#### WASTE PREVENTION PLAN

#### 1. INTRODUCTION

The Waste Prevention Plan (hereinafter: Plan) has been prepared in accordance with Article 9 of the Law on Waste Management (*Official Gazette of the Republic of Serbia*, Nos. 36/09, 88/10, 14/16, 95/18 - as amended and 35/23), for the purpose of implementation of the Directive 2008/98/EC of the European Parliament and Council of 19 November 2008 on waste and repealing certain Directives (*Official Gazette of the Republic of Serbia*, No. 2008 L 312, p. 3) and Directive (EU) 2018/851 of 30 May 2018 amending Directive 2008/98/EC on waste (hereinafter: Waste Framework Directive).

The Government shall adopt prevention programmes for six-year periods, and assess and, if appropriate, revise them each three years.

In accordance with the Law on Waste Management, the waste prevention plan defines the general prevention objectives and measures, as well as assessments of prevention measures or other appropriate measures which may have an impact on:

- 1) the general conditions of waste prevention;
- 2) the design, production and distribution of products;
- 3) the phase of consumption and use of the product.

The Law on Waste Management establishes the principle of the hierarchy of waste management as the general principle of waste management in the Republic of Serbia. According to this hierarchy, waste prevention is the highest priority, followed by preparation for reuse, recycling and other forms of recovery, and finally, disposal, as the least desirable option.

The development of the Plan is based on the following principles:

- 1) precaution principle;
- 2) principle that environmental damage is primarily remedied at the source;
- 3) sustainability principle;
- 4) "polluter pays" principle;
- 5) producer responsibility principle (this principle makes the producer responsible for the entire lifecycle of a product);
- 6) lifecycle principle (from the extraction of raw materials, through production and distribution, to end consumption);
- 7) eco-efficiency principle (generation of multiple goods and serviced while using fewer resources and generating less waste and pollution);
  - 8) equal opportunities principle.

At the same time, the Plan is a comprehensive framework for monitoring the progress of the Republic of Serbia in the attainment of the objectives set concerning waste prevention, which ensures progress in European integration, and contributes to the attainment of the Sustainable Development Goals of the 2030 Agenda.

Activities in this field are oriented towards overcoming the gender gap, i.e. improvement of gender equality and socio-economic position of vulnerable social groups (by increasing chances and opportunities for sustainable employment and self-employment, strengthening of female entrepreneurship, participation in innovation activities). In view of the fact that implementation of the European Union (hereinafter: EU) environmental standards is crucial for the improvement of the quality of individual life, efforts will be made to contribute to the implementation of the policy of equal opportunities through the proposed measures and activities. Thus, the impact of measures will benefit all citizens of the Republic of Serbia.

The purpose of adoption of the Plan is to, after conducting an analysis of the current situation concerning waste prevention in the Republic of Serbia and the description of the measures provided in the Waste Framework Directive, define the objectives and priority areas for waste prevention, define the measures for its implementation of the period 2025-2030, as well as to establish quantitative criteria or indicators for an assessment of the Plan. The Plan, as a document, has been designed for Serbia as a whole, in order to encourage all stakeholders to cooperate for achieving the potentials for waste prevention at the local and regional level.

Expressions used in this Plan have the meanings identical to the ones defined in the Law on Waste Management, the Law on Packaging and Packaging Waste (*Official Gazette of the Republic of Serbia*, Nos. 36/09 and 95/18 – as amended) and in other laws and regulations which govern waste prevention and waste management.

In addition, all the expressions used in this Plan that are of masculine gender simultaneously and equally refer to the feminine gender.

### 2. GENERAL STATISTICS ON WASTE GENERATION

The Republic of Serbia has the area size of 88,361 km². The Republic of Serbia has two autonomous provinces, AP Vojvodina in the north (21,506 km²) and AP Kosovo and Metohija in the south (10,887 km²). AP Kosovo and Metohija is under temporary international administration in accordance with the United Nations Security Council Resolution 1244, and is not covered by this Plan.

The Republic of Serbia has 6,647,003 inhabitants (the Statistical Office of the Republic of Serbia - the data are from the 2022 census, excluding Kosovo and Metohija). According to the 2022 census, 62% of the population live in urban areas.

The cities with the largest population are Belgrade (1,681,405), Novi Sad (368,967), Niš (249,501) and Kragujevac (171,186). A little more than half of total population are women (51.4%), while men make up 48.6%. The average age of the population is 43.8 years, where women are on average three years older than men.

The Gross Domestic Product (in 2022) is 60,368 million EUR (8,917 EUR per capita)<sup>1</sup>.

There is 4,073,703 ha of available land for agricultural purposes in the Republic of Serbia, of which 3,257,100 ha is used agricultural land.

Industrial production is oriented towards mining, processing industry, chemical and metallurgic industry. Important industrial sectors include production of cement and other construction material, fertilizers, electrical equipment, wood processing industry, paper industry, leather and fur products, rubber, textile and food products. According to the Report on Waste Management in the Republic of Serbia 2021 – 2023, drawn up by the Serbian Environmental Protection Agency<sup>2</sup> (hereinafter: Agency), the amount of generated waste (without mining waste) was approximately 11,750,995 tonnes in 2021, 11,460,971 tonnes in 2022, and 10,888,212 tonnes in 2023.

For the purpose of assessing the current situation in terms of waste generation in the Republic of Serbia, an analysis of available data on waste generation and waste prevention and available indicators has been conducted. Available data are a key baseline for examining the current situation of waste prevention in the Republic of Serbia. It should be noted that there is a difference between these data and those of the Statistical Office of the Republic of Serbia, as those institutions collect data in two different ways. In accordance with the Law on Waste Management, the Agency is in charge of collection of all data on waste management other than mining waste, which is under the purview of the Ministry of Mining and Energy.

The Statistical Office of the Republic of Serbia (hereinafter: SORS) reports and submits the data on the total generated waste to Eurostat, and these data include mineral mining waste.

Information on waste generation is used for an analysis of the current situation and for identifying priority waste streams with the largest potential for prevention and largest adverse impact on the environment and/or human health in comparison with other waste streams, i.e. largest generated quantities of that waste.

In 2022, within the framework of the ENVAP 4 project, the report "Analysis of the situation in terms of separate waste collection at the level of local self-government units" was compiled. The goal of that analysis was to answer the question where the main problems lie and what challenges local self-government units and public utility companies face in introducing a system of waste selection and separate collection, as well as the quantity of waste and extent of recycling, for the purposes of regular reporting to the Agency.

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<sup>&</sup>lt;sup>1</sup> https://publikacije.stat.gov.rs/G2023/pdf/G202317016.pdf

<sup>&</sup>lt;sup>2</sup> Report on Waste Management in the Republic of Serbia 2011 – 2023, https://sepa.gov.rs/wp-content/uploads/2024/12/Otpad2011-2023.pdf

In the Republic of Serbia, the largest portion of municipal waste is landfilled, which, according to the hierarchy of waste treatment, is the last solution, after waste prevention, reuse of waste, recycling and other forms of waste recovery.

The Agency's assessment indicates that the Republic of Serbia annually recycles around 15% (17.7% in 2022) of generated municipal waste, while a maximum of 3% of local self-government units are involved in recycling of that quantity and other quantities of recycled waste originating from the informal sector. The level of recycling of municipal waste is directly linked with activities and the organisation of the waste management system of a local self-government unit, undertaken by public utility companies. The low recycling percentage is a result of the fact that a large majority of local self-government units has not introduced a system of primary selection of waste. There are multiple reasons for that, from the lack of technical, personnel and financial capacities, to the poor organisation of data and lack of strategic documents and mechanisms for implementation of legal obligations in that field.

According to the SORS Report<sup>3</sup>, in 2023, the sectors of agriculture, forestry and fisheries, mining, production, gas and steam supply, water supply and wastewater management, construction and services in the Republic of Serbia generated 180.1 million tonnes of waste, which was an increase from 2022 (174.7 million tonnes). Of that quantity of generated waste, 78% was non-hazardous waste, and 22% was hazardous waste.

According to the Report on Waste Management in 2023, compiled by the Agency, the total quantity of waste generated in 2023 was 10.9 million tonnes, of which 8.3 million tonnes was industrial and commercial waste<sup>4</sup>. The total quantity of hazardous waste generated in 2023 was 90,259 tonnes. In 2022, it was 80,604. This number indicates that the quantity of hazardous waste has been increasing. (see Table 1).

The generated quantities reported to the Agency in 2023 include 7.3 million tonnes of industrial waste (Groups 02 to 14 from the Waste Catalogue).

According to the SORS statistics, the total quantity of generated waste in the construction sector in 2022 was 660,626 tonnes (Group 17 in the Waste Catalogue, uncontaminated land and mineral waste originating from construction and demolition). Generated quantities of waste reported to the Agency include just 347,541 tonnes of construction and demolition waste (Group 17 in the Waste Catalogue) for the reference year 2022.

According to the Agency report, approximately 20.2 thousand tonnes of electrical and electronic equipment and 2.2 million of pieces of equipment were marketed and placed on the market of the Republic of Serbia in 2023. The estimated quantity of collected waste electrical and electronic equipment in 2023 was 35,373 tonnes, which was approximately 5.12 kg per capita per year. Collection of waste electrical and electronic household equipment has not been fully introduced yet. Citizens dispose of

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<sup>&</sup>lt;sup>3</sup> https://publikacije.stat.gov.rs/G2024/Html/G20241196.html

<sup>&</sup>lt;sup>4</sup>The quantity of waste excluding household waste

waste electrical and electronic equipment on the operator's site, or in some cases, informal collectors arrive to the address to collect waste electrical and electronic equipment.

Table 1 Information on waste generation in the Republic of Serbia in 2022

Waste type	Total (tonnes per year)	Per capita (tonnes per year)	Per GDP unit (tonnes/milli ons of EUR)	$\begin{array}{c} \text{Drop} \downarrow \ / \\ \text{Growth} \ \uparrow \\ / \text{Stable} \ \leftrightarrow \\ \text{(in} \\ \text{comparison} \\ \text{with 2021)} \end{array}$	Progress*
Total quantity of generated waste	10,888,212	1.6	0.14	$\leftrightarrow$	<b>(2)</b>
Total quantity of generated waste	90,259	0.013	0.0013	1	☺
Industrial waste	7,325,971	1.1	0.12	<b>↓</b>	⊗
Construction and demolition waste	660,626	0.1	0.01	1	☺
Waste electrical and electronic equipment	34,532	0.005	n/a	1	⊗
Total quantity of packaging placed on the market	401,229	0.06	0.0066	1	8
Total quantity of generated municipal waste	3,180,000	0.48	0.053	1	8
Food waste	1,450,000	0.22	0.024	1	⊗

<sup>\* © -</sup> positive movement of indicators, the situation is improving;

According to the annual reports of the Agency, 400,000 tonnes of packaging were placed on the market of the Republic of Serbia over the last few years (403,011 tonnes in 2023). The average structure of packaging material was 18.3% glass, 24% plastic, 31.7% paper and cardboard, 4.9% metal, 20.6% wood, and 0.15% other. It may be concluded that all the packaging placed on the market during a certain year becomes waste during the same year. The estimated packaging waste stream from households is approximately 33% of the total packaging waste stream, while the percentage of the commercial and industrial waste stream is estimated to be 67%. In the Republic of Serbia, collection of packaging waste is oriented towards packaging waste from industrial and commercial streams.

In 2021, 247,634 tonnes of industrial and commercial packaging were reported by collective operators, and the quantity of separately collected municipal packaging waste

<sup>😊 -</sup> in terms of environment, the situation is neither better nor worse;

<sup>🗇 -</sup> negative movements of indicators, the situation is deteriorating in terms of environment

was 45,000 tonnes<sup>5</sup>. The largest part of household packaging waste is included into mixed municipal waste.

In the Republic of Serbia, in 2023, 3.07 million of tonnes of municipal waste were generated, which was equivalent to the average annual quantity of 58,4 kg per capita, while the EU average in 2022 was 478<sup>6</sup> kg per capita. Collection of municipal waste currently covers approximately 87% of the population.

At the moment, there are no data on the quantities of generated food waste. The average is 100 kg food waste per capita per year, which results in the assumed potential of 664,700 in 2022 (previous assessments were 841,000 tonnes). Recently estimated quantity of food waste is 1,450,000 tonnes. The Republic of Serbia is the largest food exporter among the Parties of the Free Trade Agreement in Central Europe and the only net exporter. The treatment of food waste is still underdeveloped. It is estimated that 30% of food produced worldwide is lost or discarded. Just in Belgrade, there are 1,147 registered restaurants and bars, which produce commercial waste and biodegradable food waste. In addition, there are 1,639 snack bars and café bars. In Belgrade, 158,000 tonnes of food waste are produced per year (26.3%), which is 8% of total municipal waste in Serbia. The total impact of the city of Belgrade on the food sector is comprehensive and expansive and affects national and international forms of supply, energy and water consumption and waste management.<sup>7</sup>

<sup>&</sup>lt;sup>5</sup> Serbian Environmental Protection Agency Report on packaging and packaging waste in 2021 http://www.sepa.gov.rs/index.php?menu=5000&id=1304&akcija=showDocuments&godina=2021

<sup>&</sup>lt;sup>6</sup> https://ec.europa.eu/eurostat/web/circular-economy/monitoring-framework

<sup>&</sup>lt;sup>7</sup> Guidebook for proper food waste management, NALED, 2020

# 3. ASSESSMENT OF THE CURRENT SITUATION AND BENEFITS FROM THE APPLICATION OF WASTE PREVENTION MEASURES

Waste prevention is an option which is the highest priority in the hierarchy of waste management in accordance with the environmental legislation and national strategic documents, and this document is the first waste prevention plan in the Republic of Serbia.

In addition to the Law on Waste Management, other regulations which introduce waste generation as a key priority are the Law on Environmental Protection (*Official Gazette of the Republic of Serbia*, Nos. 135/04, 36/09 – as amended, 72/09 – as amended, 43/11 - CC, 14/16, 76/18, 95/18 – as amended and 94/24 – as amended), the Law on Integrated Pollution Prevention and Control (*Official Gazette of the Republic of Serbia*, Nos. 135/04, 25/15 and 109/21) and the Law on Packaging and Packaging Waste.

Annex 4 of the Waste Framework Directive contains examples of measures whose benefits are estimated within the framework of the Plan.

