

SUSTAINABLE PUBLIC PROCUREMENT GUIDELINES FOR SELECTED PRODUCTS FOR PILOT TENDERS IN THE REPUBLIC OF MOLDOVA

Action implemented by:

Disclaimer

The report :Sustainable Public Procurement Guidelines for selected products for pilot tenders in the Republic of Moldova” has been developed within the framework of the project of the “European Union for Environment Action” (EU4Environment), funded by the European Union and implemented by the OECD, UNECE, UNEP, UNIDO, and the World Bank. The guidelines were prepared in close cooperation with the Public Procurement Agency of the Republic of Moldova, under the guidance of UNEP. The guidelines were presented and discussed with the stakeholders during the online training on the use of sustainable procurement criteria for the prioritized products in Public Procurement, held on 3rd and 10th March 2023. The guidelines were prepared by Ms. Natalia Postolache, National Expert of EU4Environment project team. The comments to the guidelines were provided by Ms. Lesya Nikolayeva (UNEP), Mr. Eriks Mezalis, International Legal Expert of the EU4Environment project team and national experts. Provided comments were incorporated into the document.

The views expressed herein are those of the author only and can in no way be taken to reflect the official opinion of the European Union, its members, the Governments of the Eastern Partnership Countries or the implementing partners.

This document was produced with the financial assistance of the European Union. It is permitted to use the text of this document on condition that proper reference to the source is provided.

Sale of this document is prohibited.

Please cite this publication as EU4Environment (2023), *“Sustainable Public Procurement guidelines for selected products for pilot tenders in the Republic of Moldova”*.

© 2023 UNEP. All rights reserved. Licensed to the European Union under conditions.

Table of contents

Table of Abbreviation	5
1. Introduction.....	6
2. SPP Criteria	7
3. Sustainable criteria for selected products for sustainable public procurement in the Republic of Moldova.....	8
3.1. Sustainable criteria of fresh vegetables and fruits	8
3.1.1. The field of application	8
3.1.2. Environmental impacts	8
3.1.3. Technical specifications	8
3.1.4. Selection criteria	10
3.1.5. Award criteria	10
3.1.6. Contract execution clauses	11
3.2. Sustainable criteria of energy-efficient double-glazed windows and doors	12
3.2.1. The field of application	12
3.2.2. Environmental Impacts	12
3.2.3. Technical specifications	13
3.2.4. Selection criteria	14
3.2.5. Award criteria	14
3.2.6. Contract execution clauses	14
3.3. Sustainable criteria for personal computers.....	16
3.3.1. The field of application	16
3.3.2. Environmental Impacts	16
3.3.3. Technical specifications	17
3.3.4. Selection criteria	18
3.3.5. Award criteria	18
3.3.6. Contract execution clauses	19
3.4. Sustainable criteria for motor vehicles.....	20
3.4.1. The field of application	20
3.4.2. Environmental Impacts	20
3.4.3. Technical specifications	20
3.4.4. Selection criteria	22
3.4.5. Award criteria	22
3.4.6. Contract execution clauses	23
3.5. Sustainable procurement criteria for printer paper	24
3.5.1. The field of application	24

3.5.2.	Environmental Impacts	24
3.5.3.	Technical specifications	24
3.5.4.	Selection criteria	25
3.5.5.	Award criteria	25
3.5.6.	Contract execution clauses	25
4.	Conclusion	26

Table of Abbreviation

CA	Contracting authority
CO ₂	Carbon dioxide
CPV	Common Procurement Vocabulary
EO	Economical operator
EU	European Union
EU4Environment	European Union for Environmen
FSC	Forest Stewardship Council
GHG	Greenhouse gas
GPP	Green Public Procurement
ICT	Information and Communication Technologies
OECD	Organisation for Economic Cooperation and Development
PC	Personal computer
PPA	Public Procurement Agency
PPL	Public Procurement Law
PVC	Polyvinyl chloride
SDGs	Sustainable Development Goals
SPP	Sustainable Public Procurement
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization

1. Introduction

The Sustainable Public Procurement (SPP) concept aims to promote the sustainable and balanced development of the country in the way that economic, environmental (climate, water resources, energy resources, etc.) and socio-economic aspects are considered in the process of public procurement.

Public procurement represents a significant part of public expenditure. Therefore, incorporation of the principles of sustainable development into the public procurement system will also have a direct impact on social, economic and environmental aspects.

The impact on socio-economic aspects will directly influence jobs or the development of the local market, as the market will also develop taking into account consumers and governmental demand.

Reflection of the environmental aspects in the public procurement system will help to improve environment and accelerate environmental protection process in the country. SPP can help Moldova achieve Sustainable Development Goals (SDGs) (in particular, SDG 12 on Responsible Consumption and Production) and other international environmental commitments. The public sector can also encourage the private sector to reduce its impact on the environment and motivate it to develop green production and services, apply innovative models.

These guidelines are based on an analysis of good practices in the European countries and the European Union Green Public Procurement criteria¹ (EU GPP criteria) were taken as the template for technical specifications for the selected products. They have been developed with the aim of enabling and encouraging contracting authorities of the Republic of Moldova to procure selected products in a sustainable manner, keeping account of one of the key aspects of sustainable development – the environmental protection.

The provisions provided by this document are of a recommendation nature and are formulated in such a way that they can be (partially or totally) integrated by the contracting authorities in the tender documentation.

The guidelines provide information on sustainability criteria and technical specifications for the following selected products: fresh vegetables and fruits; energy-efficient double-glazed windows and doors; personal computers, motor vehicles and print paper.

¹ https://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm

2. SPP Criteria

The basis for this document is the EU GPP criteria² (for selected products), which are designed to facilitate the purchase of goods, services and works by public authorities and which have a low impact on the environment. The use of these criteria is voluntary.

