pea flakes,
	TM TERRA	buckwheat flakes, rye flakes, rye flakes cut, corn flakes, pearl flakes, wheat
		flakes, wheat flakes, wheat flakes, wheat flakes , wheat, ground millet, cereal
		mixture, oatmeal, buckwheat oatmeal, corn oatmeal, barley
15.	LLC "Firm" Diamond LTD ",	Oatmeal, buckwheat, buckwheat green kernels, buckwheat parting, corn, pearl
		barley, wheat, spelled not crushed, barley
16.	Poltava, TM Kozub product	Millet
17.	LLC "Tsefey Group", Zhytomyr region.	Oatmeal, buckwheat, buckwheat green kernels, spelled

Risks and benefits Assessment for food products and catering

Environmental Impact.

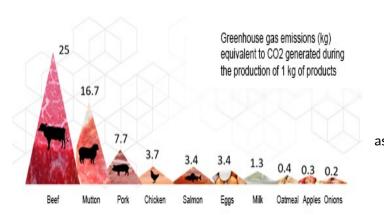
Table 5.5. Environmental impact assessment of food products (from 0 to 3 points).

CPV -class and type of	Environmenta	l impact indicat	ors					Scores
goods, services, works	Energy consumptio	Water consumptio	Consumption of other	Impact on climate	Emissions of	Chemica I safety	Waste s	
	n	n	natural	change	pollutants			
			resources					
15610000-7 Cereals	1	1	1	1	1	1	1	7
15810000-9 Bread	2	2	2	2	1	1	1	11
15800000-6 Milk	3	1	2	3	1	3	3	16
15550000-8 Yogurt	3	1	2	3	1	3	3	16
15420000-8 Oil	3	1	3	2	2	2	3	16
03221111-7 Beetroot	1	1	1	1	1	1	1	7
03210000-6 Potatoes	1	1	1	1	1	1	1	7
03221112-4 Carrot	1	1	1	1	1	1	1	7
03221410-3 Cabbage	1	1	1	1	1	1	1	7
03220000-9 Tomatoes	1	1	1	1	1	1	1	7
03221113-1 Onion	1	1	1	1	1	1	1	7
03142000-8 Chicken	3	3	2	2	3	3	3	19
eggs								

Note. Vegetables and cereals were assessed as seasonal locally produced.

In connection with Ukraine's accession to the Paris Agreement, the development of organic and cleaner food production and the provision of sustainable catering services is quite relevant today due to a number of clear environmental, economic and social benefits:

- helps reduce emissions of carbon dioxide, nitrous oxide and methane, which contribute to global warming.
- reduces the risk of health loss for agricultural workers, they are the most vulnerable to pesticides and other



chemicals used in conventional production; - Organic and natural products are more beneficial to consumers by minimizing the health effects of toxic and persistent chemicals¹⁰¹;

- especially useful organic and natural products for children, as the child's body is more vulnerable to pesticide residues, nitrates, heavy metals and antibiotics in food.

Table 5.6. Influencing factors and areas for improvement in the field of food and catering services

	Category Impacts and area		Improvement measures to be considered in the criteria *
	Food purchase	improvement	
ıd catering	Operational measures	Lighting, refrigeration / freezing / storage, water supply, consumables (cleaning, toilets, disposable products), energy use and partial use of cleaning agents have a major impact on carcinogens, eco-toxicity and fossil fuels	Improving the competence of the bidder in: - Prevention of food and other waste; - Use of products and consumables with less impact on the environment; - sustainable use of energy in catering; - Use of consumables with less impact on the environment, including: - Paper and plastic / polyethylene products; - Use of reusable utensils; - Disposable items (for example, cutlery) only for takeaway (as a general rule, which allows certain exceptions); - garbage bags and gloves; - dishwashing detergents (such as hand soap, detergents and dishwasher detergents).
Food services and catering	Storage and cooking	Method - cooling / storage / freezing after cooking has a relatively greater impact compared to cooking and serving food in the city, because it involves two processes: preparation / cooking, and then cooling and heating before serving. However, the food preparation and storage system shows less food waste.	Measures to encourage the implementation and support of environmental management - Use of products and consumables with less impact on the environment; - Sustainable use of water and energy in kitchens / cooking areas and places of public catering; - Solid waste management; - Prevention of food and beverage waste and redistribution of food and beverage - Lower generation of food waste; - Better management of food stocks, portion sizes and adequacy of tastes of food consumers. Introduction of plant-based menus: - Avoid meat; - Vegetarian days weekly; - proteins of plant origin/
	Waste management	Production and utilization of organic waste Reuse and disposal of packaging	Other wastes: -prevention of formation, sorting / recycling / sustainable disposal; - sustainable management of liquid and solid waste, as well as waste of electronic and electrical equipment.
	Transportation	Long distances mean higher transport emissions	Transportation of food - Reduction of emissions from combustion from the fleet; - Better planning of food transportation (raw and ready meals).
	Preparation / processing of products	Energy use in preparation / processing / processing of products Wastewater treatment Energy and refrigerants used for cold storage	Energy and water consumption in kitchens -Use of energy efficient kitchen equipment Energy consumption and GDP of refrigerants (vending machines); -Use of energy-efficient vending machines.

Table 5.7. Assessment of socio-economic impacts of SPPs when ordering certain types of food (from 0 to 3 points).

¹⁰¹ The average conventional vegetable and fruit may contain residues of more than 20 pesticides, meat and milk, in turn, may contain antibiotics, hormones, growth stimulants.

