Waste management country profile

with a focus on municipal and packaging waste

Belgium

March 2025

European Environment Agency

Key messages

- After a decrease in 2012, total waste generation in Belgium shows an increasing trend from 2012 onward, followed by a decrease in 2022. Overall, no clear decoupling of waste generation from economic growth is visible over the 12-year period for total waste generateion.
- Belgium is considered to be on track to meet the 2025 targets for the preparing for reuse and recycling of municipal waste and packaging waste as well as the 2035 landfill target. In 2022, the Belgian preparing for reuse and recycling rate was 55% for municipal waste and the recycling rate was 80% for packaging waste. Less than 2% of municipal waste is landfilled.
- The recycling rates for packaging waste materials have stayed rather stable over the past decade with the exception of plastic packaging which increased above the 2025 target in 2022.
- While Belgium performs rather well already, there is still room for improvement, especially by diverting waste from incineration to recycling. For example, separate collection could especially be improved in the Brussels Capital Region. On the other hand, Belgium has reinforced the provisions for bio-waste collection, with some plans to expand food waste collection.

Trends in waste generation and treatment

Total waste generation

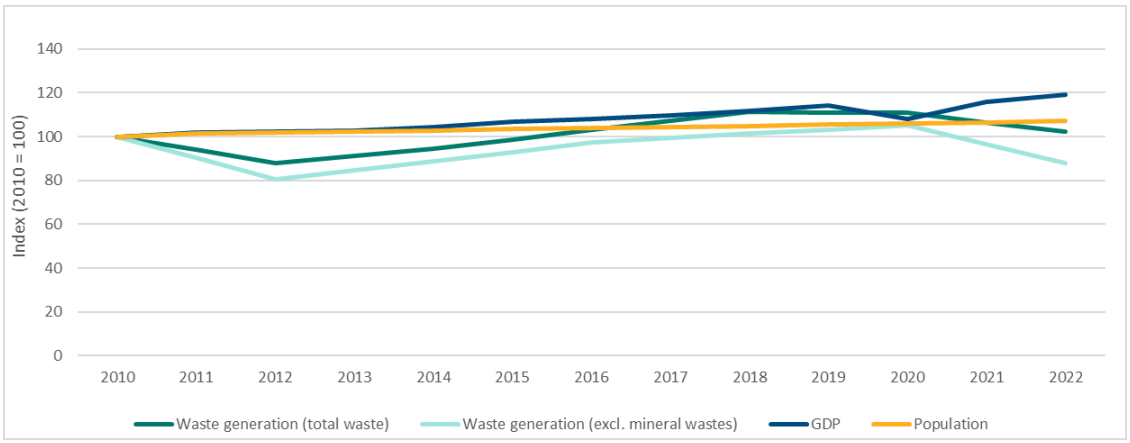
After a period of decline, Belgium's total waste generation, including waste excluding major mineral waste, increased from 2012 onward, before decreasing again in 2022 (Figure 1). The rise in waste excluding major mineral waste was primarily attributable to animal and vegetal waste, which almost doubled by 2020 before sharply declining. Meanwhile, the increase in total waste was largely due to higher volumes of soil and mineral waste from construction and demolition.

Belgium's GDP grew steadily until 2019, albeit at a slower rate than waste generation. Notably, when GDP dropped sharply in 2020, likely due to the COVID-19 pandemic, waste generation did not follow the same pattern. Over the 12-year period, there is no clear decoupling of total waste generation from economic growth. One contributing factor is policies on energy and pollution, including those promoting the removal of contaminated soils, asbestos-containing construction and demolition waste, and the renovation and insulation of buildings to meet climate targets.

In Flanders, clean soil is not classified as waste, while all reported soil is both waste and contaminated. The region aims to remediate all historically contaminated soils by 2036 and become asbestos-safe by 2040, which will result in increased asbestos waste.

However, total waste generation—excluding major mineral waste—appears to have slightly decoupled from economic growth.

