

Biodegradable Waste Management in Slovenia: Preserving Good Practices, Adapting to New Realities²

Abstract

Following the revision of the Waste Framework Directive in 2023, the obligation for the separate collection of bio-waste was formally introduced in the EU. This revision mandates that all Member States, including Slovenia, establish systems for the separate collection of biodegradable waste. Within a broader comparative framework, this study outlines the key characteristics of biodegradable waste collection and treatment in Slovenia. Particular attention is devoted to the effectiveness of separate collection, treatment methods, composting, public information and communication strategies, and potential health concerns associated with the collection and processing of biodegradable waste.

Keywords: Bio-Waste, Biodegradable Waste, Municipal Waste, Waste Collection, Waste Treatment, Composting, Waste Framework Directive, Recycling

1. Introduction

Like many countries, Slovenia has not been immune to the global increase in waste production. It generates, on average, over 8 million tonnes of waste annually, of which over one million tonnes constitute municipal waste, with biodegradable waste accounting for slightly less than 25%.³ In general, EU legislation requires reducing the amount of biodegradable waste sent to landfills and prohibits mixing it with other types of waste.

1 | Associate Professor, University of Ljubljana, Faculty of Law & Researcher at the Institute of Comparative Law, Faculty of Law in Ljubljana; ORCID: <https://orcid.org/0000-0002-8359-2915>; e-mail: karmen.lutman@pf.uni-lj.si

2 | *The research and preparation of this study was supported by the Central European Academy.*

3 | <https://www.stat.si/StatWeb/news/Index/12798> (13. 5. 2025).

Karmen LUTMAN: Biodegradable Waste Management in Slovenia: Preserving Good Practices, Adapting to New Realities. *Journal of Agricultural and Environmental Law* ISSN 1788-6171, 2025 Vol. XX No. 39 pp. 59–72



The separate collection of bio-waste became mandatory in EU Member States on 1 January 2024, following the Waste Framework Directive.⁴ It is well known that such collection reduces greenhouse gas emissions and facilitates the conversion of these materials into high-quality compost or biogas. In Slovenia, most households have access to separate bio-waste collection, especially in urban areas. However, as with all waste categories, the most effective approach remains the prevention of its generation.

As one of the EU leaders in municipal waste recycling (including bio-waste),⁵ Slovenia appears relatively well equipped with the expertise and methodological frameworks necessary for more sustainable waste management in the future. Nevertheless, there is room for improvement. In this context, this paper analyses the legal framework governing biodegradable waste in Slovenia, with particular emphasis on its separate collection and treatment. The objective is to evaluate the transposition and implementation of relevant EU directives into the Slovenian legal system while also examining best practices in this field.

2. Legal framework on biodegradable waste in Slovenia

Slovenia transposed the Waste Framework Directive (and its subsequent revision) into its legal system through the Environmental Protection Act (*Zakon o varstvu okolja* – ZVO-2). This act serves as the country's principal environmental legislation, establishing a comprehensive framework for environmental protection with a significant focus on regulating waste management.⁶ Together with its implementing legislation (i.e. national regulations and decrees), it provides the legal framework for managing biodegradable waste, aligning with EU directives and promoting sustainable practices.

The secondary legislation relevant to biodegradable waste management in Slovenia includes:

- | Decree on the Management of Biodegradable Kitchen Waste and Green Garden Waste,⁷

4 | Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain directives, OJ L 312, 22. 11. 2008.

5 | Slovenia's municipal waste preparing for reuse and recycling rate has significantly increased over the past years. In 2022, it was 63%, significantly above the (estimated) EU-27 average of 49% in the same year. Municipal waste incineration started in 2015 and was at the level of 13% of generated municipal waste in 2022. During the last 10 years, the landfill rate significantly decreased to 8% in 2022. For more see: <https://www.eea.europa.eu/en/topics/in-depth/waste-and-recycling/municipal-and-packaging-waste-management-country-profiles-2025/si-municipal-waste-factsheet.pdf/@download/file> (13. 5. 2025).

6 | For more see: Juhart 2024, 8–34.

7 | Official Gazette of the Republic of Slovenia No. 39/10 (with further amendments, last amendment in 2022).