The criteria are formulated in such a way that they can, if deemed appropriate by the individual authority, be (partially or fully) integrated into the authority's tender documents with minimal editing.

In the Republic of Moldova, the SPP criteria presented refer to 4 different stages of the public procurement procedure reflected in the tender documentation:

- technical specifications;
- selection criteria;
- award criteria; and
- contract execution clauses.

It is necessary to mention that the criteria listed in EU GPP criteria are of two types³:

- **Core criteria** — which are designed to allow for easy application of SPP, focusing on the key area(s) of environmental performance of a product and aimed at keeping administrative costs for companies to a minimum.
- **Comprehensive criteria** — which consider more aspects or higher levels of environmental performance, for use by authorities that want to go further in supporting environmental and innovation goals.

When the contracting authority intends to use the sustainability, criteria suggested in this document, it must do so in a manner that ensures compliance with the principles of public procurement, such as openness and transparency, non-discrimination and equal treatment, proportionality, etc.⁴ This implies, among others, that the sustainability criteria presented will not be chosen or applied in a way that directly or indirectly discriminates particular economic operators⁵.

As the result of the prioritisation exercise, conducted in the Republic of Moldova under general guidances by United Nations Environment Programme (UNEP) within the EU-funded EU4Environment project, the products and product categories were identified for future SPP promotion and application in the country, are as follows:

1. Organic fruits and vegetables;
2. Energy-efficient windows and doors
3. Computers;
4. Cars;
5. Printer paper, A4 format.

For these products, the sustainability criteria to technical specifications will be elaborated, as well, as qualification requirements for economic operators, award criteria and evaluation factors and contractual clauses.

² https://green-business.ec.europa.eu/green-public-procurement/gpp-criteria-and-requirements_en

³ For additional information on these issues please see:

[https://ec.europa.eu/environment/gpp/pdf/190927_EU_GPP_criteria_for_food_and_catering_services_SWD_\(2019\)_366_final.pdf](https://ec.europa.eu/environment/gpp/pdf/190927_EU_GPP_criteria_for_food_and_catering_services_SWD_(2019)_366_final.pdf)

⁴ See Article 7 of the Law on public procurement no. 131/2015 of the Republic of Moldova,
https://www.legis.md/cautare/getResults?doc_id=136277&lang=ro#

⁵ For additional information on these issues please see: 2016 Handbook on 'Buying green!', available at:
<https://ec.europa.eu/environment/gpp/pdf/Buying-Green-Handbook-3rd-Edition.pdf>

3. Sustainable criteria for selected products for sustainable public procurement in the Republic of Moldova

3.1. Sustainable criteria of fresh vegetables and fruits

3.1.1. The field of application

Fresh vegetables and fruits have been selected as priority products for SPP pilot tenders in the Republic of Moldova according to the UNEP SPP methodology⁶ and the recommendations on sustainability criteria use prepared for the following list of products:

- Potatoes (CPV 03212100-1);
- Cabbage (CPV 03221400-0);
- Carrots (CPV 03221112-4);
- Beetroot (CPV 03221111-7);
- Onion (CPV 03221113-1);
- Apples (CPV 03222321-9).

These fresh vegetables and fruits are most frequently purchased from the vegetables and fruits group for food preparation in institutions such as hospitals, schools, kindergartens, prisons, army, etc.

3.1.2. Environmental impacts

In order to use sustainability requirements to purchase fresh vegetables and fruits, their impact on environment must be determined. Table 1 below shows impacts on environment from buying fresh vegetables and fruits during their lifecycle, as well as the sustainable solutions.

Table N1. Key environmental impacts of fresh vegetables and fruits during their lifecycle.

Key environmental impacts during the lifecycle of a product	Ways of solutions
<ul style="list-style-type: none">• Energy used in farming, agricultural activities.• Land use and land-use change (e.g. destruction of natural habitats, particularly forests and related CO₂ emissions associated with the production of fruits and vegetable.• Production and use of fertilisers and pesticides.• Water use and water pollution.• Emissions of pollutants such as methane or nitrites from farming and agricultural activities.• Disposal of waste.	<ul style="list-style-type: none">• Organic food products.• Food waste prevention.• Other waste: prevention, sorting and disposal.• Energy and water consumption.⁷

3.1.3. Technical specifications

Technical specifications contain requirements regarding the subject of the contract. Here, the contracting authority is entitled to stipulate requirements regarding the quantity, packaging, content, terms of supply and other aspects that it considers important regarding the fresh vegetables and fruits it purchases. The Public Procurement Law (PPL) no. 131/2015 gives the right to the contracting authority to submit requirements for any stage of the life cycle of the products - in practical terms it means that the contracting authority has the right to describe not only the characteristics of the goods in the procurement

⁶ <https://wedocs.unep.org/bitstream/handle/20.500.11822/35412/IPE.pdf>

⁷ EU GPP criteria for fresh vegetables and fruits, p.5, available at:

[https://ec.europa.eu/environment/gpp/pdf/190927_EU_GPP_criteria_for_food_and_catering_services_SWD_\(2019\)_366_final.pdf](https://ec.europa.eu/environment/gpp/pdf/190927_EU_GPP_criteria_for_food_and_catering_services_SWD_(2019)_366_final.pdf)

documentation, but also to come up with the requirements on how and where they are produced or transported.

In turn, tenderers must be given the opportunity to acknowledge the conformity of the fresh vegetables and fruits they offer by referring to an ecological and/or an organic label in addition to other means of proof on the conformity to the requirements. Table N2 below shows the technical specifications used to describe the relevant products.