CPV - class and type	Social-economic impact on								
of goods, services,	Employment	Working conditions	Health	Gender	Industry	Regional			
works		(safety and hygiene)		balance	development	development			
15610000-7 Cereals	1	2	3	1	2	2	11		
15810000-9 Bread	2	3	3	2	3	3	16		
15800000-6 Milk	3	3	3	2	3	3	17		
15550000-8 Yogurt	3	3	3	2	3	3	17		
15420000-8 Oil	2	3	2	2	2	3	14		
03221111-7 Beetroot	1	1	2	1	1	2	8		
03210000-6 Potatoes	1	1	2	1	1	2	8		
03221112-4 Carrot	1	1	2	1	1	2	8		
03221410-3 Cabbage	1	1	2	1	1	2	8		
03220000-9	2	1	1	1	2	2	9		
Tomatoes									
03221113-1 Onion	1	1	3	1	1	1	8		
03142000-8 Chicken	2	2	3	2	2	2	13		
eggs									

Table 5.8. Assessment of application of ecological labels and declarations to food and food and catering services (from 0 to 3 points).

CPV -class and type of	Standards and schemes of ecological markings and declarations					
goods, services, works	Eco- labelling	Self-declared Environmental claims	Environmental product	1		
	type I	(type II environmental labelling)*	declarations type III			
Food	1	2*	0	3		
Food provision	0	0	No	0		
services and catering						

^{*)} the use of Self-declared Environmental claims (type II environmental labelling) has the problem of improper or unjustified use

During the 2019-2020 period, customers most often announce tenders under the following codes (DC 021:2015): 55520000-1 Catering services, 55510000-8 Canteen services, 55320000-9 Catering services. In this segment, **qualification criteria** are one of the main requirements in the tender. To participate in the tender, it is necessary to provide confirmation of compliance with one or more qualification criteria of the presence of:

- equipment and material and technical base;
- suitably qualified employees who have the necessary experience;
- experience of executing a similar (analogous) contract;
- information about vehicles that will be used to deliver the relevant food;
- founding documents and grounds for using the property specified in the information;
- documents confirming that the participant's staff has undergone a periodic preventive medical examination.

Technical specifications must contain the recommended portion sizes and the list of products that the menu should consist of, approved by the CMU, however, the customer can refer to the recommended menu or offer his own option, with reference to regulatory documents (standards, methodological recommendations of the Ministry of Health, Ministry of Health, and Ministry of Economy). In addition, the customer can define certain requirements for the service, for example HACCP certification, requirements for energy and resource conservation, waste management, etc.

Dairy products, buckwheat, oatmeal, oil, bread, vegetable set "borscht" (beets, potatoes, cabbage, carrots, onions, tomatoes) are the most purchased to provide nutrition in educational institutions, according to ProZorro data. A comparative analysis of market availability of durable products of these categories (in equivalent measurement indicators) is provided in Appendix 6 to this report.

With regard to food services, when compiling the technical specification, it is necessary to take into account the cost and expiration of disposable tableware, energy consumption, the volume and cost of production of organic waste, plastic, paper. For example, the amount and cost of energy consumed by a refrigerator of class G and class A + can differ almost four times. In addition, the use of gas stoves in addition to the costs produce emissions into the atmosphere. For example, the cost of servicing 1 person, UAH using a set of utensils (2 plates, cup, glass, tableware): disposable (plastic) - 3.15; ordinary reusable (ceramics, porcelain, glass) - 0.50¹⁰².



Figure 5.1. Examples of market prices for consumables that can be used in the provision of catering services (2021).

¹⁰² The average cost of water (centralized water supply, water t = 450C) required for washing a standard set of dishes = 1.50 UAH. The average cost of detergent with ecolabel, required for washing a standard set of dishes = 0.38 UAH.

19520000-7 Plastic products (in the context of catering services and goods for children's institutions)

Table 5.9. Assessment of market availability of sustainable goods, works and services.

Conventional products/ works	Price, UAH	Availability on the market of a more sustainable alternative (specify which one), price, UAH	Price, UAH	Comparison of the difference ¹⁰³ between the purchase price of goods/works in %	Availability in the regions
Disposable plastic utensils	19,9	Disposable Habip noorally Yuinak паперовый одноразовий 24,99 гря for 5 persons	24,99	20	+
Disposable tableware Lunch box for other dishes 104	3,8	* Disposable tableware made of cane Lunch box for second courses	4,0	5	+
Products for educational institutions. Touch toys - sorters 105	57,0	** Touch toy - a sorter made of wood 106	60,0	5	
Plastic bags for packing 107 and garbage Garbage bags of TM EuroStandart blue, 35 I (30 pieces / roll), the price for a roll 18,60 UAH	18,6	from natural starch of DELAMARK TM, 35 I (20 pieces / roll) Price for 1 piece 5 UAH	5,0	87	
Garbage bags TM DIONIS 35 L (30 pcs / roll) price per roll UAH 18.60. The price for 1 piece is UAH 0.61	0,61	Packages from natural starch of TM Freken Bok, 35 I (20 pieces / wheel), the Price for 1 piece 2,75 UAH	2,75	77	
Plastic containers for collecting and sorting of	5195,0	**** Eurocontainer 1100 for separate	11500,0	48	

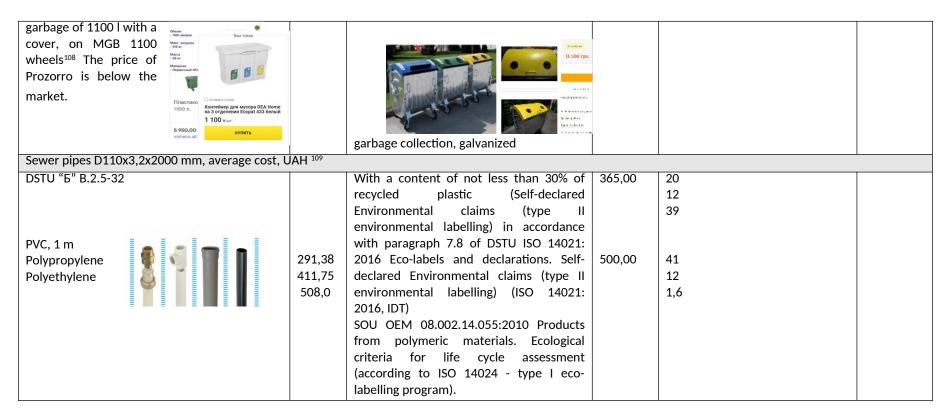
¹⁰³ The difference between the average cost of a more stable offer compared to the average cost of a regular offer.