These measures are grouped as measures which may be used to affect the following:

- 1) framework conditions relating to waste generation,
- 2) the phases of design, production and distribution of products;
- 3) the phase of consumption and use of the product.

The general description of said waste prevention measures and assessment of existing measures in the Republic of Serbia are provided in the text.

# 3.1 Measures which may be used to affect the framework conditions of waste prevention

Examples of measures which may be used to affect the framework conditions of waste prevention are:

- 1) implementation of planning measures or other economic instruments for promotion of efficient use of resources;
- 2) encouraging research and development concerning the acquisition of cleaner products and technologies with less waste, as well as expansion and use of the obtained results of such research and development;
- 3) development of effective and meaningful environmental indicators linked to waste generation, with a view to contributing to waste prevention on all levels, from comparing products at the level of community, through actions of local authorities, to national measures.

## 3.1.1. Implementation of planning measures or economic instruments

Taxes and other charges may be used as an incentive for change of conduct for the purpose of waste prevention. For example, the Pay-as-you-throw (PAYT) system, meaningfully applied, may have a significant impact both on waste prevention and on the participation of citizens in programmes of separate waste collection. Subsidies or facilities which increase the inflow of eco-efficient products on the market are another set of important measures which should be taken into consideration.

In the Republic of Serbia, the allocation of subsidies for waste prevention projects, which used to be within the purview of the Environmental Protection Fund (2007-2012) and state budget (2012), has not been regulated yet. If objectives in programmes and measures for separate collection of municipal waste are not achieved within the prescribed timetable, the Pay-as-you-throw system for disposal of municipal waste may be introduced.

Economic instruments encouraging efficient use of resources have not been implemented in the Republic of Serbia. On the other hand, certain planning measures were introduced through the Waste Management Programme in the Republic of Serbia 2022-2031 (Official Gazette of the Republic of Serbia, No. 12/22 - hereinafter: Programme) and the Circular Economy Development Programme in the Republic of Serbia 2022–2024 (Official Gazette of the Republic of Serbia, No. 137/22).

Within the negotiations for EU accession, the Republic of Serbia, through Chapter 27, initiated the process of establishing the waste management system and its adjustment to the EU objectives and the acquis. The Programme was adopted in January 2022. The Programme was prepared in accordance with the Law on the Planning System of the Republic of Serbia (Official Gazette of the Republic of Serbia, No. 30/18) and its by-laws.

This document was preceded by the Waste Management Strategy for the period 2010-2019 (Official Gazette of the Republic of Serbia, No. 29/10), which laid down the conditions for introduction and development of an integrated waste management system in the Republic of Serbia. In the previous period, progress was achieved in the alignment of the legislation concerning waste with the EU legislation, in institutional strengthening, reaching regional agreements for introduction of joint waste management, as well as construction of a number of sanitary landfills. The general objectives laid down in the Strategy were not fully achieved, primarily with respect to organised waste collection, level of primary separation and recycling, construction of infrastructure and phasing-out of disposal on unsanitary and non-compliant landfills, application of economic instruments and establishment of a system of financing of sustainable waste management. Since planned objectives from the previous document were not fully achieved, and since new EU objectives have been laid down in the meantime in the field of waste management within the framework of "green transition", for a transition to circular economy in the EU, it was necessary to also establish new objectives in the field of waste management in the Republic of Serbia. Accordingly, the Ministry for Environmental Protection (hereinafter: Ministry) coordinated the development of the Programme for the purpose of achieving continuity in the implementation of the waste management policy and its alignment with EU regulations and standards.

The general objective of the Programme is development of a sustainable waste management system for the purpose of preservation of resources and human health, and reduction of adverse impacts on the environment and degradation of the surroundings. This includes, inter alia, waste management for the purpose of waste prevention,

according to the principles of circular economy. The Programme establishes strategic objectives for an improvement of the waste management system and the basic principles that all waste management actors must observe so that these objectives would be achieved in the Republic of Serbia in the period from 2022 to 2031. In addition to the reduction of harmful impact on the environment and climate chance, implementation of the Programme should enable the fulfilment of preconditions for the use of waste in circular economy, and the objectives and measures for its development are established in a special programme.

The objective of the Industrial Policy Strategy of the Republic of Serbia from 2021 to 2030 (Official Gazette of the Republic of Serbia, No. 35/20) is to improve the competitiveness of the Serbian industry. The Strategy states that, due to the application of the linear business models in the Republic of Serbia, there are significant losses in flows of raw materials and products, resulting in an uneconomic use of resources. One of the specific objectives (Objective 5) concerns the transformation of the industry from the linear model to the circular one. Sectors with the largest potential for application of the circular economy concept in the Republic of Serbia have been identified as the processing industry (in particular food industry), construction industry and primary agriculture.

The Circular Economy Development Programme in the Republic of Serbia for the period 2022-2024 was adopted in December 2022. Circular economy has been recognised as an important strategic concept of green transition of the Republic of Serbia, which has been one of the top priorities of the development of our society over the last few years. The Circular Economy Development Programme in the Republic of Serbia for the period 2022-2024 contains a three-year action plan which defines general and specific objectives. The general objective of this document is to create a stimulating environment for the development of circular economy, with a view to supporting the green transition in the Republic of Serbia. To achieve the general objective, five specific objectives are provided for, with measures and activities which will be realized in the period from 2022 to 2024. One of the priorities is providing support to companies with a view to improving the efficiency of production and waste disposal from supply chains, retaining parts and materials in a closed circuit through processing and recycling, applying new technologies with advanced and renewable materials, transition to the use of sustainable sources of energy and materials, extension of the lifecycle of products by designing and servicing, and virtual delivery of goods and services. It is also necessary to support local selfgovernments in drawing up local roadmaps for circular economy, which will contribute to the creation of sustainable communities. Certain stakeholders (media, schools, universities consumers) need to be educated, and cooperation needs to be strengthened between the business sector and the academic sector in order to encourage innovation contributing to circular economy, as well as application of green public procurement and voluntary environmental documents. The procedure of transition to green economy requires a systemic approach, use of research potential, innovation and digitalisation, and connecting of all stakeholders and their long-term cooperation. A full transition to circular economy exceeds the three-year duration of this programme, and thus this document initiates the process and lays the groundwork for further development and application of this concept.

The Circular Economy Development Programme in the Republic of Serbia for the period 2025–2030 is in preparation.

## 3.1.2. Promotion of research and development

Research and development in the field of cleaner products and technologies, and products and technologies which generate less waste, followed by expansion and use of obtained results, are important factors for the success of waste prevention strategies. Research and development on resource efficiency and sustainable management of materials constitute long-term support for waste prevention. Research of the conduct of consumers and social-economic demographics, which affect waste prevention, is another important field. Granting subsidies for financing research is thus an important waste prevention measure to be taken into account.

The current GEF (Global Environment Facility) project Reducing Community Carbon Footprint by a Circular Economy Approach in the Republic of Serbia<sup>8</sup> was launched in 2022, and will be completed in 2027. The general objective of this project is to provide support for green transition in the Republic of Serbia, by encouraging development and support to the implementation of circular ideas, business models and products of public and private enterprises, in order to reduce the carbon footprint of local communities in the Republic of Serbia. The project is implemented by the Ministry and the United Nations Development Programme. In 2022, 41 innovative ideas for circular vouchers were reported. Of that number, 12 academic organisations were rewarded for their innovative ideas with circular vouchers in the value of 10,000 USD. Of 25 companies which participated in the accelerator, ten were rewarded with prizes in the total amount of 783,000 USD. A new call in 2023 was in May, and at the moment, 26 companies are undergoing the procedure of acceleration.

#### 3.1.3 Development of indicators

Effective and comprehensive indicators serve as means for measuring the pressure of the generated waste on the environment, and for measuring progress in terms of the public policy objectives, i.e. assessment of progress in reduction of waste generation. The waste prevention indicator should show whether certain activities are improving in certain time period, in terms of materials and the waste intensity during its lifecycle. The mass of generated waste or waste sent to the landfill by person or household per year, as well las the GDP, are usually the baseline for analysis. It should be noted that annual changes in waste generation may be consequences of a large number of factors, including changes in the number of inhabitants and the GDP, and thus such reduction may not be automatically attributed to waste prevention actions.

In the Republic of Serbia, indicators for measuring progress in waste prevention have not been officially adopted. Nevertheless, statistical data on waste generation are available (see Chapter 2).

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<sup>&</sup>lt;sup>8</sup> https://www.undp.org/serbia/projects/circular-communities-serbia

The Agency is, inter alia, responsible for establishing and maintaining the national environment information system (environmental monitoring including waste management registers). The Agency assesses electronic data on waste generation and its management and makes them available. Data on waste streams and secondary raw materials, achieved results in terms of performance indicators pursuant to the Law on Waste Management are submitted by operators and other actors, and controlled by the Agency.

Pursuant to the Law on Waste Management, legal persons which collect, transport, store and treat and dispose of non-hazardous and hazardous waste, as well as special waste streams (used batteries and accumulators, waste oils, end-of-life vehicles, waste tyres, waste electrical and electronic equipment, waste fluorescent pipes with mercury, medicinal and pharmaceutical waste, construction and demolition waste, sludge from municipal wastewater treatment plants, waste resulting from the production of titanium dioxide and waste polychlorinated biphenyls) must own a license for waste management activities, establish and maintain records on special waste streams, as well as collected, stored or treated quantities, and are also obliged to submit these data to the Agency. Every person generating waste, as well as every owner of waste, other than households, is obliged to create and maintain daily records and to submit a regular annual report to the Agency. Local self-government units undertake to establish and maintain records on collected municipal waste, as well as a list of non-compliant landfills in their territory, and to submit these data to the Agency. For products which become special waste streams after their use, a reporting entity is obliged to compile an annual report and to maintain daily records on the quantities and type of produced and imported products, and to submit them to the Agency.

Other sources of information (e.g. information from survey, information from scientific institutions, etc.) may be used, inter alia, to monitor waste prevention in the Republic of Serbia.

## 3.2. Measures which may impact the phases of design, production and distribution

Examples of measures which may impact the phases of design, production and distribution may be:

- 1) promotion of Ecodesign;
- 2) information on waste prevention techniques;
- 3) organising trainings for competent authorities with a view to introducing waste prevention into licenses (e.g. for IPPC plants);
  - 4) waste prevention in plants;
  - 5) use of awareness raising campaigns;
- 6) provision of financial support, as well as support in decision-making and other support to firms;
- 7) support to firms to use voluntary agreements, consumer/production panels or sectoral negotiations in order to introduce own waste prevention programmes;
  - 8) promotion of the environmental management system.

### 3.2.1. Promotion of Ecodesign

Ecodesign is a systematic integration of environmental aspects into the product design for the purpose of improvement of environmental friendliness of a product throughout its lifecycle. Promotion of Ecodesign is an important waste prevention measure, since most of the environmental impact of a product was already defined during its designing. In the designing phase, decisions are made on which material will be used to manufacture that product, and in which quantities or volume. That phase already determines the durability of the product and the replaceability of its parts, and thus also the repairability of the product. In this phase, it is determined if the product will contain substances which are an issue of concern, which may prevent the reuse and recycling of such products in one of the subsequent phases.

Ecodesign should be particularly oriented to products containing critical raw materials, i.e. raw materials of economic and strategic importance both for the Republic of Serba and the European Union. In view of their use in environmental technologies, electronics (for wide use), in health care, automotive industry, renewable energy technologies, steel production, defence, space exploration and aviation, these raw materials are not just "of crucial importance" for important industrial sectors and future application, but also for sustainable functioning of the economy (e.g. many renewable energy technologies rely on critical raw materials). The supply of such raw materials is linked to the instability of prices in world markets, as well as major dangers to the environment. In order to respond to that challenge, the European Union has published a proposed draft Regulation at the EU level which establishes a framework for ensuring secure and sustainable supply of critical raw materials in 2023, which contains the fifth list of critical raw materials in Annex II is subject to regular revisions.

Ecodesign may enable sustainable production business models in order to improve circularity, energy performances and other sustainability aspects, and, inter alia, prolonged durability of products, their reusability and repairability. These types of business models are suitable for capital intensive companies, such as manufacturers of industrial equipment, and for companies which do business with consumers in markets where new products bring few additional benefits compared to the previous versions.

The Ecodesign Directive 2009/125/EC introduces requirements for the ecological design of products with respect to energy. On 13 June 2024, Regulation (EU) 2024/1781 of the European Parliament and of the Council was adopted, establishing a framework for the setting of Ecodesign requirements for sustainable products, amending Directive (EU) 2020/1828 and Regulation (EU) 2023/1542 and repealing Directive 2009/125/EC, and it was published in the Official Journal of the European Union on 28 June 2024. It established the framework for adoption of requirements for Ecodesign concerning certain groups of products, thus significantly improving its circularity, energy performances and other environmental sustainability aspects. This Regulation enabled the adoption of performance requirements and information requirements for almost all categories of physical goods, including, inter alia, information on durability and repairability of products, recycled content and resource efficiency and energy efficiency.

In the Republic of Serbia, Ecodesign is promoted through legal regulations for reduction of quantities of hazardous substances in products, e.g. in packaging, electrical and electronic equipment, vehicles, batteries and accumulators. For example, the Law on Packaging and Packaging Waste stipulates that waste prevention is the highest priority, and introduces essential requirements for manufacture and composition of packaging. Pursuant to this Law, and relating to waste prevention, the following by-laws have been adopted:

- 1) Rulebook on limit values of the total concentrations levels of lead, cadmium, mercury and hexavalent chromium in packaging or its components, exceptions from application and the deadline for application of the limit value (*Official Gazette of the Republic of Serbia*, No. 70/09);
- 2) Rulebook on the criteria for defining what might be packaging, with examples for application of the criteria and lists of Serbian standards concerning essential requirements which must be met by the packaging to be placed on the market (*Official Gazette of the Republic of Serbia*, No. 70/09).

Similarly, the Rulebook on the List of electrical and electronic products, measures for restricting or prohibiting the use of electrical and electronic equipment containing hazardous substances, manner and procedure for management of waste originating from electrical and electronic products (*Official Gazette of the Republic of Serbia*, No. 99/10) prescribes limitations and prohibitions for electrical and electronic devices placed on the market of the Republic of Serbia since 1 July 2011 which contain harmful metals.