Table N2. Technical specifications for fresh vegetables and fruits

Products/ Aspect	Technical specifications
Potatoes	<p>Fresh aspect; Integral; Well-covered with their jackets; Tough, intact; Unsprouted; Healthy; No external or internal defects that affect the product aspect and quality; Without strange odour and/or taste; Without spots of green/blue-grey/black colour; Without holes, black pulp or other internal defects; Without cracks, cut-offs, or traces of bites or hits; There shall be allowed no dry potato tubers, with the signs of rottenness, frostbitten potato tubers or with any other changes that make them impossible to be used; There shall be allowed the tubes with eyeholes, but the green area shall not exceed 1/8 of the tuber area; The vegetables shall come in satisfactory condition, to the place of destination.</p>
Cabbage	<p>Fresh and integral, healthy and clean cabbage heads, which are fully formed and typical for their botanical species by their colour and shape; Not attacked by diseases or insects that make them impossible to be used; Without visible traces of strange substances; Without damages resulting from frosts; The cabbage shall be cleaned from leaves up to green or white leaves, which are tight and which form the cabbage head.</p>
Carrots	<p>Fresh presentation; Integral; Healthy; Tough; Clean, without visible strange elements; Without pests; Without damages caused by pests; Not forked, having no secondary roots; Without rods; Without tendency to sprout; Without abnormal external wetness; Without strange odour and/or taste; Without breaks and cracks; Without damages caused by frosts; Without green ends or purple nuances; The vegetables shall come in satisfactory condition, to the place of destination.</p>
Beetroot	<p>Fresh, integral, health and clean roots; Without damages caused by pests;</p>

	Without excessive wetness on the surface, without damages with the shape and colour that are typical for this species of beetroot, with the length of remaining stalks not exceeding 2.0 cm, or without stalks; The deviations, but not ugly ones, shall be allowed from the typical shape; There shall be allowed the roots with skinned-over cracks, which do not change the typical shape.
Onion	Intact; Healthy, without traces of mildew or changes Clean, without visible strange elements; Without damages caused by frosts; Dry enough; Without abnormal external wetness; Without hollow or tough stems; Without pests; Without damages caused by pests; Without visible external buds; Without strange odour and/or taste; The vegetables shall come in satisfactory condition, to the place of destination.
Apples	Integral; Healthy, without traces of mildew or changes; Clean, without visible strange elements; Not attacked by parasites (pests); Without pests; Without abnormal external wetness; Without strange odours and/or tastes; Resistant to carriage and handling; The fruit shall come in satisfactory condition, to the place of destination.

3.1.4. Selection criteria

The selection criteria mainly focus on the ability of the economic operator to execute the public procurement contract. When evaluating it, in addition to other requirements provided in PPL 131/2015, the contracting authorities have the right to take into account the specific experience and competence related to environmental aspects that are relevant to the object of the public procurement contract. They may request evidence (verification) of the operators' ability to apply environmental measures when performing the public procurement contract. The contracting authority is also authorized to require the economic operator to comply with social, environmental and labor law norms in order to promote sustainable development.

It is possible to introduce environmental elements into the selection criteria of an economic operator by establishing provisions in the procurement terms regarding the technical and professional capabilities of an economic operator. In this regard, it should be borne in mind that, in terms of technical and professional compliance, the contracting authority is authorized to determine the necessary requirements, such as sufficient human and technical quality, as well as the work experience of the economic operator and environmental management system.

In addition to common qualification and selection criteria the contracting authority must request from the economic operator **reference standards showing that the products are organic**: domestic eco-certification or any other eco-certification acknowledged by the Republic of Moldova.

3.1.5. Award criteria

When purchasing organic vegetables and fruits, one of the following criteria can be used: **lowest price** or **the best quality-price ratio**.

If such a criterion of awarding as 'The best quality-price ratio' is applied, the following may be used as assessment factors:

- Reference standard – eco-certification of the product;
- Minimal energy use during transportation and storage - requirement for the economic operator to supply the products by vehicles having the reduced impact on the environment: Euro 6 Standard as a minimum, by electric or hybrid vehicles;
- Packaging with recyclable materials or no hazardous materials in packaging.

The above assessment factors are provided merely as an example, while the contracting authority shall choose and use them, relying on the individual terms, conditions and needs. Before coming up with particular criterion (or technical demand thereof), contracting authority should make sure that it does not negatively impact market participants.

3.1.6. Contract execution clauses

During the execution of the contract, the contracting authority may impose the following requirements for its execution:

1. Requirements to product packaging:

- The package shall be recyclable;
- Delivery of small quantities shall be avoided;
- There shall be foreseen the possibility to return the package to the economic operator, after the products are consumed;
- Minimal packaging;
- Energy and water conservation for the packing house;
- No hazardous or toxic materials in packaging;
- Waste management for packing house;
- Environmental management system for the packing house.

2. Delivery requirements:

- Frequent delivery of small quantities shall be avoided;
- Delivery shall be realised outside the rush hours;
- Delivery shall be realised by vehicles having the reduced impact on the environment: Euro 6 Standard as a minimum, by electric or hybrid vehicles.

The contracting authority is obliged to perform supervision over the implementation of the procurement contract. This obligation relates, among others, to the performance of the requirements determined for the implementation of SPP and, in turn, plays an important role in public procurement procedures with sustainability criteria.

During the contract management process, the economic operator may be required to periodically provide an information in order to determine compliance of a certain part of the delivered goods with the required standards.

Therefore, in order to verify that an economic operator has fulfilled the above mentioned activities, the contracting authority is entitled to conduct monitoring and controlling actions. If the contracting authority wishes to use these rights, it shall define the rules for such inspection in the terms of procurement, in such a way that the principle of free enterprise is not restricted and that there is no unjustified interference with universally recognized rights.