Figure 1 Generation of waste (total and excluding major mineral wastes), population and economic development, 2010-2022



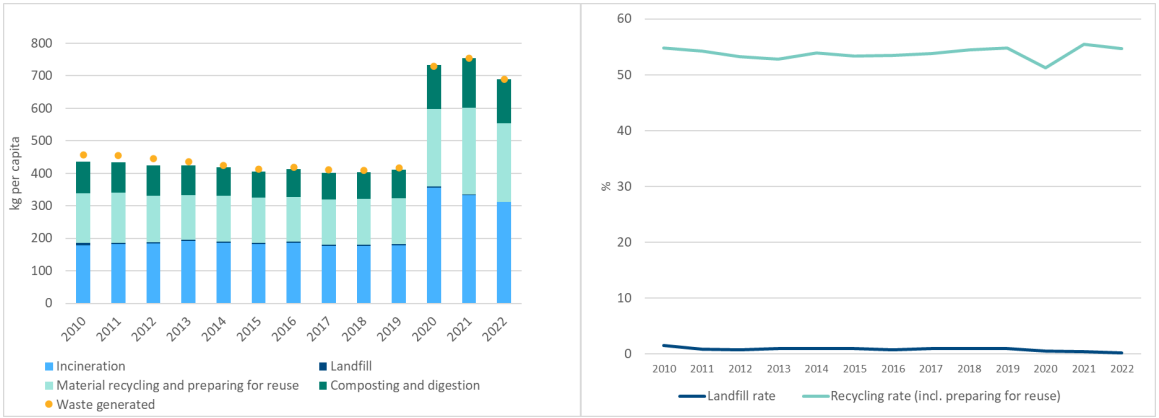
Source: Eurostat (2024b, 2024c, 2024g)

Note: Waste generation data for odd years are interpolated.

Municipal waste

Municipal waste generation per capita in Belgium remained relatively stable until 2019, with a slightly decreasing trend. Values significantly increased in 2020 (Figure 2, left) when new reporting rules applied: while until 2019, reporting was solely based on household waste, reporting from 2020 onwards also encompasses similar waste from businesses. In 2022, the country generated 690 kg/cap of municipal waste, which is significantly above the (estimated) EU-27 average of 513 kg/cap ([1]).

Figure 2 Municipal waste management (left) and rates of recycling (incl. preparing for reuse) and landfill (right), 2010-2022



Source: Eurostat (2024e)

Note: There is a break in series in 2020. As of the reference year 2020, new reporting rules apply for calculating recycled municipal waste pursuant to the targets laid down in Article 11.2(c-e) of Directive 2008/98/EC. However, it is unclear based on the information available whether these new reporting rules have been fully implemented in Belgium yet.

([1]) The EU-27 average might be influenced by the situation that not all Member States already fully apply the definition of municipal waste as defined in the Waste Framework Directive as amended in 2018.

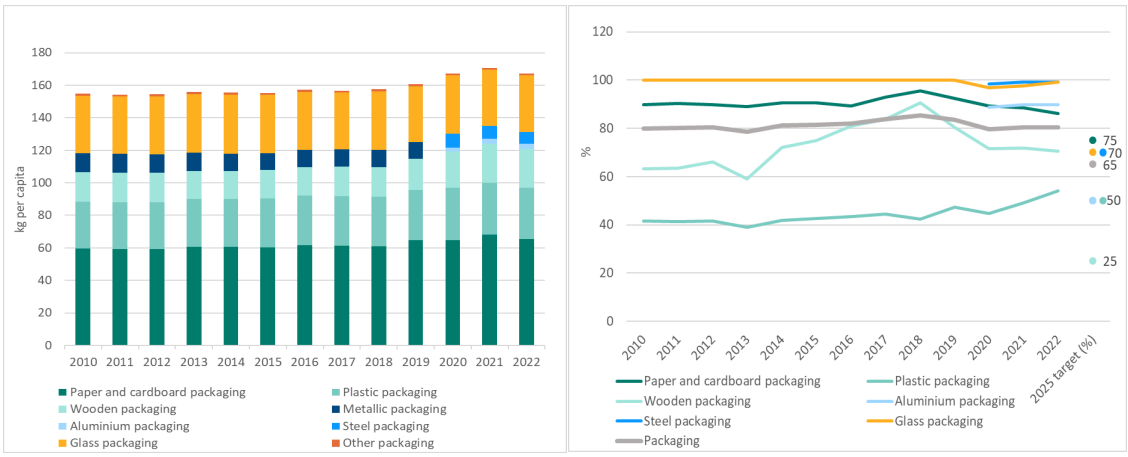
The shares of treatment types remained rather stable. The preparing for reuse and recycling rate for municipal waste stagnated over the past years in Belgium (Figure 2, right) and was 55% in 2022, which is slightly above the (estimated) EU-27 average of 49% in the same year. Notably, the landfill rate remained very low throughout the considered time frame. There was a small increase in the incineration rate, reaching 45% in 2022.