 $[\]frac{104}{\text{https://spending.gov.ua/new/disposers/02005585/agreements/1743235495}} \text{ Agreement N}^{\text{Q}} \text{ 118 of 23.04.2020.}$

 $[\]frac{105}{\text{https://spending.gov.ua/new/disposers/41373091/agreements/1888108452}} \text{ Agreement N}^{\text{o}} \text{ 74 of 11.08.2020.}$

https://kidsstore.com.ua/ru/razvivayusshie-igrushki/17424-razvivayusshaya-igrushka-sorter-figurka-limotoy-md-0715-6903152890014.html? gclid=CjwKCAjw092IBhAwEiwAxR1lRuEddDkqJpL7 iCY1W1ybyw nLTJzVg2iiCxfOaBPhOq y0JDzBkZxoCMToQAvD BwE Examples of procurement procedures.

 $[\]frac{107}{https://spending.gov.ua/new/disposers/08751177/agreements/1940451316}$



The use of plastic as a raw material for production is becoming increasingly popular in small business ¹¹⁰, however, industrial-scale production still requires the adoption of a number of bills in the field of waste management.

The Ukrainian market of waste tank equipment is represented by manufacturers and suppliers in all regions.

When it comes to packaging, the main alternative to plastic bags is biodegradable bags. However, insufficient legislative regulation in Ukraine has caused a collision where consumers are misled into thinking that the package, they are buying does not harm the environment.

There are several types of packages that decompose in the environment. The most popular are the following.

1. Packages, which trade networks call "Biopackages" or more precisely oxo-biodegradable packages. Composition: 99% ordinary polyethylene and 1% oxo-decomposable impurity. Oxodegradable impurities are metal-based additives that are added to polymeric materials to accelerate their decomposition under the action of oxygen and ultraviolet light into individual small fragments (micro plastics) over a period of time. The decay of such packages occurs only under

https://spending.gov.ua/new/disposers/05384560/agreements/1784368126

 $[\]frac{109}{\text{https://prozorro.gov.ua/tender/UA-2020-01-23-000168-a}}; \frac{\text{https://prozorro.gov.ua/tender/UA-2019-02-13-001787-a}}; \frac{\text{https://prozorro.gov.ua/tender/UA-2019-10-23-002378-b}}; \frac{\text{https://prozorro.gov.ua/tender/UA-2019-002-13-002378-b}}; \frac{\text{https://prozorro.gov.ua/tender/UA-2019-002-13-002378-b}}; \frac{\text{https://prozorro.gov.ua/tender/UA-2019-002-13-002378-b}}; \frac{\text{https://prozorro.gov.ua/tender/UA-2019-002-13-002378-b}}; \frac{\text{https://prozorro.gov.ua/tender/UA-2019-002-13-002378-b}}; \frac{\text{https://prozorro.gov.ua/tender/UA-2019-002-13-002378-b}}; \frac{\text{https://prozorro.gov.ua/tender/UA-2019-002-13-002378-b}}; \frac{\text{https://prozorro.gov.ua/tender/UA-2019-002-13-b}}; \frac{\text{https://prozorro.gov.ua/tender/UA-2019-002-13-b}}; \frac{\text{https://prozorro.gov.ua/tender/UA-2019-002-13-b}}; \frac{\text{https://prozorro.gov.ua/tender/UA-2019-002-13-b}}; \frac{\text{https://prozorro.gov.ua/tender/UA-2019-002-13-b}}; \frac{\text{https://prozorro.gov.ua/tender/UA-2019-002-13-b}}; \frac{\text{https://prozorro.gov.ua/tender/UA-2019-002-13-b}};$

¹¹⁰ https://www.youtube.com/watch?v=5dExw-Ppvvo

the condition of access of oxygen. If the package ends up in a landfill, nothing happens to it. If the package does break up, it forms millions of microscopic plastic particles. These plastic particles do not disappear anywhere and remain forever in the soil and water. Together with water and food, micro plastic enters the human body. Often these packets are labelled with TDPA or D2W. The EU already bans oxo-biodegradable plastic bags. In Ukraine, on the contrary - some chain stores sell them as environmentally friendly alternatives, which misleads the consumer.

- 2. **Compostable bags** made of material of organic origin plant, animal, microbiological or other. Such packages undergo aerobic biodegradation to carbon dioxide, water, mineral salts and biomass as a result of the biological activity of microorganisms in an oxygen-rich environment, and anaerobic biodegradation to carbon dioxide, methane, mineral salts and biomass in a medium with limited oxygen access. Usually, these bags are made of starch or cellulose. They are safe for the environment. Decompose even in home compost pits. Compostable packages are certified and marked with a special mark. National Standardization Body State Enterprise "Ukrainian Research and Training Center for Standardization, Certification and Quality" has implemented **National Standards and amendments to them**, according to which the manufacturer, starting from January 1, 2019, can certify its products for biochemical degradation, composting, biodegradation:
- DSTU EN 14995: 2018 (EN 14995: 2006, IDT) Plastics. Evaluation of biochemical degradation ability. Test procedure and technical conditions.
- DSTU EN 13432: 2015 (EN 13432: 2000, IDT) / Amendment № 1: 2018 (EN 13432: 2000 / AC: 2005, IDT) Packaging. Requirements for packaging disposed of by composting and biodegradation. Test schemes and evaluation criteria for final acceptance of packaging.