- | Decree on the Treatment of Biodegradable Waste and the Use of Compost or Digestate,⁸
- | Decree on Waste,⁹
- | Decree on the Mandatory Municipal Public Utility Service for the Collection of Municipal Waste.¹⁰

The Decree on the Treatment of Biodegradable Waste and the Use of Compost or Digestate sets conditions for treating biodegradable waste and for the use and marketing of compost or digestate. The Decree on the Management of Biodegradable Kitchen Waste and Green Garden Waste sets provisions for the compulsory treatment of household kitchen waste and green garden waste, including collection and processing requirements. The last two listed decrees are broader, applying not only to biodegradable waste but to waste management in general. Thus, the Decree on Waste establishes requirements for preventing or reducing the adverse impacts of waste generation and management, including provisions related to biodegradable waste. The Decree on the Mandatory Municipal Public Utility Service for the Collection of Municipal Waste defines the organisation, scope, and standards of municipal waste collection services.

3. Waste management in Slovenia: general overview

3.1. Statistics

Statistics show that the total amount of waste in Slovenia is increasing year by year. The Statistical Office of the Republic of Slovenia reported that in the first quarter of 2024,¹¹ the amount of collected municipal waste increased by nearly 5% compared to the first quarter of 2023. It amounted to 249,000 tonnes, of which 29%, or 72,000 tonnes, was mixed municipal waste—an increase of 16%.

In total, 71% of municipal waste was separately collected. Among this, the largest share—one quarter—was paper and cardboard, followed by biodegradable waste at 23% and mixed and composite packaging at 16%. Wood and wooden packaging accounted for just over one-tenth of all separately collected municipal waste.

8 | Official Gazette of the Republic of Slovenia No. 99/2013 (with further amendments, last amendment in 2022).

9 | Official Gazette of the Republic of Slovenia No. 77/22 (with further amendments, last amendment in 2025).

10 | Official Gazette of the Republic of Slovenia No. 33/17 (with further amendments, last amendment in 2022).

11 | Available at: <https://www.stat.si/StatWeb/news/Index/12798> (8. 5. 2025).

3.2. Waste collection

Waste collection services may only be performed by providers who have obtained a final decision from the Ministry of the Environment, Climate, and Energy ('Ministry of the Environment') confirming entry into the register of waste collectors. The essential conditions for registration as a waste collector are: (i) registration in the business register for the activity of waste collection; (ii) ownership of the facility and land where the activity is to be carried out; and (iii) ownership of the means and equipment necessary for collection. The collection of municipal waste is carried out as a mandatory public utility service.¹²

The national government or a local community ensures the provision of public utility services in the following forms:¹³

- | Municipal internal service ('in-house service unit'): used when, due to the small scale or nature of the service, it would be uneconomical or irrational to establish a public company or grant a concession;
- | Public economic institution: used when one or more public utility services, by nature, cannot be profit-making activities or when profit is not their objective;
- | Public company: used when one or more large-scale public utility services are performed, or when the monopolistic nature of a public utility service requires it and the activity can be carried out for profit;
- | Concession: granted on the basis of public tenders after a selection process; the concession holder may also be a foreign entity.

3.3. Waste transportation

Waste transport services may be provided only upon obtaining an official permit and registration in the waste transporters' register maintained by the Ministry of the Environment. The essential conditions for registration are: (i) registration in the business register for waste collection and transport activities or road freight transport activities; and (ii) possession of the means and equipment necessary for transporting waste.¹⁴ A permit is granted, and the provider is entered into the register, once these criteria are met.

3.4. Waste treatment

The performance of waste treatment activities requires an environmental permit. The essential conditions for obtaining it are:¹⁵ (i) registration in the business

12 | Art. 35 ZVO-2. For more see, e.g. Viler-Kovačič 2011; Mužina 2013.

13 | See: Public Utilities Act (*Zakon o gospodarskih javnih službah, ZGJS*), Official Gazette of the Republic of Slovenia No. 32/93 (with further amendments, last amendment in 2011).

14 | Art. 25(4) ZVO-2.