Belgium has also reported data to show compliance with the preparing for reuse and recycling target of 55% for 2025, as laid down in the EU Waste Framework Directive (2008/98/EC). The difference between these (provisional) data, following the reporting obligation of the Waste Framework Directive, and the data shown in Figure 2 (voluntary reporting) is below 1 percentage point for the preparing for reuse and recycling rate both in 2021 and 2022. The 2022 data according to this reporting obligation are still awaiting validation by Eurostat. (Eurostat, 2024d)

Packaging waste

Packaging waste generation in Belgium slightly increased throughout the considered time frame (Figure 3, left). The country generated 167 kg/cap in 2022, which is slightly below the (estimated) EU-27 average of 186 kg/cap in the same year ([2]).

Figure 3 Packaging waste generation (left) and recycling rates (right), 2010-2022



Source: Eurostat (2024f)

Note: As of the reference year 2020, the rules for calculating recycled packaging waste have changed, pursuant to Article 6a of Directive 94/62/EC. Belgium is applying the new calculation rules since the reference year 2020 (Eurostat, 2024a).

Belgium's overall packaging waste recycling rate has reached high levels and the same applies to most material-specific recycling rates (ETC/CE, 2022). In the past decade, the recycling rate of total packaging remained stable, reaching 80% in 2022 (Figure 3, right).

The evolution of Belgian recycling figures is influenced by a multitude of factors which are different for Household packaging waste and for Commercial & Industrial packaging waste. All

([2]) The EU-27 average might be influenced by the situation that not all Member States already fully apply the reporting rules for packaging waste as defined in the Commission Implementing Decision 2019/665.

explanations have been communicated to Eurostat and can vary from consequences of Covid-19 to reasons linked to the economical context, such as the energy crisis following the war in Ukraine or the presence of excess of some material on the market (wood for instance) during a specific period. Paper and cardboard packaging constitutes the most used packaging material for both household and commercial & industrial packaging and has a high recycling rate. (SPW - Agriculture, Natural Resources and Environment of Belgium, 2024) After reaching a peak in 2018, recycling rates for paper and cardboard and wooden packaging started decreasing. On the contrary, plastic packaging recycling continued to increase in the past few years.

Different phenomena can play out simultaneously compensating for one another (SPW - Agriculture, Natural Resources and Environment of Belgium, 2024). For example, for plastic, there was a marked impact of the new calculation method as of the year 2020, but this was largely compensated by:

- For household packaging waste, the separate collection of all plastic packaging instead of only bottles and flasks; this phenomenon will influence the recycling data for the next several years.
- The entry into force of a new and improved method for documenting and auditing recycling. For the reference year 2020 and onwards, it is mandatory to report steel and aluminium packaging separately. In 2022 the reported recycling rates of both fractions were above the 2025 target.