The market inspection sector of the Ministry of Internal and Foreign Trade is authorised to check products which are placed on the market of the Republic of Serbia, including requirements concerning food. Nevertheless, there is no available information on the compliance of packaging producer as well as electrical and electronic equipment with the prescribed requirements.

When promoting Ecodesign and the use of Ecolabel, special attention needs to be paid to the Directive 2023/0085 on substantiation and communication of explicit environmental claims (Green Claims Directive), which is yet to come into force.

Unclear environmental labels of products, and unclear producer certificates, will be limited. A product will be adequately environmentally labelled only if it has been proven that its adverse environmental impact is low compared to other similar products that are available at the market, taking into consideration the entire lifecycle of the product.

It will be insisted that a third party check it, so that statements on environmental protection would be credible. In some cases, it will be insisted on the validation of verified allegations and statements.

#### 3.2.2. Providing information on waste prevention techniques

Integrated permits are an essential measure for promotion of the application of cleaner technologies in large plants. In accordance with the requirements provided for in the Law on Integrated Pollution Prevention and Control, issuance of integrated permits

concerns a broad spectrum of activities, from metal production, mineral industry, chemical industry, poultry and pig farming, to waste incineration and fuel combustion in large oil burners. In accordance with the Law on Integrated Pollution Prevention and Control, there are 220 enterprises doing business in the Republic of Serbia which are obliged to obtain an integrated permit. Of these 220 enterprises, 47 had obtained a permit by June 2023.

Legal persons which are obliged to obtain integrated permits must draw up and implement a joint plan of environmental protection activities, including measures for saving natural resources and waste reduction, as well as other pollution prevention measures. Requirements for integrated permits must be based on Best Available Techniques (BAT) per industrial branches. At the EU level, Best Available Techniques are defined through specific legally binding documents, for various areas and segments of industry, and these documents must be used as the basis in the issuance of permits. The documents were published in languages of EU Member States. The Best Available Techniques are additionally elaborated in BAT Reference Documents (BREF). These documents have not been translated to Serbian, but Best Available Techniques may be found in Croatian. Providing information in Serbian on the waste prevention techniques described in reference documents would facilitate the application of Best Available Techniques in industry.

# 3.2.3. Organising trainings with the purpose of including waste prevention into integrated permits

As stated in the point above, information on Best Available Techniques are already available. In addition to informing the industry, it is necessary to also organise trainings of competent authorities (the Ministry, the Agency, the Provincial Secretariat for Urban Planning and Environmental Protection of AP Vojvodina, local self-government units, etc.) on the topic of incorporating requirements of waste prevention into integrated permits. In the Republic of Serbia, this type of training for competent authorities and industrial branches is not regularly conducted. Nevertheless, certain activities relating to issuance of permits are carried out under several international projects, such as:

Project IED Serbia Green Transition - Implementation of the Industrial Emissions Directive in the period 2021-2025, which constitutes the third phase of cooperation between the Ministry, the Cleaner Production Centre, the Faculty of Technology and Metallurgy of the University of Belgrade and the Swedish International Development Cooperation Agency and expanded support in the application of national regulations in the field of integrated pollution prevention and control, by encouraging the transition of Serbian industry to green technologies.

The main objective of this project is providing assistance and support to competent authorities and enterprises in the implementation of the Directive, which would reduce the impact of industrial emissions on the environment and human health. The project will provide technical and administrative support to the Ministry and other

competent authorities in the preparation of draft versions of integrated permits for selected enterprises, as well as in amendments and supplements or preparation of regulations and a part of the Negotiating Position in the field of industrial pollution.

The project will also support the development of the Directive Specific Implementation Plan for Directive ETS EU, as support in the achievement of national climate goals. By developing new business models, support will be provided to the industry with respect to the reduction of footprint by applying cost-effective and clean technological solutions for transition to the European Green Deal.

Green Transition - Implementation of the Industrial Emissions Directive in the period 2021-2025 is an ongoing project. This project supports the establishment and training of the main team of inspectors which will gain experience at different administrative levels in checking installations which are subject to issuance of integrated permits.

### 3.2.4. Waste prevention in industrial branches

With a view to encouraging waste prevention in industry, it is important not just that plants which are subject to issuance of integrated permits introduce waste prevention measure, but also that the entire industrial sector along the supply chain adopts an assessment procedure or waste prevention plans.

In this regard, there are no legal processes for adoption of these plans for other plants, other than those subject to the obligation to obtain an integrated permit. Nevertheless, the Republic of Serbia has a rich experience in the implementation of cleaner production, which is voluntary, preventive, with environmental protection initiatives applicable in the specific plant. An analysis of the flow of materials and energy in companies aims to identify options of reduction of waste and emissions from industrial processes through strategies of waste reduction at the source. This may result in a feasibility study by adopting the Product-as-a-Service business model, which provides products through rental agreements or pay-as-you-go agreements.

The Cleaner Production Centre was established in 2007 within the Faculty of Technology and Metallurgy of the University of Belgrade (as a host institution) and is an expert centre for expansion of the practice of cleaner production in the industrial sector. The Cleaner Production Centre has a decision-making body - the Council, which consists of representatives of all stakeholders (Government, universities, industry and consulting houses). The Cleaner Production Centre cooperates with a large number of educated and highly specialised national and international experts, on various projects in the Republic of Serbia. The Centre offers training on resource efficient and cleaner production, services of assessment of plants and audit of enterprises, etc. In addition, it cooperates with over 100 companies (large as well as medium-sized and small enterprises) from different industrial sectors, and has trained over 60 consultants on the methodology of resource efficient and cleaner production. A good and successful example of waste prevention and cleaner production is the project "Product-as-a-Service business model" on chemical leasing, which has been adopted in one company. As a result of that approach, consumption of toxic solvents has been reduced six times, and the quantity of generated waste is also lower.

# 3.2.5. Use of awareness raising campaigns and provisions of other support to the business sector

Use of awareness raising campaigns or provision of financial support, support for decision-making or other forms of support to the business sector by the Government has been proven to be an effective measure of waste prevention in other countries.

Such measures are particularly effective when they are aimed and adjusted to small and medium-sized enterprises, and when they are applied through already established business networks.

At the moment, there are no awareness raising campaigns on waste prevention in the Republic of Serbia which would be initiated by the state and which would be oriented towards the business sector.

### 3.2.6. Assistance to companies in drawing up own waste prevention plans

Other measures for promotion of waste prevention in industrial branches include the use of voluntary agreements, consumer/producer panels and sectoral negotiations, so that waste prevention plans would be adopted or so waste products or waste packaging would be repaired in appropriate business sectors and industrial sectors. Examples of such activities may be efforts resulting from sectoral cooperation with a view to preventing food wastage or reducing the risks of hazardous substances in the textile industry.

There are currently no joint initiatives in the Republic of Serbia that would promote the drawing up of waste prevention plans in appropriate activities and sectors.

## 3.2.7. Promotion of the environmental management system

The promotion of the environmental management system (EMS), including the EU environmental management and assessment system (EMAS) and the environmental management system according to the requirements of the standard SRPS ISO 14001:2015, have been proven to be an important instrument for organisations in assessments of different possibilities for improvement of processes in organisation and reduction of adverse environmental impacts of an organisation's operations. The main objective of the environmental management system is to assist companies in the permanent improvement of their environmental performance relative to the set environmental objectives. The environmental management system is based on the well-known cycle Plan-Do-Check-Act, where an organisation sets its own objectives and performance measurements, and monitors and measures the situation and responds to the measurement results.

In accordance with the report published by the International Standardization Organization (ISO), 1,794 enterprises in the Republic of Serbia certified its environmental management systems in 2021 in accordance with the standard SRPS ISO 14001:2015.

In accordance with the European Commission Decision of 7 December 2011, in reference to the guide for registration of enterprises in the EU, third countries and the

entire world in accordance with the Regulation (EC) 1221/2009 of the European Parliament and of the Council on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), non-EU organisations may also be registered in EMAS. The Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management has, as a body for EMAS licencing, published the Guidelines for Registration of Organisations from Third Countries. These Guidelines are expected to result in further action for the purpose of EMAS registration in the Republic of Serbia, since cooperation between the Ministry and the Environment Agency Austria (EEA) was started on the project Enforcement of the law in the field of control of industrial pollution, prevention of chemical incidents and establishment of the EMAS (Europe Aid/131555/C/SER/RS). At the moment, there is one company preparing for registration in accordance with the requirements of the EMAS Regulation. To conclude, implementation of the environmental management system is an indirect, but effective measure contributing to waste prevention, and application of that system should be more encouraged n companies in the Republic of Serbia.

## 3.3. Measures which may impact the phases of consumption and exploitation

Examples of measures which may impact the phases of consumption and exploitation are as follows:

- 1) introduction of economic instruments (subsidies, fees) for waste prevention;
- 2) use of awareness raising campaigns and provision of information to consumers,
- 3) promotion of Ecolabels;
- 4) agreements with the industry or retail sector;
- 5) incorporation of environmental criteria into public or company procurements and calls for tenders and contracts;
  - 6) encouraging of reuse and repair of products.

In addition to the example referred to in Annex 4 of the Waste Framework Directive, measures for encouraging food waste prevention and sustainable consumption model are described below.

### 3.3.1. Introduction of economic instruments for the purpose of waste prevention

Economic instruments as a measure for encouraging waste prevention in the phases of consumption and exploitation may refer to facilities to "green public procurement" or introduction of mandatory monetary fees paid by consumers for a certain product or packaging, which would otherwise be free (plastic bag charges).

Fee for import or domestic production of plastic (polyethylene) bags in the Republic of Serbia was introduced in 2011. The main objective of introducing the fee was for the production of plastic bags made of polyethylene to be replaced by bags made of biodegradable plastic (plastic bags with additives) (the tax rate in 2017 reached 11 EUR per tonnes of biodegradable bags and 200 EUR per tonnes of other plastic bags). Nevertheless, since 2014, quantities of both types of plastic bags has grown. That result shows that taxation of producers/traders with respect to plastic bags may not be an

effective waste prevention measure. By contrast, there are many examples throughout the world which indicate a considerable reduction of the consumption of plastic bags per capita when a fee for bags is imposed on the consumer rather than the producer or the retail trader. In the Republic of Serbia, in 2018, the largest supermarket chains independently launched an initiative for charging plastic bags for purchase from consumers. After a certain period of time, many smaller retail stores joined this initiative. At this time, no data and results on the implementation of this initiative are available, but effects on the consumption of plastic bags should be monitored for the purpose of development of future policy.

## 3.3.2. Informing consumers

Awareness raising campaigns and information for the general public or a specific portion of consumers in some countries are widely used for the purpose of waste prevention, particularly at the level of consumers and households. The target groups of awareness raising initiatives often includes schools and students.

One prominent example of it is participation in the European Week for Waste Reduction (EWWR), with the participation of different institutions from the EU and the entire world, which realizes a series of waste reduction activities, aimed at a large audience which includes public administration bodies, private companies and citizens. Every year, a specific topic is chose(e.g. reuse, waste prevention or packaging waste prevention), n and promotional material is created and distributed to participants. A part of the European Week for Waste Reduction is the campaign "Let's clean up Europe", which provides a single network for cleaning actions, in order to solve the problem of littering in nature.

According to the information from the database of the European Week for Waste Reduction, some organisations from the Republic of Serbia already participated in the EWWR in 2015 and 2017. No action has been recorded since then. At this time, there are no campaigns launched against littering in nature in the Republic of Serbia within the initiative "Let's clean up Europe". In the future, wider participation of organisations from Serbia in the European Week for Waste Reduction should be encouraged.

### 3.3.3. Promotion of Ecolabels

Ecolabel is an initiative which aims to affect the choice of consumer in purchase and to inform external users on one or more aspects of the environmental performance of a product or a service. Ecolabel has been used for over 40 years, but over the last 15 years, we have witnessed the presence of a large and growing number of labels of different contents, sizes, nature and effectiveness, since companies wish to attract consumers with awareness on the importance of the preservation of the environment.

Today, there are over 450 Ecolabels in almost 200 countries, in approximately 25 industrial branches. The most important label at the EU level is the EU Ecolabel. Regulation (EC) No 66/2010 on the EU Ecolabel prescribes the rules for establishment and application of a voluntary scheme of ecolabelling. Regulation on the EU Ecolabel provides for criteria based on standardised procedures on scientific evidence and takes

into consideration the entire lifecycle of goods and services (hereinafter: product). Criteria for specific groups of products are aimed at determining products with the best environmental performance on the market within a specific category of products. This is typically the best 10% to 20% of products available at the market in terms of environmental performance at the time of adoption of said criteria. At the moment, there are criteria for over 30 groups of products for non-food products and non-medicinal products, which are regularly revised.

The National Ecolabelling Programme, Ecolabel, was introduced in the Republic of Serbia in 2009 through the Rulebook on detailed conditions and procedure for attaining the right to use the ecology sign, elements, appearance and method of use of ecology sign for products, processes and services (*Official Gazette of the Republic of Serbia*, No. 3/09). The Rulebook on detailed conditions, criteria and procedures for attaining the right to Ecolabel, the elements, appearance and method of using the Ecolabel for products and services (*Official Gazette of the Republic of Serbia*, No. 49/16) was adopted in 2016. This Rulebook defines the conditions and procedures for attaining and using the Ecolabel. At this time, only two Serbia companies own an Ecolabel for their products. New by-laws for Ecolabel and EMAS are to be adopted by the end of 2024. For the purpose of promotion of eco-labelling, the Ministry launched the initiative "Ecolabel for a more competitive product", and three more companies will be included in the process of attaining the Ecolabel for its products.

## 3.3.4. Promotional activities of the industry or retail tradee

One of the preventive measures are promotional activities of the industry and retail trade which would positively impact the development of consumer awareness.

The results achieved in the implementation of waste prevention measures with consumers would be evaluated as a precondition for achievement of the right to certain incentives.

These activities would be aimed at awareness raising of consumers and stimulating them to adopt more responsible habits which will contribute to waste reduction.

The possibility of achieving certain incentive might be a motivating factor to actively include industries and retail into the process of promotion of sustainable development and waste reduction.

## 3.3.5. Integrating environmental criteria into tender calls and tender agreements

In the context of corporate and public procurement, integration of environmental criteria and waste prevention criteria in invitations to tender and contracts is an important waste prevention measure.