15 | Art. 25 ZVO-2.

register for waste treatment services; (ii) operation of a waste treatment facility or plans to construct one, if required for the treatment process; (iii) ownership of the facility, the building housing the facility, the land on which it is located, the equipment for the acceptance of waste (if the applicant collects the waste directly from holders), and other movable property necessary for performing waste treatment activities, or proof of future ownership if the facility is yet to be constructed. Exceptions apply if the applicant is also a provider of a public service treating specific types of municipal waste, or if applying for an environmental permit for a mobile facility in accordance with the regulation governing waste treatment in mobile facilities (valid for less than two years); (iv) adequate measures must ensure compliance with environmental, technical, and other requirements governing emissions of substances and energy into the environment, handling specific types of waste, or specific treatment procedures; and (v) the planned treatment must not pose a risk to human health or cause harmful effects on the environment.

Treatment of certain types of municipal waste is carried out as a mandatory public utility service.¹⁶

3.5. Disposal of waste and sanitation services

An environmental permit is also required for waste disposal services. Conditions are similar to those for waste treatment, with specific differences depending on the disposal method (e.g. incineration, landfilling) and the type of waste (e.g. asbestos). Incineration of certain municipal waste is carried out as a mandatory public utility service. Sanitation services are also mandatory municipal public utility services essential for environmental protection.

4. Collection of biodegradable waste

4.1. Bio-waste as a legal category

In line with the classification established by the Waste Framework Directive, bio-waste falls under the broader category of municipal waste (Art. 3(7.4.) ZVO-2). The definition of bio-waste (Art. 3(4) of the Waste Framework Directive) was, without any changes to the original phrasing, transposed into Slovenian law by the Decree on Waste. Accordingly, bio-waste is considered as “biodegradable garden and park waste, food and kitchen waste from households, offices, restaurants, wholesale, canteens, caterers and retail premises and comparable waste from food processing plants” (Art. 3(1) of the Decree on Waste).

¹⁶ | For more on waste collection and related legal issues see: Sekirnik 2024; Juhart 2023; Dajčman 2021.

4.2. Composting and collecting of bio-waste

The management of biological waste is regulated by the Decree on the Management of Biodegradable Kitchen Waste and Green Garden Waste, which requires households to separate biodegradable kitchen and garden waste from other municipal waste. Mixing food waste with other waste (e.g. mixed municipal or biological waste) is prohibited, as is cutting, crushing, grinding, or diluting it with the intention of discharging it into the public sewage system, cesspools, sealed cesspits, or directly into water bodies.

Households must compost kitchen and garden waste in a home composter (Art. 5 of the Decree). Those who do not compost must hand over this waste to the public waste management service provider in a designated container, subject to a fee. The household waste producer must store kitchen and green garden waste separately until composting or delivery to the public service provider, in such a way that it does not mix with other waste and remains suitable for composting or treatment under the regulation on biodegradable waste. Mixing household kitchen and garden waste with other municipal waste is explicitly prohibited (Art. 4 of the Decree).

Bio-waste may only be placed in the bio-waste container using biodegradable or paper bags, or newspaper, and not plastic bags. Furthermore, the waste must not be in liquid form.

Systematic collection of kitchen and garden waste in Slovenia is carried out with designated brown containers. Municipal public utility services are responsible for informing citizens about eligible materials.¹⁷ These include all types of vegetable and fruit waste, eggshells, coffee grounds and filters, spoiled food, food leftovers, paper tissues and towels, paper bags, branches, grass clippings, leaves, flowers, weeds, and bedding from small herbivorous animals.

Conversely, certain items are not permitted in bio-waste containers, including cigarette butts, bones, diapers and sanitary pads, cat litter, chewing gum, cork (to be disposed of as residual waste), textiles, leather, rubber (to be delivered to a designated collection centre), pharmaceuticals, chemicals, fats or used cooking oil (classified as hazardous waste), and animal carcasses.

4.3. Separate collection in condominium and single-family zones

The frequency of bio-waste collection falls within the competence of local communities, that is, public utility providers for the specific area. Minimal state-level standards are laid down in the Decree on the Mandatory Municipal Public Utility Service for the Collection of Municipal Waste. According to Article 10, bio-waste

17 | See, e.g. <https://www.vokasnaga.si/locevanje-odpadkov/biolosko-razgradljivi-odpadki> (8. 5. 2025).

is collected door-to-door from original waste producers. Containers are emptied at least once per week from April to September and at least once every 14 days from October to March.¹⁸ In areas where residents predominantly practice home composting, collection may be reduced to once every three weeks during October to March.¹⁹ Although the Decree does not specifically distinguish between condominium zones and single-family zones, at the municipal level bio-waste is generally collected more frequently in condominium zones than in single-family zones.