It is advisable for the contracting authority to indicate the supervision mechanisms in advance in the draft contract (which in turn will be an integral part of the terms of the procurement) and the economic operators will be informed of the expected processes from the outset.

3.2. Sustainable criteria of energy-efficient double-glazed windows and doors

3.2.1. The field of application

The "energy efficient windows and doors" product group includes the following:

- Windows, doors and related articles (CPV 44221000-5);
- Windows (CPV 44221100-6);
- Doors (CPV 44221200-7);
- Doors with mosquito nets (CPV 44221212-4);
- Double windows (CPV 44221111-6);
- Carpentry for constructions (44230000-1);
- Installation of doors, windows and related elements (CPV 45421100-5);
- Installation of doors and windows (CPV 45421130-4);
- Non-metallic carpentry installation works (CPV 45421150-0);
- Installation of windows (CPV 45421132-8).

Energy efficient windows and doors have been selected as priority products according to the UNEP SPP methodology for SPP pilot tenders in the Republic of Moldova and the recommendations on sustainability criteria use prepared for these products. This product group is purchased by any public institution.

3.2.2. Environmental Impacts

In order to use sustainability requirements to purchase energy efficient windows and doors, their impact on different aspects that contribute to sustainable development must be determined. The impact on the environment generated by Polyvinyl chloride (PVC) carpentry is determined by:

- High thermal and acoustic protection;
- The lifespan can reach 50 years;
- The PVC profile is fire resistant, it self-extinguishes from the beginning of a fire;
- Windows made of virgin PVC can be recycled and reused.

Table 3 below shows Office Building Design, Construction and Management (doors and windows fall under this category) impacts on one of the key aspects of sustainable development – the impact on the environment.

Table N3. Key environmental impacts of energy efficient windows and doors

Key environmental impacts during the lifecycle of a product	Ways of solutions
<p>Key environmental areas</p> <ul style="list-style-type: none">• Primary energy consumption and associated greenhouse gas emissions during use of and travel to and from the building• Depletion of natural resources, embodied energy and emissions associated with the manufacturing and transportation of building materials• Waste generation during site preparation, construction, use and demolition of the building• Deterioration in indoor air quality due to emissions of hazardous substances from building products and the intake of particulate air pollution from the external environment• Pollution of the local environment and deterioration of local air quality due to emissions from vehicles used to travel to and from the building	<ul style="list-style-type: none">• Design and construction to achieve high energy efficiency performance and low associated CO₂ emissions• Installation of high efficiency and renewable energy technologies which make use of site-specific opportunities to reduce energy consumption and CO₂ emissions• Design and specification to reduce the embodied impacts and resource use associated with construction materials• Design, specification and site management to minimise construction and demolition (C&D) waste and to use building products or materials with a high recycled or re-used content• Specification of fit-out and finishes that minimise hazardous emissions to indoor air

<ul style="list-style-type: none"> • Water consumption during use of the building <p>Key life cycle environmental impacts and parameters for resource use:</p> <ul style="list-style-type: none"> • The following environmental impact categories along the product life cycle are considered to be the most important ones: global warming potential, acidification, exploitation of renewable and non-renewable primary energy resources eco-toxicity, human toxicity, eutrophication, abiotic resource depletion and water consumption , use of secondary and re-used materials and waste material flows 	<ul style="list-style-type: none"> • Ventilation design in order to ensure healthy air and minimise the intake of external air pollution • Specification and installation of water saving technologies • Installation of physical and electronic systems to support the ongoing minimisation of energy use, water use and waste arising by facilities managers and occupiers • Implementation of staff travel plans to reduce transport related fuel use and CO₂ emissions, including infrastructure to support electric vehicles and cycling.⁸
---	---

3.2.3. Technical specifications

The technical specifications contain requirements related to the object of the contract, and the contracting authority, according to the provisions of the Public Procurement Law no. 131/2015, is entitled to submit requirements for any stage of the life cycle of the products - in practical terms it means that the contracting authority has the right to describe the characteristics of the requested goods and come up with the requirements regarding how they are produced or transported.

Table N4 below shows the technical specifications used to describe the relevant products.

Table N4. Technical specifications for energy efficient windows and doors.

Products/ Aspect	Technical specifications
Energy-efficient double-glazed windows and doors	<p>The Terms of Reference, the Section 'Materials, Compatibilities, Technical Regulations and Applied Standards' shall specify the quality, conformity and applicability of materials, laws, technical regulations and applied standards, acceptance of materials and works, service life of works and liability for the terms, conditions and quality of works.</p> <p>Technical requirements to the materials used upon procurement of works on carpentry replacement (PVC windows and doors).</p> <p>Minimum technical specifications for the carpentry:</p> <ul style="list-style-type: none"> - PVC profile of class 'A', with the exterior wall thickness of ≥ 2.8 mm; - Profile with a minimum of 5 sections, which are reinforced with galvanised steel with the thickness of a minimum of 1.5 mm, with special anti-corrosion coating, - Eco-profiles (without lead) – Green Line or equivalent certification, - Thermal transfer factor: $K = \max. 1.5 \text{ W/mpK}$ - Double-glazed windows, Low-e windows with argon or krypton, 32 mm (4-10a-4-10a-4k), - Noise insulation – min. 35 dB, - Fire safety – class 'C', according to EN 13501⁹ or an equivalent directive, - Water proofing – class '7A' according to EN 12208 or an equivalent directive, - Wind load behaviour – class 'C3' according to SREN 12210 and SREN 12424 or an equivalent directive,