Policies in place to encourage waste prevention measures and to increase recycling

Legislative framework and waste management plans

Waste management is a regional competence in Belgium and therefore the responsibility of the three regions: the Brussels Capital Region (BCR), Flanders and Wallonia. The waste management plans are at the regional level as well. However, for packaging waste, the three regions signed the Cooperation Agreement on the prevention and management of packaging waste, a legal document harmonising packaging waste management in all regions. (ETC/CE, 2022)

In the **BCR**, the Resources and Waste Management Plan for 2018-2023 outlines waste prevention and management, including adaptation to European directives, ambitious recycling targets, strengthened Extended Producer Responsibility (EPR), increased waste incineration tax, new business sorting obligations, bio-waste management policies, and regulations to facilitate decentralised composting. (Leefmilieu Brussel, 2018). No information was available about a new Resources and Waste Management Plan for the period after 2023.

In **Flanders**, the Flemish Material Decree 'Vlaams Materialendecreet' aims at sustainable management of material cycles and waste, focusing on prevention, reuse, and closing material cycles (OVAM, 2023). The implementation plan for 2023-2030 targets local household and business waste management, while VLAREMA guidelines address special waste, raw materials, separate collection, waste transport, and registration obligations (OVAM, 2023; Vlaamse Regering - Leefmilieu, 2012).

In **Wallonia**, the Waste-Resource Plan (PWD-R), adopted in 2018, combines waste management and prevention programmes with targets for 2024 and 2025. It emphasises

circular economy principles, economic instruments for sorting, optimisation of take-back obligations, selective collection for reuse, bio-waste separation, and increased plastic packaging waste collection. (Wallonia Environment, 2018)

Waste prevention policies

Belgium's waste prevention programmes are also developed at the regional level.

In the **BCR**, the Waste Prevention Programme (WPP) is integrated into the Resources and Waste Management Plan for 2018-2023 (Région de Bruxelles-Capitale, 2018). The objectives for waste prevention included promoting sustainable and circular practices. Measures included a policy to support economic actors in reuse applied since 2018, and the ban on plastic bags implemented in 2017-2018. An evaluation report was published in 2024 (Bruxelles Environnement, 2024). Quantitative targets have been specified to reduce food waste (Région de Bruxelles-Capitale, 2018). The BCR has adopted The Reuse Roadmap for 2025, published in 2022, which outlines priority measures for reuse and repair, with a target to reuse 5 kg/year/inhabitant by 2025(Brussels Environment, 2022). To prevent food waste, the BCR approved its second strategy called 'Good Food Strategy, Towards a More Sustainable Food System in the Brussels-Capital Region'. (L'environnement à Bruxelles, 2021)

Flanders integrates its Waste Prevention Programme (WPP) into several programmes and plans, with prevention and reuse as priority areas, including within the *Lokaal Materialenplan 2023-2030*. The latter includes the Implementation Plan for Household Waste and Similar Industrial Waste with the objective to reduce household and industrial waste. It also contains the Implementation Plan Plastics 2020-2025, the Circular Construction Policy Programme 2022-2030 (OVAM, 2022), and the Action Plan for Food Loss and Biomass 2021-2025 (OVAM, 2021). Quantitative targets related to waste prevention have been specified for the Flanders region for several areas: food waste, bio-waste, wood, construction, and plastic. An example is to reduce food waste by 30% by 2025. (EEA, 2023b)

Wallonia's WPP is part of the Walloon Waste Plan and aims to optimise resource use and promote waste prevention actions, with reuse being a priority area. Quantitative targets related to waste prevention have been specified for several areas, such as reduction of food waste, and repair of electronic and electric equipment (EEE). The Walloon food waste prevention plan *Réduction du Gaspillage Alimentaire en Wallonie* (REGAL) aims to reduce food waste by 30% by 2025 and includes actions on food waste prevention. The actions of the REGAL plan can also be found in the Waste-Resource Plan (EEA, 2023b; Government of Wallonia, 2018; SPW - Agriculture, Natural Resources and Environment of Belgium, 2024).

In all three regions, prioritised waste streams for prevention include food waste, construction and demolition waste, hazardous waste, household and municipal waste, paper and packaging waste, waste electrical and electronic equipment (WEEE), manufacturing waste, textile waste, and non-plastic materials (EEA, 2023b). Evaluations for the three regions are mentioned, but no information can be found on how these have been integrated into the programmes and plans. While the budget allocation for waste prevention implementation is unspecified, Flanders allocates a financial budget in the Implementation Plan for Plastics, and Wallonia measures estimated additional annual costs and savings associated with waste prevention efforts (EEA, 2023b).