According to Article 20(2), service providers must clean and maintain transport vehicles and waste collection containers to prevent risks to human health and harmful environmental impacts. Cleaning frequency varies by municipality: in some, containers are cleaned once a year, while in others they are cleaned monthly during summer.

4.4. Strategies

To achieve the EU's sustainable waste management objectives, the Slovenian Ministry of the Environment prepares, in accordance with ZVO-2, an operational environmental protection programme in the field of waste management, typically every four years, and publishes it on its official website.²⁰ The current Waste Management Programme and Waste Prevention Programme of the Republic of Slovenia (hereinafter, 'the Programme') was adopted in 2022.²¹ It aims to implement waste prevention measures, ensure compliance with prescribed waste management practices, and achieve waste management objectives for the period up to 2035. In light of new environmental requirements, it represents a revision of the programme adopted in 2016.

According to the Programme, Slovenia had already achieved the goal set out in Article 5(2)(a) of the Landfill Directive²² (a reduction of biodegradable municipal waste going to landfills to 75 percent) before 2006. In 2010, it also met the subsequent target—to below 50 percent of the total (by weight) of biodegradable municipal waste generated in 1995—by reaching 48 percent (set out in Article 5(2)(b) of the Landfill Directive). The final target under Article 5(2)(c), a reduction to 35 percent compared with the 1995 baseline, was achieved in 2011.

The Programme further outlines a comprehensive strategic plan for the collection and management of bio-waste through 2035, in alignment with EU directives and national sustainability goals. Its main objectives are: (i) mandatory separate collection of biodegradable kitchen and garden waste, as prescribed by

18 | Article 10(4) of the Decree.

19 | Article 10(5) of the Decree.

20 | Available at: <https://www.gov.si/teme/ravnanje-z-odpadki/> (9. 5. 2025).

21 | Available at: https://www.gov.si/assets/ministrstva/MOP/Operativni-programi/op_odpadki_2022.pdf (9. 5. 2025).

22 | Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, OJ L 182, 16. 7. 1999.

the Decree on the Management of Biodegradable Kitchen Waste and Green Garden Waste, emphasising the importance of proper waste collection; (ii) infrastructure and service provision, education (enhancing infrastructure and raising public awareness about proper waste collection practices); (iii) treatment and processing (measures under the Decree on the Treatment of Biodegradable Waste and the Use of Compost or Digestate); and (iv) monitoring and evaluation (mechanisms for regular monitoring and evaluation of bio-waste management to ensure compliance with set targets and identify areas for improvement). The Programme also refers to best practices in the aerobic treatment of bio-waste (composting).²³

4.5. Promoting responsible waste management

Slovenia has implemented a range of measures to encourage responsible management of biodegradable waste. Public authorities promote this through financial instruments, awareness-raising, and information campaigns.

4.5.1. Financial instruments

Many Slovenian municipalities employ pay-as-you-throw (PAYT) schemes, under which residents are charged based on the amount of residual (non-recyclable) waste they produce. This incentivises composting and the separation of biodegradable waste. Some municipalities also provide financial support or discounts for purchasing home composters, especially in rural areas where garden waste is more prevalent. Slovenia additionally uses EU cohesion funds to invest in improved waste infrastructure, including bio-waste collection and composting facilities. Municipalities that perform well in waste separation and reduction may also receive performance-based funding or support for further development.

4.5.2. Awareness-raising campaigns

Slovenia is part of the Zero Waste Europe network and, building on it, developed the 'Zero Waste Slovenia' movement.²⁴ Since 2014, 'Ecologists Without Borders'²⁵ (*Ekologi brez meja*) has served as the national organisation for the Zero Waste Slovenia programme, reviewing municipal waste management plans and proposing their admission to the European Zero Waste network.²⁶ The organisation promotes the Zero Waste concept at the national level and provides a platform for collaboration

23 | The Programme, 187.

24 | For more see, e.g. Vovk 2014.

25 | <https://ebm.si/zw/o/zero-waste-slovenija/> (12. 5. 2025).

26 | The first such municipalities in Slovenia were Vrhnika, Borovnica, and Log-Dravograd. In early July, the City Council of the Municipality of Ljubljana (MOL) also approved a waste management strategy and an action plan for the period 2014–2035 (Vovk 2014).

with businesses and policymakers. The Zero Waste network also includes tourism service providers such as event organisers, accommodation providers, and restaurants.²⁷ Ljubljana was the first capital in Europe to declare the zero waste goal and, in 2014, separately collected 61% of its municipal waste. The city has committed to halving residual waste and increasing separate collection to 78% by 2025.

Municipal campaigns complement national efforts, with local authorities conducting regular public education on proper waste sorting, particularly for biodegradable waste. Environmental education is also integrated into school curricula, with lessons and activities on composting and bio-waste. Several mobile apps and websites (e.g. Odpadki.info) further guide residents on waste separation rules, including for bio-waste.

Slovenia also has 'compost masters'—trained individuals who promote and support home composting and bio-waste management at the community level. This concept is part of Slovenia's broader environmental education and community engagement strategy. Compost masters are usually volunteers or municipal employees who receive specialised training in composting methods, soil health, and bio-waste treatment. Training is often provided by environmental NGOs (such as Ecologists Without Borders), public waste management companies, or municipal environmental departments. These individuals act as local ambassadors, helping residents compost effectively at home or in community gardens. They are particularly active in municipalities participating in Zero Waste community programmes or EU-funded pilot projects. Training typically covers topics such as proper sorting of bio-waste, composting methods (hot, cold, and worm composting), and troubleshooting issues (odour, pests, moisture balance).

4.5.3. Information campaigns

Local authorities in Slovenia implement a range of initiatives to promote the responsible handling of biodegradable waste. Public consultations and workshops are regularly held to engage communities in discussions about sustainable waste practices and the planning of supporting infrastructure. To facilitate proper sorting, bio-waste bins and collection points are clearly labelled with visual instructions, reducing contamination and confusion. Media campaigns across television, radio, social media, and local newspapers raise public awareness about the importance of sorting biodegradable waste, highlighting environmental benefits such as compost production and biogas generation. Posters in public spaces further promote proper collection by providing clear and accessible instructions on how to separate biodegradable and other types of waste.²⁸

27 | For more see: <https://ebm.si/zw/o/> (12. 5. 2025).

28 | See, e.g. https://www.vokasnaga.si/sites/www.jhl.si/files/dokumenti/plakat_zacetrne_skupnosti_1.6.2021_0.pdf (9. 5. 2025).

5. Recycling and treating biodegradable waste

5.1. General overview

According to the Waste Management Programme and Waste Prevention Programme of the Republic of Slovenia currently in force (Programme of 2022), Slovenia employs four primary treatment methods for bio-waste: (i) aerobic processing (composting), (ii) anaerobic digestion (biogas production), (iii) mechanical-biological treatment (MBT), and (iv) thermal treatment, with landfilling as a last resort.²⁹

Aerobic treatment (composting) focuses on minimising environmental emissions, particularly odour, through controlled processes. Composting facilities must comply with hygienisation protocols, especially when processing kitchen waste containing animal by-products. Depending on the method, compost may be restricted to domestic use or approved for the EU market. As explained in the Programme, the regulatory framework for limiting odour emissions is still under development.

Anaerobic digestion (fermentation) enables both material stabilisation and energy recovery through biogas. Plants must be gas-tight to prevent methane leakage, and specific hygienisation standards apply depending on whether mesophilic or thermophilic processes are used. Hygiene compliance is particularly required for materials derived from animal by-products and may involve pre- or post-treatment heating or composting.

MBT helps meet landfill restrictions, particularly for waste with high organic content. Integration of anaerobic processes in MBT is encouraged for energy recovery, as aerobic MBT does not utilise the energy potential of organic waste effectively.

Thermal treatment (incineration and co-incineration) is regulated to ensure high energy efficiency and strict air pollution control. EU-aligned standards set emission thresholds and fuel quality testing protocols, promoting waste-to-energy recovery under specific efficiency criteria. Facilities must also comply with Best Available Techniques (BAT) outlined in BREF documents.