⁸ EU GPP criteria for Office Building Design, Construction and Management, p.8, available at:

https://ec.europa.eu/environment/gpp/pdf/swd_2016_180.pdf

⁹ <https://www.eurolab.net/en/testler/yangin-testleri/en-13501-1-yapi-malzemelerinin-ve-yapi-elemanlarinin-yangin-siniflandirmasi-bolum-1-yangina-tepki-testlerinden-elde-edilen-verileri-kullanarak-siniflandirma/>

	<ul style="list-style-type: none"> - Air permeability – class 3 according to SR EN 12207 or an equivalent directive, - Eco-maintenance (profile cleaning shall not require chemical substances), - Carpentry shall not need painting, - Antistatic-treated profiles, - Sustainable fittings, tilt-turn opening, increased safety degree, - Opening resistance: windows – at least 10,000 cycles, doors – at least 100,000 cycles, - Profile warranty period – at least 10 years, - Fitting warranty period – at least 5 years. <p>The windows shall be fully assembled and finished from interior and exterior, subject to abidance by the minimum requirements as set forth by the effective rules, and they shall also have the relevant aesthetic aspect, without cracks, faults or defects.</p> <p>*Remark: The contracting authority may also stipulate the window and door sketches, in the tender documents, depending on the establishment's needs.</p>
--	---

3.2.4. Selection criteria

Qualification and selection criteria in addition to common criteria for procurement of energy-efficient double-glazed windows and doors are:

- Carpentry reference standards: Green Line or equivalent certification,
- Management system certification according to EN ISO 14001/EMAS¹⁰ standard or an equivalent standard,
- Quality management system certification for carpentry production, according to ISO 9001 Standard¹¹.

3.2.5. Award criteria

When purchasing energy-efficient double-glazed windows and doors, one of the following criteria can be used: **lowest price** or **the best quality-price ratio**.

If such a criterion of awarding as 'The best quality-price ratio' is applied, the following may be used as assessment factors:

- Reference standard – eco-certification of the product;
- Minimal energy use during transportation and storage - requirement for the economic operator to supply the products by vehicles having the reduced impact on the environment: Euro 6 Standard as a minimum, by electric or hybrid vehicles;
- Packaging with recyclable materials or no hazardous materials in packaging;
- Carpentry reference standard – eco-certification of the product;
- Profile capacity to be recycled;
- Number of sections of a PVC profile.

The above assessment factors are provided merely as an example, while the contracting authority shall choose and use them, relying on the individual terms, conditions and needs.

3.2.6. Contract execution clauses

During the execution of the contract, the contracting authority may impose the following requirements for its execution:

1. Requirements to product packaging:

- The package shall be recyclable;
- There shall be foreseen the possibility to return the package to the economic operator, after the products are consumed;
- No hazardous or toxic materials in packaging;
- Waste management for packing house;

¹⁰ <https://op.europa.eu/en/publication-detail/-/publication/cca83b1c-5b40-4dc5-b186-62fd0b9c620c>

¹¹ <https://www.iso.org/iso-9001-quality-management.html>

- Environmental management system for the packing house.

2. Delivery requirements:

- Delivery shall be realised outside the rush hours;
- Delivery shall be realised by vehicles having the reduced impact on the environment: Euro 6 Standard as a minimum, by electric or hybrid vehicles.

3. Environmental management system.

3.3. Sustainable criteria for personal computers

3.3.1. The field of application

The "personal computers" product group includes the following:

- Personal computers (CPV 30213000-5) or Stationary computers:
 - Desktop computers;
 - Integrated desktop computers;
 - Desktop Thin Clients;
 - Desktop workstations (or Workstations).
- Portable computers (CPV 30213100-6):
 - Notebook computers;
 - Two-in-one notebooks;
 - Mobile Thin Clients;
 - Mobile workstations.

Personal computers have been selected as priority products according to the UNEP SPP methodology for SPP pilot tenders in the Republic of Moldova and the recommendations on sustainability criteria use prepared for these products. This product group is purchased by any public institution.

3.3.2. Environmental Impacts

In order to use sustainability requirements to purchase personal computers, their impact on different aspects that contribute to sustainable development must be determined. These criteria for computers focus on the most significant environmental impacts during their life cycle, which have been divided into four distinct categories:

- Product lifetime extension;
- Energy consumption;
- Hazardous substances;
- End-of-life management.

The impact on the environment generated by personal computers is shown in Table 5.

Table N5. Key environmental impacts of personal computers.

Key environmental impacts during the lifecycle of a product	Ways of solutions
<p>Key environmental areas</p> <ul style="list-style-type: none">• Use of finite resources and critical raw materials to produce IT products.• Air, soil and water pollution, bioaccumulation and effects on aquatic organisms due to raw material extraction and processing, and hazardous substances used in products.• Energy consumption and resulting greenhouse gas emissions from production and use.• Generation of potentially hazardous waste electronic equipment upon final disposal.	<ul style="list-style-type: none">• Extended services and warranty.• Design for durability, upgradeability and reparability.• Extending a product's life at the end of its service life (reusability).• Purchase of energy-efficient models.• Purchase of products with a restricted amount of hazardous constituents and reduced potential for hazardous emissions upon disposal.• Design for dismantling and end-of-life management to maximise the recovery of resources.• Purchase of refurbished/remanufactured equipment.¹²

¹² EU GPP criteria for computers, monitors, tablets and smartphone, p.8, available at: https://ec.europa.eu/environment/gpp/pdf/210309_EU%20GPP%20criteria%20computers.pdf

3.3.3. Technical specifications

Table N 6 below shows the technical specifications used to describe the relevant products.

Table N6. The technical specifications for personal computers.