As regards public procurement, the main purpose of so-called green procurement is to encourage the authorities to apply environmental criteria when purchasing products and services which affect the environment less during its lifecycle. Green public

procurements are often linked to ecolabels, since they cannot play a role in the development of technical specifications for award criteria.

The Law on Public Procurement (Official Gazette of the Republic of Serbia, Nos. 91/19 and 92/23), in particular Article 132 of the Law, prescribes a possibility that public procurement implementers include environmental criteria into procurement of products and services and lifecycle assessment costs. Article 134 of this Law prescribes that lifecycle costs include, if relevant, certain or all cited costs incurred during the lifecycle of goods, services or works, which are borne by the contracting entities or other users, such as:

- 1) procurement costs;
- 2) costs of the utilisation of products, e.g. consumption of electricity and other resources;
  - 3) maintenance costs;
  - 4) costs at the end of the lifecycle, such as collection and recycling costs;
  - 5) costs of introducing a product's digital password.

The Law amending and supplementing the Law on Public Procurement (*Official Gazette of the Republic of Serbia*, 92/23), which has applied since 1 January 2024, adds a new Article 134a, which regulates the application of environmental aspects in public procurement procedures.

This Law prescribes that the Public Procurement Office prescribes the types of goods, services and works for which contracting entities are obliged to apply the environmental aspects when defining the technical specifications, criteria for selection of an economic entity, criteria for contract award, or conditions for execution of a public procurement agreement.

Pursuant to Article 134a of the Law on Public Procurement, the Public Procurement Office adopted the Rulebook on the types of goods for which contracting entities are obliged to apply the environmental aspects in public procurement procedures (*Official Gazette of the Republic of Serbia*, No. 115/23 - hereinafter: Rulebook).

Article 2, paragraph 1 of this Rulebook prescribes that contracting entities are obliged to apply environmental aspects in public procurement procedure when defining technical specifications, criteria for selection of an economic entity, award criteria or conditions for execution of a public procurement contract for the following goods:

- 1) photocopier paper;
- 2) computer equipment (Desktop computers, laptop computers and monitors);
- 3) office electronic equipment (printers, scanners, multifunctional devices etc.);
- 4) inverter air conditioners (standard air conditioners, inverter air conditioners for heating and cooling, etc.);
  - 5) cleaners (products for cleaning of hard surfaces, textile cleaning products, etc.).

Article 2 paragraph 2 of this Rulebook prescribes that the percentage of the subjects of procurement with the environmental aspects in public procurement procedure

of goods from paragraph 1 of this Article is at least 10% relative to the total volume of the subject of public procurement.

In addition, the Public Procurement Office issued the Handbook on Green Public Procurement in 2019. According to the Annual Report on Public Procurement in the Republic of Serbia for the period from 1 January 2022 to 31 December 2022, contracting entities stated that environmental aspects were applied in 1,111 public procurement procedures, which constitutes 0.44\$ of the total number of public procurement procedures.

Relative to 2021 (650), there has been a considerable increase in the number of procedures that included the use of environmental aspects.

For the purpose of promotion of the use of environmental aspects in public procurement procedures, a special focus is placed on the training provided to participants, in order to learn about public procurement procedures which are suitable for green procurement, as well as examples of environmental aspects which the Public Procurement Office could apply. The Public Procurement Office published tender documentation models for green public procurement on its website.

The environmental aspects are mostly used within technical specifications and criteria for quality selection for economic entities.

The most frequent subjects of procurement with applied environmental aspects are stated for:

- 1) vehicles (cars, municipal vehicles);
- 2) cleaners and cleaning services;
- 3) computer equipment (computers, scanners and printers);
- 4) street lighting;
- 5) cooling devices;
- 6) household devices;
- 7) procurement of various construction works;
- 8) drawing up technical specifications.

#### 3.3.6. Encouraging reuse and repair of products

The other widely recognised waste prevention measure concerns encouragement of reuse and repair of products and their parts. Reuse is important since it has a huge potential for waste prevention and application of consumer habits for more sustainable solutions. This measure reduces resource losses, which are restricted to the economy, with a smaller environmental impact compared to recycling and landfilling, and it can also contribute to social planning and new job openings through employment of persons from vulnerable groups and professional training. Methods for encouraging reuse and/or repair are educational, economic, logistic and other measures, such as, for example, measures of support for introduction of accredited centres and networks for repair or reuse.

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 $<sup>^9\</sup> https://eupodrska.ujn.gov.rs/wp-content/uploads/2020/01/Smernice-Zelene\_JN.pdf$ 

Economic incentives for improvement of the reuse sector may be exercised in different forms, such as recovery of a portion of costs of the labour force recruited for repairs, subsidies for repairs of certain types of products, tax reliefs as an incentive for donations of goods to humanitarian organisations, various fees within the extended producer responsibility programme (e.g. depending on how simple it is to disassemble a product for repair, on the availability of spare parts or information/instruction for repair of said product), i.e. VAT reduction for repairs of products.

Logistical allowances for the purpose of encouraging reuse may have the form of providing locations for repair centres or cafes, as well as trade events, allocation of premises for reuse in municipal institutions or in places of municipal waste collection.

So-called Repair Cafés and repair networks are initiatives that are mostly launched by municipalities and local/citizen organisations at the local level, which voluntarily cooperate in order to provide expertise on repairs of electrical and electronic equipment to citizens. These initiatives usually have a small budget to work with, so they rely on donations by guests of Repair Cafés. Support to local or national authorities may be necessary for providing premises for regular organisation of these workshops, as well as for prescribing general conditions and insurance coverage for such organisations.

Reuse and repair must be also promoted through awareness raising campaigns, which includes efforts to popularize that practice among consumers (e/g/ reuse should be seem as "modern practice"). That role may be also played by already established reuse and repair network, inter alia, for promotion of own activities. Various events may be organised more or less regularly to promote reuse of products, such as Repair Cafés, swap events (for exchange of goods), etc.

For an exchange of information and knowledge at the local level, it is important to establish local and regional networks for reuse and repair. These networks may promote activities of reuse and repair and establish a strong brand, so that repairs and reuses become a matter of prestige, and so that consumers may identify with that practice. In return, this may be a way to achieve an increase of income and profitability of the sector. Participation in international networks such as Reuse may also be helpful, enabling the use of best practices and already established business models.

In addition to environmental benefits, establishment of reuse and repair centres, with a strong focus on the involvement of vulnerable groups, may have a positive impact on poverty reduction and fight against unemployment. Professionalization of the sector needs to be promoted e.g. for gaining skills for repairing electrical and electronic equipment

Reuse of materials may be encouraged in the construction and demolition sector, for example, by establishing guidelines or standards for demolition of old building and preparation of demolition materials for reuse. This may include, inter alia, legal obligations for removal of construction components for reuse, removal of hazardous substances prior to demolition, obligation to keep certain construction materials separate from others after demolition, as well as defining the quality criteria for secondary aggregates made of demolition materials. An additional measure is integration of reuse

and preparation for reuse into important education and training channels (e.g. technical faculties, traineeship).

Construction and demolition waste after treatment may become a new raw material if it is entered into the register of "end-of-waste status", confirming that it meets the conditions concerning regulations on standards for construction materials.

Reuse and repair of objects in the Republic of Serbia has a long tradition and is widely applied (e.g. wood palettes, used cars, protected rubbers, used spare car parts etc.). Due to economic circumstances, the repair sector still does business successfully, and used goods stores are also popular. Data of the Customs Administration and the Business Registers Agency indicate that, in September 2017, there were approximately 740 registered companies for re-sale of imported and second hand clothes, and it is estimated that there are over 1,000 of them, although there is no single list of these companies. In addition, there is a rising number of social initiatives aimed at achieving social objectives, i.e. on assisting socially vulnerable people, as well as for promotion of sustainable consumption through exchange and reuse of objects. There are no organised reuse networks and repair workshops in the Republic of Serbia at the moment.

At this time, there are no specific locations for collection of potentially reusable products (nor any official centres for preparation for reuse).

Expansion of the handover of bulky wastes and other products suitable for reuse into the official waste management system, using collection sites, whose introduction is planned in accordance with the National Waste Management Plan for the period 2022-2031. Nevertheless, at this sites, no option of reuse is currently envisioned.

As regards reuse of packaging, a study of glass bottles for reuse is in preparation.

As regards construction and demolition waste, Regulation on the manner and procedure of construction and demolition waste management. (*Official Gazette of the Republic of Serbia*, Nos. 93/23 and 94/23 – corr.). This Regulation governs the manner of handling construction and demolition waste which provides for reuse of materials originating at the construction site.

At the moment, construction and demolition waste is disposed at landfills, or used as inert materials for covering landfills, which will be changed by adopting a new rulebook which will govern the end-of-waste status. It is envisaged that treated construction and demolition waste gains the end-of-waste status and the status of materials if it fulfils certain conditions for construction products.

## 3.3.7. Promotion of food waste prevention

Approximately 30 percentage (around 2.5 billion tonnes) of food produced globally for human consumption is lost or thrown out every year. Food waste causes huge economic losses, as well as adverse environmental impact, and food may always be used to feed the hungry. Due to all the important issues, food waste prevention is high on international political agendas. Sustainable Development Goals (SDG), adopted by the United Nations (UN) General Assembly om 25 September 2015, include the objective "halve per capita global food waste at the retail and consumer levels and reduce food

losses along production and supply chains, including post-harvest losses by 2030" (SDG 12.3). The European Waste Framework Directive also highlights Sustainable Development Goals and prescribes monitoring and measuring responsibilities relating to food waste, as well as special waste prevention programmes which will be adopted as a part of the waste prevention programme.

Examples of food waste prevention measures include but are not limited to:

- 1) promotion of food donations;
- 2) promotion of further food processing for human consumption;
- 3) promotion of use or processing of expired food for human consumption into animal feed;
- 4) regulations on food labelling with respect to the duration of a food product;
- 5) prohibition of disposal of food for retail;
- 6) educational campaigns and awareness raising campaigns (e.g., on marking the dates and differentiating best used by and best used by the end of for food quality and "use by" on food safety and on proper storage);
- 7) capacity building and trainings for operators on the topic of food loss reduction throughout the food value chain (agriculture, production, hospitality, retail, households, public services);
- 8) education and trainings for the hospital sector and for health care institutions and child care (for example, on the topic of planning and buying on the needs basis);
- 9) voluntary agreements in the retail food sector (e.g. objectives in terms of food donations or sale of food products which are about to expire at discount prices, prohibition of discount offers on the basis of XXL and promotional quantities);
- 10) tax reduction/exemption for food donations;
- 11) introduction of criteria of green public procurement for sustainable hospitality services;
- 12) awareness raising of public procurement implementers may be an important measure for food waste reduction.

For the purpose of food waste reduction in retail trade, some traders in the Republic of Serbia introduced label with discounts (e.g. prices lower by 30%, 50%) for food products prior to the expiry date. At the moment, there is no national food waste prevention programme.

As regards food donations, there are no special regulations in the Republic of Serbia at this time. At this time, food may be donated in accordance with the Law on Donations and Humanitarian Aid (*Official Journal of the FRY*, Nos. 53/01, 61/01 – correction and 36/02 and *Official Gazette of the Republic of Serbia*, No. 101/05 – as amended).

A legislative framework needs to be created to regulate conditions for food donations, the responsibility of donors and intermediaries in the food donation chain, animal feed donation, intermediaries' records, and conditions for the end recipient of the donations.

Of food donation organisations, the Food Bank, which is a member of the European Food Banks Federation (FEBA), is the only major organisation which has been

working on linking food surpluses and needs for food in the Republic of Serbia since 2006. The main role of that organisation is to connect food donors with social institutions and associations (e.g. charity organisations, local aid organisations etc.). The quantity of available resources for work is very limited. A food bank relies on volunteers in carrying out its activities. At this time, major cities are covered by food donation services, but there is a lack of capacities for covering rural areas, which also have a large population and which also have the need for such a service. Due to the Food Bank, approximately 1,200 tonnes of food were donated (mostly fruit, vegetables and juices, as well as some frozen packed food). It is estimated that this quantity of food may feed approximately 10,000 people. The Food Bank and donors are legally obliged by the contract. By connecting food donors and social associations, the Food Bank ensured the transparency and reliability of the system: by remaining connected to social institutions and associations (e.g. by appointing a person who will take over the food from a retail establishment and similar), one may prevent attempts of fraud against food donors. Between six and eight retail chains have a permanent cooperation with the Food Bank, donating food. It should be noted that 20% VAT is applied to donated food, which certainly hinders the readiness of operators in the food sector to donate surplus food.

Although progress which has been achieved over the last few years, the percentage of donated food is very low relative to the quantity which is discarded. Also, the number of people who need food is considerably higher than the number of people who have access to that service. Thus, there is a strong need, as well as large potential for further increase of the quantity of donated food, both in terms of waste prevention, and in terms of social protection measures.

### 3.3.8. Promotion of the sustainable consumption model

Promotion of the circular business models for sustainable consumption is another measure for promotion of waste prevention in phases of consumption and exploitation. This measure may contribute to waste prevention through reduction of the number of products and goods which must be purchased. For example, the so-called sharing platform is a business model where the owner sells/leases the access to assets that are insufficiently used to the next purchaser. Examples of the sharing platform model are car sharing (e.g. BlaBlaCar), short-term lease of premises (e.g. AirbnB), workspace sharing (e.g. Nova iskra), sharing of tools and equipment, sharing of surplus food reserves.

There are some examples of such platforms in the Republic of Serbia (e.g. car sharing services, pallet pooling), but they are primarily located in urban areas and are not promoted as a concrete measure of waste prevention, nor as a sustainable consumption model.

In order to teach the society to use sustainable business models, a series of campaigns need to be implemented with a view to awareness raising. For example, competitions between green schools and pre-schools concerning waste prevention and sustainable life style (including everyday sustainable consumption models) may serve as an effective measure of waste prevention.