This means that products in Ukraine will be evaluated according to the same standards as in the EU. There are capacities for the production of biodegradable bags in Ukraine, but there is no demand for them yet. Banning the distribution of conventional plastic bags, in addition to having an extremely positive impact on the environment, will stimulate the demand for the production of biodegradable bags, which will make them cheaper for the end consumer. This will allow manufacturers to apply innovative technological processes and establish the export of biodegradable bags to countries where the ban on the use of plastic bags has entered into force. The main goal is to stimulate the development of the production of biodegradable plastic bags, which will provide an opportunity for Ukrainian manufacturers to follow the path of global European and world trends and take a leading place in the world production chain. The list of manufacturers of plastic and paper goods with valid environmental certificates is provided on the website of the NGO "Living Planet" as an accredited certification body.

Risks and Benefits Assessment

Ukraine has adopted a law restricting the circulation of plastic bags, in connection with which, as part of the approximation of Ukrainian legislation to European legislation, work is underway to develop regulations and standards in the field of environmental labelling. This will raise the awareness of small and medium-sized businesses and consumers at the household level. As the restrictions do not apply to biodegradable plastic bags and ultra-light plastic bags up to 225 mm wide (without side folds), up to 345 mm deep (including side folds), up to 450 mm long (including handles), intended for packaging and (or) transportation of fresh fish and meat and meat products, as well as bulk products, ice, which are distributed in retail outlets as primary packaging, marking of biodegradable plastic bags in accordance with National Standards DSTU EN 14995: 2018, DSTU EN 13432: 2015 should be mandatory.

However, the biggest problem of the impact on the environment and public health (before the adoption of the framework law on waste management and a number of sectoral legislations to it, as well as the law on chemical safety and a number of regulations to it) remains the process of handling chemicals and lack of sustainable criteria to the container that contains them during storage and transportation. Hazardous chemicals, such as plant protection products such as pesticides and agrochemicals, are seasonal products and their packaging must ensure that the quality of the product is maintained even during long-term storage. Therefore, pesticides and agrochemicals are packaged in special containers made of polymeric materials. After the loss of consumer properties, it must be disposed of. Its use for storage of water, food, animal feed and other household needs is strictly prohibited. Since plastic itself is a material that is almost

"eternal", does not decompose over time, and its incineration can harm humans and the environment, the disposal of such containers should not be carried out by economic entities, but by a specialized enterprise.

Table 5.10. Environmental Impact Assessment of SPPs when ordering certain types of products (from 0 to 3 points).

CPV -class and type of goods, services, works	Environmental impact indicators						Scores	
	Energy consumption	Water consumption	Consumption of other natural resources	Impact on climate change	Emissions of pollutants	Chemical safety	Waste s	
Disposable tableware		'						
39220000-0 Disposable tableware (included in the	3	2	3	3	2	3	3	19
product group "Kitchen utensils111, household goods								
and accessories for catering establishments ")								
33770000-8 Disposable paper utensils	2	3	3	2	2	2	3	17
39830000-9 Disposable tableware (cardboard)	2	3	3	2	2	2	3	17
15810000-9 Disposable tableware (plastic)	2	1	3	3	2	3	3	17
44610000-9 Disposable tableware (lunch box for	3	1	3	3	2	3	3	18
second courses made of expanded polystyrene and								
organic materials)								
39290000-1 Disposable tableware	3	2	3	3	2	3	3	19
Toys	'	•					!	
37520000-9 Toys from polymeric materials	2	1	3	3	1	2	2	14
developing in assortment (for children's institutions)								
Garbage collection								
19640000-4 Plastic bags and garbage bags	2	1	3	3	2	3	3	17
34920000-2, 44610000-9 Plastic containers for	2	1	3	3	1	2	2	14
collection, sorting and accumulation of garbage and								
waste								
44160000-9 Sewer pipes								
PVC	2	1	3	3	3	3	3	18
Polypropylene	2	1	3	3	1	2	2	14
Polyethylene	2	1	3	3	1	2	2	14

Table 5.11. Assessment of socio-economic impacts of SPPs when ordering certain types of plastic products (from 0 to 3 points).

Type of goods, services, works		Social-economic impact on					
	Employment	Working conditions (safety and hygiene)	Health	Gender balance	Industry development	Regional development	
Utensils made of plastic or with plastic parts	2	2	2	1	1	1	9
Toys and sports equipment containing plastic	2	2	2	1	1	1	9
Plastic bags for garbage and packaging	2	2	2	1	1	1	9

 $[\]frac{111}{\text{https://zakupki.com.ua/prozorro-market/kuhonne-priladdya-tovari-dlya-domu-ta-gospodarstva-i-priladdya-dlya-zakladiv-gromadskogo-harchuvannya}$

Plastic containers for garbage collection and sorting	2	2	2	1	2	3	12
Plastic sewer pipes	2	2	2	1	2	3	12

Table 5.12. Assessment of application of environmental labels and declarations for plastic products (from 0 to 3 points).