Landfilling remains the least preferred option. Slovenia enforces strict pre-treatment requirements to ensure deposited waste is inert and non-leachable. National targets under the Landfill Directive aim to reduce landfilling of municipal waste to $\leq 10\%$ of the total generated by 2035. Statistics show that the amount of biodegradable waste landfilled decreased rapidly until 2013, after which the reduction stalled.³⁰ In 2016–2017, disposal decreased significantly again due to the expansion

29 | The Programme, 188–192.

30 | <https://kazalci.arso.gov.si/sl/content/kolicina-odlozenih-biorazgradljivih-odpadkov-2> (12. 5. 2025).

of MBT infrastructure. From 2018 to 2020, it was almost zero. During 2016–2020, the amount remained well below the 2020 target. The main measures contributing to this reduction were waste separation and MBT of mixed municipal waste.

5.2. Promoted treatment methods

At the household level, composting is most strongly encouraged.³¹ Among modern treatment methods, priority is given to anaerobic treatment. However, many biogas plant investments in Slovenia have sparked public opposition due to concerns about environmental impacts, odour, and food self-sufficiency. These plants process not only dedicated crops but also manure from livestock farming.³² A greater challenge than large biogas plants, usually planned outside settlements and industrial areas, are small biogas plants established as supplementary farm activities, which often generate conflicts in local communities. Currently, only a smaller share of biodegradable municipal waste is processed in biogas plants, while more is processed in composting facilities.

5.3. Health issues

The main challenges in bio-waste management are improper separation at the household level and suboptimal processing, marked by insufficient use of advanced treatment technologies. Hygiene-related issues in waste collection often arise when waste is deposited in locations not designated for that purpose. Media reports frequently cite rodent (rat) infestations in such cases.³³ Problems also occur when waste is improperly sorted due to overfilled containers, leading to waste discarded on the ground, which again attracts rodents. Media coverage has also raised public concerns about the negative impact of toxic substances released during waste incineration.³⁴

To encourage responsible waste collection, video surveillance at collection sites was proposed some time ago. The Information Commissioner of the Republic of Slovenia issued a non-binding opinion³⁵ on whether installing video surveillance systems in front of multi-unit residential buildings and at ecological collection points is permissible. The Commissioner explained that surveillance in public spaces is lawful only if demonstrably necessary for protecting persons

31 | Article 5(1) of the Decree on the Management of Biodegradable Kitchen Waste and Green Garden Waste.

32 | For more see: <https://deloindom.delo.si/energija-in-okolje/odpadki/biolosko-razgradljivi-odpadki-razpad-na-odlagaliscih-zelo-segreva-ozracje> (12. 5. 2025).

33 | See, e.g. <https://www.dnevnik.si/novice/lokalno/podgane-so-prisle-zaradi-neppravilno-odlozenih-odpadkov-2704236/> (13. 5. 2025).

34 | See, e.g. <https://www.24ur.com/novice/slovenija/izpusti-sezigalnic-ogrozajo-zdravje-ljudi-a-politika-ponuja-se-vec-kapacitet-za-sezig-odpadkov.html> (13. 5. 2025).

35 | Opinion No. 0712-1/2014/3489 of 14 November 2014. See also: Vovk 2011.

or property and if it adheres to proportionality. This requires prior assessment of the property's value, as well as an evaluation of the likelihood based on previous incidents of damage or theft. On this basis, the legitimate objectives for reviewing footage would be safeguarding public safety and property. Surveillance may not, however, be employed primarily to detect or prove minor offences related to improper disposal. Therefore, the operator may access and review recordings only in cases involving actual damage, theft, or exceptional incidents where the footage may serve as supplementary evidence in offence or criminal proceedings.

6. Biodegradable waste management in case law and legal literature

Publicly accessible case law indicates that legal disputes concerning bio-waste primarily relate to the following issues: (i) proper waste collection,³⁶ (ii) obtaining environmental permits for the operation of bio-waste treatment facilities,³⁷ (iii) appropriate handling of waste once collected,³⁸ (iv) illegal disposal of municipal waste,³⁹ (v) unlawful dumping of waste on agricultural land,⁴⁰ and (vi) illegal disposal of bio-waste.⁴¹

However, legal literature on bio-waste or biodegradable waste is very scarce. The majority of scholarly works address the issue of waste in general, often in the context of implementing EU secondary legislation into the Slovenian legal system. More specific articles focus on waste packaging and plastics⁴², food waste,⁴³ extended producer responsibility,⁴⁴ property law aspects of waste,⁴⁵ and the provision of public utility services for waste collection and management.⁴⁶

36 | Judgment of the Administrative Court of the Republic of Slovenia, No. I U 438/2020-19 of 26 October 2022; Decision of the Administrative Court of the Republic of Slovenia, No. IV U 1/2020-34 of 18 December 2023.