## 3.3.9. Introduction of implementation of equal opportunity policy

In view of the fact that, on the one hand, the above described current status of implementation of waste prevention measures and the set objectives, and, on the other hand, obligations of the Republic of Serbia which arise from other laws and strategic documents concerning guarantee of equal opportunities for women and men, inclusion of gender perspective and antidiscrimination perspective in all public policies, programmes and practices, as well as implementation of gender responsible budgeting through measures and activities for the implementation of the Plan, there will be efforts to ensure equal inclusion of women and men in further development directions of waste prevention, equal access to knowledge, information and resources for the purposes of providing equal opportunities after changes in the economy, method of functioning of the economy, as well as chances for new jobs, entrepreneurship and social entrepreneurship, particularly with respect to changes which have occurred due to the Green Transition. It is particularly important to include sensitive social groups in waste prevention activities and procedures, and thus connect the social and environmental policies.

As women are the ones responsible or taking care of the family and for housework in most households, they have a large role in handling various types of waste, starting from food waste, through packaging waste, to hazardous waste which is generated in households, and thus their role in waste prevention is very important.

As regards consumer topics, it should be kept in mind that it is necessary to educate women and include them in campaigns or other informative-educational activities for the purpose of awareness raising, in view of the fact that women are the ones who play the decision-maker role in terms of shopping to fulfil everyday household needs.

On the other hand, in view of the fact that there are considerable differences in opinions in terms of gender and behaviour with respect to waste prevention, i.e. that it is more frequent for women than for men to believe that consumers play a significant role in waste prevention, and that they are readier than men to change their behaviour with a view to reducing and sorting waste and thus avoid food waste generation or generation of packaging waste, for example, that, among waste sector employees, women's priorities are connected to changes in behaviour and awareness raising on waste prevention, while the priorities of men are connected to improvement of business activity, for example, for optimization of waste collection and recycling and reduction of landfilling, this means that inclusion of women in activities relating to improvement of knowledge on the importance of waste prevention, strengthening of women's entrepreneurship activities, and inclusion of women into innovative activities which contribute to waste prevention, and into research in the field of achieving cleaner technologies, and strengthening of women's role in decision-making on waste prevention matters, are essential both for improvement of gender equality and for development of society as a whole.

For the purpose of monitoring the success of the implementation of the policy of equal opportunity and promotion of gender equality, it is necessary to improve the availability of data aggregated by gender. A detailed analysis of quantitative data and collection of qualitative data are of crucial importance so these data would be useful for further development of the Plan. This is the only way it will be possible to consider the

actual causes and patterns at the core of gender differences, and to deal with them within the framework of waste management policies.

# 4. GENERAL AND SPECIFIC OBJECTIVES; AND PRIOORITY AREAS OF THE PLAN

## 4.1. General and specific objectives of the Plan

The objectives of the Plan are the following:

- 1) separation of economic growth from the environmental impacts which are linked to waste generation;
  - 2) improvement of resource efficiency;
  - 3) prevention of the spreading of pollution.

The specific objectives of the Plan are based on Article 9 of the Waste Framework Directive 2008/98/EC (amended and supplemented by Directive (EU) 2018/851), which requires that measures for the execution of the Plan must at least:

- 1) promote and support business modes of sustainable production and consumption;
- 2) promote and support design, production and use of resource efficient and durable products (in terms of duration and lack of planned expiry dates), which may be repaired, reused and upgraded;
- 3) target products containing critical raw materials, in order to prevent this material from becoming waste;
- 4) encourage the reuse of products and establishment of a system promoting activities of repair and reuse, particularly including electrical and electronic equipment, textile and furniture, as well as packaging and construction material and products;
- 5) encourage, if needed and when it does not endanger intellectual property rights, availability of spare parts, instructions for use, technical information, or other documents, equipment or software for repair and reuse of products without endangering their quality and safety of products;
- 6) reduce waste generation in procedures of industrial production, extraction of minerals, production activities, construction and demolition, taking into account the Best Available Techniques;
- 7) reduce food waste generation in primary production, treatment and processing, food retail and distribution, in restaurants and catering services, as well as households, all as a contribution to the Sustainable Development Goal of food waste reduction of 50% per capita in the entire world, at the level of retail and individual consumers, and reduction of food wastes in production and supply chains by 2030;
- 8) encourage food donations and other forms of redistribution of food for human consumption, prioritizing its use for human consumption relative to animal consumption, as well as its processing into non-food products;
- 9) promote reduction of contents of hazardous substances in materials and products, without any harm to aligned legal regulations concerning these materials and products, which have been introduced at the EU level, and ensure that any supplier of an item, as defined in Article 3, point 33) of the Regulation (EC) No. 1907/206 of the European Parliament and of the Council (1) of 5 January 2021, submits information to the European Chemicals Agency, in accordance with Article 33(1) of this Regulation;
  - 10) waste prevention, particularly wastes which are not suitable for reuse or recycling;

- 11) introduce Eco-modulation in the field of packaging and packaging waste;
- 12) identify products which are the main source of waste generation in nature, particularly in green environment and water systems, and undertake appropriate measures for prevention and reduction of waste of these products in nature;
- 13) make efforts to stop waste generation in water systems as a contribution to the Sustainable Development Goal of the United Nations on prevention and considerable reduction of pollution in the maritime environment of every kind;
- 14) develop and support informative awareness raising campaigns on waste prevention and prevention of littering in nature;
  - 15) introduce Eco-modulation in the field of packaging.

In addition, policies of equal opportunities and improvement of gender equality will be considered and implemented within the framework of the execution of the Plan.

## 4.2. Priority areas of the Plan

This plan covers all waste streams, but certain areas, selected on the basis of these criteria, are prioritized:

- 1) waste streams with the strongest adverse environmental impact (e.g. hazardous waste);
- 2) areas with the largest waste prevention potential is easily available wastes (e.g. food waste);
- 3) waste streams at the top of the international EU political agenda (e.g. food waste, plastic bags);
- 4) areas characterized by large economic losses due to waste generation (e.g. food waste);
  - 5) areas with a lot of previous experience in waste prevention (e.g. industrial waste).

On the basis of these criteria, priority areas (waste streams) for waste prevention in the Republic of Serbia are: industrial waste, hazardous waste, packaging waste, food waste, construction and demolition waste, waste electrical and electronic equipment.

#### 4.2.1. Industrial waste

Industrial waste has been selected as a priority area of the Plan, as that type of waste may cause huge environmental problems and enormous economic losses. Thus, it has a large potential for waste prevention. In addition, the Republic of Serbia has a lot of experience in industrial waste prevention (e.g. through the implementation of projects for cleaner production and resource efficiency).

According to statistical data of the Agency, the total quantity of generated industrial waste in the Republic of Serbia in 2023 was 7.6 million tonnes.

Non-hazardous and hazardous industrial wastes have a high prevention potential. There are many examples of good practices in the field of industrial waste prevention in the world. In order to reduce the quantity of various industrial waste streams, recommended measures include the implementation of projects for cleaner production

and resource efficiency, by establishing the environmental management system, applying Best Available Techniques, Ecolabel, awareness raising, organising trainings etc.

#### 4.2.2. Hazardous waste

Hazardous waste has been selected as a priority area of the Plan, because, if it is not managed and safely disposed, it may be a risk to the human health and environment, in spite of the fact it makes up only a smaller part of the total generated waste.

Hazardous waste is generated from a broad spectrum of various sources, including households, commercial activities and industry. According to the data of the Agency, 90,259 tonnes of hazardous waste was produced in 2023, which is 0.8% of the total quantity of generated waste in 2023.

According to the Agency, 12 types of hazardous waste in 2022 constituted 98% of the total hazardous waste generated in the Republic of Serbia. These types of waste include, inter alia, sludge cakes and waste from gas purifier filters, packaging which contains residue or has been contaminated with hazardous substances, hazardous components removed from waste equipment, waste that contains oil, etc.

Examples of hazardous waste generated in households include waste electrical and electronic equipment, solvents, batteries, medicinal waste etc.

To reduce hazardous waste generation at the level of production, the following measures need to be considered: regulations for reduction of prohibition of the presence of hazardous substances in products, Ecodesign, environmental management systems, cleaner production projects, examples of Best Available Techniques. In addition, operators from the industrial sector will be trained and receive information for the purpose of awareness raising and improvement of skills in practice in waste prevention.

More information needs to be provided to consumers, particularly in terms of informing citizens on potential dangers of certain substances contained in products, such as chemical substances, and on the possibility of buying environmentally friendly products, e.g. choosing products with the Ecolabel.

#### 4.2.3. Construction and demolition waste

Construction and demolition waste has been selected as a priority area of the Plan due to large quantities of this waste generated every year, since there is a large potential for reuse of many components of high economic value.

On the basis of the 2023 data of the Statistical Office of the Republic of Serbia, 660,626 tonnes of construction and demolition waste were generated in Serbia in 2022. Construction and demolition waste is generated by activities such as construction of buildings and civilian infrastructure, full or partial demolition of buildings and civilian infrastructure, and in the road planning and maintenance sector/. Construction and demolition waste contains various materials such as plaster, glass, metals, plastics,

solvents, concrete, clay, wood, asbestos and excavated soil, and a large part of that material may be reused or recycled.

Possible measures for construction and demolition waste reduction include adoption of an environmental management system in the construction sector, establishment of centres for reuse of that type of waste at the municipal level, green public procurement, promotion of reconstruction and remediation of old buildings (instead of building new ones), reuse of materials in new construction projects, implementation of designing strategies and construction techniques for new structural elements (sustainable construction), separate collection of materials during demolition, and promotion of systems of ecological classification of new buildings. Systems of ecological classification of new buildings ensure various measures helping in solution of complex environmental issues in various phases - from planning, through management and maintenance of buildings, to the final demolition. Systems of ecological classification of new buildings may be a very useful instrument for achieving environmental performance (e.g. efficient use or energy, materials and chemical substances, reduced environmental impact of definitive demolition, etc.).

## 4.2.4. Packaging waste

Packaging waste has been selected as a priority area of the Plan, because it has huge potential for prevention and is high on the EU political agenda (which in particular refers to plastic bags).

Packaging waste is generated in all phases of a product's lifecycle, but the largest quantities are generated in the consumption phase. On the basis of Agency's data, 403,011 tonnes pf packaging waste, or 58.4 kg per capita, were placed at the market of the Republic of Serbia in 2023.

To reduce packaging waste generation, appropriate measures need to be applied throughout the packaging value chain. In the phases of designing and production, the most promising measure is Ecodesign, i.e. education of the weight and volume of packaging, limitation of the content of hazardous substances and design of reusable packaging and recyclable packaging. Voluntary agreements within the retail and production sectors (e.g. beverage industry) may also be promoted for the purpose of retention and development of the system for reuse of existing packaging. In the phase of consumption, consumers may be notified of the possibility to seek and buy products in a lighter packaging, in a packaging with fewer internal wraps, or in reusable or refillable packaging.

## 4.2.5. Food waste

Food waste has been selected as a priority are of the Plan because it causes enormous economic losses, has a huge potential for prevention, and this topic is highly ranked in the international political agenda (Sustainable Development Goals).

Food waste is generated in the overall food supply chain – in agriculture, storage, transport, possession, retail, hospitality, public sector, consumption (households, consumers).

As regards food waste management, the situation in the Republic of Serbia may not be characterized as good. Almost all the generated quantities of food waste end up on landfills without any prior treatment. The number of plants for composting and anaerobic digestion is not high. In view of the lack of precise data on food surpluses in Serbia, it is estimated that approximately 247,000 tonnes of food, i.e. 30-40 kg per capita, are thrown away annually. Other than for social and ethical matters, the topic of food surpluses is also important in terms of environmental protection, because food production, distribution and storage uses large quantities of natural resources. According to the data, food waste generates approximately 8% of greenhouse gas emissions, which affects climate change. Thus, the matter of sustainable waste management is important from the social, environmental and economic aspect.

Waste prevention measures are listed in the Subchapter 3.3.7.

## 4.2.6. Waste electrical and electronic equipment

Waste electrical and electronic equipment has been selected as a priority area of the Plan, due to the increasing quantities of that waste which cause concern throughout the world, and due to the presence of hazardous substances incorporated in electrical and electronic products (e.g. heavy metals, asbestos, polychlorinated biphenyls, polychlorinated terphenyls, ozone depleting substances) as well as due to a high potential for reuse of many components of the product of high economic value. Electrical and electronic equipment includes objects such as computers, television sets, refrigerators and mobile phones.

The estimated quantity of electrical and electronic equipment placed on the market in the Republic of Serbia is: 18,619 tonnes in 2021 and 20,226 tonnes in 2022, and corresponds to approximately 3 kg of electrical and electronic equipment per capita.

A key part of prevention of waste electrical and electronic equipment is extension of the lifecycle of electronic devices and reduction of their dispersion in the environment. Measures of prevention of that waste include promotion of Ecodesign, separate collection with a view to differentiating between waste electrical and electronic equipment and electronic equipment which may be prepared for reuse or reused, facilitating reuse and repair, application of regulations on extended producer responsibility, and organising awareness raising campaigns among consumers.

### 4.2.7. Household waste

Household waste consists of various types of reusable materials with a high potential for waste prevention, and thus it has been selected as a priority area of the Plan. Municipal waste makes up approximately 27.7% of total waste in the Republic of Serbia.

The quantity of municipal waste in the Republic of Serbia in 2023 was 3.07 million tonnes. Although all companies which should submit data on this type of waste do not fulfil that obligation, it is estimated that the average daily quantity of municipal waste in 2023 was 1.26 kg per capital, and the average annual quantity is 460 kg, while the EU average in 2022 was 530 kg. It is estimated that collection of municipal waste

currently covers approximately 88% of the population of Serbia<sup>10</sup>. Municipal waste contains many fractions, of which some may be reused or recycled. Textile waste is particularly mentioned a lot, as this waste fraction has a large potential for reuse and further processing.

Applicable measures for household waste prevention mostly include awareness raising campaigns in households and schools, promotion of the reuse and repair sectors, as well as economic facilities. Proper waste separation at the source may enable better sorting in order to facilitate reuse or recovery of certain waste fractions. "Pay-as-youthrow" may be an important waste prevention measure, in spite of the collection of fees so far, which is based on the size of the household in m<sup>2</sup>.

<sup>&</sup>lt;sup>10</sup> Report on the state of the environment in the Republic of Servia for 2022, Serbian Environmental Protection Agency,2466-295Xhttps://sepa.gov.rs/wp-content/uploads/2024/10/ZivotnaSredina2022.pdf

#### 5. MEASURES FOR IMPLEMENTATION OF THE PLAN

Waste prevention measures which should be implemented for the purpose of achieving the objectives of the Plan are described below.