Type of product	Standards and schemes of eco-labels and declarations						
	_	Self-declared Environmental claims (type II environmental labelling)	·	Standards for improved chemical safety	Standards for improved resource efficiency indicators (energy, water, materials, etc.)		
Utensils made of plastic or with plastic parts	0	2*)	0	0	2 (organic plastic or recycled)	4	
Toys and sports equipment containing plastic	0	1	0	0	1	2	
Plastic bags for garbage and packaging	0	3*)	0	0	2 (organic plastic or recycled)	5	
Plastic containers for garbage collection and sorting	0	3	0	0	1 (recycled)	4	
Plastic sewer pipes	2	2	0	0	0	4	

Annex 6. Comprehensive analysis of the road construction services sector.

45230000-8 Construction of pipelines, communication lines and power lines, highways, roads, airfields and railways; levelling surfaces (including 50230000-6 Repair, maintenance of road infrastructure and related equipment and related services)

According to the Ministry of the Regional Development and Territorial Communities 112, the total length of the street and road network in Ukraine in 2020 is more than 271.36 thousand km, with a total area of the more than 4748.4 million m².

At the same time, the length of the roadway network with a hard surface is more than 179.77 thousand km (66.25% of the total length). Only 6.85 thousand km of roads (3.8% of the total length of paved roads) are equipped with closed storm drains. Its absence affects the operation of the road surface and leads to negative phenomena in the conditions of possible floods and floods.

The length of streets and roads with artificial lighting is almost 88.95 thousand km (32.78% of the total length).

There are 12,097 bridges and overpasses in operation in Ukraine, of which 8,936 are road bridges, 2,391 pedestrian bridges, and 770 overpasses. The total length of bridges and overpasses is 746.83 km.

A significant increase in the intensity of traffic, especially heavy loads, leads to the destruction of the pavement of the carriageway of the street-road network and structural elements of bridge structures.

Thus, out of the total number of bridges and overpasses, 393 structures (3.2%) have limited bearing capacity or are in an emergency condition.

In 2020, the number of enterprises working in the field of road and bridge construction amounted to 832 units with a total number of employees of almost 25.6 thousand people, including communal enterprises – 401, private – 229, other organizational and legal forms of business – 202.

In 2020, the total costs for construction, reconstruction, capital and current repair of road and bridge facilities amounted to over 827.4 billion hryvnias.

In accordance with Article 16 of the Law of Ukraine "On Motorways", the streets and roads of cities and other settlements are under the jurisdiction of local self-government bodies and are communal property.

Article 41 of this Law stipulates that the financing of construction, reconstruction, repair and maintenance of streets and roads in cities and other settlements is carried out at the expense of local budgets, as well as other sources of financing determined by legislation.

At the same time, local self-government bodies are in no hurry, and sometimes delay, in attracting financial resources for the construction and repair of the street and road network.

At the same time, local self-government bodies are in no hurry, and sometimes delay, in attracting financial resources for the construction and repair of the street and road network.

¹¹² Analysis of the state of the road and bridge industry for 2020: https://www.minregion.gov.ua/napryamki-diyalnosti/zhkh/terretory/analiz-stanu-sfery-dorozhno-mostovogo-gospodarstva-za-2020rik/

Table 6.1. Legal and regulatory documents that can be used in establishing the criteria of SPP when ordering repair or new road construction.

Product	Technical regulations and	Application of voluntary standards	Availability of eco-labelling and	Other standards	Life cycle costing
	other documents in the field	necessary for the implementation and	declaration programs	and regulations	methods, in particular
	of state regulation	maintenance of management systems		that can be used	for certain types of
		- 11:		as SPP tools	goods or works
Construction,	DBN, EIA	Quality management systems,	No	DSTU "A", DSTU	No
repair and		environmental aspects, occupational		"Б".	
construction		health and safety management (ISO 9001,			
works		ISO 14001, ONSAS 18001).			
Building	State construction and	Quality management systems,	Eco-criteria for evaluating the LC of the	DSTU"Б", DSTU	No
materials	sanitary norms	environmental aspects, occupational	type I eco-labelling program ("Green	"B" , MSD	
		health and safety management, energy	Crane") are set for:		
		management (ISO 9001, ISO 14001,	Concrete and concrete products		
		ONSAS 18001, ISO 50001).	Rolled steel		
			Self-declared Environmental claims (type II		
			environmental labelling) according to ISO		
			14021.		
Chemical	Sanitary norms and	Quality management systems,	Eco-criteria for evaluating the LC of the	DSTU, chemical	No
products	requirements of the	environmental aspects, occupational	type I eco-labelling program ("Green	safety data sheets,	
	legislation regulating the	health and safety management (ISO 9001,	Crane") are set for: <u>Paints and varnishes</u>	safety data sheets	
	content of certain dangerous	ISO 14001, ONSAS 18001).			
	chemicals (lead, VOC)				
Slag materials	State construction and	Quality management systems,	Self-declared Environmental claims (type II	DSTU, TC	No
(metallurgical	sanitary norms	environmental aspects, occupational	environmental labelling) according to ISO		
slags and fly ash)		health and safety management (ISO 9001,	14021.		
		ISO 14001, ONSAS 18001).			
Road lighting	State building norms and	Quality management systems,	Class of energy efficiency, Self-declared	DSTU, EN, TC	No
equipment	regulations in the field of	environmental aspects, occupational	Environmental claims (type II		
	energy efficiency	health and safety management (ISO 9001,	environmental labelling) according to ISO		
	-	ISO 14001, ONSAS 18001).	14021.		

According to the analytical resource CoST Ukraine in the field of construction and repair of roads and infrastructure in Ukraine, the cost of the current average repair of 1 km of roads of national importance in each of the regions ¹¹³ given in order: the name of the area; the number of restored kilometres of roads in 2021 (January-July); average price per 1 km; the difference in cost compared to the previous 2020 year.