Products/ Aspect	Technical specifications	Verification
Personal computers	<p>PC (personal computer for the office) central unit, inclusively the keyboard and mouse*:</p> <p>International brand name,</p> <p>Processor:</p> <p>Processor frequency: a minimum of ... GHz,</p> <p>Cache processor: a minimum of ... MB,</p> <p>RAM memory: a minimum of ... GB as installed with the frequency of ... MHz, memory type – ...,</p> <p>Hard Disk: a minimum of ...,</p> <p>Graphic card ...,</p> <p>Optical unit: ...,</p> <p>High Audio Definition,</p> <p>LAN/WLAN network interface: ...,</p> <p>Ports: a minimum of ...,</p> <p>Included peripheral devices for data input: Keyboard + Mouse,</p> <p>Operating system: ...,</p> <p>Warranty: a minimum of 24 (36) months.</p> <p>* The contracting authority shall fill out the technical parameters, relying on their individual needs.</p>	<p>The tenderer must provide a written declaration that the products supplied will be warranted in conformity with the contract specifications and the related service level agreement.</p>
Product lifetime extension	<p>1.Reparability, reusability and upgradeability:</p> <p>1.1. Service agreement associated with the supply of ICT equipment</p> <ul style="list-style-type: none"> • Provision of an extended service agreement, • Continued availability of spare parts. <p>1.2. Supply of ICT equipment</p> <ul style="list-style-type: none"> • Manufacturer's warranty, • Design for reparability, • Functionality for secure data deletion. <p>2. Rechargeable battery life and endurance (applies to portable computers):</p> <ul style="list-style-type: none"> • Rechargeable battery endurance, • Minimum requirements for electrical performance, • Information on battery state of health, • Battery protection software. <p>3. Mobile equipment durability testing (applies to portable computers):</p> <ul style="list-style-type: none"> • Drop testing, • Temperature stress, • Ingress protection level – semi-rugged and rugged devices, <p>4. Interoperability and reusability of components:</p> <ul style="list-style-type: none"> • Standardised port, • Standardised external power supply (for portable computers), 	<p>The tenderer must provide a declaration that the requested spare parts will be available for X years [minimum 2, to be defined] for each model provided. Equipment holding a relevant Ecolabel fulfilling the specified requirements will be deemed to comply.</p> <p>The tenderer must provide:</p> <p>A statement that the applicable parts are replaceable by the end-user and/or a technician.</p> <p>The service/repair manual with instructions on how to replace the parts through a direct link to</p>

	<ul style="list-style-type: none"> • External power supply: detachable cables, • Backward compatibility: adapters. 	the document on the manufacturer's website. Equipment holding a Ecolabel fulfilling the specified requirements will be deemed to comply.
Energy consumption	Minimum energy performance of computers	For each model delivered, the tenderer must provide the valid Energy Label
Hazardous substances	<ul style="list-style-type: none"> • Restriction of chlorinate and brominate substances in plastic parts 	The tenderer must provide the computer's certificate of conformity
End-of-life management	<ul style="list-style-type: none"> • Marking of plastic casings, enclosures and bezels 	

Note: CA will fill in the blanks according to its needs.

3.3.4. Selection criteria

The selection criteria for economic operators in the case of the purchase of personal computers will focus on the following aspects:

- Reference standards for PC energy-efficiency: **Energy Star** or equivalent certification,
- Registration number in the 'List of Producers of Electrical and Electrical Household Waste' kept by the Environmental Agency via the information subsystem, which is integrated into the Automated Information System 'Waste Management'¹³.

3.3.5. Award criteria

When purchasing personal computers, one of the following criteria can be used: **lowest price** or **the best quality-price ratio**.

If such a criterion of awarding as 'The best quality-price ratio' is applied, the following may be used as assessment factors:

- Reference standards for PC energy-efficiency;
- Electrical power consumption (Improvement in energy consumption above the specified threshold for computers);
- Possibility for the economic operator to supply the products by vehicles having the reduced impact on the environment: Euro 6 Standard as a minimum, by electric or hybrid vehicles;
- Restriction of Substances of Very High Concern;
- Avoidance of regrettable substitution;
- Recyclability of plastic casings, enclosures and bezels – separable inserts and fasteners;
- Recyclability of plastic casings, enclosures and bezels – paints and coatings;
- Provision of an extended service agreement,
- Continuous availability of spare parts,
- Producer's warranty,
- Restricted substance controls.

For portable computers:

- Further rechargeable battery endurance;
- Ingress protection level – semi-rugged and rugged devices;
- Mobile equipment durability testing;
- ICT equipment without accessories.

¹³ <https://siamd.gov.md/portal/deee.html>

The above assessment factors are provided merely as an example, while the contracting authority shall choose and use them, relying on the individual terms, conditions and needs.

3.3.6. Contract execution clauses

During the execution of the contract, the contracting authority may impose the following requirements for its execution:

- Service agreement;
- Delivery shall be realised outside the rush hours;
- Delivery shall be realised by vehicles having the reduced impact on the environment: Euro 6 Standard as a minimum, by electric or hybrid vehicles;
- Provision of an extended service agreement,
- Continuous availability of spare parts,
- Producer's warranty.

3.4. Sustainable criteria for motor vehicles

3.4.1. The field of application

The "motor vehicles" product group includes the following:

- Vehicles (CPV 34100000-8);
- Cars (CPV 34110000-1).

Motor vehicles that have been selected as priority products according to the UNEP SPP methodology for the SPP pilot tenders in the Republic of Moldova and the recommendations on sustainability criteria use prepared for these products. And this product group is purchased by any public institution.

3.4.2. Environmental Impacts

In order to use sustainability requirements to purchase motor vehicles, their impact on different aspects that contribute to sustainable development must be determined.