5.1. Measures to promote and support business modes of sustainable production and consumption

For the purpose of promotion and support to sustainable production and consumption models (e.g. Product-as-a-Service model, sharing platforms, useful life of products), it is necessary to raise awareness of the staff on the best practices in the application of the sustainable production and consumption models, particularly those in small and medium-sized enterprises.

The following measures need to be implemented:

- 1) information for the purpose of raising awareness of sustainable production and consumption models (e.g. sharing platforms, products as services) in small and medium-sized enterprises;
- 2) promotion of the sustainable production and consumption model (Best Available Techniques);
  - 3) promotion of reuse of demolition materials in the construction of new buildings.

Implementation of these measures requires:

- 1) organising an international conference on the best of the application of sustainable production and consumption business models;
- 2) organising a national open competition and giving awards for implementation of innovative sustainable business models, for example, for launching one's own business; or strengthening female entrepreneurship;
- 3) laying down the conditions that demolition material must meet in order to be reused;
  - 4) encouraging reuse of demolition materials in the construction of new buildings.

These activities are carried out by the Chamber of Commerce and Industry of Serbia.

This group of measures will particularly contribute to waste prevention in the following priority areas: industrial waste, hazardous waste, packaging waste, construction and demolition waste, waste electrical and electronic equipment and household waste.

#### 5.2. Measures for promotion of designing, production and use of green products

In order to encourage designing, production and use of resource efficient, permanent, repairable, recoverable and upgradable products, the following measures need to be implemented:

- 1) encouraging research and development concerning the acquisition of cleaner products and technologies with less waste, as well as expansion and use of the obtained results of such research and development;
- 2) building capacities in Ecodesign for packaging and electrical and electronic equipment in small and medium-sized enterprises;
  - 3) promotion of credible eco-signs;
- 4) promotion of green procurement and incorporation of environmental criteria concerning waste prevention in calls for public procurement.

For promotion of research and development in the field of achieving cleaner products and technologies, while generating less waste, as well as promotion of expansion and use of results obtained from such activities of research and development, the following activities need to be implemented:

- 1) introduce study programmes of academic studies and research in design and production of cleaner products to universities;
- 2) organising a conference with a view to presenting the results of research and development for obtaining cleaner products.

The former activity is implemented by the Ministry of Education and the Ministry of Science, Technological Development and Innovation, and universities, upon a proposal of the Ministry.

The latter activity is implemented by the Ministry of Science, Technological Development and Innovation in collaboration with the Ministry and universities. A continuation of the Green Innovation Vouchers Programme, launched by the European Bank for Reconstruction and Development, would also support research and development in the field of achieving cleaner products and technologies with less waste.

With a view to capacity building in Ecodesign in small and medium-sized enterprises, in packaging and electrical and electronic equipment sectors, which are the priority sectors of the Plan, the following activities need to be implemented:

- 1) organising a workshop for training of instructors in Ecodesign;
- 2) organising a workshop for training of instructors in corporate greenwashing;
- 3) organising trainings for small and medium-sized enterprises in Ecodesign of packaging and electrical and electronic equipment;
- 4) on the basis of the acquired knowledge, design technical criteria which will be used to prescribe Ecodesign requirements when designing specific products.

These activities will be carried out by the Chamber of Commerce and Industry of Serbia in collaboration with the Ministry.

For promotion of credible Ecolabels, an informative campaign needs to be organised for raising awareness on the credibility of Ecolabels. These activities need to be implemented by the Ministry.

For the purpose of integration of environmental criteria in the domain of waste prevention in calls for public procurement, the following activities need to be implemented:

- 1) preparation of a study on the status of green public procurement and identification of groups of products with the largest potential for waste prevention;
- 2) development and definition of environmental criteria for groups of products with the largest potential for waste prevention;
- 3) prepare guidelines for green public procurement and products/categories which must be taken into consideration during purchase (e.g. warranties for electronic products, durability of materials).

All activities are carried out by the Ministry.

This group of measures will particularly contribute to waste prevention in the following priority areas: industrial waste, hazardous waste, packaging waste, construction and demolition waste, waste electrical and electronic equipment and household waste.

## 5.2.1. Measures for reduction of waste of products containing critical raw materials

With a view to encouraging reduction of waste from products containing critical raw materials, the following measures need to be implemented:

- 1) analysis of reduction of the consumption of products containing critical raw materials;
- 2) analysis of possibilities for reduction of the consumption of products containing critical raw materials, as well as possibilities for recovery.

For implementation of these measures, three studies need to be prepared:

- 1) study on products containing critical raw materials, which would cover the critical raw materials defined in Annex II to the proposed Regulation COM(2023) with the fifth list of critical raw materials in the EU;
- 2) study of possible products and collection routes, where critical raw materials may be recovered and reused (on the basis of the European Commission Report on critical raw materials and the circular economy);
- 3) a study for classification of concrete measures for reduction of the consumption of products pr technologies using critical raw materials, taking into account the economic and technical feasibility and benefits for health and environment.

These activities must be implemented by the Chamber of Commerce and Industry of Serbia in collaboration with the Ministry of Economy (partner entity). This group of measures will particularly contribute to waste prevention in the following priority areas: industrial waste, hazardous waste, waste electric and electronic equipment.

# 5.2.2. Measures for encouraging reuse of products and introduction of systems promoting activities of reuse and repair

The following measures encourage the reuse of products and introduction of a system promoting activities of repair and reuse, particularly including electrical and electronic equipment, textile and furniture, as well as packaging and construction material and products:

- 1) ensuring fiscal facilities for the reuse and repair sectors;
- 2) promotion of Repair Cafés;
- 3) informing households on the importance of reuse and repair;
- 4) promotion of reuse and repair networks, in particular, electrical and electronic equipment, textile and furniture, as well as packaging and construction material and products;
- 5) encouraging employment of people belonging to socially vulnerable groups in the repair sector;
- 6) enabling a separate collection of products suitable for reuse at the level of municipalities as well as the level of individual industrial branches and provision of possibilities of collecting these products in recycling yards for household waste;
- 7) encouraging, if needed and when it does not endanger intellectual property rights, availability of spare parts, instructions for use, technical information, or other documents, equipment or software which enables repair and reuse of products without endangering their quality and safety.

In order to ensure fiscal incentive to a reuse and repair sector, it is necessary to prepare a feasibility study of introducing VAT reliefs for provision of repairs and reused products. This activity must be implemented by the Ministry of Finance in collaboration with the Ministry.

Promotion of Repair Cafés needs to be initiated by organising workshops for civil society organisations; and municipalities in the manner of organising and maintaining Repair Cafés. At these workshops, attendees will be informed on how they can launch such an action on the basis of successful examples from EU countries, local self-governments and civil society organisations (OCD) (including but not limited to considerations in terms of donations, responsibilities, employees). These activities must be implemented by the Ministry in collaboration with civil society organisations, non-profit organisations and local self-government units.

Similarly, citizens must be informed on the importance of reuse and repairs though public awareness raising campaigns. These campaigns also need to provide information on the existing repair services and possibilities of reuse (e.g. in recycling yards for household waste). These activities must be implemented by local authorities, eventually in collaboration with the Ministry.

Reuse and repair network will be established and promoted by introducing an official network with an online platform which promotes reuse (e.g. as a single information desk which provides information on second hand clothes, service centres, flea markets, portals for exchange of products, etc.). This network needs to support cooperation between insurance companies and Repair Cafés, through support in negotiations, in order to offer free insurance packages adjusted to the consumer needs. The data on the number of employees in the reuse sector in Serbia and the trade conducted in that sector should be collected and monitored. These activities must be implemented by the Ministry in collaboration with the Chamber of Commerce and Industry of Serbia. It is also important to include small and medium-sized enterprises and startup companies

in the reuse and repair sector. After the establishment of the national platform, it is to join European and international networks such as Reuse.

Linkage between the policy of equal opportunities and environmental policy seems to be of crucial importance for successful reuse policy. These activities will encourage employment of people belonging to socially vulnerable groups in the repair sector:

- 1) assessment of possibilities for promotion of employment of people belonging to socially vulnerable groups in the repair sector and development of a joint plan of employment of socially vulnerable groups;
- 2) holding trainings for repairs (of electrical and electronic equipment, inter alia, waste streams) for people belonging to socially vulnerable groups.

These activities must be implemented through collaboration between the Ministry of Labour, Employment and Social Affairs, state employment services and the Ministry.

With a view to ensuring a possibility of collecting products suitable for reuse and repair, e.g. electrical and electronic equipment, textile and furniture, it is necessary to first introduce and promote separate collection of waste at the municipal level, as well as on the level of industries (recycling yards), so that spare parts would be available and to provide space for their collection (in recycling yards), and implement training for the staff, which further ensures appropriate collection of materials. This activity will be carried out by local self-government units in collaboration with the Ministry.

To encourage availability of spare parts and enable repairs and reuse of products, it is necessary to compile instructions and guidelines for preparation for reuse and handling of products at end-of-life products. This process should ensure that, before reintroducing multiuse goods to the economic flows, all necessary steps in terms of safety and law on waste are undertaken (e.g. exclusion of hazardous products with defects which may cause serious damage to users, avoidance of illegal export of still usable products, etc.). Special attention is paid to requirements for collection, storage and transport of old electrical and electronic devices in such a manner that the functionality of devices is not hindered, nor is the possibility of their re-introduction to the market reduced. This activity needs to be implemented by the Ministry.

This group of measures will particularly contribute to waste prevention in the following priority areas: waste electrical and electronic equipment and household waste.

5.2.3. Measures to promote reduction of waste generation in procedures relating to industrial production, extraction of minerals, development, construction and demolition

In order to promote reduction of waste generation in procedures relating to industrial production, extraction of minerals, development, construction and demolition, the following measures need to be implemented:

- 1) promotion of credible environmental management systems, including EMAS and SRPS ISO 14001:2015, SRPS ISO 59004:2024 etc.;
  - 2) facilitating implementation of best available techniques in industry;
- 3) promotion of preparation for reuse of materials obtained by demolition of old buildings (Guidelines).

For promotion of credible environmental management systems, including EMAS and SRPS ISO 14001:2015, the following activities need to be implemented:

- 1) establishment of a grant programme for compensation of the costs of certification and registration of small and medium-sized enterprises in the environmental management system (EMS);
- 2) organising informative seminars on environmental management systems, including those on EMAS and SRPS ISO 14001:2015 standards.

The former activity must be implemented by the Ministry of Finance in collaboration with the Agency. The latter activity must be implemented by the Ministry in collaboration with the Agency.

To facilitate the implementation of Best Available Techniques in industrial branches, trainings for competent authorities on Best Available Techniques need to be organised.

This activity must be implemented by the Ministry.

For promotion of preparation for reuse of materials obtained by demolition of old buildings, the following activities need to be implemented:

- 1) development of standards and guidelines for demolition of old buildings and preparation for reuse of materials obtained by demolition;
- 2) organising informative seminars on the practical application of guidelines and standards for demolition of old buildings and preparation for reuse of materials obtained by demolition.

This activity must be implemented by the Ministry.

These measures will particularly contribute to waste prevention in the following priority areas: industrial waste, hazardous waste, construction and demolition waste.

5.2.4. Measures to promote reduction of food waste generation and encourage food donations

By applying these measures, food waste generation in primary production, in processing and preparation, retail, restaurants and catering, as well as households, will be reduced, and food donations will be encouraged;

- 1) providing information on the manner of food waste reduction in the food industry and in catering companies (HoReCa);
  - 2) promotion of green procurement of catering services for organising public events;
  - 3) setting up a network for food donations;

- 4) coordination and implementation of voluntary agreements on waste reduction with food trade enterprises and store chains;
  - 5) raising awareness on food waste at the level of households and schools;
  - 6) type of food that may be donated;
  - 7) financing support for food donations;
  - 8) raising awareness on food donations;
  - 9) collection and analysis of data on food waste.

For the purpose of providing information on the manner of reduction of food waste generation in food industry and the catering sector (HoReCa), the following activities need to be implemented:

- 1) preparation of guidelines for green catering aimed at canteens, restaurants and similar, in accordance with the existing regulations on food hygiene
- 2) organising trainings for employees in the food preparation industry, aimed at the prevention of food waste generation;
- 3) establishment of a food industry and catering service network for the purpose of an exchange of best practices and improvement of cooperation;
- 4) encouraging the conclusion of voluntary agreements concerning the food industry and catering services for the purpose of fulfilment of set waste reduction objectives.

This set of activities ensure that persons employed in the food industry and catering services (HoReCa) have been properly trained on the manners to optimize the preparation of food and to minimize food waste. Such training must cover various topics, such as proper food storage, optimal transport and logistics plan which would reduce damage to packaging and food losses, how to optimize a plan for large catering events, how to reduce the size of food portions, use of leftover food, etc. Introduction of a network enables efficient cooperation and exchange in efforts for reducing food waste. On the basis of the introduced food industry and catering services network, voluntary agreements with food trading companies and store chains on reducing food waste may be promoted and coordinated. This may include reporting and reduction targets for individual firms or for all signatories.

These activities must be implemented by the Ministry of in collaboration with the Ministry of Agriculture, Forestry and Water Management, Ministry of Health and civil society organisations.

For the purpose of promotion of green public procurement for catering services when organising public events, the following activities need to be implemented:

- 1) preparation of criteria for selection of "sustainable catering providers" for organising public events;
- 2) defining and compiling a list of sustainable catering providers, restaurants and event organizers meeting the criteria for sustainable catering providers;
- 3) raising awareness of public procurement implementers on the selection of sustainable catering providers through seminars and workshops.

With a view to raising awareness on food waste in households and schools, the following public awareness raising campaignsneed to be organised:

- 1) public awareness raising campaigns on the economic and environmental importance of food waste, which would include provision of practical advice on how to reduce the quantity of food waste (e.g. education on "best used by", advance planning of the purchase of required food staffs, advice for food preservation, advice for leftovers from cooking, packing leftover food in restaurants for take-away, etc.);
- 2) information campaigns and awareness raising initiatives aimed at children and school students, through targeted workshops and participation in EU activities, such as the European Week for Waste Reduction.

This activity must be implemented by the Ministry of in collaboration with the Ministry of Health and the Ministry of Agriculture, Forestry and Water Management, Ministry of Health and civil society organisations.