Mykolayivska 20.2 km / 37,904,367 hryvnias. / 97%	Donetska 8.3 km / UAH 23,338,554. / 69%	Kyivska 57.9 km / UAH 17,917,293. / 35%
Vinnytska 133.9 km / 30,260,247 hryvnias. / 80%	Zakarpatska 102.9 km / UAH 21,477,389. / 69%	Rivnenska 57.5 km / UAH 16,595,836. / -1%
Dnipropetrovska 193.3 km / UAH 31,543,901. / 56%	Chernihivska 23.1 km / UAH 19,765,555. / 36%	Zhytomyrska 3.2 km / UAH 16,469,004. / 586%
Chernivetska 168.9 km / UAH 29,572,555. / 15%	Cherkaska 47.0 km / UAH 19,093,905. / 37%	Ivano-Frankivska 95.8 km / UAH 15,374,122. / 91%
Luhanska 46.1 km / 28,383,138 hryvnias. / 15%	Lvivska 46.7 km / 18,334,247 hryvnias. / 231%	Sumska 158.8 km / UAH 14,731,665. / 21%
Zaporizhzhska 310.6 km / UAH 25,885,012. / 92%		

https://www.facebook.com/costukr/posts/1464644837253137

Odesska 89.4 km / UAH 3,638,891. / -69%	Kharkivska 452.5 km / UAH 8,379,986. / 133%	Volynska 25.1 km / UAH 10,477,846. / 230%
Ternopilska 150.7 km / UAH 17,852,341. / 32%	Kirovogradska 46.7 km / UAH 5,922,093. / -67%	Khmelnytska 580.3 km / UAH 8,990,348. / 52%

The scheme of the cost of repair works in 2020 1 km of different types of roads is given on the analytical resource in the field of road construction COST Ukraine

The availability of the use of renewable and secondary materials on the market in 2020, namely blast furnace slag, can be analysed on the example of Dnipropetrovsk region, according to Ukravtodor. 116,553.00 m3 of blast furnace slag was used at the facilities of construction and current average repair of public roads in Dnipropetrovsk region in the period from October 1, 2020, to October 20, 2020. The table below shows the amount of blast furnace slag used on site.

Table 6.2. Volumes of blast furnace slag use.

Object	Type of works	Volume of use, m3, as of 20.10.2020
H-31 Dnipro-Tsarychanka-Kobeliaky-Reshetylivka from the village of Loboykivka to the border of	NC*	22 840
Dnipropetrovsk region, km 19 + 400 -km 21 + 600		
H-31 Dnipro-Tsarychanka-Kobeliaky-Reshetylivka from the village of Loboykivka to the border of	NC	30 480
Dnipropetrovsk region, km 21 + 600 - border of Petrykivka district		
H-31 Dnipro-Tsarychanka-Kobeliaky-Reshetylivka from the village of Loboykivka to the border of	NC	11 526
Dnipropetrovsk region, the border of Petrykivka district - km 21 + 600		
H-31 Dnipro-Tsarychanka-Kobeliaky-Reshetylivka from the village of Loboykivka to the border of	NC	16 799
Dnipropetrovsk region, km 26 + 600 - km 28 + 600		
H-31 Dnipro-Tsarychanka-Kobeliaky-Reshetylivka from the village of Loboykivka to the border of	NC	2 884
Dnipropetrovsk region, transport interchange in two levels at km 21 + 900		
H-11 Dnipro-Mykolayiv (via Kryvyi Rih), 112 + 608- km 127 + 110	IR**	9 218
H-23 Kropyvnytskyi - Kryvyi Rih - Zaporizhia, km 81 + 881- km 105 + 272	IR	13 494
R-73 / N-08 / - Nikopol, km 21 + 686 - km 39 + 785	IR	5 611
R-73 / N-08 / - Nikopol, km 39 + 786 - km 64 + 140	IR	3 701
	H-31 Dnipro-Tsarychanka-Kobeliaky-Reshetylivka from the village of Loboykivka to the border of Dnipropetrovsk region, km 19 + 400 - km 21 + 600 H-31 Dnipro-Tsarychanka-Kobeliaky-Reshetylivka from the village of Loboykivka to the border of Dnipropetrovsk region, km 21 + 600 - border of Petrykivka district H-31 Dnipro-Tsarychanka-Kobeliaky-Reshetylivka from the village of Loboykivka to the border of Dnipropetrovsk region, the border of Petrykivka district - km 21 + 600 H-31 Dnipro-Tsarychanka-Kobeliaky-Reshetylivka from the village of Loboykivka to the border of Dnipropetrovsk region, km 26 + 600 - km 28 + 600 H-31 Dnipro-Tsarychanka-Kobeliaky-Reshetylivka from the village of Loboykivka to the border of Dnipropetrovsk region, transport interchange in two levels at km 21 + 900 H-11 Dnipro-Mykolayiv (via Kryvyi Rih), 112 + 608- km 127 + 110 H-23 Kropyvnytskyi - Kryvyi Rih - Zaporizhia, km 81 + 881- km 105 + 272 R-73 / N-08 / - Nikopol, km 21 + 686 - km 39 + 785	H-31 Dnipro-Tsarychanka-Kobeliaky-Reshetylivka from the village of Loboykivka to the border of Dnipropetrovsk region, km 19 + 400 -km 21 + 600 H-31 Dnipro-Tsarychanka-Kobeliaky-Reshetylivka from the village of Loboykivka to the border of Dnipropetrovsk region, km 21 + 600 - border of Petrykivka district H-31 Dnipro-Tsarychanka-Kobeliaky-Reshetylivka from the village of Loboykivka to the border of Dnipropetrovsk region, the border of Petrykivka district - km 21 + 600 H-31 Dnipro-Tsarychanka-Kobeliaky-Reshetylivka from the village of Loboykivka to the border of Dnipropetrovsk region, km 26 + 600 - km 28 + 600 H-31 Dnipro-Tsarychanka-Kobeliaky-Reshetylivka from the village of Loboykivka to the border of Dnipropetrovsk region, transport interchange in two levels at km 21 + 900 H-11 Dnipro-Mykolayiv (via Kryvyi Rih), 112 + 608- km 127 + 110 H-23 Kropyvnytskyi - Kryvyi Rih - Zaporizhia, km 81 + 881- km 105 + 272 R-73 / N-08 / - Nikopol, km 21 + 686 - km 39 + 785