The impact on the environment generated by motor vehicles it is shown in Table 7.

Table N7. Key environmental impacts of motor vehicles

Key environmental impacts during the lifecycle of a product	Ways of solutions
Key environmental areas <ul style="list-style-type: none">• greenhouse gas (GHG) and air pollutant emissions produced by energy consumption during the use phase,• GHG and air pollutant emissions produced along the supply chain of the energy carriers,• environmental impacts produced during the manufacture of batteries for electric vehicles,• noise emissions produced by the vehicle and tyres during the use phase.	<ul style="list-style-type: none">• require criteria on type-approval CO₂ emissions for cars,• require criteria based on air pollutant emissions performance for cars,• require criteria on rolling resistance of tyres,• require criteria on energy efficiency of electric cars,• require criteria on battery warranties,• require criteria on vehicle and tyres noise emissions,• require service providers to have key competences and to apply key environmental management measures and practices,• require service providers to provide adequate and frequent training for their staff,• require criteria on tyres and lubricants for maintenance activities.¹⁴

3.4.3. Technical specifications

Table N 8 below shows the technical specifications used to describe the relevant products.

Table N 8. The technical specifications for motor vehicles

Products/ Aspect	Technical specifications	Verification
Motor vehicles	Body type - Motor cylinder capacity – a minimum/maximum of ..., Fuel – ..., Gearbox – ..., Traction – ..., Pollution level – Euro 6 Standard , Atmospheric pollutant emissions – ...,	The tenderer must provide the vehicle's certificate of conformity. The tenderer must provide the vehicle's technical sheet that includes relevant information.

¹⁴ EU GPP criteria for road transport, p.9, available at:

<https://ec.europa.eu/environment/gpp/pdf/criteria/EU%20GPP%20criteria%20for%20road%20transport.pdf>

	<p>Number of seats – ..., Engine power – a minimum/maximum of ..., Wheels – ..., Braking system – ..., Fuel consumption, according to the manufacturer's information – a minimum/maximum of ..., Tank capacity – a minimum/maximum of ..., Maximum allowed weight – ..., Vehicle dimensions: - Length – a minimum/maximum of ..., - Width – a minimum/maximum of ..., - Total height, together with the roof rails – ..., - Wheelbase – a minimum/maximum of ..., Trunk volume – a minimum/maximum of ..., Spare wheel – ..., Ground clearance – a minimum/maximum of ..., EQUIPMENT (optionally):</p> <ol style="list-style-type: none"> 1. ABS with electronic brake distribution (EBD) and emergency brake assist, 2. Front driver and passenger airbags, 3. Lateral front airbags, 4. ASR + ESP (anti-spin regulation and electronic stability systems), 5. HSA (hill start assistant), 6. Tyre pressure monitoring system, 7. Central locking with remote control, 8. Electric front and rear electric windows, 9. Personal board computers, 10. Stop-Start function, 11. Fog lights, 12. Manually controlled air conditioning unit, 13. Roof rails, 14. Tyre pressure monitoring system, 15. External temperature display, 16. External rear-view windows with electric and defrosting control, 17. Heated front seats, 18. Free-hands key, 19. Navigation device with a minimum 7-inch screen, 20. Reverse parking-assist system, 21. Video camera for the reverse parking-assist system, 22. Anti-theft system. <p>IN ADDITION THERETO:</p> <ul style="list-style-type: none"> - Winter tyres, - Rims for winter tyres, - Rubber salon mats, - Front/rear mud guards, - Medical kit, - Fire extinguisher, - Reflective vest, - Warning triangle, 	<p>The tenderers must present a declaration with the warranty terms.</p>
--	---	--

	<ul style="list-style-type: none"> - Towing hook, - Warranty – a minimum/maximum of ..., - Year of manufacturing – ... <p>Sustainability criteria:</p> <p>23. CO₂ emissions and energy efficiency,</p> <p>24. Atmospheric pollutants emissions,</p> <p>25. Energy consumption displays. The vehicles must be equipped with a mechanism showing the fuel consumption level to the vehicle driver.</p> <p>26. Information about traffic and route optimisation. The vehicles must be equipped with the systems informing about the traffic and optimising the route, thus providing the vehicle driver with the services for information supply before going on the route, in order to help the driver to avoid the traffic and to take decisions on route optimisation. This system must be an integrated system, i.e. it must be an integral communication module, which is composed of a modem and a subscriber identification module (SIM), which is permanently integrated into the motor vehicle.</p> <p>27. Minimum battery warranty (for hybrid or electrical motor vehicles).</p>	
--	--	--

Note: CA will fill in the blanks according to its needs.

3.4.4. Selection criteria

The selection criteria for economic operators in the case of the purchase of motor vehicles will focus on the following aspects:

- Reference standards: EURO 6 Standard,
- The bidder must provide the certificate of conformity for the vehicle.

3.4.5. Award criteria

When purchasing motor vehicles, one of the following criteria can be used: **lowest price** or **the best quality-price ratio**.

If such a criterion of awarding as 'The best quality-price ratio' is applied, the following may be used as assessment factors:

- Lower CO₂ emissions,
- Energy efficiency,
- Improved air pollutant emissions performance,
- Fuel consumption,
- Zero tailpipe emission capability,
- Speed limiter. The points shall be given to the vehicles, which are equipped with a speed limiting device, i.e. a board device that tacitly limits the vehicle speed up to a certain maximum speed,
- Extended warranty.

The above assessment factors are provided merely as an example, while the contracting authority shall choose and use them, relying on the individual terms, conditions and needs.

3.4.6. Contract execution clauses

During the execution of the contract, the contracting authority may impose the following requirements for its execution:

- Extended warranty.