To identify the type of food products suitable for donation, it is necessary to create a legislative framework which would regulate the conditions for food donation, responsibilities of donors and intermediaries in the food donation chain, animal feed donation, intermediaries' records, conditions for the end recipient of the donation, as well as the types of food products suitable for donation.

The Commission Notice — EU guidelines on food donation C/2017/6872 needs to be taken into account. The Guidelines need to prescribe the conditions to be met by the food (donations), taking into account health, safety and suitability for distribution among relevant industrial branches.

In order to financially support food donation, feasibility study is prepared for introducing tax reliefs for food donation and subsidies for organisations which donate food. The study must be implemented by the Ministry of Finance in collaboration with the Ministry of Agriculture, Forestry and Water Management.

To raise awareness on food donation in food industry, retail and catering (HoReCa), workshops for practitioners must be organised. The workshops need to be organised by the Ministry in collaboration with the Ministry of Agriculture, Forestry and Water Management.

Collection and analysis of data on food waste may be viewed as the first step in improvement of efforts for waste prevention, as such efforts require detection of waste quantities and streams where it is necessary to introduce appropriate measures. To facilitate data collection, a study on quantities of food waste in mixed municipal waste will be conducted (pursuant to the Commission Delegated Decision (EU) 2019/1597).

These activities must be implemented by the Ministry of Finance in collaboration with the Ministry of Agriculture, Forestry and Water Management and the Statistical Office of the Republic of Serbia.

This group of measures will particularly contribute to waste prevention in the following priority areas: food waste and household waste.

# 5.2.5. Measures for promotion of substitution or reduction of the hazardous substance content in materials and products

For the purpose of promotion of reduction of the content of hazardous substances in materials and products, the following measures need to be implemented:

- 1) strengthening of market surveillance of packaging and electrical and electronic equipment concerning the hazardous substance content;
- 2) promotion of substitution or reduction of the hazardous substance content in materials and products;
  - 3) promotion of the use of green public procurement;
  - 4) promotion of the use of green chemistry.

With a view to strengthening of market surveillance of packaging and electrical and electronic equipment concerning the hazardous substance content, the following activities must be implemented:

- 1) including a group of products into market surveillance programmes concerning the reduction of hazardous substance content as defined in regulations on packaging and packaging waste and electrical and electronic equipment (RoHS);
- 2) preparation of guidelines for competent authorities on market surveillance of packaging, batteries and electrical and electronic equipment relating the hazardous substance content.

These activities must be implemented by the Ministry of Internal and External Trade, in collaboration with the Ministry.

For the purpose of promotion of replacement or reduction of the content of hazardous substances in materials and products, the following measures need to be implemented:

- 1) prepare the guidelines on substitution of the hazardous substance content in products and processes;
- 2) organise trainings for small and medium-sized enterprises on the reduction or substitution of the hazardous substance content in materials and products.

These activities must be implemented by the Ministry in collaboration with the Agency.

For the purpose of integration of environmental criteria in calls for public procurement (green public procurement), the following activities need to be undertaken:

- 1) preparation of a study on the status of green public procurement and identification of groups of products with the largest potential for reduction or replacement of hazardous components;
- 2) prepare guidelines for green public procurement and products/categories which must be taken into consideration during purchase, relating to hazardous components (e.g. lower toxicity levels).

These activities must be implemented by the Ministry in collaboration with the Agency.

For the purpose of promotion of green chemistry, the following activities need to be undertaken:

- 1) preparation of a study on the status of the use of green chemistry and best available practices;
- 2) promote the use of green chemistry through fiscal measures, e.g. subsidies for chemical leasing practices.

These activities must be implemented by the Ministry in collaboration with the Agency.

This group of measures will particularly contribute to waste prevention in the following priority areas: industrial waste, hazardous waste, waste electric and electronic equipment.

#### 5.2.6. Measures for promotion of the reduction of municipal waste generation

For the purpose of promotion of the reduction of municipal waste generation, the following measures need to be implemented:

- 1) planning waste prevention measures at the regional and local levels;
- 2) capacity building concerning waste prevention at the regional and local levels;
- 3) measuring the public awareness level of waste prevention;
- 4) information on household waste prevention.

With a view to promoting the planning of waste prevention measures at the local level, it is necessary to include requirements for incorporation of waste prevention measures into the requirements prescribed by the Law on Waste Management for regional and local waste management plans. This activity must be implemented by the Ministry.

To promote capacity building for waste prevention at the local level, training on waste prevention needs to be organised at the municipal level for the municipal staff. These activities must be implemented by the Ministry in collaboration with the Standing Conference of Towns and Municipalities.

To measure the public awareness level on waste prevention, public opinion surveys on knowledge and opinions concerning waste prevention need to be implemented. This activity must be implemented by the Ministry.

To provide information on household waste prevention, the following activities need to be implemented:

- 1) organising a public awareness raising campaign on the sustainable consumption of household chemicals;
- 2) organising public awareness raising campaigns on packaging waste prevention through, for example, selection of goods with less packaging or larger products in recyclable and economic packings;
- 3) encouraging a wider participation in the European Week for Waste Reduction, by awarding the most active municipalities, schools, civil society organisations or initiatives;

4) organising a competition between the Green School or Green Kindergarten in the field of waste prevention and sustainable lifestyle.

These activities must be implemented by the Ministry in collaboration with local self-government units.

This group of measures will particularly contribute to waste prevention in the following priority areas: hazardous waste, food waste, packaging waste, household waste.

5.2.7. Measures for promotion of reduction and prevention of littering in nature and the water system

For the purpose of promotion of reduction and prevention of littering in nature and water systems, the following measures need to be implemented:

- 1) identification of products which are the main source of littering, in particular in nature and the water system;
  - 2) promotion of reduced use of light plastic bags;
  - 3) raising awareness on negative environmental impacts of littering in the nature.

To identify products which are the main source of waste, particularly in nature and water systems, it is necessary to prepare a study for identification of the composition of waste and assessment of the quantities of waste found on river banks and in nature, and related clean-up costs. Special focus needs to be placed on the ten most frequent single use plastic objects: plates and trays, drinking cups, ear sticks, cutlery, drinking straws, balloon sticks, wet wipes, tobacco product filters, plastic bags, etc. This study must be implemented by the Agency in collaboration with the Ministry.

To promote reduction of single use plastic bags and plastics, it is necessary to transpose the Directive (EU) 2015/720 of the European Parliament and of the Council of 29 April 2015 amending Directive 94/62/EC as regards reducing the consumption of lightweight plastic carrier bags. This activity must be implemented by the Ministry. In addition, public awareness raising campaigns need to be implemented, which would highlight adverse effects of single use plastics, primarily focusing on alternative solutions, such as reusable cutlery and coffee cups.

To raise awareness on adverse environmental impact of littering in nature, the following activities need to be implemented:

- 1) assess the fractions comprising the waste left in nature and related costs, through the above study;
- 2) organise and promote campaigns of cleaning river banks and beaches, as well as recreational areas and nature reserves;
- 3) design and support information campaigns for awareness raising on the negative environmental impact of littering in nature (in particular the impact on water environments), economy and health.

These activities must be implemented by the Ministry in collaboration with local self-government units.

This group of measures will particularly contribute to waste prevention in the following priority areas: packaging waste, household waste.

#### 6. IMPLEMENTATION. EVALUATION AND MONITORING OF THE PLAN

### 6.1.Implementation of the Plan

To achieve the waste prevention objectives, the Plan must be implemented in accordance with the plan of concrete measures and taking into account the proposed timeframe (see Chapter 7).

Implementation of programme measures will be financed from the budget of the Republic of Serbia, the Autonomous Province and local self-government units, other national and international funds or programmes, as well as other legally acquired funds.

The Ministry cooperates the implementation of the Plan and its measures.

The participants in the implementation of the Plan are the Ministry of Environmental Protection, the Environmental Protection Agency, the Ministry of Economy, the Ministry of Health, the Ministry of Education, the Ministry of Science, Technological Development and Innovation, the Ministry of Agriculture, Trade, Forestry and Water Management, the Public Procurement Office, the Ministry of Labour, Employment, Veteran and Social Affairs, the Ministry of Finance, the Ministry of Interior, the Ministry of Foreign Affairs, the Ministry of Internal and Foreign Trade, autonomous provinces, local self-government units and the Chamber of Commerce and Industry of Serbia.

At the end of a budget year, by 31 March of the current year, authorities which implement the Plan are obliged to submit information on the implemented measures to the Ministry. Authorities competent for the implementation of the Plan are obliged to prepare annual reports and to submit them to the Ministry no later than by 31 March of the current year, for the preceding year.

As waste prevention covers a broad spectrum of activities, other stakeholders, such as institutions, companies, the civil society (including social groups, civil society organisations, charity organisations), waste holders, i.e. natural and legal persons;, are invited to contribute with their initiatives.

### 6.2. Assessment and monitoring of the Plan

In accordance with Article 11a of the Law on Waste Management, the Plan is adopted by the Government for a six-year period and, if necessary, the Plan is revised every three years.

For the purpose of research into the general progress that waste prevention, i.e. prevention measures, may affect, the following indicators (shown in Table 2) are used:

1) direct indicators of the generation of various waste streams and waste categories. Under regular circumstances, the difference between waste generated in the baseline year and in the reference year shows whether total quantities of generated waste are larger, smaller or stable during a certain time period, thus, whether waste prevention has been achieved;

2) indirect indicators of economic or social parameters, which indicate the status of implementation of waste prevention measures, i.e. Indirectly indicate the progress in achievement of waste prevention.

Table 2 Indicators of waste prevention

		Unit of		Preferable
No.	Indicators	measurement	Baseline data	developme nt direction
	Direct indicators of waste prevention		2022	nt direction
1.	Total quantity of generated waste	tonnes	11,460,971	I
	Quantity of waste generated in the	tonnes		<b>+</b>
2.	industrial sector	tonnes	7,325,971.	$\downarrow$
3.	Quantity of waste generated in the	tonnes/thousand	0.12	1
3.	industrial sector per GDP unit	EUR	0.12	<b>+</b>
4.	Quantity of waste generated in the	tonnes	666,626	Ţ
	construction sector per GDP unit Quantity of waste generated in the	tonnes/thousand	ŕ	•
5.	construction sector per GDP unit	EUR	0.01	$\downarrow$
6.	Quantity of generated municipal	tonnes	3,180,000	J.
7.	waste	kg per capita	480	Ĭ
	Quantity of generated hazardous			
8.	waste	Tonnes	80,604	<b>↓</b>
9.	Quantity of packaging placed on the	tonnes	401,299	$\downarrow$
10.	market	kg per capita	60	$\downarrow$
11.	Quantity of generated electrical &	tonnes	34,532	$\downarrow$
12.	electronic waste	kg per capita	5.1	$\downarrow$
13.	Outputites of food supple	tonnes	1,450,000	$\downarrow$
14.	Quantity of food waste	kg per capita	220	<u> </u>
	Indirect indicators on the status of implementation of measures of waste		2022	
	prevention:			
	Donation of food (Food Bank):			
15.	Annual quantity of donated food	tonnes	1.200	<b>↑</b>
	Number of small and medium-sized			
16.	enterprises and retail establishments which donate food	No.	6–8	<b>1</b>
	Reuse			
17.	Number of employed persons in the reuse sector	No.	n/a	<b>↑</b>
18.	Total turnover in the reuse sector	Euro	n/a	<b>↑</b>
	Sustainable production			'
19.	Productivity of resources (relation between the GDP and domestic consumption of materials **)	RSD/kg	37.2	1
20.	Number of companies which adopt environmental management systems	No.	1,794	1
	Sustainable production:			
21.	Number of issued certificates for Ecolabel	No.	2	1
	Share of green public procurement			<b>↑</b>
22.	(application of environmental aspects) in the total public	percentage	0.44	
	procurement costs			
	Public awareness:			
22	Number of implemented awareness	No	0	<b>^</b>
23.	raising campaigns on waste prevention	No.	0	<b>↑</b>
	1.4	1		

No.	Indicators	Unit of measurement	Baseline data	Preferable developme nt direction
24.	Share of population with good knowledge and positive opinion on waste prevention ***	percentage	n/a	1

<sup>†:</sup> The value should increase in time with a view to achieving positive effects.

For monitoring of the progress towards waste prevention, data on waste prevention indicators need to be collected annually, and published on the website of the Ministry by 30 June, so that these data would be available to the public.

An assessment of the need to revise the Plan shall be carried out by the Ministry in 2026, on the basis of the (indicator) monitoring results and a report on the implementation of the plan of measures for the implementation of the Plan (Chapter 7) by the competent institutions (as described in Section 6.1).

A detailed assessment of the Plan shall be carried out in 2029, and a new Plan shall be prepared for the period 2030-2035. The assessment of the Plan shall be carried out in such a manner that it enables:

- 1) monitoring of the progress in achievement of the objectives;
- 2) assessment of the effectiveness of the implemented measures (reaffirmation of the measures from the Plan, and exclusion of the measures which have turned out to be less effective or not effective at all);
- 3) proposing new measures, taking into account the achieved progress and new priorities.

<sup>1:</sup> The value should decrease in time with a view to achieving positive effects.

<sup>\*\*</sup> National consumption of materials consists of the total quantity of materials which are directly used in the industry, and is defined as annual quantity of raw materials obtained from the national focused economy, increased by the total physical import, reduced by the total physical export.

<sup>\*\*\*</sup> Public opinion surveys should be conducted in 2024, 2026 and 2028.

## 7. PLAN OF MEASURES FOR THE IMPLEMENTATION OF THE PLANS

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
1. Promote and support business modes of sustainable production and purchase	awareness of	1.1.1. Organising an international conference on the best examples of the application of sustainable production and consumption business models  1.1.2. Organising a national open	Chamber of Commerce and Industry of Serbia	Ministry of Environmental Protection, Ministry of Economy	Industrial waste, hazardous waste, packaging waste, constructio n and demolition waste, waste electrical & electronic equipment and household waste	2026	2.	