Road slag was used in these works to arrange layers of pavement according to design solutions. Blast furnace slag was not used as aggregate. The final price of metallurgical slag, agreed at the time of the request by the Service of Motor Roads of Dnipropetrovsk region, was at the time of the request UAH 180.00/m³.

Table 6.3. Selective analysis of market price proposals for the period 2020-2021 regarding the average cost of repair work.

Nº	Lay	Name of costs	Cost thousands UAH		
1	2	3	4		
2	5-1	As of March 4, 2020, maintenance services for the public highway T-10-19 Fenevychi - Borodyanka - Makariv - Byshiv km 0 + 000 - km 21 + 500, km 26 + 260 - km 47 + 288, km 51 + 118 - km 73 + 360	454,61414		
Total cos	t of works, materia	ols and equipment, including	454,61414		
Works			63,35050		
Materials	Materials and equipment				
VAT			90,92283		

https://portal.costukraine.org/

Total ii	ncluding VAT		545,53697
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	400.00/70
2	2-1	As of February 18, 2021, the current average repair of highways of general importance (DK 021: 2015 - 45230000-8	430,22673
		"Construction of pipelines, communication lines and power lines, highways, roads, airfields and railways; levelling	
		surfaces")	
Total c	ost of works, r	naterials and equipment, including	430,22673
Works			63,45823
Materi	ials and equipm	nent	366,76850
VAT			86,04535
Total i	ncluding VAT		516,27208
2	1-1	As of July 12, 2021, the current average repair of roads of general importance (DK 021: 2015 - 45230000-8 "Construction	432,67469
		of pipelines, communication lines and power lines, highways, roads, airfields and railways; levelling surfaces")	
Total c	ost of works, r	materials and equipment, including	432,67469
Works			69,41794
Materi	ials and equipm	nent	363,25675
VAT			86,53494
Total i	ncluding VAT		519,20963

All data were taken from open sources. The total amount of repairs may include the cost of developing project documentation and additional work.

Table 6.4. Assessment of the availability on the market of sustainable works and services in road construction.

Conventional products/ works	Price, UAH	Availability on the market of a more sustainable alternative (specify which one), price, UAH	Price, UAH	Comparison of the difference ¹¹⁵ between the purchase price of goods/works in %	Availabilit y in the regions
The average cost of new construction of 1 kilometre	e of road with as	phalt pavement in 2020, UAH million. according to "Ukra	avtodor» 11	6	
The performer does not have a certified SEM		The performer has a certified SEM			+
I category	170,6	I category	170,6	-	+
II category	77,4	II category	77,4	-	+
III category	69,6	III category	69,6	-	+
IV category	39,4	IV category	39,4	-	+
V category	11,3	V category	11,3	-	+
crushed stone ¹¹⁷ 14210000-6, 1t	584.00	Blast furnace slag to replace crushed stone fraction	263,52	54	
sand 14210000-6, 1 t	375.00	0-40 mm ¹¹⁸ , 14630000-6, 1t		29	

 $^{^{115}}$ The difference between the average cost price of a more stable offer compared to the average cost price of a regular offer.

¹¹⁶ https://www.epravda.com.ua/news/2020/10/1/665791/

https://spending.gov.ua/new/disposers/03188381/agreements/1907545019 Agreement № 36 of 16.03.2021.

https://spending.gov.ua/new/disposers/31657751/agreements/1919457017 Agreement № 78π-21 of 29.04.2022.

Gravel, sand, rubble and fillers: Screening (sand from crushing screenings fr.0-5 mm) ¹¹⁹ , 14210000-6	499.17	Ash and metal residues		47	
Complex plasticizing additive in concrete ¹²⁰ 44110000-4, DSTU "F" B.2.7-171:2008 Building materials. Additives for concrete and mortars. General technical conditions (EN 934-2:2001, NEQ), 1 kg	24,5	Complex plasticizing additive in concrete ¹²¹ in concrete, 44110000-4, COY OEM 08.002.016.004:2010 Concrete and concrete products. Environmental life cycle assessment criteria (according to ISO 14024 - type I eco-labelling program), 1kg	44,0	44.3	
The lamp for illumination of the road under the MGL lamp, UAH / piece 122	875.0	The lamp for illumination of the road under the LED lamp, UAH / piece 123	8 274.0	89.4	

The register of producers with valid environmental certificates is available on the websites of the NGO the Living Planet as an authorized certification body. 124

Risks and benefits Assessment for construction

Life cycle costing according to ISO $15686-5^{125}$ especially relevant for CAs in the public sector of the economy, for whom the absence of any forecasts of income from constructed assets / real estate may complicate the usual task of valuing investments. They are also relevant to the work of professionals who provide information on service life and environmental performance.

Table 6.5. Environmental Impact Assessment of SPPs when ordering certain types of repairs and construction works (from 0 to 3 points).

CPV -class and type of goods, services, works	Environmental impact indicators							Scores
	Energy	Water	Consumption of other	Impact on	Emissions of	Chemical	Waste	
	consumption	consumption	natural resources	climate change	pollutants	safety	s	
45230000-8 Construction of pipelines, communication lines and power lines, highways, roads, airfields and railways; levelling surfaces	2	1	3	3	3	2	3	17
50230000-6 Repair, maintenance of road infrastructure and related equipment and related services	2	1	2	2	2	2	1	12

 $^{^{119}~\}underline{\text{https://spending.gov.ua/new/disposers/31657751/agreements/1815797460}}~\text{Agreement N}^{2}~231\ \text{n}-20~\text{of}~27.10.2020}.$

 $^{^{120} \, \}underline{\text{https://spending.gov.ua/new/disposers/43292507/agreements/1665259479}} \, Agreement \,\, N^{\underline{o}} \,\, 81/53-19 \,\, \text{of 10.12.2019}.$

 $[\]frac{121}{\text{https://spending.gov.ua/new/disposers/38386410/agreements/1796444305}} \text{ Agreement N}^{\text{o}} \text{ 133/85 of 14.09.2020.}$

 $[\]frac{122}{\text{https://mirsveta.com.ua/ua/p148963407-ulichnyj-svetilnik-gku.html}} \text{ Street lamp GKU Helios 21 for metal halide lamps mgl 250W}.$

 $[\]frac{123}{\text{https://stolb.com.ua/ru/svitlodiodniy-vulichniy-svitilnik-schreder-avento-}71\text{-vt/}} \ \text{LED street lamp Schreder Avento 1 - }71 \ \text{W}.$

 $[\]frac{124}{\text{https://www.ecolabel.org.ua/reestr-sertifikativ}} \, \text{Register of manufacturers with valid environmental certificates for their products.}$

https://uscc.ua/uploads/page/images/normativnye%20dokumenty/bim/dstu-ISO-15686_5.pdf DSTU ISO 15686-5.

According to DSTU 9060:2020¹²⁶ "Environmental impact assessment. Transport facilities. Assessment criteria and indicators of environmental impact "and DSTU 9061: 2020" Environmental impact assessment. Transport facilities. Guidelines for the preparation of an environmental impact assessment report "environmental impact should be anticipated and the possible consequences taken into account at the design stage. In general, any work involves conducting an EIA procedure; availability of permits; management of environmental aspects during construction in compliance with environmental legislation.

Socio-Economic Impact

Each branch of the economy uses not only private capital but also public capital as a means of production. Roads, bridges, overpasses, tunnels, subways, railways, pipelines, ports, canals, dams and other transport facilities, etc. are public capital, which is mainly built by the state. Any supply chain of raw materials, products or information exists due to the above public capital. **Sectors of the economy that benefit from an increase in public capital in the form of highways** (according to a comprehensive study ¹²⁷ SE Ukravtodor and Kyiv School of Economics of socio-economic impact of road construction): transport industry - 75% of the capital is roads; postal and courier services sector - 5% of the capital is by road; tourism sector - 1% of capital belongs to roads.

Productivity benefits:

- total labour productivity (estimated at at least 0.007% per year);
- productivity in the field of transport, postal and courier transport and tourism is growing much more;
- transport services will receive a productivity increase of 5% with the improvement of the road fund in the next 5 years, the same is the value for postal and courier services; the service sector may become even more important due to the emergence of new routes, expansion and emergence of new businesses through new roads, which we estimate at 10%;
- fuel savings and repairs higher productivity of vehicles will be up to 12.5%, which can be achieved through the full cycle of road construction in 2020-2023.

In 2020, the amount of funding and the corresponding increase in the road fund amounted to UAH 82 billion, in 2021-23 it is planned at the level of UAH 98 billion (taking into account the deflator of 5% annually for the correct calculation of the impact of nominal costs). The combined impact of supply effects due to the implementation of the road construction program under Large-scale construction during 2020-2023 (with approximately 100 billion expenditures annually from 2021), will create additional GDP growth of 2.2%. This GDP growth complements the impact of expanding demand, the contribution of which is estimated at 2.2%, thus, the total additional GDP growth will reach 4.4%.

Table 6.6. Assessment of socio-economic impacts of SPP when ordering certain types of repairs and construction works (from 0 to 3 points).

CPV -class and type of goods, services, works	Social-economic impact on						
Er Er		Working conditions		Gender	Industry	Regional	
		(safety and hygiene)		balance	development	development	
45230000-8 Construction of pipelines, communication lines and power lines,	2	3	2	1	3	3	14
highways, roads, airfields and railways; levelling surfaces							
50230000-6 Repair, maintenance of road infrastructure and related	2	3	2	1	3	3	14
equipment and related services							
44113000-5 Materials for road construction	2	3	2	1	3	2	13
45230000-8 Road lighting (construction of outdoor lighting network)	1	1	1	1	3	3	10

¹²⁶ https://zakon.rada.gov.ua/rada/show/v0336774-20#Text

 $[\]frac{127}{\text{https://kse.ua/wp-content/uploads/2021/02/GC roads construction impact final compressed-1.pdf}}$

Level of application of ecological labels and declarations.

Table 6.7. Assessment of application of environmental markings and declarations for construction materials and devices for road lighting (from 0 to 3 points).

CPV -class and type of goods		Standards and schemes of ecological labels and declarations								
	Eco- labelling type I	Self-declared Environmental claims (type II environmental labelling)	Ecological product declarations of the III type	Standards for improved chemical safety	Standards for improved resource efficiency indicators (energy, water, materials, etc.)					
Building materials	1	1*)	0	0	1	3				
Devices for road lighting	0	1	1	2	3 (energy efficiency and extended service life)	7				

^{*)} the use of Self-declared Environmental claims (type II environmental labelling) has the problem of improper or unjustified use.