According to the 2021 data reported to the EEA according to Commission Implementing Decision (EU) 2021/19 (EEA, 2024), Belgium reused:

- 44314 tonnes of textiles,
- 26852 tonnes of electrical and electronic devices, and
- 112807 tonnes of furniture.

It should be noted that these data have been reported for the first time. As the reporting process matures, it is expected that these data will strengthen but for now, caution is advised in drawing insights from the dataset. More information about the interpretation and limitations of the dataset is available (EEA, 2024).

Policies to encourage separate collection and recycling

In the three regions, residual waste and paper and cardboard are mainly collected door-to-door, with additional collection at civic amenity sites in Flanders and Wallonia (ETC/CE, 2022). Metals, composite packaging, and plastic packaging waste are collected together (co-mingled) by door-to-door collection and at civic amenity sites. Glass packaging is primarily collected through bring points. Non-packaging materials from households (metals, glass, and plastic waste) are collected at civic amenity sites. In 2023, bio-waste collection became mandatory in the BCR, and it is required for all households and companies in Flanders and in Wallonia from 2024 onwards, unless composted at the source. Food waste is mostly collected door-to-door, while garden waste is typically collected at civic amenity sites, except in cities where it is mostly collected door-to-door. Furthermore, Flanders has quality standards and a quality management system for compost and digestate (EC, 2023).

In Belgium, all Flemish and Walloon citizens are incentivised to sort their waste at source through a pay-as-you-throw system of waste collection fees, while no such incentives are applied in the BCR (ETC/CE, 2022). Pay-as-you-throw and separate collection systems are key enablers for high recycling rates, which is reflected in Belgium's high packaging waste recycling rate (Figure 3, right). A voluntary deposit-return system exists for specific reusable packaging, such as glass beverage bottles and industrial containers. There is potential to improve the separate collection coverage and convenience, especially in the Brussels Capital Region. Belgium would benefit from a nationwide mandatory pay-as-you-throw system and deposit-return system for packaging to boost reuse and capture more recyclable materials (EC, 2023, 2022).

In Belgium, the separate collection of municipal waste is closely linked to national EPR schemes for packaging materials like paper and cardboard, glass, plastic, metal, and composite packaging (ETC/CE, 2022), covering both household and non-household packaging waste. Fost Plus and Valipac are accredited Producer Responsibility Organisations (PRO) for household and non-household packaging, respectively. Companies placing packaging on the Belgian market can join these PROs by paying an annual contribution, which covers information and take-back obligations, financing the collection and recycling, and coordination across municipalities and waste management entities. Fees vary by the recoverability of the material. For some materials, they are modulated based on sortability and recyclability. Notably, all reusable packaging is exempt from the EPR fee. Separate collection of non-household packaging waste is mandatory in the whole country for paper and cardboard, ferrous metals, aluminium, glass, and plastic. For wood, it is only mandatory in Flanders and Wallonia.

In addition to the EPR fees, a packaging tax is applicable to both reusable (1.41 EUR/hectolitre) and non-reusable beverage packaging (9.86 EUR/hectolitre).

Policies and instruments to discourage landfilling or incineration

Belgium strongly relies on incineration, 44% in 2021 (Figure 2, left), which highlights the need for progress in this area. All three regions have an incineration tax in place, which also applies to waste exported outside the regions. In 2022, the BCR increased its incineration tax from EUR 6.43 per tonne to EUR 15 per tonne. Both Flanders and Wallonia are looking into increasing this tax which is currently EUR 14.69 per tonne for incineration with energy recovery. (ETC/CE, 2022)