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
	sustainable production and consumption model	competition and giving awards for implementation of innovative sustainable business models						
	1.3. Promotion of reuse of demolition materials in the construction of new buildings	1.1.3. Laying down the conditions that demolition material must meet in order to be reused				2025		
		1.4.4. Providing subsidies for reuse of demolition materials in the construction of new buildings				2029	16	

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
2. Encourage designing, production and use of resource efficient, permanent, corrigible, recoverable and upgradable products	2.1. Encourage research and development of obtaining cleaner products and technologies with less waste, as well as expansion and use of the	2.1.1. Reaching agreements with universities on the introduction of student programmes of academic studies and research on design and production of cleaner products	Ministry of Environmental Protection	Ministry of Education and Ministry of Science, Technological Development and Innovation	Industrial waste, hazardous waste, packaging waste, food waste, constructio n and demolition waste,	2025	2.	
	obtained results of such research and development	2.1.2. Organising conferences for expansion of the results of research and development for obtaining cleaner products	Ministry of Science, Technological Development and Innovation	Ministry of Environmental Protection, universities	waste electrical and electronic equipment, household waste	2027		

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
	2.2. Building capacities in Ecodesign for packaging and electrical and electronic equipment in small and medium-sized enterprises		Chamber of Commerce and Industry of Serbia	Ministry of Environmental Protection,		2025	4.	

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
		designing specific products						
	2.3. Promotion of credible Ecolabels	2.3.1. Organising information campaigns; for raising awareness on credible Ecolabels	Ministry of Environmental Protection			2025	13.	
	2.4. Promotion of green procurement and incorporation of environmental criteria on waste prevention in	status of green public procurement and identification of groups of products with the largest	Public Procurement Office	Ministry of Environmental Protection		2025	15.	

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
	calls for public procurement	2.4.2. Development and definition of environmental criteria for public procurement for groups of products with the largest potential for waste prevention	Ministry of Environmental Protection	Public Procurement Office		2025		
		2.4.3. Preparation of guidelines for green public procurement: and products/categorie s which must be taken into consideration	Ministry of Environmental Protection	Public Procurement Office		2024/25		

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
3. Promotion of reduction of waste of products containing critical raw materials	3.1. Analysis of production and consumption of products containing critical raw materials, as well as possibilities for recovery	3.1.1. Preparation of a study on products containing critical raw materials, as defined in Annex II to the proposed Regulation COM(2023) with the fifth list of critical raw materials in the EU	Chamber of Commerce and Industry of Serbia	Ministry of Economy (partner entity)	Industrial waste, hazardous waste, waste electric and electronic equipment	2026	2.	
		3.1.2. Study of possible products and collection routes, where critical raw materials may be recovered and reused (on the basis of the				2027	2.	

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
		European Commission Report on critical raw materials and the circular economy),						
	3.2. Analysis of possibilities for reduction of the consumption of products containing critical raw materials	of a study for defining measures				2028	2.	

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
4. Encourage the reuse of products and establish systems for promotion of repair and reuse tasks	4.1. Ensure fiscal facilities for the reuse and repair sectors  4.2. Promotion of Repair Cafés	4.1.1. Preparation of a feasibility study of granting VAT reliefs for repair services and reused products  4.2.1. Holding workshops for CSOs and municipalities on organising Repair Cafés	Ministry of Finance  Ministry of Environmental Protection	Ministry of Environmental Protection  Civil society organisations Non-profit organisations Local self- government units	Waste electrical & electronic equipment and household waste	2027	16.	
	4.3. Informing households on the importance of reuse and repair;	4.3.1. Organising a public awareness raising campaign on the importance of reuse and repair, and for	Local self-government units	Ministry of Environmental Protection		2029		

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
		information on possible repair service and reuse possibilities						
	4.4. Establishment and promotion of reuse and repair networks, in particular including electrical and electronic equipment, textile and furniture, as well as packaging and construction	which promote reuse (e.g. single information point for providing	Ministry of Environmental Protection	Chamber of Commerce and Industry of Serbia		2025–2030		

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
	material and	4.4.2. Negotiations				2026		
	products	on cooperation						
		between Repair						
		Cafés and insurers						
		4.4.3. Collection				Annually after		
		and monitoring of				its introduction		
		data on						
		employment and						
		annual turnover of						
		the reuse and						
		repair sector in						
		Serbia, in						
		particular on						
		employment of						
		women						
	4.5.	4.5.1. Assessment	National	Ministry of		2027		
	Encouraging	of possibilities for	Employment Service	Environmental				
	employment of	promotion of		Protection				
	people	employment of						
	belonging to	people belonging						

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
	socially vulnerable groups in the repair sector	to socially vulnerable groups in the repair sector and development of a joint plan of employment of socially vulnerable groups, in particular women from this category.						
		4.5.2. Ensure training in the field of repairs (e.g. electrical and electronic equipment, textiles) for people belonging to socially vulnerable groups	National Employment Service	Ministry of Environmental Protection		2029		

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
		4.5.3. Assessment of possibilities for promotion of employment and work engagement of people belonging to socially vulnerable groups in the field of social entrepreneurship in the repair sector	Ministry of Environmental Protection	Ministry of Labour, Employment, Veteran and Social Affairs (partner entity)				
	4.6. Providing possibilities for collecting products suitable for reuse in recycling yards	4.6.1. Introduce and promote separate collection of municipal and industrial waste at the source  4.6.2. Providing premises for	Local self-government units	-		2025–2030		

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
		collecting						
		electrical and						
		electronic equipment, textiles						
		and furniture						
		which may be						
		suitable for						
		preparation for						
		reuse, reuse and						
		repairs during planning and						
		construction of						
		recycling yards						
		4.6.3. Train the				2025		
		staff on recycling						
		yards at new						
		locations for						
		collection and on criteria that the						

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
		collected goods must meet						
	4.7. Encouraging, if needed and when it does not endanger intellectual property rights, availability of spare parts instructions for use, technical information, or	4.7.1. Compile the guidelines and instructions for preparation of reuse and handling of products at the end of their life cycle which are collected at recycling yards	Ministry of Environmental Protection	-		2028		
	other documents, equipment or software which enables repair and reuse of products without							

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
	endangering their quality and safety.							
5. Promote reduction of waste generation in procedures relating to industrial production, extraction of minerals, development, construction and demolition	5.1. Promotion of credible environmental management systems, including EMAS and SRPS ISO 14001:2015	5.1.1. Establishment of a grant programme for compensation of the costs of certification and registration of small and mediumsized enterprises in the environmental management system (EMS)	Ministry of Finance	Ministry of Environmental Protection	Industrial waste, hazardous waste, constructio n and demolition waste	2026	10.	
		5.1.2. Organising informative seminars on environmental management	Ministry of Environmental Protection	Serbian Environmental Protection Agency		2026–2029	10.	

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
		systems, including EMAS and SRPS ISO 14001:2015						
	5.2. Facilitating implementation of best available techniques, per industrial branches	5.2.1. Organising trainings on best available techniques for competent authorities	Serbian Environmental Protection Agency	Ministry of Environmental Protection		2025	5.	
	5.3. Promotion of preparation for reuse of materials obtained by demolition of old buildings	5.3.1.  Development of standards and guidelines for demolition of old buildings and preparation for reuse of materials obtained by demolition (e.g.	Ministry of Environmental Protection	-		2028	-	

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
		Guidelines for sustainable buildings)						
		5.3.2. Organising informational seminars on the practical application of guidelines and standards for demolition of old buildings and preparation for reuse of materials obtained by demolition				2029	12.	
6. Promote reduction of food waste generation, and	6.1. Providing information on the manner of food waste	6.1.1. Prepare guidelines for green catering aimed at canteens,	Ministry of Environmental Protection	Ministry of Health Ministry of Agriculture,	Food waste and household waste	2025	-	

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
encourage food donations	reduction in the food industry and in catering companies (HoReCa)	restaurants and similar, in accordance with the existing regulations on food hygiene		Forestry and Water Management				
		6.1.2. Organising trainings for employees in the food preparation industry, aimed at the prevention of food waste generation.				2027	-	
		6.1.3. Establishment of a food industry and catering service network for the purpose of an				2026	9.	

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
		exchange of best practices and improvement of cooperation						
		6.1.4. Encouraging the conclusion of voluntary agreements concerning the food industry and catering services for the purpose of fulfilment of set waste reduction objectives.				2026–2029		
	6.2. Setting up a network for food donations	6.2.1. Introduction of regular round tables with appropriate stakeholders (food				2027		

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
		banks, store chains, catering services and industry)						
	6.3. Promotion of green procurement of catering services for organising public events	6.3.1. Preparation of criteria for selection of "sustainable catering providers" for organising public events	Public Procurement Administration	Ministry of Environmental Protection		2027	-	
		6.3.2. Defining and compiling a list of sustainable catering providers, restaurants and event organizers meeting the criteria for				2028	12.	

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
		sustainable catering providers						
		6.3.3. Raising awareness of public procurement implementers on the selection of sustainable catering service providers through seminars and workshops				2029		
	6.4. Raising awareness on food waste at the level of households	6.4.1. Organising awareness raising campaigns on the environmental and economic important of food waste	Ministry of Environmental Protection	Ministry of Health, Ministry of Agriculture, Forestry and Water Management,		2026		

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
				civil society organisations				
		6.4.2. Organising an information campaign and awareness raising initiatives aimed at children and school students, through targeted workshops and participation in EU activities, such as the European Week for Waste Reduction				2025		
	6.5. Type of food products	6.5.1. Development of a legislative framework:	Ministry of Agriculture Forestry and Water	Ministry		2027	-	

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
	suitable for donation	relating to food donation	Management and Ministry of Health					
		6.5.2. Draw up a regulation which would govern the type of food products suitable for donation				2027	-	
		6.5.3. Preparation and distribution of guidelines on conditions that must be met by food donations (relating to health, safety and suitability)				2027	-	

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
	6.6. Financial support for food donations	6.6.1. Preparation of a feasibility study of introducing tax reliefs for food donation and subsidies for organisations which donate food	Ministry of Finance	Ministry of Agriculture, Forestry and Water Management		2025	1.	
	6.7. Raising awareness on food donations	6.7.1. Organising workshops on food donations for employees of food industry, retail and catering (HoReCa)	Ministry of Environmental Protection	Ministry of Agriculture, Forestry and Water Management		2026	12.	
	6.8. Collection and analysis of data on food waste	6.8.1. Conducting a study on food waste in mixed municipal waste				2026	-	

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
7. Promotion of reduction of the hazardous substance content in materials and products	7.1. Strengthening of market surveillance of packaging and electrical and electronic equipment concerning the hazardous substance content	7.1.1. Including a group of products into market surveillance programmes concerning the reduction of hazardous substance content as defined in regulations on packaging and packaging waste and electrical and electronic equipment (RoHS)	Ministry of Internal and Foreign Trade	Ministry of Environmental Protection	Industrial waste, hazardous waste, packaging waste, waste electric and electronic equipment	2027	1.	
		7.1.2. Preparation of guidelines for competent authorities on market				2027	2.	

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
		surveillance of packaging, batteries and electrical and electronic equipment relating the hazardous substance content						
	7.2. Promotion of substitution or reduction of the hazardous substance content in materials and	hazardous substance content	Ministry of Environmental Protection	Serbian Environmental Protection Agency		2025		
	products	7.2.2. Organise trainings for small and medium-sized enterprises on the reduction or				2026		

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
		substitution of the hazardous substance content in materials and products						
	7.3. Promotion of green public procurement	of a study on the status of green public procurement and identification of groups of products with the largest potential for reduction of hazardous components,				2025	15.	
		7.3.2. Providing guidelines for gen procurement and				2026		

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
		products/categorie						
		S						
	7.4. Promotion	7.4.1. Preparation				2025	-	
	of the use of	of a study on the						
	green chemistry	status of the use of						
		green chemistry and best available						
		practices						
		7.4.2. Promote the			-	2026	11.	
		use of green						
		chemistry through fiscal measures,						
		e.g. subsidies for						
		chemical leasing						
		practices						
8. Promote	8.1. Planning	8.1.1. Including a	Ministry of		Hazardous	2025	15.	
reduction of	waste	request for	Environmental		waste,			
household	prevention	introducing	Protection		food			
	measures at the	prevention			waste,			
		measures in the			packaging			

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
waste generation	regional and local levels	requests for regional and local waste management plans in the Law on Waste Management or drawing up specific request which are to be adopted by the Ministry of Environmental Protection			waste and household waste			
	8.2. Capacity building concerning waste prevention at the regional and local levels	trainings on waste prevention at the municipal level for	Ministry of Environmental Protection	Standing Conference of Towns and Municipalities		2025	-	

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
	8.3. Measuring the public awareness level of waste prevention	8.3.1. Implementation of a survey of public opinions on waste prevention	Ministry of Environmental Protection			2025, 2026, 2028	12.	
	8.4. Information on household waste prevention	8.4.1. Organising a public awareness raising campaign (in particular women) on the sustainable consumption of household chemistry	Ministry of Environmental Protection	Local self- government units		2028		
		8.4.2. Organising an awareness raising campaign on packaging waste reduction				2027		

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
		8.4.3. Encouraging a wider participation in the European Week for Waste Reduction, by awarding the most active municipalities, schools, civil society organisations or initiatives				2025-2030		
		8.4.4. Organising a competition between the Green School or Green Kindergarten in the field of waste prevention and sustainable lifestyle				2029		

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
9. Promotion of reduction and prevention of littering in nature and the water system	9.1. Identification of products which are the main source of littering, in particular in nature and the water system	identification of objects that are most frequently	Serbian Environmental Protection Agency	Ministry of Environmental Protection	Packaging waste, household waste	2025	-	
	9.2. Promotion of reduction of the use of light plastic bags, as well as other single use plastics	9.2.1. Transpose into the legislation of Serbia: Directive (EU) 2015/720 of the European Parliament and of the Council of 29 April 2015 amending Directive	Ministry of Environmental Protection	-		2028	-	

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
		94/62/EC as regards reducing the consumption of lightweight plastic carrier bags						
		9.2.2. Promote the use of reusable cutlery. coffee cups etc. through public awareness raising campaigns				2025 – in continuity	12.	
	9.3. Raising awareness on negative environmental impacts of littering in the nature		Ministry of Environmental Protection	Local self- government units		2025- 2030 (at least once a year)	12.	
		9.3.3. Design and support				2025		

Objective	Measure	Activities	Main responsibility	In collaboration with	Target priority waste streams	Timeframe for implementation	Reference to the measure from Annex IV to the Directive 2008/98/EC	
		information campaigns for awareness raising on the negative environmental impact of littering in nature (in particular the impact on water environments), economy and health						