37 | Judgements of the Administrative Court of the Republic of Slovenia, No. IV U 193/2010 of 4 October 2011, No. IV U 227/2011 of 3 July 2012; No. II U 380/2011 of 7 December 2011; No. I U 1745/2011 of 8 December 2011.

38 | Judgements of the Administrative Court of the Republic of Slovenia, No. I U 1646/2011 of 1 December 2011; No. I U 1905/2010 of 9 June 2011.

39 | Judgement of the Administrative Court of the Republic of Slovenia, No. I U 304/2016-10 of 11 April 2017.

40 | Judgement of the Administrative Court of the Republic of Slovenia, No. I U 1195/2019-11 of 23 March 2021.

41 | Judgement of the Administrative Court of the Republic of Slovenia, No. I U 1203/2019-8 of 29 October 2021.

42 | Strle 2023; Krefc 2022; Dajčman 2021.

43 | Igličar 2023.

44 | Tanko 2023.

45 | Juhart 2023.

46 | Sekirnik 2024.

7. Concluding remarks

This analysis shows that Slovenia has implemented the relevant EU legislation in the field of bio-waste management. Statistics indicate that the use of modern methods of bio-waste treatment is improving. At the household level, composting is most strongly encouraged. Among modern treatment methods, priority is given to anaerobic treatment. To some extent, problems still arise from improper collection and separation of waste, which is why public awareness and information campaigns remain of great importance.

Although the Waste Framework Directive introduced the obligation of separate collection of bio-waste, this practice has already been established in Slovenia. In rural areas, there is a long-standing tradition of composting, while separate waste collection at the systemic level has been in place for more than a decade. Nevertheless, further efforts will be required to reduce overall waste generation. Campaigns aimed at reducing food waste are already relatively present, yet there remains significant potential for further progress in this area. Of particular importance is raising public awareness that responsible behaviour can meaningfully contribute to a more sustainable future.

Reference list

1. Dajčman N (2021) Obveznosti gospodarskih subjektov po novi embalažni uredbi, *Pravna praksa*, No 28, pp. 14–16.
2. Igličar M (2023) Pravni ukrepi za zmanjšanje količine zavržene hrane v Evropski uniji, *Pravni letopis*, No 1, pp. 111–129.
3. Juhart M (2023) Stvarnopravni vidiki odpadkov, *Podjetje in delo*, No 6–7, pp. 1318–1327.
4. Juhart M (2024) Regulation of unlawful waste deposition in the Republic of Slovenia, *JAEL* 19(36), pp. 8–34, <https://doi.org/10.21029/JAEL.2024.36.7>
5. Kreft K (2022) Problematika plastike v okolju, *Pravna praksa*, No 35–36, 2022, pp. 10–11.
6. Mužina A (2013) Stvarne pravice na javnem premoženju, javno-zasebno partnerstvo (koncesije) in javna naročila, *Pravna praksa*, No 16–17, p. 6.
7. Sekirnik J (2024) Okostnjaki v omari ZVO-1 – finančne izravnave nosilcev skupnih načrtov, *Podjetje in delo*, No 5, pp. 822–849.
8. Strle N (2023) Prihodnost embalaže v načrtovanem krožnem gospodarstvu Evropske unije, *Pravni letopis*, No 1, pp. 131–155.
9. Tanko G (2023) Razširjena odgovornost proizvajalca – rešitev za zajezitev pojava hitre mode?, *Pravni letopis*, No 1, pp. 91–109.
10. Viler-Kovačič A (2011) Javno-zasebno partnerstvo pri vodnih pravicah in pooblastilih na področju varstva okolja, *Pravna praksa*, No 21, p. 22.
11. Vovk I (2011) Uporaba videonadzornega sistema občin za ugotavljanje prekrškov, *Pravna praksa*, No 13, p. 25.
12. Vovk I (2014) Ničelni odpadki, *Pravna praksa*, No 34, p. 38.