The Belgian landfill rate is very low (Figure 2, right). In Flanders, there has been a ban on landfilling separately collected waste since 1998, some combustible waste (with Total Organic Content (TOC) > 6% and Loss on Ignition > 10%) since 2000, and biodegradable waste since 2007. Additionally, there are specific landfill taxes in place, amounting to EUR 107.87 per tonne for combustible waste and EUR 59.33 per tonne for non-combustible waste. In Wallonia, a ban on landfilling combustible waste (with TOC > 6%) has been applied since 2004, along with a ban on landfilling biodegradable waste since 2007. Similarly, there are landfill taxes set at EUR 119.59 per tonne for general waste and EUR 66.37 per tonne for non-combustible waste. These rates are considerably higher than the average of the EU-27 Member States applying such taxes (EUR 39-46 per tonne (EEA, 2023a)). Since the BCR lacks landfills within the region, a tax is levied on all waste landfilled outside the BCR (ETC/CE, 2022).

Prospects for meeting the targets on recycling and landfilling

Belgium is considered to be close to reaching the 2025 recycling targets for municipal waste and all packaging waste materials (ETC/CE, 2022). Belgium reports already a lower landfill rate than the 2035 target (10% of the generated municipal waste). In 2022, the preparing for reuse and recycling rate of municipal waste was 55%, at the level of the target (Figure 2) (EC, 2023). Consequently, the European Commission did not issue any policy recommendations for waste management performance. In 2022, the rates of packaging waste recycling were above the 2025 targets for total packaging waste and all packaging materials (Figure 3).

Nevertheless, the Commission's Environmental Implementation Review (EIR) emphasised that there is further potential to divert recyclable waste from incineration, potentially through the implementation of economic measures (EC, 2022).

References

Brussels Environment, 2022, *Feulle de route réemploi - Priorités à l'horizon 2025 pour la Région de Bruxelles-Capitale* (https://environnement.brussels/sites/default/files/user_files/2022_feuille_de_route_reemploi_2025_fr.pdf) accessed 2 November 2025.

Bruxelles Environnement, 2024, *Plan de gestion des ressources et déchets (PGRD) - Rapport d'activité (2018-2023)* (https://document.environnement.brussels/opac_css/doc_num.php?explnum_id=11178) accessed 18 October 2024.

EC, 2022, *Environmental Implementation Review 2022 Country Report - BELGIUM*, COMMISSION STAFF WORKING DOCUMENT No SWD(2022) 268 final, Directorate-General for

Environment (https://environment.ec.europa.eu/law-and-governance/environmental-implementation-review_en) accessed 10 December 2025.

EC, 2023, *2025 EU waste recycling targets STATE OF PLAY - Belgium*, European Commission (https://environment.ec.europa.eu/publications/waste-early-warning-reports-2023-country-specific-factsheets_en) accessed 10 December 2025.

EEA, 2023a, *Economic instruments and separate collection systems — key strategies to increase recycling*, EEA Briefing (https://www.eea.europa.eu/publications/economic-instruments-and-separate-collection) accessed 12 February 2025.

EEA, 2023b, *Waste Prevention Country Profile - Belgium*, EEA (https://www.eea.europa.eu/themes/waste/waste-prevention/countries/2023-waste-prevention-country-fact-sheets/belgium_waste_prevention_2023) accessed 11 April 2024.

EEA, 2024, *Reuse flows according to the implementing decision (EU) 2021/19 Information on the database structure and use*, No Database version 1, European Environment Agency (EEA) (https://sdi.eea.europa.eu/catalogue/srv/api/records/50b2430b-8218-471c-86ea-65236a870a28/attachments/Reuse%20metadata%20annex%20Version%201.pdf) accessed 5 March 2024.

ETC/CE, 2022, *Belgium - Early Warning Assessment Related to the 2025 Targets for Municipal and Packaging Waste*, European Environment Agency (EEA) (https://www.eea.europa.eu/publications/many-eu-member-states/early-warning-assessment-related-to).

Eurostat, 2024a, Country-specific notes referring to data on Packaging and Packaging Waste, 10/10/2024, (https://ec.europa.eu/eurostat/cache/metadata/Annexes/env_waspac_esms_an_3.pdf) accessed 28 October 2024.

Eurostat, 2024b, 'GDP and main components (output, expenditure and income) [nama_10_gdp]' (https://ec.europa.eu/eurostat/databrowser/view/nama_10_gdp__custom_9301905/default/table) accessed 15 October 2024.

Eurostat, 2024c, 'Generation of waste by waste category, hazardousness and NACE Rev. 2 activity (env_wasgen)' (https://ec.europa.eu/eurostat/databrowser/view/env_wasgen/default/table?lang=en) accessed 22 October 2024.

Eurostat, 2024d, Information provided by Eurostat on provisional data in response to the reporting obligation in Art. 37(1) Waste Framework Directive related to the target on the preparing for reuse and recycling for municipal waste (Art. 11(2c)).

Eurostat, 2024e, 'Municipal waste by waste operations [env_wasmun]' (https://ec.europa.eu/eurostat/databrowser/view/ENV_WASMUN/default/table) accessed 22 October 2024.

Eurostat, 2024f, 'Packaging waste by waste management operations (env_waspac)' (https://ec.europa.eu/eurostat/databrowser/view/ENV_WASPAC__custom_842634/default/table?lang=en) accessed 28 October 2024.

Eurostat, 2024g, 'Population change - Demographic balance and crude rates at national level [demo_grind]' (https://ec.europa.eu/eurostat/databrowser/view/demo_gind__custom_9301558/default/table) accessed 15 October 2024.

Government of Wallonia, 2018, *Réduction du Gaspillage Alimentaire en Wallonie (REGAL)* (https://moinsdedechets.wallonie.be/gaspillage-alimentaire/#17actions) accessed 4 July 2024.

Leefmilieu Brussel, 2018, *Hulpbronnen- en Afvalbeheerplan (HABP)*, Leefmilieu Brussel (https://leefmilieu.brussels/media/452/download?inline) accessed 28 March 2024.

L'environnement à Bruxelles, 2021, *Good Food Strategy*, L'environnement à Bruxelles (https://goodfood.brussels/fr/content/la-strategie-good-food-2016-2020?domain=cit) accessed 12 April 2024.

OVAM, 2021, *Flanders: Action Plan Circular Food Loss and Biomass (Residual) Flows 2021-2025 (Actieplan Voedselverlies en biomassa(rest)stromen circulair 2021-2025)*, Openbare Vlaamse Afvalstoffenmaatschappij (https://emis.vito.be/sites/emis/files/articles/91/2021/VR%2020210423%20Actieplan%20voedselv erlies%20en%20biomassa%202021-2025.pdf) accessed 29 April 2024.

OVAM, 2022, *Towards Circular Construction Policy Programmes 2022-2030 (Op weg naar Circulair Bouwen. Beleidsprogramma 2022-2030)*, Openbare Vlaamse Afvalstoffenmaatschappij (https://ovam.vlaanderen.be/beleidskeuzes) accessed 29 April 2024.

OVAM, 2023, *Lokaal Materialenplan - Uitvoeringsplan Huishoudelijk afval en gelijkaardig bedrijfsafval 2023-2030*, Openbare Vlaamse Afvalstoffenmaatschappij.

Région de Bruxelles-Capitale, 2018, *Plan de Gestion des Ressources et des Déchets*, Région de Bruxelles-Capitale (https://environnement.brussels/media/442/download?inline) accessed 12 April 2024.

SPW - Agriculture, Natural Resources and Environment of Belgium, 2024, Information provided during the Eionet review of the draft EEA country profile on waste management for Belgium.

Vlaamse Regering - Leefmilieu, 2012, *Vlaams reglement betreffende het duurzaam beheer van materiaalkringlopen en afvalstoffen*, Vlaamse Regering (https://navigator.emis.vito.be/detail?woId=43991) accessed 29 March 2024.

Wallonia Environment, 2018, *Plan wallon des Déchets-Ressources* (http://environnement.wallonie.be/rapports/owd/pwd/PWDR_3.pdf).