3.5. Sustainable procurement criteria for printer paper

3.5.1. The field of application

The "printer paper" product group includes the following:

- Paper for photocopiers and xerography (CPV 30197642-8);
- Paper for photocopiers (CPV 30197643-5).

The recommendations discussed in this chapter apply to the printer paper that have been selected as priority products according to the UNEP SPP methodology. And this product group is purchased by any public institution.

3.5.2. Environmental Impacts

In order to use sustainability requirements to purchase printer paper, their impact on different aspects that contribute to sustainable development must be determined.

The impact on the environment generated by printer paper it is shown in Table 9.

Table N 9 Key environmental impacts of printer paper

Key environmental impacts during the lifecycle of a product	Ways of solutions
Key environmental areas <ul style="list-style-type: none">• Forest destruction and potential loss of biodiversity,• Emissions to air and water during pulp and paper production,• Energy and water consumption during production,• Chemical consumption during production,• Waste generation during production such as rejects and sludge.	<ul style="list-style-type: none">• Procurement of paper based on post-consumer recovered paper fibres (recycled paper) or paper based on legally and/or sustainably harvested virgin fibre,• Procurement of paper produced through process characterised by low energy consumption and emissions,• Avoidance of certain substances in paper production and bleaching.¹⁵

3.5.3. Technical specifications

Table N 10 below shows the technical specifications used to describe the relevant products.

Table N 10. The technical specifications for printer paper

Products/ Aspect	Technical specifications	Verification
Printer paper	Format – A4, Class ‘C’ as a minimum, Packaging: 500 sheets/top, packed in boxes having 5 packs each, Colour – white, Weight – 80+/-0.6 g/square metre, Thickness – a minimum of 104 microns, White hues (at least 147%), No electrostatic powder, Printing capacity – 91%, Tensile strength – a maximum of 3.2 kN/m, Ash – a maximum of 10%, Humidity – a maximum of 4.5% of the weight,	The tenderer must provide supporting documentation that the products meet the specified criteria.

¹⁵ EU GPP criteria for Copying and graphic paper, p.2, available at: <https://circabc.europa.eu/ui/group/44278090-3fae-4515-bcc2-44fd57c1d0d1/library/9aac4fa8-155e-4faa-9c9c-597fe2be1339/details>

	Whitening without chlorine use (Chlorine Free), Made from 100% recovered paper fibres or based on virgin fibre stemming from legally and/or sustainably harvested sources (also potentially containing a percentage of recovered fibres).	
--	--	--

3.5.4. Selection criteria

The selection criteria for economic operators in the case of the purchase of printer paper will focus on the following aspects:

- Paper reference standards: FSC (Forest Stewardship Council®), Blue Angel label, European Ecolabel, Nordic Swan label, or any other equivalent standard.

3.5.5. Award criteria

When purchasing printer paper, one of the following criteria can be used: **lowest price** or **the best quality-price ratio**.

If such a criterion of awarding as 'The best quality-price ratio' is applied, the following may be used as assessment factors:

- Reference standard – eco-certification of the product,
- Possibility for the economic operator to supply the products by vehicles having the reduced impact on the environment: Euro 6 Standard as a minimum, by electric or hybrid vehicles,
- Paper class (A, B or C).

The above assessment factors are provided merely as an example, while the contracting authority shall choose and use them, relying on the individual terms, conditions and needs.

3.5.6. Contract execution clauses

During the execution of the contract, the contracting authority may impose the following requirements for its execution:

- Delivery shall be realised outside the rush hours;
- Delivery shall be realised by vehicles having the reduced impact on the environment: Euro 6 Standard as a minimum, by electric or hybrid vehicles.

4. Conclusion

Sustainable development in the context of achieving SDGs is a key part of state policy, along with the shift into green economy patterns. In this regard, improvement of legislation and elaboration of the supportive tools and procedures, including the development of appropriate action plans and guidelines, are the best way to achieve the set objectives of green economy. Introduction of SPP policy and practices are among successful examples of green economy tools. The Republic of Moldova took the path towards shifting to Green economy, including introducing such tools, as SPP.

In the area of public procurement, contracting authorities and economic operators are key actors in the process of achieving the established objectives on greening the processes, in particular in the field of SPP implementation. In order to start practicing SPP public tenders the list of 5 products was prioritised and the present technical specifications are developed.

The priority products for which the SPP criteria are presented in this document (namely, fresh vegetables and fruits, energy-efficient PVC windows and doors, motor vehicles, personal computers, printing paper) represent an important starting point in the implementation of SPP in the Republic of Moldova. The SPP criteria for these product groups presented are largely based on the EU GPP criteria¹⁶.

The technical specifications developed for the 5 groups of products, prioritized according to the UNEP methodology for SPP pilot tenders in the Republic of Moldova, are to be presented and promoted within the training workshops for all Moldova actors involved in public procurement procedures:

- Contracting authorities;
- Economic operators;
- The staff of the Public Procurement Agency;
- The staff of the National Agency for the Resolution of Appeals;
- Representatives of control bodies such as the Court of Accounts of the Republic of Moldova, the Financial Inspectorate, etc.

Later, it is planned, as a result of these training workshops, also based on the discussions with the actors involved in the public procurement process, if necessary, adjustments will be made to the SPP criteria and technical specifications set out in this document. The technical specifications and sustainability criteria will be recommended to the contracting authorities for application in the procurement procedures public for the 5 groups of prioritized products. These criteria will be used for SPP pilot tenders.

The SPP technical specifications will be published on the official web page of the PPA, to be available to the CAs, and, if necessary, they will be modified/updated/supplemented to meet modern challenges, also taking into account the needs of the CAs.

¹⁶ https://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm